

State-owned Enterprise Management

Advantages of Centralized Models

Enrique Moreno de Acevedo Sánchez

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Abstract*

This document analyzes the advantages and disadvantages of the different management models of state-owned enterprises (SOEs) in Latin America and the Caribbean. SOEs are important in the region. In many countries, they provide basic services to citizens, and their economic importance is relevant in terms of public finance. At the same time, SOEs confront political, financial, regulatory, and managerial problems, making them less efficient and transparent. In turn, governments should adopt management models to minimize these problems, while helping to ensure the quality of services and avoid the associated fiscal risks. This document argues that centralized models offer more advantages in correcting the current deficiencies of SOEs.

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ABOUT THE AUTHOR

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EXECUTIVE SUMMARY

State-owned enterprises (SOEs) are of major importance throughout the world and even more so in developing countries, where they provide basic services such as electricity, water, and transportation. SOEs make up 10 percent of the world's largest enterprises in terms of market capitalization and/or asset valuation. In Organisation for Economic Co-operation and Development (OECD) countries, sales by SOEs represent 6 percent of total GDP and they employ more than 6 million workers. In Latin America and the Caribbean (LAC), SOE assets account for 12 percent of the region's GDP; in Venezuela alone, sales by the state-owned oil company Venezuela Petroleum, Inc. (Petróleos de Venezuela S.A., or PDVSA) represent around 35 percent of the country's GDP.

Despite many attempts in the past to reform the SOE sector, the problems that have historically afflicted SOEs are still present, and they are of various kinds: political, financial, regulatory, and management. They are difficult to address not only due to the public character of the owner but also to their political character. The problems are manifested in numerous and sometimes contradictory objectives, multiple owners, lack of incentives, lax legislation, cases of corruption, clientelism, financing, and soft budgets, among others, and they affect the efficiency of the sector.

Presently, SOE management follows three differentiated models: decentralized, dual, and centralized. These models differ from each other

with regard to the number of owners responsible, their processes and procedures, and their capacity to solve the problems of SOEs. Until now, governments have failed to address the problems of SOEs in a comprehensive and inclusive way. They have carried out reforms that focus on specific aspects, rather than conducting a more integrated, long-term analysis and proposing intermediate stages that affect all areas and actors involved. The choice of management model is important for situating the owner on the organizational chart. The model also governs how ownership is exercised, with all the responsibilities and consequences that this implies.

This paper seeks to fill a void by reviewing the management models and arguing why the centralized model is most preferable. The paper has two objectives:

- First, to present a conceptual and empirical analysis of the three SOE management models, detailing the advantages and drawbacks of each and highlighting how each one may or may not help to resolve the problems of SOEs.
- Second, to provide a different and more systematic way of approaching the SOE sector, which will serve as an instrument for public policymakers and SOE management in governments for analyzing the key areas and the actors involved. Reforms or actions can be derived from the analysis, which may lead to greater SOE efficiency.

The centralized model seems to be clearly the one that can help most substantially to tackle and eliminate most of the problems that persist in SOEs. The most obvious problems relate to the fact that SOEs have multiple owners with different and/or contradictory objectives. Centralized models envisage a single body charged with exercising the rights and duties of ownership. Moreover, by erecting more barriers between political power and SOE management, centralized models make political interference more difficult. They produce a de facto separation between the regulatory agency and the owner, which does not happen with decentralized models and is not envisaged in the dual model. Furthermore, centralized models improve management and governance; facilitate implementation of cross-cutting policies; have more effective, transparent, and informative monitoring and evaluation systems; offer economies of scale in certain operational areas by functioning as a group of enterprises, and allow for more professional management and thereby attract more talented people.

At the same time, the centralized model allows the sector to be analyzed and treated holistically. It is also the model that makes it possible to most effectively include and coordinate all of the actors in the SOE ecosystem. Finally, it allows for more effective and transparent implementation of the necessary measures that the proposed analysis entails.

This theoretical approach will provide a basis for future research that analyzes cases of centralized models in Latin America and the Caribbean and for the development of this method of analysis for the SOE sector.¹

¹ The proposed method of SOE analysis will be developed in detail in a future discussion paper, with a summarized version in Annex 4. This includes the subsections that constitute the SOE pillars, as well as an analysis of the actors in the ecosystem and the implications of their interventions for the future of SOEs.

DEFINITION, HISTORY, AND EVOLUTION OF SOEs

Witker (1979) defines a public enterprise as “that body that combines three essential elements: (i) the presence of the administration, (ii) individuality, and (iii) engagement in an economic activity.” This definition responds more to economic than to legislative criteria, notwithstanding the fact that legal aspects must be considered during SOE sector restructuring, due to the implications of defining the role of the owner.

The range of sectors in which SOEs have historically operated is broad, regardless of the reasons given to justify their existence or of a country’s level of economic development. The sectors in which SOEs have traditionally been present are public services, mining, and oil. Other sectors include: (i) textiles (in Denmark and Italy, among the developed countries, and in some Latin American and Caribbean (LAC) countries); (ii) food, beverages, and tobacco (in Australia, France, Germany, Ireland, Italy, and Japan among the developed countries, the Scandinavian countries, and some developing countries); (iii) ceramics (in Austria and Germany) and cement (in Italy and in some developing countries of Asia and Africa); and (iv) transport equipment, including aeronautics and naval equipment (in Colombia, India, Indonesia, Italy, Nigeria, Pakistan, and the United Kingdom) (Toninelli, 2000).

The origins of SOEs are remote and diverse depending on each country’s circumstances, which explains why the legacy in terms of SOE characteristics might also be so. According to Millward (2005), the origin of SOEs in the modern era dates back to the nineteenth century. They arose to regulate, coordinate, and define the rights of the new networks, energy systems, and infrastructure created during the industrial revolution in three main areas:

- Mass consumption of services, such as drinking water, gas, transport, communications, telegraph, and railways
- Defining rights of way and regulating expropriations, routes, tariffs, engineering rules, guaranteed interests, subsidies, taxes, and administrative limits
- New infrastructure built to last, which alters territories and cities

In general, although each country and region has peculiarities that may have influenced their evolution, SOEs at the global level went through the following historical stages:

- Proto-industrial, manufacturing, and royal arsenals (eighteenth century)
- Public services (1815–1914), with a new financial services and banking infrastructure
- Expansion and restructuring (1914–40), driven by two world wars, protectionism, and

nationalism in the oil, coal, gas, electricity, radio, and armaments sectors

- Expansion, maturity, and restructuring (1940–80), with State intervention and direction in industrial activities
- Privatization and reform (1990 onward)

In recent decades, the phases of creating SOEs or nationalizations have alternated with waves of privatizations in which the public sector presence is totally or partially reduced. This has been a common trend from the nineteenth century to the present day.

Nineteenth Century

In the nineteenth century, with the aim of resolving problems and market failures, the State took the lead role in supplying public goods (postal service, drinking water supply and sewerage, electricity, telephone, and railway transport), either directly or via public–private partnership schemes, which were fundamentally concessions.

In LAC countries, SOEs have existed since colonial times, especially during the Bourbon era (eighteenth century), when the majority were fiscal monopolies: tobacco, quicksilver, salt, gunpowder, and so on. In the first half of the nineteenth century, however, the majority of these fiscal monopolies were weakened and eventually dissolved.

The SOEs in the LAC region arose during the post-colonial or republican era in response to shortcomings in water supply, transport, and electricity supply services. One example is Chile in 1884, which established the State Railway Company (Empresa de los Ferrocarriles del Estado) to unify traffic between companies, offer affordable tariffs to encourage agriculture, and strengthen state control over the country’s interior (Guajardo,

2007). For its part, Mexico’s National Railway (Ferrocarriles Nacionales de México) was established mainly in response to the lack of regulation.

In the second half of the nineteenth century, enterprises with state participation in the financial and railway sectors (Banco de la Provincia de Buenos Aires, Banco do Brasil) were created in various LAC countries, as were public entities to manage telegraphy and postal services, water supply, and ports. These were quasi-state enterprises or public services. Some of them began to operate under this concept in Argentina, Brazil, Chile, Peru, and other countries in the region starting in 1850 (Marichal, 2011).

These public enterprises and agencies were financed to a large extent from the tariffs they collected in exchange for providing services. Public banks financed the enormous expansion of the railway companies of that period. Financing from abroad also helped them, without which the development at that time could not have occurred. These waves of state enterprises were linked to the early phase of overseas borrowing which, given the weakness of local capital markets, helped to drive large-scale and extremely costly projects in railways, port infrastructure, and other public works.

Privatizations, which alternated with phases of nationalizations, are at the other end of the pendulum swing. The end of the nineteenth century saw the rise of significant state ownership in infrastructure financing, such as the avalanche of investments made in Peru.² Most of the financing

² In the second half of the century, Peru lived through a period of what might be termed “guano fever,” when there were extraordinarily high levels of demand for this product. It was then that the government tried a fiscal experiment that consisted of establishing a fiscal monopoly over exports of the fertilizer. The extraordinary

for these large investments was in the hands of foreign financial institutions. Following the financial crisis of 1873, the country was unable to service its debt; consequently, it decided to privatize all of its assets, which ended up in the hands of banks, especially the British banks that had been the major backers (Marichal, 2011).³

Twentieth Century

A further era of nationalizations at the global level began in the first two decades of the twentieth century (e.g., Banque de France, Société Générale, Crédit Lyonnais, British Broadcasting Corporation, Central Electricity Board) and continued until the 1980s. The State's presence was dominant in certain sectors. Often, this participation was not the result of an orderly reflection but rather an undesired consequence arising from the circumstances of the moment (world wars, the Great Depression). Naturally, macroeconomic shocks and political programs have an important influence on the fate of SOEs. From the 1930s onward, the presence of the State in enterprises became even more intense, diversifying beyond public services and adopting a different and planned role: that of investor and even of entrepreneur (Millward, 2005).

In the LAC region, the 1970s oil crisis was partly responsible for accelerating the process of oil company nationalization, as in the case of the Venezuelan government in 1976. During this period, the role of the State as owner was also encouraged, as it was considered to be a fundamental part of the industrialization policies that aimed to substitute imports, create "national champions," and encourage research, development, and innovation. During these years, deficits of the SOEs were not excessive on average, and were covered by transfers from government or by overseas borrowing. However, the

accumulated effects of the oil shock, added to the high inflation rates that forced the United States to raise interest rates, and the spread of the Mexican debt default to the rest of the countries in the region, made it extremely difficult for countries to refinance their sovereign debt. The international capital markets were closed and governments sought new courses of action to finance their deficits and refinance the debt. In Chile and Mexico, aggressive privatization plans were launched as a means of raising funds. It was not only financial problems that drove this wave of privatizations; the conservative tendencies of many governments and the belief that SOEs were inefficient compared to their private sector counterparts went against the role of the State as entrepreneur and accelerated disinvestment in many of the enterprises with state participation (Bortolotti, 2003). This second wave of privatizations began initially in European countries and subsequently spread to developing countries.

Twenty-first Century

A further wave of privatizations occurred during the first decade of the twenty-first century,

profits obtained by the Peruvian government during this period enabled it to obtain levels of borrowing far higher than the rest of the countries. To provide an outlet for the country's entire production, the government embarked on an ambitious plan of expanding the railway network that would connect the dynamic coastal regions with the peasant communities in the high Andean plains. Two main lines were built, one of 170 km and another of 222 km, provided by international suppliers and with Chilean and Bolivian labor. The railway cars came from the sawmills of Chile and Oregon, the flour from Chile's Central Valley (Valle Central), iron bridges, rails, and locomotives from the United Kingdom. A total of 61 bridges and 65 tunnels were built, including the Galerna tunnel at more than 4,500 meters above sea level (Marichal, 2011).

