Perotti, Enrico; Bortolotti, Bernardo

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From Government to Regulatory Governance: Privatization and the Residual Role of the State
Enrico Perotti and Bernardo Bortolotti

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Enrico Perotti, University of Amsterdam
Bernardo Bortolotti, University of Turin, and Fondazione Eni Enrico Mattei

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Corso Magenta, 63, 20123 Milano (I), web site: www.feem.it, e-mail: working.papers@feem.it
From Government to Regulatory Governance: Privatization and the Residual Role of the State

Summary
This paper reviews the state of thinking on the governance role of public ownership and control. We argue that the transfer of operational control over productive assets to the private sector represents the most desirable governance, due to the inherent difficulty for citizens to constrain political abuse relative to the ability of governments to regulate private activity. However in weak institutional environments the process needs to be structured so as to avoid capture of the regulatory process. The speed of transfer should be timed on the progress in developing a strong regulatory governance system, to which certain residual rights of intervention must be vested. After all, what are “institutions” if not governance mechanisms with some degree of autonomy from both political and private interests? The gradual creation of institutions partially autonomous from political power must become central to the development of an optimal mode of regulatory governance. We advance some suggestions about creating accountability in regulatory governance, in particular creating an internal control system based on a rotating board representative of users, producers and civil society, to be elected by a process involving frequent reporting and disclosure.

Keywords: Regulatory Governance, Privatization

JEL Classification: G38, L53

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Address for correspondence:

Enrico Perotti
University of Amsterdam
Finance Group
Roetersstraat 11
1018 WB Amsterdam
The Netherlands
Phone: +31 0 20 525 4159
Fax: +31 0 20 525 5285
E-mail: E.C.Perotti@uva.nl
1. Introduction

The boundaries of state ownership have moved considerably in modern times, following historical events, business cycles and of the ebbs and tides of economic thinking on the role of the state in the economy.

A sweeping nationalization movement took place starting with World War I in Europe, as public demand for greater social control over markets followed a series of devastating financial crises (hyperinflation, the 1929 stock market crash, banking crises). Indeed, the economic downturn caused by the Great Depression led to a strong interventionist approach almost everywhere. In the late 1920s, the French and the Belgian governments established financial institutions taking control of the banking sector. In Germany, from the Weimar Republic to the National Socialist period, large scale nationalizations were implemented to foster the industrialization process. Similarly, in 1933 - under the fascist era - the state-owned industrial holding Istituto per la Ricostruzione Industriale (IRI) was created in Italy in order to recover the national economy. After the Civil War, Spain imported the “IRI” model, creating the Instituto Nacional de Industria (INI), with the aim to strengthen domestic development, foster import substitution, and inject growth in underdeveloped areas. In Portugal, since 1933, the "corporative" ideology became the manifesto of the Salazar's authoritarian regime, which aimed at keeping political and economic activity under tight public control.

While the process continued apace in several European countries after the World War II, decolonization created many new independent states eager to engage in nation building and to promote development through SOEs. Most of the new African leaders were ideologically prone to take over the “commanding heights” of the economy and firmly convinced that economic planning was the right policy to address poverty and disease (Nellis, 2005). As a consequence, several Sub-Saharan countries established socialist (and sometimes Marxist) regimes and based their industrial policies on large scale nationalizations.
Yet the post-war experience led to a drastic rethinking over time. Evidence confirmed the inefficiency of state-owned enterprises, questioned the motives of politicians in establishing direct control for regulatory purposes and challenged the social equity of favouring specific constituencies at high public costs. In response, in the last two decades a massive privatization process of productive and other activities previously considered public services has taken place across the world.