³ This privatization gave rise to the Peruvian Corporation (Corporación Peruana), which "inherited" all the state railways, 2 million hectares of government property, and a series of mining concessions (Marichal, 2011).

mainly undertaken by China and some of the former Soviet-bloc countries. The main characteristic of this new wave of sell-offs was that the majority of them were partial disinvestments.

In some countries, such as Argentina, Bolivia, and Venezuela, after the last privatization spree, nationalizations reversed the sell-offs to the private sector, mainly for ideological and political reasons. The nationalized companies include YPF, Cemex, Lafarge, Holcim, Casino, and others. The history of SOEs resembles the movement of a pendulum that oscillates between creating SOEs or nationalization and periods of privatization, driven fundamentally by macroeconomic shocks but also by ideological currents or different positioning.

Today, SOEs continue to be prevalent. Around 10 percent of the world's largest enterprises in terms of market capitalization and/or asset valuation are state-owned. There are more than 2,000 SOEs in OECD countries. Their sales make up 6 percent of the GDP of all the countries combined. They employ more than 6 million workers, their sales exceed US\$3.6 billion, and they have an estimated value of more than US\$2 trillion. Fifty percent of the SOEs in terms of value and 60 percent in terms of employment are found in the oil, gas, transportation, and public service sectors.⁴

State-owned enterprises in the LAC region are diverse in terms of efficiency and models of

governance. Each country has its own definition of an SOE and of the size of the SOE sector. Only 7 percent of SOEs in the region are listed in the capital markets. This has a direct bearing on their transparency and management. However, those SOEs that are listed enjoy a substantial volume of business and economic importance. In Brazil, for example, Petrobras alone represents 25 percent of the market capitalization on the Brazilian stock exchange, and in Colombia, three SOEs—Ecopetrol, ISAGEN and ISA (Interconexión Eléctrica, S.A)—represent 50 percent of share values in the country.

Seventy-seven percent of the sales of the most important SOEs in the region in terms of market capitalization and/or asset valuation are in the oil and gas sector. Assets of SOEs make up 12 percent of the region's GDP, although each LAC country is different. As shown in the annexes, in Venezuela, sales of PDVSA alone account for 35 percent of the country's GDP, whereas in Peru, this percentage is 5 percent. Between these extremes, the range of possibilities includes Bolivia (30 percent), Ecuador (29 percent), and Brazil (5.65 percent), among others.⁵

⁴ Data from the OECD and the World Bank.

⁵ Data from the OECD and the World Bank.

SOEs: JUSTIFICATION, PROBLEMS, AND EFFICIENCY

Defenders of a state interest in enterprises have generally argued that it can be an instrument for eliminating market failures or for achieving non-economic objectives such as control over natural resources, social and employment objectives, regional policies, and so on (Grout, 2003). Those who argue against state interventionism suggest that its presence responds to ideological motives, which can change depending on whichever elite happens to be in power.

Justifications for the Existence of SOEs

There is agreement in the literature on several justifications for the existence of SOEs, especially with respect to the cases with a defined plan. In other cases, however, the State becomes an owner without a totally defined model, or even a contradictory one in some cases. This role is sometimes forced by the lack of alternatives, and inherited in others. Although the reasons might converge, the groupings or classifications can differ.

Toninelli (2000) mentions three main groups of reasons for the existence of SOEs:

- **Political and ideological reasons.** This was true of the Communist bloc countries and countries in the Western sphere after World War II. The justification lies in the confidence

that public intervention can play a significant part in redistributing power within society, striking a balance in which the private sector cedes part of its power to the working class. It is also a way to make executives or managers accountable not only to their private shareholders but also to society as a whole. This form of public intervention found an echo in European countries with socialist leanings, such as France and the Netherlands, and in countries with fascist regimes, such as Italy and Spain, as a way of building an autarkic state and forcing or guiding society forward to its “higher” destiny.

- **Social reasons.** In this case, the aim is to guarantee full employment, improve employment conditions for the working class, or to improve industrial relations. This happened in France and Italy after World War II. A good example that illustrates the social spirit behind certain SOEs is contained in the declarations made by Austrian chancellor Kreisky in the 1960s regarding the situation faced by certain SOEs: “...I prefer to run a budget deficit of a few billion than to have a few thousand unemployed” (Stiefel, 2000).
- **Economic reasons.** These play a major role in the motivation to create a strong public sector. The most common among them is the government’s attempt to **address market failures**. When there is a lack of information, or when both economic and social externalities are sufficiently important, then state intervention

becomes necessary. Natural monopolies, such as electric power markets, are the most specific case, in which state participation ensures—in principle—fair and affordable tariffs and adequate service quality. In cases where these markets are opened up to the private sector, then some kind of regulator becomes necessary. This figure must be sufficiently strong and enjoy government backing to guarantee that prices and tariffs are not abusive and to monitor the level of service quality and the profits generated by the private sector. For these reasons, the existence of SOEs in natural monopolies will always be necessary while a regulatory framework is being developed and a regulating body is trained to prevent the aforementioned excesses and defects.

Another economic motive is **promoting economic development and social transformation in underdeveloped areas**. For example, efforts are made to ensure that the exploitation of natural resources remains the exclusive preserve of the State (e.g., in France, the Netherlands, Italy, and currently in nearly all LAC countries). Likewise, infrastructure development responds to the State's wishes to bring economic development via SOEs. This happened in Germany in the railway sector and in the United States and Italy with roads and highways.

A third economic motive is to **bail out** companies that would simply go under without state intervention. The fundamental reason here is social concern; in other words, the potential loss of countless jobs if the State fails to come to the rescue. This occurred, for example, with the temporary nationalizations of Rolls Royce, Jaguar, and Rover in the United Kingdom during the 1970s; in Spain from the 1950s onward; and a few years ago with General Motors in the United States. Nationalization has also been justified for

strategic and political reasons, as seen recently in Argentina, Bolivia, and Venezuela.

Each country justifies the existence of its SOEs based on different criteria. In Hungary, for example, the law defends their existence to acquire the corporate assets needed to execute functions assigned to the State, such as meeting social needs or pursuing political-economic aims. In Israel, a prior analysis is made of the products or services that might be satisfactorily supplied by the private sector. Norway firmly believes that the State can be as good a capitalist as anyone. It justifies the State's presence as necessary for redistributing actors throughout enterprises and for keeping companies in Norwegian hands to address market failures or safeguard revenues that accrue from the exploitation of natural resources. In the Netherlands, SOEs are present mainly in the infrastructure sectors, often as a consequence of the public-private partnerships that initially developed the projects. In New Zealand, where SOEs are not considered to be the best alternative, their existence is justified in cases where the public interest cannot adequately be protected using available instruments, such as regulation.

However, market liberalization, the study of the political economy of the SOE, and questions about their management have caused controversy about whether SOEs are the ideal way of solving the problems that in theory should be resolved by their creation.

The Problems of SOEs

SOEs suffer from, or can present, a series of problems, which can be classified into four groups: (i) political, (ii) financial, (iii) managerial, and (iv) regulatory. As will be shown below in more detail, some of these arise from the production

of goods and services that fail to correspond either with those conceived when the enterprise was established or with citizen demands—as in the case of the former Soviet Union. These problems can distort the productive process, with locations that are decided for political reasons—as in the case of Airbus—or that facilitate political favoritism and corruption, as occurred recently with Petrobras. Moreover, they are intimately interconnected, and in many cases it is hard to define when they are a cause and when an effect.

The fact that the owner of the SOE is public might lead to the problems that are detailed below. In this type of enterprise, the special public nature of its owner, above all in the political sense, strongly influences the way it acts. The owner's political nature has an immediate effect on the willingness to adopt a suitable regulatory framework. Both of these circumstances will determine the obstacles that the management has to face, which will eventually translate into financial problems that will naturally affect the SOE's efficiency.

Political problems. The fact that the owner is political means that the following problems of ownership have a strictly political character when it comes to SOEs. The forms that these problems take are diverse: direct or indirect subsidies, rent seeking, or preferential treatment, both regulatory and financial.

In the first place, there is a convergence of **multiple initial objectives, both economic and social** (there might not be a direct link between the subsidies received and social objectives), which might be contradictory and even erroneous. A lack of **definition of and compensation for social objectives** might have undesirable effects. These include larger deficits and higher borrowing by selling at below cost to make the service

or product affordable, increasing shortfalls in services due to lack of investment, erroneous investment decisions due to lack of incentives, or a waste or incorrect use of resources. Objectives are defined in many ways. They can be specified in performance contracts signed by the government and the enterprises, or the board of directors, or the owning entity or entities might define them. The objectives are financial and social. The way in which social objectives are tackled (using subsidies, for example) can create bottlenecks throughout the economy. Furthermore, if the service users are large institutions or enterprises, then the access and benefit-sharing effect is not the desired one, and even greater inequalities will result if the tax system is regressive. Managing the variety and contradictory nature of these objectives is one of the main challenges faced by SOEs (World Bank, 2006).

The way that social costs are covered differs by country. In Israel, for example, public monopolies negotiate tariff structures with regulators, enabling them to cover their operating costs. In New Zealand, Television New Zealand receives around NZ\$10 million for developing and broadcasting local programs (Luke, 2010). In fact, Millward (Millward, 2005) argues that one of the causes behind the deregulation and privatization phase since 1990 was, to a large extent, the complexity and variety of the objectives set for some SOEs. This led many of them to fail to meet the minimum requirement of financial equilibrium, with the consequent effects on borrowing and deficits for the countries in the region; therefore, a current of opinion began to favor solving the problem by allowing the private sector to take over management in certain sectors. A further problem is the so-called **third agency problem** (Penfold et al., 2015), in which the objectives of the government differ substantially from those of the ultimate owner (i.e., the citizen).

In second place is the **issue of ownership**. Another typical political problem is the **existence of various owners** with different strategies, which is known as the common agency problem. This is the classic case of decentralized management models, usually caused by the lack of a coordinated strategy among the owners. For example, the objectives of the treasury are sometimes in direct conflict with those of the line ministries. Although the **principal-agent** problem has a direct effect on management, its origin is the lack of leadership by the owner or failure to exercise its role. This creates a divergence of goals in which the executive unit focuses on pursuing its own objectives, which do not coincide with the owner's goals. When an enterprise's objectives are ambiguous or contradictory, executives and managers tend to lead the company toward their own interests (Jensen, 2000). Another political problem is failure to **separate the figure of the regulator from that of the owner**, which can lead to conflicts over roles and prices.

Finally, the most visible and sensitive political problem for the public is **corruption**. Recent research carried out by the Pew Research Center rates corruption as one of the problems that citizens find most alarming, and finds that this alarm is growing. In its first report on international bribery, the OECD (2014) analyzed 400 cases. One of its conclusions was that most bribes were given to managers of SOEs, closely followed by customs officials.

Regulatory problems. For SOEs to operate well, the regulatory framework has to envisage the enterprises and their relationship not only with the owner but also with the rest of the actors. On the one hand, there may be a lack of regulation in terms of responsibilities, favorable treatment given to some SOEs when it comes to observing certain regulations, coexistence of the public

and the private sectors, protection of the rights of minority shareholders, or even how to restrain governments from using SOEs to avoid complying with certain rules. On the other hand, many SOEs are not regulated, and there is a lack of regulatory institutions.