In early 1980s, the problem of the inefficiency of the SOE sector – absorbing an increasing amount of public subsidies – became a priority in the political agenda of most European countries, prompting the surge of privatizations that began in the 1980s and gathered momentum from 1991 onwards after the ratification of the Maastricht Treaty. The restructuring and privatization of the SOE sector became necessary not only to modernize the economy, but also to meet convergence criteria without politically costly tax increases. Privatization in developing countries has been spurred in the 90s since the IMF and the World Bank started to make their assistance and lending conditional on privatization. In the early period, the largest share of activity came from the three main countries in Latin America. After the peak in 1997, revenues declined partly following the East Asian financial crisis and the Russian debt crisis of 1998. The recent resurgence of the process in developing countries results from increased privatization activity in China and several Eastern European countries (Kikeri, 2005).

After 20 years of this process, the borders of state ownership have been dramatically redrawn in many countries. The process has unquestionably been quite successful overall. The general evidence of privatization is favorable in terms of improvement in firm performance (see Megginson and Netter, 2001; Kikeri and Nellis, 2004). In the case of Latin America privatization resulted in some (small) increases in inequality, surely in the short run, with the gains (efficiency and access to infrastructure) more diffused and over longer term (Nellis, 2000). The experiences in the Bulgaria, Czech Republic, Russia and other transition economies also show how a voucher scheme privatization aimed at the general public can get high-jacked by insiders. Privatization currently underway in China,
Vietnam and other countries is also expected to yield adverse effects in income distribution.

Thus the experience of privatization has led to objections and resistance even among early and committed proponents, who find that privatization in certain Latin American and Eastern European countries created specific risks and social costs (Nellis, 1999).

To discuss the relative merits of state and private ownership we review the fundamental literature on ownership, discuss the main drivers of political decision making and draw some conclusions on what role state ownership or more generally public governance does and/or should play in regulating economic activity. Particularly, section 2 introduces our view about the basic tradeoffs of private vs public ownership of firms. Section 3 presents the intrinsic limits of state ownership in solving commitment problems, while section 4 addresses the risks of privatization in poorly regulated contexts. Section 5 develops the concept of regulatory governance advancing some suggestions about institutional development. Section 6 concludes.

2. The costs and benefits of State ownership: a broad conceptual framework

SOEs exhibit a significant lower productive efficiency in comparison with privately owned counterparts.¹ The main causes have been traced back to a general lack of accountability,² leading to:

a) a lack of managerial and employee incentives to efficiency

b) problems of competence or corruption by state authorities

c) the use of SOEs for political purposes to cater favoured constituencies.

¹ Good surveys are found in for instance in Megginson and Netter (2001), McKenzie and Mookherjee (2002), and Boubakri and Cosset (1999).

² We mean accountability to citizens, not investors. While SOEs are incorporated firms, they have no private shareholders; nor do lenders play a disciplining role, as SOE debt is perceived as a public obligation.
Russia provides a conspicuous example of political abuse and capture of SOEs by special interest groups. The power vacuum after the collapse of the Soviet Union was not compensated, as in Central Europe, by an identification with the West supported by a realistic prospect of joining the European Union. Weak legitimacy made the Yeltsin government vulnerable to the support of special interests, and led to the capture of state decisions which further undermined support. A distorted corporate and regulatory governance system, in which each strong interest sought to maximize and secure short term gains, produced a massive build-up of non-payment, tax evasion, and barely conceived asset theft from SOEs (Black, Kraakman and Tarassova, 2000).

Although state ownership comes with substantial costs, two arguments have been set forth to justifying it in the presence of market failures such as market power or externalities (see e.g. Esfahani and Ardakani, 2002). The first (which we term the ‘public commitment problem’) concerns the inability of a sovereign government to commit to market-friendly tax and regulatory policies, which discourages private investment and may result in direct government involvement in production as a substitute. The approach takes the view that politicians have difficulties in credibly committing to refrain from tax and regulation manipulation to collect “quasi-rents” on relation-specific and often sunk assets. For instance, state control of infrastructure may be the result of the unwillingness of private investors to fund large ex ante investments whose rewards, once sunk, are subject to political decisions.