Financial problems. For all these reasons, SOEs in general have less discipline and control, which leads to a lack of adequacy and allocation of responsibilities. The problem of the so-called "soft" budget is well known: since the State is the owner, there is no real risk of bankruptcy, given that the State will always come to the rescue in the event of financial problems. SOEs have enjoyed privileged access to government guarantees or credit, low- or even zero-cost funding, and so on.

This situation has many consequences for SOE management. It eliminates proper incentives, the workforce is oversized, there is friction in terms of responsibilities, business decisions are made without taking standards of efficiency into account, and fiscal risks are increased, either through sovereign guarantees (explicit or implicit), or unnecessary borrowing.

Management problems. This type of problem can be generally divided into two groups. First, in most SOEs, responsibilities are diluted and are therefore less demanding. The lack of clear objectives, defined owners, and structured information systems means that the responsible persons are not identified and a certain disorder prevails. Second, the incentive policy is deficient at all levels, starting with the owner, followed by the board of directors and the management team, and finally, the workers. Added to this is the lack of training programs and of the means of monitoring the executives, who are less exposed to the discipline and the learning process that occurs in the private sector.

The result is that SOEs lack the means to attract talent. Common examples in SOEs are seen in enterprises with more workers than necessary, with both low- and high-paid workers who earn better salaries than their peers in the private sector. This has an additional effect because SOEs face restrictions with respect to staff reductions, regardless of their productivity. Budget limitations preclude providing attractive monetary incentives to motivate people. At the same time, the soft budget produces a perverse effect, as workers and executives have no incentive to improve their performance. Finally, due in part to political interference, there is no training, especially in cases in which executive appointments are made within the government's administrative apparatus, with little attention to merit, experience, or the knowledge needed to perform commercial, technical, and social functions.

Public vs. Private Efficiency⁶

There is no conclusive empirical evidence showing that SOEs are more or less efficient than private enterprises. However, it seems that, in view of the aforementioned obstacles, it is more difficult for SOEs to achieve their initial objectives.

An SOE is not inefficient by definition. Numerous examples bear this out, such as the United Kingdom's BBC or Medellín's Public Enterprises (Empresas Públicas de Medellín). According to Trebat (1983), the financial efficiency and rapid growth of Vale, a Brazilian SOE, were due largely to its autonomy from the federal government. The management team had considerable experience in the enterprise, they were not appointed by the government, and their incentives were results-based, with salaries comparable to those in similar private sector enterprises. Subsequent progress in the company's trajectory has not been, however, entirely satisfactory, due to the

changes in management introduced by governments with different approaches.

Despite the undeniable individual successes, which have been less frequent than is desirable, the fiscal effect of SOEs has turned out to have grave consequences in some cases in the LAC region.⁷ This is not due, however, to the amount of external resources but rather to how they are invested and how they affect economic growth. It is a matter of management efficiency, regardless of who is managing the resources (the public or the private sector).

Results in the LAC region in terms of profitability are varied, regardless of sector or country. Figure 1 presents returns on sales (ROS), returns on assets (ROA) and returns on equity (ROE) of the largest LAC SOEs.⁸ The enterprise Petroecuador has been excluded to achieve a more accurate comparative view of the remaining enterprises included, given that its data distorted the figure (ROE = 195.89 percent).

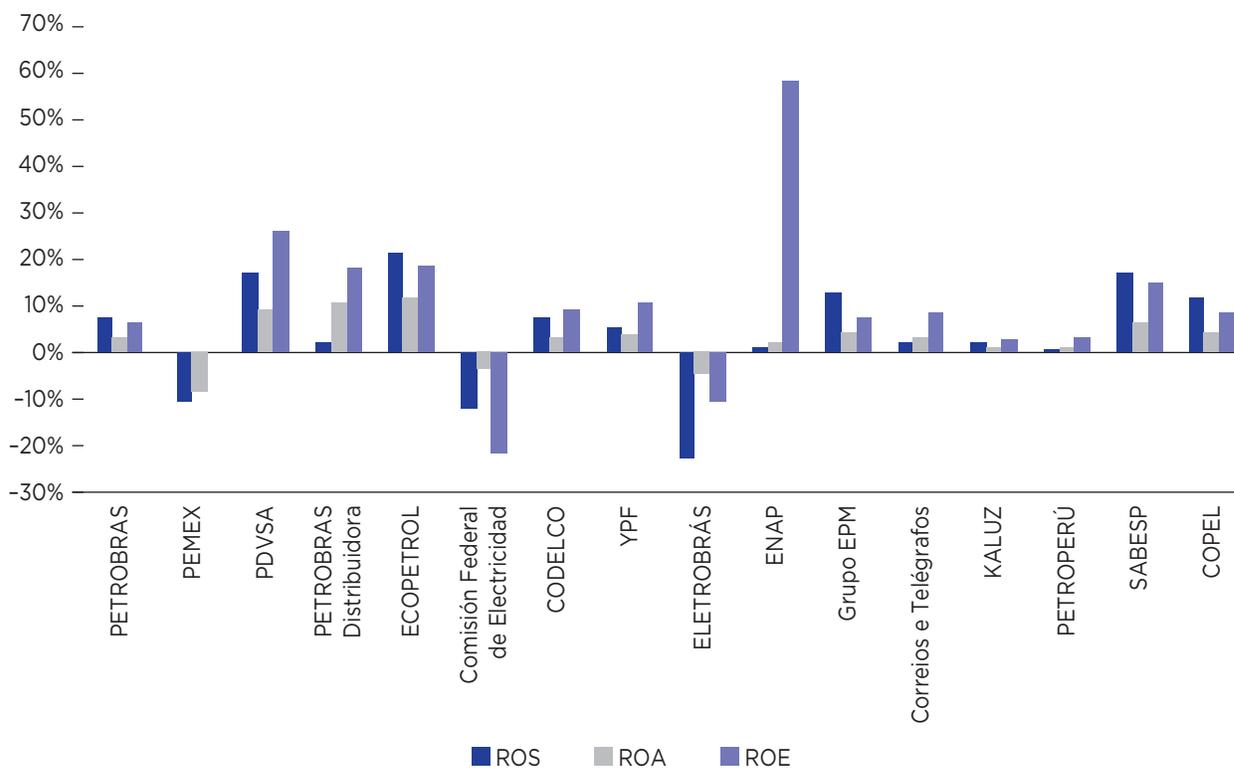
In the oil sector, the results achieved by SOEs in the region are disparate, with some SOEs very profitable and others less so (*América Economía*, 2013).⁹ However, if the largest LAC oil sector

⁶ Whenever SOE efficiency is discussed, despite the breadth of the term in itself, in general it is always financial efficiency that is meant. Although SOEs often do have social objectives, the lack of qualitative information and the impact and the comparability of the financial data mean that generally the concept of SOE efficiency refers to financial efficiency.

⁷ For example, the cases of PEMEX, or ENAP in Chile are significant with regard to the level of borrowing reached, 113 percent and 99 percent in 2012, respectively (*América Economía 2013*: http://rankings.americaeconomia.com/2013/ranking_500_latino-america_2013/propiedad-mayores-estatales.php).

⁸ See the annex, which includes more details of data relating to the largest SOEs in the LAC region.

⁹ http://rankings.americaeconomia.com/2013/ranking_500_latinoamerica_2013/propiedad-mayores-estatales.php.

FIGURE 1: Profitability Ratios of the Largest SOEs in the LAC Region

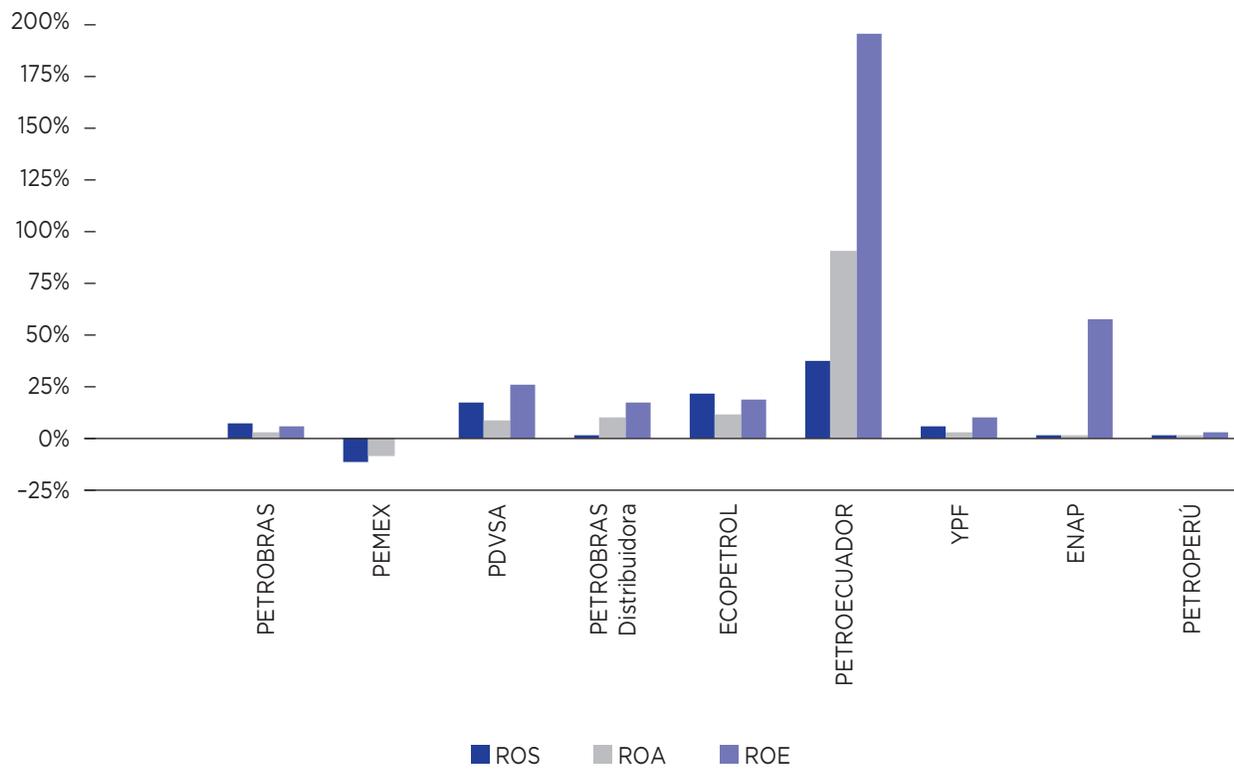
Source: Author's elaboration.

enterprises are compared with their private sector equivalents worldwide, it is notable that the private enterprises achieve more homogeneous results within more limited ranges while the results for SOEs are more random. Although this is insufficient information on which to draw conclusions, analysis of the problems of SOEs demonstrates that this behavior might respond to the multiplicity of objectives and/or to the different strategies of the owners and, therefore, to any of the various consequent effects. For their part, private enterprises only answer, in simple terms, to a single objective—profitability—and to a sole owner.

The search for SOE efficiency resides initially in the theory that any enterprise with at least some commercial interests, whether public or private, will operate more efficiently when it attempts to

maximize profits in competitive markets—under the management of directors who have the capacity, autonomy, and motivation to respond to market signals—and assuming that enterprises that fail to compete go bankrupt (Shirley, 1989). On occasion, social objectives have served as an excuse to justify lower efficiency, but the reality is that efficiency must be measurable in all objectives.