The public commitment view is buttressed by considerable evidence showing that the size of the public sector is smaller in countries endowed with better institutions, especially those curbing the risk of arbitrary changes in policies, such as contract repudiation and expropriation by the government (Keefer and Knack, 1995). In a similar vein, La Porta, Lopez-de-Silanes and Shleifer (2002) find that government ownership of banks is more pervasive in countries with poorly defined property rights, finding support for Gerschenkron (1962) view that in these circumstances only the government can promote financial market development.
The second (which we term the ‘private commitment problem’) identifies the difficulty for regulators in controlling significant decisions by private owners, unless government has direct control over the enterprise (see Hart et al., 1997; Shleifer and Vishny, 1994). For instance, state ownership of banks may arise because private banks take advantage of depositors or deposit insurance. Most large Russian private banks became empty boxes ahead of the 1998 crises, as their capital fled abroad and liabilities piled up. Depositors and foreign investors took large losses. In the end, the experience led most retail depositors to turn to state-owned Sbarbank.

Both these rationales for the state ownership presume that state authorities seek to correct classic market failures such as externalities, natural monopolies, high information costs or public goods. Yet rather than assuming such a public objective, it seems useful to discuss under what governance forms there will be enough public scrutiny to ensure political attention to public welfare.

In general, commitment problems apply to both private individuals and state authorities under incomplete private contracting and its public sector counterpart, incomplete legislation. The critical difference is that the sovereign state has greater discretion and thus greater scope for abuse.

For example, a typical cost of market contracting is the possibility of “lock-in”. When the transaction extends over a long period of time and is potentially affected by unforeseen contingencies, one party may be exposed to the risk of exploitation when some relation-specific investments must be made. Under incomplete contracting, these costs are usually mitigated by vertical integration, i.e. assigning ownership rights to the parties most severely exposed to these risks. Under incomplete legislation, the greater scope from exploitation and abuse comes from the fact that the government can write rules and enforce them, exposing the private party to an additional “regulatory risk” which was absent under private contracting. Indeed, the government can not only renege a contract, but more generally can modify legislation for its own advantage.

Thus the main argument against state control arises from the combination of broader discretionary powers and the potential for political opportunism. Given that many
developing countries have weaker institutions constraining public abuse, the case for state control is particularly difficult precisely in those contexts where its need may be in principle the greatest.

We claim that in general constraining public abuse is more difficult than regulating private economic activity. Thus a more desirable governance mode implies the transfer of ownership rights to the private sector combined with open regulation. While privatization is necessary for productive efficiency, open regulation is needed to achieve allocative efficiency. This proposition implies that private ownership creates better incentives to improve firm productivity, but firms must be suitably regulated in order to maximize social surplus.

There is a broad consensus that privatization usually fails to deliver much of its potential in poor institutional contexts, when poor regulation leads either to public or private abuse. Yet regulation fails just as privatization does, namely when it leads to regulatory or (in the extreme cases) to state capture. Good examples are the large privatization programs in Chile in the late 1970s, in Mexico in the 1980s and in Russia in the mid 1990s. In some early Latin American privatization programs, large private investors were grossly favoured on the privatization of the large state banks, which were sold on the cheap and on highly leveraged terms. This enabled these investors to fund the acquisition of control over a number of privatized firms. In all these cases, the abuse of bank resources for private purposes led to brutal financial crises, which forced re-nationalization of most of these groups (Velasco, 1988). The Russian experience is also instructive in how captured privatization programs can undermine the authority of the state and other institutions (Perotti, 2002). In contrast, the Chinese experience of gradual privatization of the economy by favouring entry while retaining control over the process has limited private capture of the process, although it still leaves some uncertainty as there may be gradual retreat.

Thus the relevant notion of non-private governance appears to be regulatory governance. Regulation needs to be explicit in order to expose both public policy and private behaviour to greater public scrutiny. To function properly in poor institutional
contexts, however, the regulatory institutions may need to be developed along with societal institutions able to detect or respond to abuse. In what follows, we will argue that a grassroots form of governance may be required to create legitimacy and scope for increasing independence from the executive branch of government. But before describing more precisely the mechanics of regulatory governance and its relation with residual state ownership, we will try to further explore the limits of state ownership and control in pursuing social welfare.

3. Self-interested or benevolent government?

Sappington and Stiglitz (1987) present the classic argument for state ownership and control. They argue that information, contracting and bargaining costs limit the government’s ability to regulate by ex ante design. They also suggest that when the government cannot exactly determine its objectives due to lack of experience, it may want to retain direct control to avoid costly contract renegotiation procedures with private parties. To the extent that intervention has large costs, state ownership (or rather, state control) is to be preferred to private ownership (Hart et al, 1997).³

Yet the regulation of SOEs by politicians suffers serious drawbacks. First, it is widely known that any public institution empowered to exert control for a temporary purpose tends to make it a permanent task. It may thus be difficult for dispersed citizens to intervene to reverse state control once its purposes have ceased to exist. Second, it is hard to induce politicians in office to represent the interest of the electorate over special interests and to avoid conflict of interests.

When voters are poorly informed or too dispersed to coordinate collective responses, politicians are able to pursue special interests at the cost of the common good. If selfish politicians are prone to corruption and patronage (Shleifer and Vishny, 1993), then SOEs’ inefficiency is not just due to weak incentives, but results from a deliberate

³ Authors in the past have argued that social goals, such as acceleration of technology transfer, increased employment, reduced inequality, and regional development, may be best realized via SOEs (Cholski, 1979). The evidence on the actual role of SOEs have largely discredited this view.
political choice to transfer resources to supporters (Shleifer and Vishny, 1994). Such indirect targeting, distorting the productive choices, produces inefficiency (Bias and Perotti, 2002), such as excessive employment and wages above marginal productivity.\textsuperscript{4} For instance, SOEs may build plants in economically unfavorable but politically attractive regions (Martinelli, 1981). Other inefficient political benefits include the production of goods that are not socially desirable.\textsuperscript{5} Politicians may even distort the regulatory framework ahead of a SOE sale, by reducing future competition, hence maximizing revenues (or bribes) at the cost of consumer surplus.

Even if we abstract away from the most blatant cases of political abuses, the empirical record of SOEs solving market failures is quite poor. Externalities such as pollution were not visibly better managed by SOEs, as the environmental situation in Eastern Europe vividly illustrates (Grossman and Krueger, 1995). Public monopolies often abuse their market power not necessarily by high prices but by sheer inefficiency, allowing their employees a “quiet life”, or by granting preferential treatment to political constituencies (Kikeri, Nellis and Shirley, 1992). This form of internal capture has led to such low rates of investment under state monopoly in many countries. Primary examples are the energy or telecommunication sectors, which often only after privatization and the resulting increase in competition expanded and modernized their infrastructures (Bortolotti et al., 2002).

If outright ownership and control do not yield efficient outcomes, the issue becomes how to establish a credible time path for the retreat of the direct control role of the state and the emergence of genuine, more accountable forms of regulation.

4. Privatization, regulatory capture, and institutions building

\textsuperscript{4} Even in the U.S., state entities employ typically 20-30% more employees than their private counterparts (Donahue, 1989).

\textsuperscript{5} The development of the Concorde plane is a good example (Anastassopoulos, 1981).
Privatization outcomes are heavily affected by the institutional setting in which divestiture takes place. In countries where public regulation cannot control private activity, the speed of privatization should be aligned with the progressive strengthening of institutional foundations. Where the institutional foundations to support or regulate private activities are completely missing, rapid privatization may lead to an unacceptable loss of control over the economic system. Under these circumstances, privatization cannot escape capture, and it may even weaken corporate governance (weak regulatory, bankruptcy and take-over procedures, corrupt legal enforcement) and lead to a loss of ultimate control over the process and its goals. Major structural reforms can thus fail when their design leads to regulatory or (in the extreme cases) to state capture.