A wide range of literature attests to the lower efficiency of SOEs and to the problems associated with them: Boardman (1989), Muir (1995), la Porta (2002), Chong (2003), and Gómez Ibañez (2006). In a study by Goldeng, Grunfeld, and Benito (2008), two alternative measurements of results were employed: return on assets and operating costs as a percentage of sales. Regardless of the measurement used, SOE returns were

FIGURE 2: Profitability Ratios of Oil Sector SOEs in the LAC Region

Source: Author's elaboration.

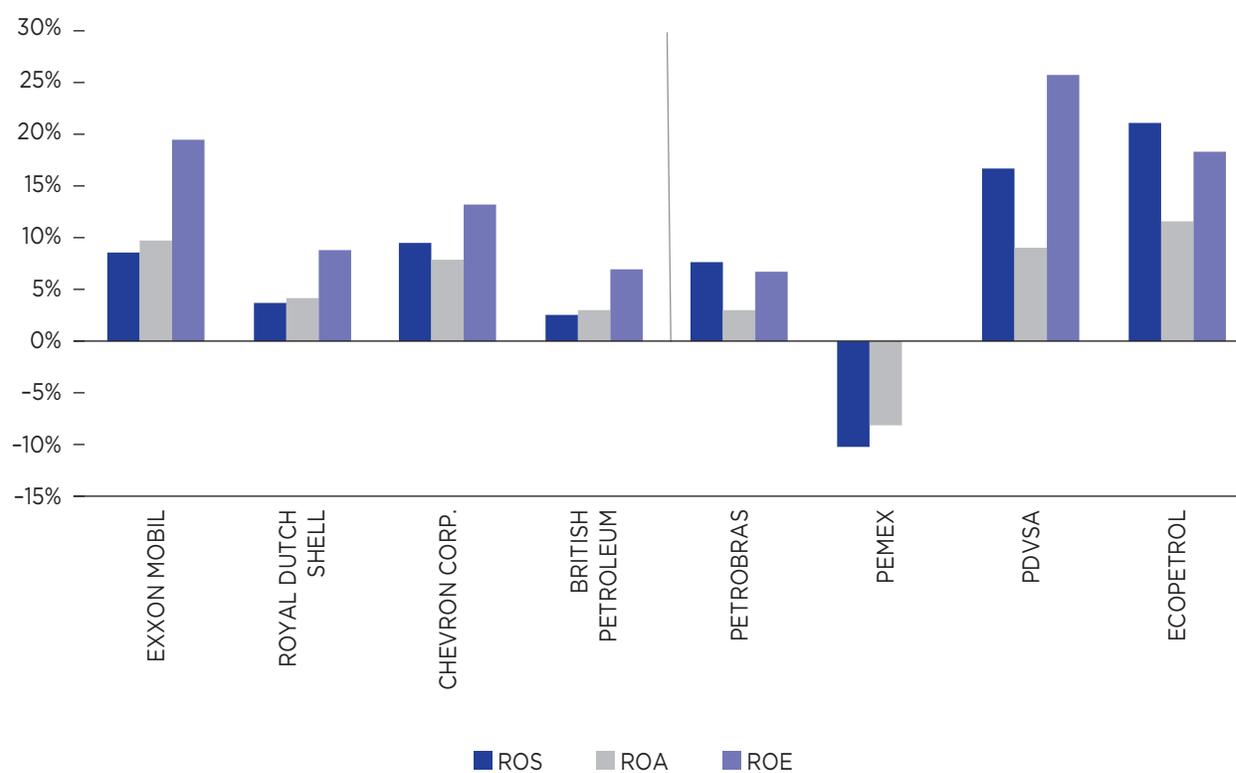
lower than those of private enterprises after controlling for market structure. Likewise, the study shows that performance is positively correlated with market share and concentration, from which it can be deduced that market structure (i.e., the level of competition) affects performance. Based on this conclusion, a plan of action could be devised that is consistent with the need for markets to be competitive and, therefore, that government, via public policies and regulation, should encourage competition in general and within the sphere of SOEs in particular. The study also suggests that greater market competition is less harmful to SOEs than to private enterprises.

Furthermore, general economic theory suggests that a lack of competition can improve results of enterprises in those markets due to higher prices

or lower levels of service provision. Competition drives down prices and, as a result, reduces compensation for the owners in the form of dividends. Consequently, empirical analysis of the relationship between ownership, the executives, and the performance of the enterprises has to take into account the structure of the market in which the enterprises are competing.

Some research suggests that the quality of the goods or services supplied is inversely related to the indicators of efficiency, especially for businesses—whether public or private—that are not operating in situations of strong competition (Vergés-Jaime, 2014).

With regard to the owners and their effects on the behavior of the enterprises, some studies

FIGURE 3: Comparative Profitability of the Largest Private Oil Companies vs. SOEs in LAC

Source: Author's elaboration.

on corporate governance claim that the type of ownership clearly affects efficiency (Januszewski, 2002) (Thomsen, 2000). The combination of factors regarding the type of ownership and the degree of competition is the most important element in predicting business efficiency. Similarly, there is a noticeable reduction in productive efficiency in private enterprises that operate as monopolies.

The effects of the aforementioned problems notwithstanding, recent studies suggest that the older literature fails to offer conclusive evidence regarding the difference in results achieved by SOEs and private enterprises. Sector-based studies, however, find more cases in which private enterprises are more efficient. Shirley and Walsh (Shirley, 2000) find that, of the 52 studies

they examined, five indicate that SOEs outshone the results obtained by private enterprises. In 32 cases, the private enterprises performed better than the public ones, and in 15 others there was no clear difference between the two. Ashworth and Forsyth (1984) discuss the curious case of the efficiency of different airline companies, highlighting the low efficiency of British Airways in terms of revenues/costs during its pre-privatization period. The study also reveals that the most efficient airline company worldwide, according to the same indicator, was Air Canada, which is also owned by the State.

However, in cases where the SOE is inefficient—in either absolute or relative terms—the government must implement the necessary measures to remedy the situation. This is true of Malaysia's

oil and gas SOE, Petroliam Nasional Berhad (Petronas), which at one point initiated an operational excellence program focused on improving technical capacities and encouraging a better work culture at its plants. After five years, the campaign had generated more than US\$1 billion in savings and new sales, and its productivity indicators had risen to among the highest in the sector (Budiman, Lin, and Singham, 2009).

In the 1980s, New Zealand carried out a substantial government reform aimed at improving public sector efficiency and effectiveness. The reform was consistent with the international public sector management trend that sought to equate public sector management with private sector practices. However, in this case, the focus was on improving results in combination with an effective use of public resources. SOEs were therefore clearly envisaged. According to the decree on state-owned enterprises enacted in New Zealand in 1986, the main aim of all SOEs is to operate as a successful business and, therefore, to be as profitable and efficient as any business not owned by the State, to be a model employer, and to demonstrate a sense of social responsibility by respecting the interests of the community in which it operates and making the necessary efforts to acknowledge these interests and promote them whenever possible. Other conditions of the reform were that SOEs must be self-financing, that there must be a clear separation between the management and the government or State, the State must act as a purchaser of products or services rather than a provider of them, and all contracts and incentives must be results-based.

New Zealand's reform is considered to be a success (Easton, 1999; Scott, 2001) and a practical example of New Public Management (Polidano, 1999), resulting in increased efficiency in public

service provision. SOEs, therefore, are not more or less efficient per se. Efficiency depends on the country, the markets in which they compete, the regulatory framework, government intervention, temporary conditions, and so on. However, a series of questions that affect efficiency must be addressed.

Improving SOE efficiency will yield benefits, such as increased profitability, which brings additional and scalable improvements in the government's financial position. These improvements contribute to higher productivity and economic activity, redistributing resources throughout the SOE sector and the economy in general. There are many approaches to improving SOE efficiency. The accumulated experience of the World Bank (Shirley, 1989) has amply demonstrated that in most cases, efforts to improve SOEs in an individualized manner have been significantly undermined by defects within the overall public policy and oversight scheme. Individual reforms often fail to make a rational analysis of the very existence of SOEs or of the relationships between governments and enterprises.

Reforms

In recent decades, various reforms have focused on restructuring the SOE sector. They were designed to either make it more efficient or prevent it from becoming a problem. These reforms can be classified into three general areas:

- Privatization
- Reorganization of the owner's role
- Improving corporate governance

The effects of these reforms have been limited, and many of the problems persist. The problems faced by SOEs during different phases coincide to a certain extent, and they have been tackled

in different ways and with varying degrees of intensity. The role of the State in enterprises is experiencing a resurgence. This calls for a thorough review of the role of SOEs and their dominance in certain sectors to eliminate both the inefficiencies of these enterprises and those of the system and its ecosystem. Within the Trans-Pacific Partnership,¹⁰ one of the central and most controversial issues is the favorable position of SOEs in terms of competition compared with private enterprises, due to regulatory or financial advantages, at the national level but especially at the international level in free trade agreements. The discussions will undoubtedly affect the profile of SOEs in the rest of the world.

The Pillars of State-owned Enterprises, the Ecosystem, and its Reforms

The SOE sector must be reviewed from a comprehensive and inclusive perspective. This paper analyzes the three main pillars of SOEs that comprise their main aspects and that represent the three principal and crucial areas for improving processes, procedures, and responsibilities.

In each pillar, all of the actors involved in the operation of SOEs must be understood. This approach and analysis will then classify the actions and reforms that derive from the circumstances in each area.

This is a holistic analysis that enables the sector to be understood in all its dimension and complexity, analyzing all participants in each pillar and every relationship, to identify shortcomings and ways to improve them. The necessary reforms suggested by the analysis will take into account both the group and the final objective, avoiding isolated and isolating interventions, and enabling an individualized prioritization according to the needs and resources of each country. For more details, see Annex 4.

¹⁰ The Trans-Pacific Partnership (TPP) seeks to reach trade agreements that open up markets, establish high commercial standards, and address the challenges of the global economy of the twenty-first century. It is made up of Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam, and the United States.

STATE-OWNED ENTERPRISE MANAGEMENT MODELS

The owners of SOEs employ different management models, which depend on a variety of factors (level of economic development, size of the SOE sector, institutional development, etc.). These factors affect the degree of responsibility within each model. In general, there are three models: centralized, decentralized, and dual. Because of its potential advantages, the current trend is toward the centralized model. This is reflected in the OECD guidelines on Corporate Governance of State-owned Enterprises, first published in 2005 and recently updated (OECD, 2015).

The following table sets out the characteristics of the three models, in three domains: regulatory framework, operational efficiency, and governance. These characteristics are explained more fully below.

In the three models, at some point in their development, the modality of performance contracts has appeared as an instrument for improving monitoring and efficiency, either in isolated cases or as an intermediate step toward more centralized SOE management. The results have been uneven, and the limited effect might be related to a piecemeal approach, which is not part of a long-term reflection (Annex 3 includes a more detailed analysis).

Decentralized Model

Concept

In the **decentralized model**, different agents (ministries) take responsibility for managing and overseeing the enterprises. There might be a wide range of requirements and relationships with other parts of the administration. This is true of the majority of LAC countries.

Advantages

The main advantage of this model is that the SOE depends on the line ministry. In its role as owner, the ministry already has experience in the sector (Forfás, 2010). Nevertheless, although this experience is necessary, it may not be sufficient.