In a grand political bargain to buy out opposition to privatization, most Russian enterprises became controlled by managers (Shleifer and Treisman, 2000). Perhaps there was no other way to securely establish private property in Russia than to "buy in" the potential opposition. Yet it appears that the extent of control transfer to the managers seriously weakened the ability of the state to control the reform process. Many structural reforms, such as bank legislation, the sale of the most valuable resource companies, the public debt market, and the provision of currency hedges were implemented in a compromise with powerful interests.

A spectacular example of policy capture was the debt-for-shares deal negotiated in Russia on the eve of the 1996 presidential elections. Via a highly dubious secured loan, control of the best natural resource companies was captured by a few influential banks, creating a number of Financial Industrial Groups (FIGs). Cash-generating companies in these groups were actively milked by controlling shareholders, leading to major conflicts with investors, and more recently, with the new Russian government. The high opportunity cost of cash payments (because of the high appropriability of cash for

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6 Large industrial-financial groups, common in underdeveloped financial systems, certainly owe their influence to political support, yet may provide governance and an internal capital market to alleviate credit constraints. Empirical research on Russian FIGs (Perotti and Gelfer, 2001) has shown that while group firms were better managed, cash flow from cash rich group firms was reallocated on a massive scale, and may have been shifted outside the group.
managers) also fed a massive demonetization of transactions and a shift to barter, an extremely inefficient payment system.\(^7\)

In contrast, the Chinese experience, where the state has retained control over privatization and deregulation, has a more limited record of private capture of the reform. While its success has been attributed to its gradualism, its main critical element may have been privatization by favouring entry, rather than rapid transfer of control. Arguably, the Chinese economy had ample underutilized resources and its industrialization had barely began, so there were many free resources to deploy, while in the FSU reforms required massive reallocation of resources frozen in inefficient production. Moreover, considerable uncertainty remains over the future path of further retreat.

Privatization can lead to increased efficiency and improved welfare only in settings with enough capacity to ensure appropriate protection of property rights, contract enforcement, control of market abuse, fair regulation and open entry, and commercial dispute settlement based on law, not payments.

At the same time, there are enough cases of poor performance of privatization in some contexts to alert us to some objective limits in private control, primarily due to regulatory inefficiency or outright capture. When the transfer of critical assets to private ownership cannot be managed safely (in the sense of avoiding losing control of the sale and the regulatory process), public ownership (and control) can have a temporary role, while some process of institution-building takes place. Indeed, under uncertain public commitment, governments can credibly inspire confidence by selling ownership gradually, signalling commitment to privatization policy through willingness to bear residual risk (Perotti, 1995). A parallel argument may be made by arguing that the State should keep control over the decision rights until proper regulation is in place. In both cases the argument is for temporary, gradually decreasing residual cash flow /control rights.

\(^7\) Evidence that cash-stripping took precedence over productive activity is that barter rose with real interest rates, and with ruble overvaluation. Ivanova and Wyplosz (1999) find that both higher monetary growth and higher interest rates are correlated with higher barter.
Yet to be feasible, the structure and role of this residual ownership form needs to be designed from the beginning for this temporary purpose, however long it may take. The suggestion is that without an explicit commitment by the state to release control under some conditions, the process of institution building may not even start.

Thus the State has to be progressively removed from direct involvement in the economy, in order to create some scope for allocating residual regulatory and enforcement rights in new institutions. The emphasis should be toward creating increasingly professionalized and autonomous regulatory institutions that draw their legitimacy and the right to gain further autonomy from a direct, i.e. non-state form of governance that involves consumers and citizens to a greater extent.