Disadvantages

The main drawbacks of this model are the following:

- The functions of owner, regulator, and public policymaker are merged into a single figure (OECD, 2005b; Vagliasindi, 2008).
- There is a lack of harmonization, in terms of structure and timeframes, of cross-cutting operational and governance policies; monitoring

TABLE 1: Main Characteristics of SOE Management Models

		Management Models		
		Decentralized	Dual	Centralized
Pillars	Regulatory Framework			
	Legislative and regulatory uniformity	-	-	✓
	Harmonization of corporate legal forms	-	-	✓
	Operational Efficiency			
	Management capacity	-	-	✓
	Sector knowledge	-	✓	-
	Application of cross-cutting policies and governance	-	-	✓
	Economies of scale	-	-	✓
	Fiscal and financial discipline	-	✓	✓
	Governance			
	Comprehensive vision	-	-	✓
	Harmonization of objectives	-	-	✓
	Separation of regulator and owner	-	✓	✓
	Separation from political power	-	-	✓
Reduction of agency problems	-	-	✓	
Facilitates monitoring and evaluation	-	-	✓	
Coordination with the ecosystem of actors	-	-	✓	
Better information and transparency	-	-	✓	

Source: Author's elaboration.

systems are dispersed and piecemeal (Shirley, 1989).

- There is political interference (Vagliasindi, 2008).
- There is a lack of transparency (Guberna, 2014).
- Management capacity (commercial, financial, etc.) is weak.
- The model suffers from a lack of monitoring and oversight of the group and of a comprehensive strategic approach.

Dual Model

Concept

In the **dual model**, one or more ministries, such as the ministry of finance or the relevant line ministry, exercise specific ownership functions. This is the model found in countries such as Brazil, Bulgaria, Mexico, Vietnam, and others. Whether this resembles a more centralized or a decentralized system will depend on the

functions assumed by each ministry. In New Zealand's, where the Treasury and the Ministry of Public Enterprises are responsible for SOEs, functions and responsibilities are coordinated and distributed, and whenever overlapping occurs, the leadership role is defined. The Treasury takes the lead in fiscal and economic affairs, and the Ministry of Public Enterprises focuses on commercial issues and results. Each ministry's functions and responsibilities are clearly described, and both share ownership of the SOE on equal terms.

Advantages

The main advantages of this model are that ownership is shared among more than one ministry, which means that a certain fiscal and financial discipline can be maintained (Vagliasindi, 2008), and that there is a possibility of a balanced share of functions, responsibilities, abilities, and coordination (Luke, 2010). Finally, the problem that the regulator and the owner are one and the same can be mitigated under this model (Vagliasindi, 2008).

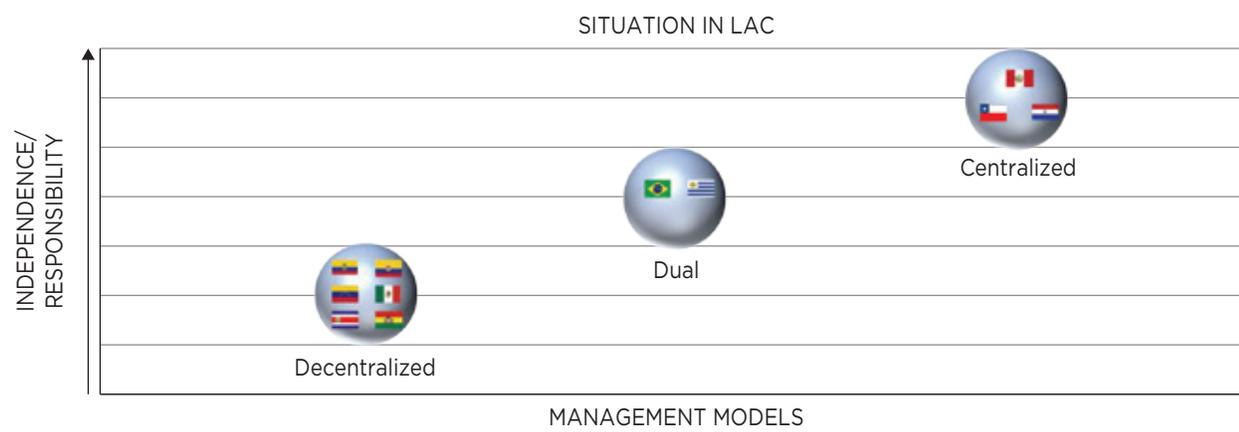
Disadvantages

The model's disadvantages are the following:

- There are multiple owners, which can lead to numerous and, in some cases, contradictory objectives (Tirole, 2001).
- There is a potential increase in the chances of political interference (Forfás, 2010).
- It may aggravate the agency problem, making the allocation of responsibilities, and therefore decision making, more difficult.
- Coordination becomes more complicated due to multiple ownership.
- There is the possibility of an imbalance between the capacity to take action and the responsibilities of the two ministries involved.

The reality is much more complex than this classification, because there are variations that are hard to classify or that fall between the models. Most LAC countries follow a decentralized or a dual model. Only Chile and Peru clearly fall within the centralized model group. Paraguay may also belong to the latter, as its board

FIGURE 4: SOE Management Models in LAC



Source: Author's elaboration.

(*consejo*) model shares certain characteristics with the centralized model but lacks many of its advantages.

Neither the decentralized nor the dual model seems to be ideal when it comes to avoiding

most of the problems described above, because they fail to take into account the aforementioned pillars and disregard or exclude some of the actors in the ecosystem. The centralized model may be the best alternative for solving most of the problems faced.

CENTRALIZED MODEL: CONCEPT, ADVANTAGES, DISADVANTAGES, AND KEYS TO ITS SUCCESS

5

Concept

The essence of centralized models is that they have a sole owner. They can be classified into three categories according to their degree of separation from political power:

- **Ministry:** the function of ownership is exercised by a department or directorate. This is the model that enjoys the least political independence. The employees are usually civil servants. This is the model found in France, Paraguay, Poland, and South Africa.
- **Agency:** this model is characterized by greater independence than those owned by a ministry, normally within a framework of public legislation. This is true of China's SASAC or the SEP in Chile.
- **Holding company:** this is usually regulated by private law and enjoys budgetary and managerial independence. Hungary, Peru, and Spain follow this model. One variation adopts the form of an investment company, which often acts like a private equity fund. This is the model adopted in Finland, Malaysia, and Singapore. Development banks, such as the BNDES in Brazil, would also have to be included in this category because, in addition to performing the functions of financial entities by lending, they act as owners via shares of capital while, operationally speaking, they resemble a holding company.

Holding Companies

Among centralized management models, holding companies might be considered the purest type since, at least theoretically, they are allowed to act with greater independence from political power and they enjoy the appropriate legal status, budgetary independence in many cases, and the required distance from the agency responsible for both regulation and public policymaking. Holding companies are entities set up by the State with the aim of directly financing new SOEs or of merging existing ones by acquiring their shares and thereby exercising greater control over their financial resources and/or management or operational monitoring (Witker, 1979).

A report published by the Swedish government in 2005 concerning liberalization and regulation underlines the fact that public holding companies must have an owner within the government that is separate from the line ministry responsible for regulation. A 2012 report on governance of the ownership of central government assets pointed out the need to establish an independent professional organization for corporate operation and administration. This instrument would connect the strategic and political governance of Parliament and the government, on the one hand, and the portfolio of SOEs, on the other, with the aim of creating value and

managing operational governance (Detter and Folster, 2015).

This is a pyramid structure in which the organization of proprietary management, with the president or executive director at the head of the board of directors, is found at the apex, and the SOEs that belong to the group are at the base of the pyramid.

According to the classification in the box below, which remains valid despite the passage of time, the passive holding company seems to work best in more advanced economies and in cases in which there is a single, fundamentally financial objective. In the public sector, the active holding company model seems more appropriate. In addition, the model's greater exercise of control can be more suitable when there is a lower

Box 1. Types of Holding Companies

Two types of holding companies can be identified according to their share and influence in the enterprises of the group:

- **Passive holding company**, in which the shareholder is limited to activities such as appointing directors and approving the accounts and the financial statements of the subsidiary enterprises. It acts as any other shareholder does in a limited company. In these cases, the key moment is the shareholders' board meeting, where the aforementioned activities are carried out. To summarize, the passive holding company concentrates on, and is limited to, the financial aspects of management. In this way, the holding company seeks to maximize the group's financial position to create economies of scale that endow greater negotiating power and better financial management for the group. Depending on the degree of monitoring exercised, when control is strictest, financial activity may be centralized, in which case the holding company performs and centralizes treasury functions. To carry out these activities, the holding company normally harmonizes accounting and financial information rules and procedures. With regard to the independence of this type of holding company, and to the public policies established for the subsidiaries, they become a mere transmitter of government directives, without entering into the discussion about them.
- **Active holding company**, which exercises stricter control over the activities of the enterprises of the group. One of its fundamental characteristics is setting goals for the subsidiaries. To guarantee compliance, a set of regulations is established that ensures both the adoption and the achievement of the objectives. In this way, the holding company approves the plans to be executed, with the appropriate investment and operational budgets. For plan monitoring purposes, the enterprises of the group are obliged to supply the required information within the agreed timeframe. This type of holding company focuses on results-based monitoring, management monitoring, and unified management of the group. One of its aims is to benefit from the economies of scale that might arise from the size and scope of some of the activities, in the areas of research, procurement, and sales, among others. In the case of procurement, better prices are obtained than when acting individually, more reliable and better quality supplies are provided, and more coherent procurement policies are set. With regard to independence, these holding companies act as genuine interlocutors with the government rather than passive transmitters of its policies.

Source: Vilorio (1984).

degree of development and training and there are objectives other than strictly financial ones.

Advantages of Centralized Models

Centralized models can help to overcome many of the problems that affect SOEs. Despite the fact that some help to resolve more than one problem, they are classified here according to these problems, and are therefore divided into political, regulatory, management, and financial advantages.

Political Advantages

- **They offer a chance to profoundly rethink the SOE sector.** When a country considers moving to a centralized management model, a unique opportunity arises to analyze its structure, size, and sectors and to decide whether or not all of its elements make sense, in which sectors the public sector is seeking to act, to what extent, and so on. This can be done as soon as the decision-making capacity is concentrated and the entire SOE sector is under the same leadership.
- **They make political interference more difficult,** because there are more intermediate levels (Fan, Wong, and Zhang, 2012) while shielding political power from the negative impacts of SOEs. In short, they limit political infiltration. One of the major advantages of centralized models, especially when an autonomous entity, agency, or holding company exercises property rights, resides in the separation of these rights from regulatory functions or from public policy. When the centralized management designs the policies adequately and links incentives to results, then the responsibility is limited; therefore, there is a much lower risk that governments are affected by inappropriate behavior or a lack of efficiency in pursuit of

the objectives designed for the SOE, because the responsibilities are distributed ex ante in a transparent way, and the responsible individuals are clearly identified. In a decentralized or dual system, those ultimately responsible are always ministers at the head of the owner ministries. The existence of more intermediate levels likewise permits greater protection from political power for SOE activities.

- **They solve the problem of multiple SOE owners and mitigate the agency problem between shareholders and executives** (Jensen and Meckling, 1976). Companies with different and dispersed shareholders face governance challenges that can only be addressed by a well-developed institutional framework, whether they belong to the public or the private sector. In the case of SOEs, the owners might be one or various ministries, an entity designed for that purpose, or a system that combines any of the aforementioned options. When different owners converge in the same SOE, interests come into play that do not necessarily coincide and might in some cases conflict. In general, it is difficult to reconcile the objectives of finance ministries with those of line or sector ministries. The ministry of finance will in theory promote a dividend policy aimed at maximizing revenues for the treasury and controlling borrowing levels, whereas, in the case of, for example, electrical power suppliers, the ministry of energy will be more concerned with service quality, proposing investments to maintain and improve quality, and seeking to increase service coverage, even when profitability is limited or nonexistent. It may therefore promote subsidies to reach the desired levels. It becomes clear that their objectives may not be compatible, and an agreement between owners must be reached. This is, without a doubt, a multiple agency problem at different governmental levels.