Recent evidence (Acemoglu and Johnson, 2005; Djankov et al., 2003) suggests that the most important institutions are those that restrain the executive and reinforce its accountability, i.e. limit abuse of power over those that regulate relationships among individuals. The reason may be that power-restraining institutions also correct political incentives to favour strong private interests, for instance to control market power, and thus undermine a level playing field and the process of entry by new producers.8

State capture by special interests seriously weakens the credibility of enforcement. While corruption accompanied transition in all countries, its extent in the FSU (Former Soviet Union) led many authors to describe it as state capture, where the corrupting agents hold more power than the corrupted officials. There is evidence that while connected firms benefit, on average, firms grow less than in less captured economies (Hellmann, Jones and Kaufmann, 2000). In Russia, the private capture of the privatization process weakened the ability of the government to control the behaviour of the most powerful private owners (Perotti, 2003).

A way to summarize the case for a further retreat of state ownership even in countries with poor institutions comes from Djankov et al. (2003). They argue that the

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8 Perotti and Volpin (2003) suggests that in a context of poor political accountability, established interests can lobby successfully to adapt regulation and even selective enforcement in their favor, blocking entry by new firms. Thus institutions reinforcing political and regulatory accountability are a preliminary step to ensure also proper enforcement of relationships among individuals.
more civic capital a country has, the more it is able to achieve cooperation among its members without coercion. Civic capital, fixed in the short run, is determined by culture, factor endowments, and history. The less civic capital a country has, the less it can ‘buy’ order with extra regulation. Thus less developed countries can achieve less with regulation. Deregulation of competitive markets in less developed countries should then count as a high priority. The presence of relatively high barriers to entry in such countries suggests that regulation is often captured and thus tends to hinder growth. But just as barriers to entry must be reduced, the urgency to amend the regulatory institutions increases. We claim that this requires a deliberate policy toward greater scrutiny and accountability via a more directly elected form of regulatory governance.

5. The mechanics of regulatory governance

The bottom-line of our reasoning is straightforward. Both private agents and the public sector face commitment problems. Since governments are sovereign institutions, they have more difficulty in committing to specific decision criteria than the private sector. They should ideally be constrained by private ownership, and the private sector should be constrained by regulation. Thus the critical question shifts to the governance of the regulatory institutions.

Regulatory authorities have grown throughout the developed and developing world as a result of privatization, and exhibit various degrees of autonomy. We will argue here that whatever the record, the separation of ownership from regulation tends to generate additional open scrutiny and necessarily improves the governance of the regulatory process, at least as long as it is not captured. One of the most neglected benefit of privatization is the increase in public scrutiny arising from the fact that political control becomes exercised more at arm-length, or in any case through explicit legislation, so that its goals become more open to public opinion. This is comparable to the case of a

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9 A common criticism is that regulatory inefficiency is less observable when buried inside a public institution than when it is subject to public scrutiny as public regulation of private activity.
firm with dispersed ownership obtaining a public listing, a move which improves the
good of information available to judge its management.

In the language of Pistor and Xu (2002), laws and regulations are necessarily
incomplete, just as private contracts are. By default, residual rights to regulate belong to
the State. Yet the authority to adjust enforcement under unspecified contingencies could
be granted to semiautonomous judiciary or regulatory authorities. The role of regulatory
agencies is more proactive than courts, which may respond only after damaged parties
bring legal action and may not intervene preventively.

Provided that such institutions operate under a framework in which they can avoid
being captured, granting them progressively increasing residual enforcement rights has
several advantages over the assertion of direct state control.

Currently the degree of regulatory autonomy is politically controlled. In
perspective, regulatory governance could be made contingent on public approval in
similar ways as the public sector. As long as the mandate is both explicit and focused,
and a reputation can be established (as for central banks), such institutions have less
power and appetite for secondary political goals. Besley and Coate (2003) argue along
similar lines that politically appointed regulators tend to pursue unrelated political goals.
They report evidence that US states with elected regulators in place of political
appointees choose more pro-consumer policies.

The ability to ensure that regulators act in an independent and accountable fashion
towards their stated goals can be reinforced by a novel approach to their governance.
Their mandate should be temporary and subject to public review: their governance should
include representatives of consumers and other nongovernmental organizations. There are
traditional forms of institutional governance, such as in mutual banks or administrations
of public infrastructure, in which there are elected representatives of users. This concept
should be broadened and further experimented in other contexts as well.

An important distinction needs to be made between NGOs and grassroots
organizations. Especially in developing countries, grassroots organizations are
arrangements around specific underrepresented interests (say small farmers or craft makers, or neighbourhood organizations). They are usually detached from the political system and relatively communal in nature. In contrast, NGOs are foreign-inspired, staffed with more educated individuals, often driven by some strong motivation. They are better politically connected, or at the very least they have some access to foreigners in terms of either funding or visibility. Clearly, the two types of organization are complementary. It could be particularly interesting to create stronger links between the ability of NGOs to mobilize external resources or broader attention and the ability of grassroots organizations to mobilize support or public opinion. They should therefore have distinct roles in regulatory governance, yet they may also become encouraged to cooperate more to ensure that fundamental needs may rise to the attention of the regulatory system.

In conclusion, we argue that the governance process of regulators should take a more democratic, directly elected turn. The logic of the argument is not democratization per se; there are agency and common good problems to this solution as well as to others. The logic of this proposal reflects the sensible economic principle that those who have the greatest benefit from proper regulations should be at least in part entrusted with its governance (Hansmann, 1996; Besley and Coate, 2003). Thus the composition of a regulatory board may include representatives from different constituencies and nongovernmental organizations, elected on a rotational basis from broad lists. The governance assignments of individual organizations may be made temporary, and extensions and rotation may be made subject to public, rather than political, approval. Importantly, the regulators should be subject to various forms of explicit accountability by the establishment of specific quantifiable or verifiable goals, and they would need to report on an annual basis as to their achievements. A task of the external appointees would be then to report publicly on their view on the regulatory effort, and to contribute to adjust the statement of regulatory intents and their priorities by increasing public scrutiny.
6. Conclusions

The issue of public versus private governance in circumstances of market failure hinges on the relative ability to commit to a fair and efficient allocation. We have argued that the state has on average greater difficulty in committing, due to its status. State ownership should remain an extreme solution, not advisable except in circumstances when privatization leads to uncertainty over the allocation of ultimate control. This is evident in the case of executive powers and public security, as in the case of the army, the police or the prisons.

In countries where private commitment is hindered by poor legal enforcement, a case can be made for some form of state control. Yet because such environments are also commonly associated with corrupt politicians and unconstrained abuse of power, the public commitment problem is here even more serious. The evidence in the recent literature clearly points to institutional development as a precondition for the functioning of both private and public policy (see Acemoglu et al., 2003) on macroeconomic instability in poor institutional environments), which produce worse outcomes even after controlling for policy choices.

The conclusion is that in such environments there is too little institutional capacity for proper state-controlled regulation, and thus the balance should tilt in favour of more direct state control.

Of course, this is only a static view. The fact that an institutional framework is too weak to support active state regulation suggests that institutional capacity has to be built up, not forsaken. What are institutions if not governance mechanisms with some degree of autonomy from both political and private interests? The gradual creation of institutions partially autonomous from political power becomes central to the development of an optimal mode of regulatory governance.

In conclusion, a residual degree of state control, rather than outright ownership, may have a role when proper institutional mechanisms are not (yet) in place. Yet this role
must be progressively reduced by the creation of intermediate, focused regulatory institutions that may offer some weakening of the political grip on decision making.

The separation of enterprises from ministries and their corporatization, the creation of independent regulators, and the resort to temporary mixed ownership are all policies qualifying the shift from government ownership to regulatory governance, which should allow a greater exposure to market discipline, better incentives in firms, and an increased accountability towards citizens.
REFERENCES


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