In centralized management models, the entity that exercises the ownership functions is responsible for designing a common strategy—with peculiarities adapted to each enterprise (growth, characteristics, industry)—that can be applied throughout the entire group under the same management. This fosters financial discipline, avoids unfairness, and allows the board of directors some discretionality, although they must always justify their decisions.

- **They facilitate the separation between ownership and regulatory functions** (Ang and Ding, 2006; Feng, Sun and Tong, 2004; Singh and Siah, 1998). The fact that the centralized body is granted more distance and independence makes it less likely that the functions of the enterprise and its regulatory body will overlap. In cases where there is no independent regulator, this is more obvious; however, even when there is one, the fact that ownership of the SOE is exercised by an entity that is not linked to the line ministry reduces the possibilities of conflicts of interest, given the common relationship between regulators and line ministries.

Regulatory Advantages

- **They enable a uniform legal and regulatory framework to be established.** Grouping SOEs under the same umbrella makes it easier to homogenize legal formulations. In the same way, accounting and financial rules that affect the entire group and enable a transparent view of its situation can also be established, thereby facilitating comparability and decision making.
- **They facilitate a uniform corporate governance policy in both substance and over time.** Centralized models enable the same level of corporate governance to be established

in all SOEs and facilitate harmonization of guidelines. Moreover, in cases where the centralized model adopts an entrepreneurial form, a second corporate level is created, which is the central unit's board of directors. A good example of this is Temasek (Singapore), some of whose SOEs have received several national and international prizes for corporate governance (Dhanabalan, 2002).

Management Advantages

- **They analyze SOEs from a joint perspective,** unifying areas that need reviewing and that, as they are cross-cutting and/or common to all, enable an approach that has greater economic impact and longer duration. The fact that all or most SOEs are under the same umbrella means that better knowledge can be gained about the behavior of the group and its effects, its needs, and the available resources. SOEs can therefore be managed in a more uniform and coordinated manner, since they are all subject to the same rules and directives, while enabling comprehensive investment prioritization. Often an enterprise may still be listed in the public inventory as a consequence of a historical legacy, although the function it fulfilled in the past is no longer valid. Likewise, questions such as whether the products or services provided by the enterprise should remain in public sector hands, whether the market failure persists, or whether the State should maintain full ownership can be reconsidered. The centralized model can facilitate the assessment of whether to allocate new functions to an SOE.
- **They offer greater independence and management capacity.** As a consequence of the new legal structure and positioning on the organizational chart, centralized models help to improve SOE management, coordination,

and monitoring and can avoid leadership that is badly focused or exercised based on exclusively political criteria.

- **They encourage specialization and competition.** Centralized models are capable of attracting staff who are more adept at business functions than civil servants. Holding company executives usually have better technical and management training and are not restrained by budgetary limits, which can favor the attraction of talent. At the same time, transparency in setting goals and responsibilities means that, on the one hand, the public can be informed regarding how public money is being spent and, on the other, all personnel understand what is expected of them. This will lead to an appropriate, efficient, realistic, and motivating incentive policy.
- **They facilitate the definition of objectives, the implementation of incentives, and the allocation of responsibilities.** The fact that the functions of owner and public policymaker can be separated and that there are no multiple owners following disjointed strategies facilitates management policy design and the identification of objectives and responsible individuals. Identifying the objectives and the people in charge will lead to better monitoring and help establish in detail the reasons for failure to achieve goals, should this happen. This is true, for example, of UK Shareholder Executive (ShEx) and Finland. With regard to the objectives, centralized models can help differentiate between social and economic impacts, thereby measuring them and providing differential financing. This has occurred in Chile and Peru.
- **They lead to better information and greater transparency.** The obligation to disclose, through reporting, is more advantageous or appropriate in the case of centralized models. These models enable all necessary and

relevant data to be gathered and standardized, which leads to better decision making. It also facilitates both the individual and the collective view, enabling data comparability and combination. All of this contributes to greater transparency (as in France, Hungary, and Norway). In this way, enterprises listed on the stock market are subject to much closer scrutiny than unlisted companies. This helps shareholders to monitor their evolution and performance and to evaluate their behavior and management teams. This also applies to listed SOEs. In view of the fact that these demands help improve business efficiency and transparency, this scrutiny should be applicable to all other SOEs. Listed enterprises should report their financial statements in accordance with the International Financial Reporting Standards (IFRS), or similar standards. Unlisted SOEs should follow similar rules for the sake of uniformity and comparability, which will facilitate analysis and monitoring by those responsible for ownership. In centralized models, such as those in Peru and Spain, all enterprises within the group follow the same accounting standards, and there is usually a specialized department responsible for accounting functions and financial consolidation within the owning agency.

- **They offer better monitoring, evaluation, and oversight systems.** As a consequence of clearly defining responsibilities and yielding better-quality information, centralized models promote better measurement and evaluation of both financial and nonfinancial aspects (e.g., indicators of efficiency, effectiveness, and service quality). Monitoring and evaluation systems must be transparent, demanding, enforceable, and efficient, establishing information channels and the necessary requirements, including internal and external auditing. Again, the centralized model plays a

part in unifying policies and processes (for example, in Peru, Singapore, and Spain).

- **They harmonize operational policies.** Setting standards in certain operational areas of SOEs, such as investments, dividends, treasury, human resources, procurement, contracting, and auditing, brings efficiency, transparency, and agility. One example is the reform carried out in the Solomon Islands (Asian Development Bank, 2014; Ramírez and Tan, 2004; Shirley, 1989). The fact that the role of the owner is unified in a single institutional entity helps policymaking enormously in areas such as :
 - **Investments:** The variety or the lack of dividend and investment policies in SOEs is one of the reasons for the lack of efficiency derived from setting contradictory goals when there is more than one owner responsible, or for the failure to pursue social and financial objectives simultaneously due to a lack of adequate planning. If the owner(s) lack a strategy and coordination, there will be no discipline within the SOE, which executives may interpret as a sign of laxity. This leads to unnecessary or low-priority investments, discretionary use of resources, and lower incentives for responsible and efficient management. The opposite might also occur, where every investment needs the approval of various authorities or higher authorities, such as the parliament. This affects SOE performance tremendously because their investment processes are prolonged for bureaucratic or institutional reasons. It can lead executives to forgo investments or projects due to the difficulty and the amount of time needed to see them through. The centralized model places the central entity itself in charge of making investment policy and of deciding which policies require approval by the aforesaid authority—generally those that

might affect the capital structure or might have a substantial monetary or strategic impact. Some examples are acquiring other enterprises or significant assets, diversification, and business internationalization. The centralized model grants the enterprise more autonomy regarding investment decisions that affect normal business development. Designing an investment policy that is coherent and suitable to the circumstances of each enterprise helps guard against discretionality and political interference in the future.

- **Human resources:** Centralized models have a lower executive turnover rate, which favors better long-term planning. Centralized models also design an operational plan for the board of directors that is common to all subsidiaries, and a plan governing appointments and requirements for board members. The fact that the owning agency keeps its distance from political influence should mean that boards of directors are more professional, with members who can provide the necessary experience and knowledge. These boards will be useless if their members are linked to the different ministries and are appointed merely so they can receive additional remuneration that, due to legal or budgetary restrictions, they cannot normally be paid as public servants. By establishing clear responsibilities and policy objectives, centralized models can improve human resource management through uniform incentives and career development policies. Harmonizing human resource policies avoids unfairness. Financial remuneration is not the only form that incentives take: there are several other ways of attracting talent (Budiman, 2009). This model makes the relationship with trade unions and negotiations on collective bargaining agreements more fluid and can

encourage specific regulations for employees in the SOE sector.

- **Debt:** In contrast to a private enterprise, an SOE has distinguishing aspects that can undermine efficiency. For example, the board of directors cannot be removed following a takeover or merger with a private sector third party, and the risk of bankruptcy is very slight. Therefore, its expenditure, borrowing, and investment discipline is lax. Centralized models favor negotiations with banks due to their greater purchasing power. This policy enables more control over liabilities and more efficient management. In countries with commercial and public development banks, there is a risk of carelessness in the terms of credit provision between SOEs, which entails a significant fiscal risk. In such cases, the loan policy must be strict and specific with regard to terms and limits, although some authors suggest that financial and nonfinancial SOEs should have separate owners (Mako, 2004). In addition to this is the problem of government guarantees, which, in the case of the dual or decentralized systems, can lead to abuse or poor monitoring. This ties in to the well-known and criticized argument put forward by opponents of SOEs regarding their soft budgets or the practical impossibility of bankruptcy.
- **They improve coordination with other actors.** The fact that there is only one owner, with management independence, can simplify interaction with the rest of the actors in the SOE ecosystem. In general, the president of the group will report to parliament concerning the group's SOEs once a year. The relationship with the country's supreme audit institution (Auditoría General del Estado), the government, civil society, and other entities can be coordinated more efficiently in the

centralized model, as the owner and the responsible parties are clearly identified. Even the relationship with trade unions is more harmonious and fluid, reducing the risk of conflicts (e.g., in Norway).

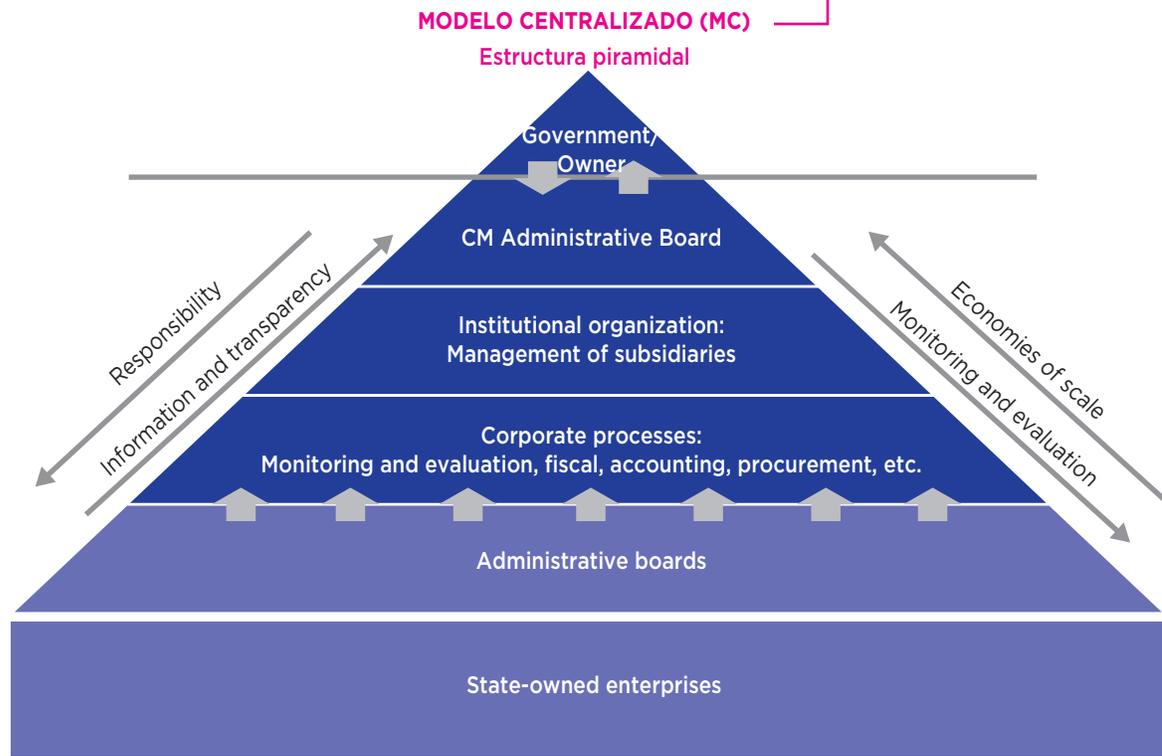
- **They favor execution of partial and total privatization policy** (Sam, 2013). Management teams at centralized organizations can comprise better-qualified, full-time staff, who can gain deeper knowledge of SOEs and the market in which they operate. This kind of specialization and knowledge makes the centralized model an ideal instrument for carrying out and managing privatizations.

Financial Advantages

- **They create economies of scale.** The fact that all of the SOE's resources are grouped under the same ownership strengthens the State's negotiating power (Witker, 1979). Size boosts negotiating capacity, which can improve many aspects of management. This occurs with regard to management (Spain), bank negotiations, and procurement (Peru). On occasion, these economies of scale have immediate effects on an SOE's income statements, as in the case of centralized purchasing agencies or better financing terms in the capital market than those available to individual enterprises. When enterprises belong to a holding company, they benefit from the availability of internal loans whenever financing in the market becomes complicated (Leff, 1978). Furthermore, they enable resources to be pooled to finance internal services which might otherwise be out of reach (research, information systems, etc.).
- **They produce synergies** between enterprises, and prices, services and products, debt (Paraguay), and contracts can be coordinated, thus avoiding confrontation. This happens most frequently among a group of

Please provide Translation in ENGLISH

FIGURE 5: Pyramidal Structure of the Centralized Model



Source: Author's elaboration.

enterprises that belong to the same sector, especially with respect to prices, contracts, or services. For example, to avoid legal costs and save time, Peru's FONAFE established an internal system aimed at resolving conflicts among the companies that belong to the holding company.

Figure 5 illustrates some of these advantages. Centralized models follow a pyramid structure, in which the owner is situated at the apex, represented by the board of directors of the central body. Beneath this level is the management structure, below the board of directors of each SOE. The figure also illustrates some of the main advantages of centralized models: they delegate more responsibility and facilitate monitoring and evaluation by the owner. They

also provide better information and transparency and create economies of scale that lead to greater efficiency. In short, by participating at all stages of the processes (ex ante, during, and ex post), centralized models have an overarching, integrated effect.

Advantages of Holding Companies Compared to Other Types of Centralized Models

Although the advantages mentioned above apply to centralized models in general, holding companies have certain characteristics that make it easier for them to achieve their goals. The comparative advantages of holding companies with respect to centralized models can be summed up as follows:

- In theory, they offer more independence from political interference by introducing a further degree of separation, incorporating the characteristics of an external institutional investor (Ang and Ding, 2006; Qian, 1996; Qian and Wu, 2003; Singh and Siah, 1998).
- They are usually subject, to a greater or a lesser degree, to private sector regulations, which implies additional transparency requirements.
- They are not subject to budgetary restrictions in terms of incentives, which helps attract talent (Sam, 2013).
- They are the direct owner of the SOE, which facilitates the design and execution of operational policies (inter-group market of resources).
- They help to address shortcomings in other areas of governance (e.g., a weak board of directors) by assuming additional responsibilities.
- They help to inculcate market discipline into SOEs not listed in the capital markets, while the management team shows more professionalism (Fan, Wong, and Zhang, 2012).
- They foster joint resource and asset management.
- There may be intangible benefits that derive from the brand name or reputation (Khanna and Yafeh, 2007).

Disadvantages and Limitations of Centralized Models

Centralized models should be part of a long-term plan and should share some basic elements, without which their implementation would fail to deliver the desired results. Among the potential disadvantages and limitations of these kinds of management models are the following:

- **Lack of political commitment and political interference.** If there is no formal commitment by the government to refrain from interference and to cede autonomy, then the entity will fail to achieve its goals and become merely an additional level without adding value, which would, moreover, result in a lack of authority. This is true of the SASAC agency in China (Chan, 2009; Chiu and Lewis, 2006; Lin, Ma, and Su, 2009). When these agencies are badly managed, they can become mere instruments to transfer funds from profitable to less profitable companies, thereby camouflaging their results.
- **Development and structuring that is purely cosmetic,** which leads to a loss of power and authority. This can happen when the SOE is working toward the wrong objectives, with the intention of merely playing to the gallery with no real intention of seeking greater efficiency, to appear better at management. In these cases, in the name of simplification, the structure ends up being expanded, which leads to even greater inefficiency.
- **A purely bureaucratic entity.** It risks becoming just another entity, increasing bureaucracy and thereby jeopardizing flexibility and agility: a bureaucratic entity that duplicates activities and responsibilities, or a mere monitoring agency, which has to approve even the smallest investments in maintenance. Consequently, rather than helping, the centralized model can become an obstacle for the SOE's regular activity.
- **Limited effect.** If it does not comprise the SOE universe, such as when those enterprises with the most economic power are excluded, then the effect will be limited. In some cases, the largest enterprises with the greatest economic impact remain beyond the scrutiny and procedures established by the centralized model for the rest of the SOEs—usually for political reasons—and this status is often difficult to amend. The effect of including the largest SOE functions is twofold: first, it can force this type of enterprise to introduce discipline in certain

areas and instill group dynamics that can prove beneficial for the whole; second, smaller enterprises have an opportunity to learn from larger ones in certain aspects of management and experience and to share knowledge and resources. Likewise, with regard to the centralized model's circle of influence, if the subsidiaries are not included, then its effect is diminished. To be completely effective, the model's measures and controls must be extensive at least in the subsidiaries in which the State has a direct or indirect majority interest. Centralized models lose their power of harmonization when there are entities with similar functions and of greater size or importance, such as development banks (e.g., Brazil's BNDES), which apply management techniques and policies in their enterprises that differ from those prevailing in others.

- **Power struggles.** The mere suggestion that SOEs should be grouped together under a centralized management model can provoke inter-ministerial power struggles. Creating a centralized body can lead to the loss of power by the owning ministries in decentralized models. This carries a clear risk of insufficient support from the political leadership to conduct the reorganization sought by the creation of this model. In the largest SOEs, there is a risk of a power struggle between similar executive levels, such as the company president and the president of the centralized body.
- **An insufficient and ineffective single central body.** This can happen in countries in which the SOE sector is very large and has complex segments. In these cases, it might be advisable to set up sector-based holding companies, although a higher coordinating authority might also be created for the sake of uniformity. This decision must be studied carefully, because of the risk that the sector-based holding companies may end up becoming

models comparable in structure to ministerial departments while missing out on some of the advantages of holding companies, such as economies of scale and synergies.

- **Lack of adequate resources and/or sector specialization.** If the centralized model lacks adequate financial and human resources and/or the necessary sector specialization, then it will be ineffective at managing large-scale and complex SOEs. There may also be doubts about the capacity of a single entity to manage contradictory objectives (e.g., social vs. financial).
- **Lack of overall sector-based planning,** and failure to create or strengthen independent regulators, as well as the lack or shortcomings of the supervisory and auditing agencies—an audit office or a supreme audit institution (SAI)—that can evaluate the management of the holding company and its subsidiaries.
- **Fiscal problems.** In some cases, establishing the holding company has failed to remedy the fiscal problems of SOEs and has been ineffective in terms of corporate restructuring and financial management (OECD, 2005b; Vagliasindi, 2008). In these cases, because one of the advantages of the centralized systems is more uniform and homogeneous monitoring (ex ante, during, and ex post), it is worth attempting to discover the reasons behind the failure to control debt.
- **Oversight and governance.** If no controls over the centralized model itself are established through supervisory agencies, and unless the same governance policies applied to its subsidiaries are also applied to the central entity, the model will lack the basic elements needed for optimal operation.

Keys to Success

It is obvious that centralized models can become a useful instrument for rethinking and managing

the SOE sector, but what will they need to be successful? Bearing in mind the limitations and risks mentioned above, if establishment of a centralized model is to obtain the desired outcome, it must meet a series of conditions, such as the following:

- **Comprehensive approach.** In the past, the approach was individualized and did not take into account either the ecosystem of actors and responsibilities or the interventions needed to establish the basis for bringing stability to the sector, which would ensure the SOE's sustainability. A comprehensive approach must address questions such as: which enterprises actually comprise the SOE sector? What are their objectives? Do they achieve them? Does it make sense to maintain them under state ownership? How are they organized? What problems do they pose? Are they efficient? Could they be even more efficient? At the same time, it is important to consider the steps, phases, and areas that need to be addressed: regulation, ownership, corporate governance, information, systems, and internal policies, among others.
- **High-level political support and capacity for dialogue with the other actors.** This support should be reflected both internally and externally (e.g., by encouraging competition, stimulating capital market growth, ensuring the independence of the regulators, etc.). In the purely internal sphere, this support can no longer be used as an instrument to further objectives other than those stated. The centralized model is not just another SOE; it has a higher role, given its responsibilities for management and coordination.
- **Adequate regulation.** There should be clear rules and ownership policies, as well as regulatory developments and specific implementation guidelines, accompanied by strong institutions. Likewise, there must be specific and unambiguous regulation, which enables SOE operational systems to endure regardless of political changes.
- **Explicit and definite mandate.** The definition, process, and establishment of objectives must be clear and precise, and the results measured fairly. Once the objectives have been set, the management system and those responsible should focus on achieving them and getting results.
- **Sufficient resources.** The centralized body must be staffed with capable and qualified people. The personnel must possess the necessary capacity, experience, and knowledge, and they should come from outside the public administration. Therefore, transparent and public recruitment processes must be established to respond to these requirements. With regard to financial resources, they must be available in sufficient quantity to carry out the allocated functions and responsibilities adequately.
- **Harmonization of cross-cutting policies.** One of the great advantages of centralized models is their capacity to harmonize internal management policies in all of the SOEs. To achieve more efficient management, the critical areas that will benefit from harmonization must be identified.
- **Suitable information systems.** These will create the necessary internal and external transparency and provide the basis for monitoring and accountability mechanisms. The same standard of information and systems demanded from companies listed in the capital markets should be established, albeit with nuances that depend on the circumstances.
- **Independent oversight systems and agencies.** This should apply to both the subsidiaries and the centralized body, including their boards of directors.

- **Individualized implementation.** Depending on the degree of development of SOE management in the country, the centralized model should have different focuses, speeds, and phases. Each case will have its

peculiarities, which means that there is no single blueprint applicable to all. Each SOE sector must therefore be approached individually to analyze the pillars and the actors in its ecosystem.

CONCLUSIONS AND RECOMMENDATIONS

SOEs have been, are, and will remain a key part of any country's development. They offer a unique opportunity to generate efficiency, progress, and innovation in improving coverage and quality in the provision of public services. It is time to stop making generalizations and demonizing SOEs, since they often perform a clear, necessary, and desirable function. It is precisely because of their performance of these functions that SOEs should be provided with the **management structure and the necessary resources, processes, and procedures to enable them to achieve their objectives in an efficient and transparent manner, and with the expected impacts.**¹¹

The evolution of SOEs throughout history can be compared to the movement of a pendulum that oscillates from their creation, to nationalization, to privatization, and back again. These movements indicate a degree of social improvisation when it comes to approaching and defining the role of the State as owner. The State often acts more reactively than proactively. Perhaps this is one of the reasons for the persistence of some of the problems of SOEs. These problems, for the most part, derive from the **special characteristic inherent in the owner, which is both public and political.** One of the most serious problems has to do with its political character and the constant interference by political actors suffered by SOEs and their management. Government influence in SOEs does not arise merely

because the government is a shareholder; even in some wholly privatized enterprises, especially in regulated sectors, the government uses the regulator to influence the activities of private companies.

Attempts have been made to tackle these problems through partial reforms. All too frequently, these attempts have run up against political opposition from managers and trade unions with a lack of institutionality and capacity or little or no collaboration with the rest of the actors in the ecosystem, and above all with the lack of comprehensive and long-term planning, precisely because they were partial measures. Consequently, there has been no serious reconsideration of the role of SOEs in the state machinery, regardless of economic and political circumstances. Doing so would address the fact that the SOE sector is more reactive than proactive; therefore, it would require **long-term planning, removed from political posturing and in scenarios that take macroeconomic conditions into consideration.** The persistence of political, regulatory, management,

¹¹ As Trevor Mallard, New Zealand's Minister for Public Enterprises, stated in June 2006 (Luke, 2010): "New Zealanders have agreed that we should keep state assets in public hands. That does not mean that they should not be put to work for us. They're big commercial operations and that's why they're perfectly placed to play a key role in helping to change New Zealand into an innovative, high-wage and high-value economy." In other words, the Minister is proposing being very efficient while achieving the proposed objectives.

and financial problems is what makes SOEs less efficient than they should be.

Beyond ideology, public policies, or SOEs' contribution to GDP, **governments must ensure that their SOEs are efficient, even more so when their importance to the economy is substantial.** Moreover, the evolution of SOEs in an era of increasing globalization, internationalization, and automation will require them to adapt using the appropriate methods, training, processes, and management models.

We must proceed on the basis that it difficult to homogenize the term “efficiency” and that, depending on the enterprises' objectives and the market in which they operate, it can be interpreted in different ways. When looking at financial efficiency, the results will differ depending on which indicators are used to measure them. **Efficiency indicators enhance transparency and the demand for responsibility and results.** However, to be reliable, they require good quality data and skilled evaluators who have a clear mandate to make decisions based on the results obtained. Information gathering per se does not solve any problems unless there is an adequate subsequent mechanism for making accurate decisions based on the data obtained.

Furthermore, all SOEs should demand efficiency, regardless of whether they are in deficit. Governments often pay much more attention to the enterprises that post losses in their financial statements, when there might be profit-making enterprises that are not realizing their full potential and are thereby harming public finances by incurring opportunity costs.

Likewise, **SOEs must be transparent, since they have obligations to citizens and they manage public funds.** Currently, this is one of their

most significant shortcomings. SOEs should therefore report expenditures as well as other financial measures, as well as results obtained at the social level and potential contingent and non-contingent liabilities. Lack of transparency carries significant risks in terms of fiscal and budgetary stability. It also hampers resource allocation, monitoring, and accountability.

SOEs have social as well as financial goals.

Clearly defining quantified and measurable social objectives is a way of addressing the possible problems. Doing so would help to achieve greater freedom from political meddling by leaving less room for maneuver. Moreover, the government must budget and compensate for its objectives to balance the fact that providing coverage is not profitable. Once the social objectives have been defined, it is pertinent to determine whether an SOE is the best instrument available for achieving them, whether there are more efficient organizational structures to achieve them, or if the State should achieve social objectives by purchasing rather than directly providing the services.

To solve all of these problems, **a different approach is necessary, one that takes into account all of the pillars of the sector (regulation, operational efficiency, and governance),** as well as the actors that interact with the SOEs. Using this approach, a range of potential actions can be derived that can be prioritized and carried out based on the needs, resources, and possibilities of each case.

In short, the SOE ecosystem cannot be reduced to the SOEs themselves and to those acting as owners; a variety of actors that interact with these enterprises and whose behavior has a clear influence on the future of the SOE must also be included. Emphasis cannot be placed exclusively

on SOE corporate governance; the concept of governance must be extended to the rest of the actors, including the State. The formula for improving the SOE sector must include improving the governance of the State.

Therefore, regardless of the management model that the government decides to employ, there is one a priori condition for SOE management: the need to view SOEs as a comprehensive, coordinated project, with long-term economic and social planning, in which diverse sectoral interests are included, specific objectives identified, and priorities aligned.

Every government should establish an ownership model or policy with regard to its SOEs, including the legal formula and its status within the government's chain of command. This ownership model will be affected by various factors, such as the level of government on which the enterprise depends, how and when it was created, the government's strategic and social goals, and others.

This paper has demonstrated that, **of the three SOE general management models, the centralized model best enables analysis of the issues, with many advantages when it comes to SOE sector management, monitoring and oversight.** It permits comprehensive and uniform analysis of the SOE sector, enabling the implementation of cross-cutting operational policies (e.g., corporate governance, investments, dividends, borrowing, human resources, etc.), and harmonization of management, monitoring, and oversight systems to generate more and better-quality information, which in turn leads to greater transparency. Likewise, the model **creates greater economies of scale and synergies among the enterprises of the group and encourages more independence from political power—solving**

the problem of multiple owners—and separates the roles of regulator and owner. This form of centralization contributes substantially to transparency, facilitating information gathering and peer comparison. It has been demonstrated that having the same legal and corporate format provides more protection from political interference and greater independence for the board of directors (Wong, 2004). The centralized model, with all its potential advantages, favors, includes, and to a large extent resolves, in the best possible way, the integration of both the pillars and the ecosystem as whole, smoothing the path for implementation of the reforms recommended by the analysis.

A model that is centralized with regard to management but decentralized from political power can help resolve some of the problems of SOEs. It is not the definitive solution, however. A comprehensive view is needed, with the unequivocal desire to restructure/reform the sector to tackle its weaknesses. This must go hand-in-hand with changes in public policies and regulation and institutionalization of the necessary structures and incentives, whether through corporate governance, governance of the State, or both. Likewise, the **transition from decentralized to centralized models is not achieved automatically. Intermediate and preparatory steps, such as performance contracts, are often required on the path toward formalizing and institutionalizing centralized management models.**

Based on the reform carried out in New Zealand, the following lessons can be learned and applied to centralized models:

- **Regulatory frameworks that govern SOEs should consider the effectiveness of the accountability mechanism** regarding the

number of competent entities to which SOEs are responsible.

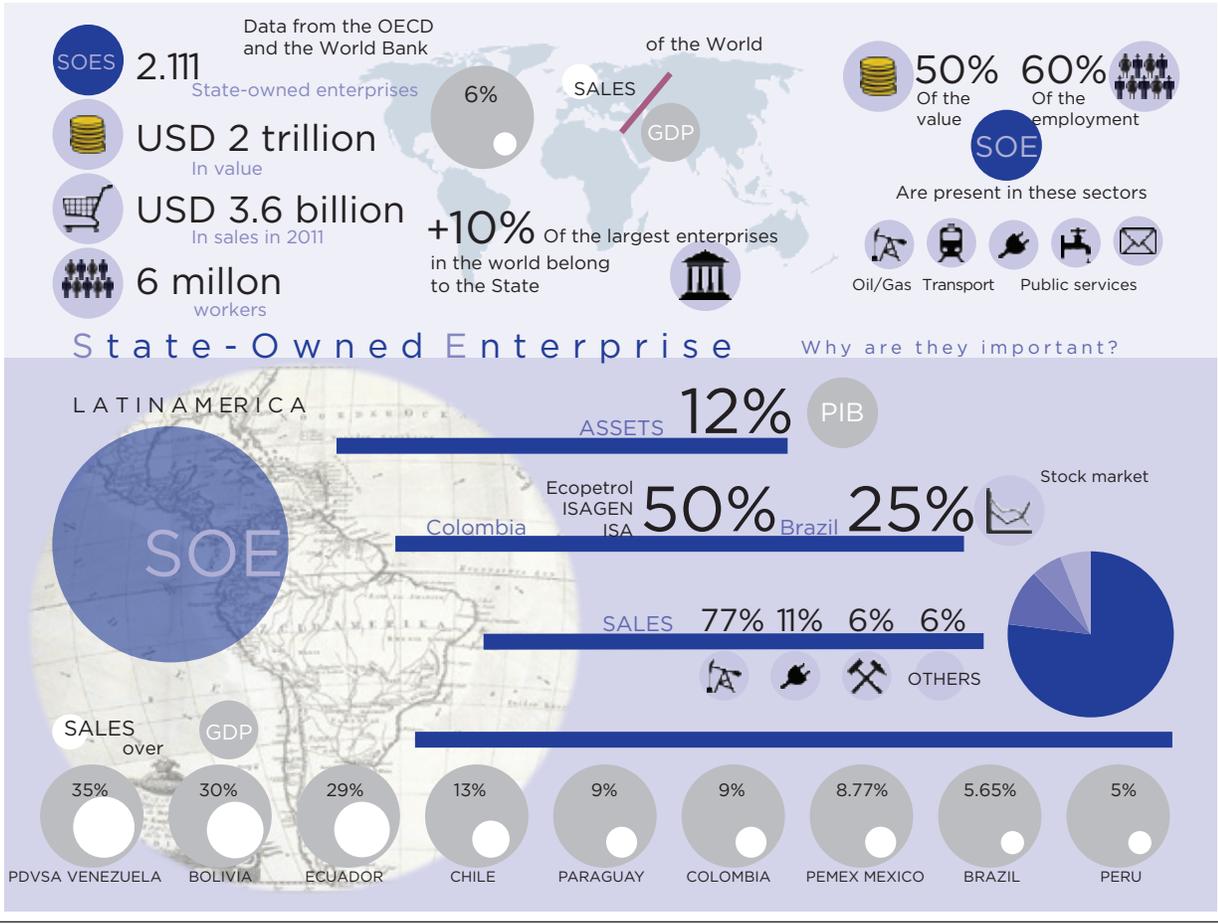
- **Separation of the functions of management and politics must be clearly documented in the SOE regulatory framework**, which will enable both SOEs and the government to be responsible for fulfilling their respective functions.
- Whenever various objectives are specified for SOEs, **the basic priorities and obligations should be described in detail to provide clarity** and further improve accountability with regard to individual SOE conduct.

The conclusions drawn from any successful process, in terms of both execution and results, highlight how the structuring of a centralized model can help achieve some of the advantages highlighted above. This structuring can be an opportunity and an effective instrument for rethinking and integrating the SOE sector.

In summary, centralized SOE management models help address sectoral management challenges holistically. They allow managers to find solutions that will have greater impact, both in economic terms and over time.

ANNEXES

Annex 1. Infograph Showing the Importance of SOEs



Source: Enrique Moreno de Acevedo.

Annex 2. The Largest SOEs in LAC

Sub ranking 2013	Enterprise	Country	Sector/ heading	Sales 2013 in US\$ millions	Net profit 2013 us\$	Total assets 2103 US\$ millions	Net wealth 2013 US\$ millions	Ranking 2013	ROS	ROA	ROE
1	PETROBRAS	BRA	Petróleo/Gas	130,150.3	9,992.3	321,423.5	149,122.3	1	7.68%	3.11%	6.70%
2	PEMEX	MÉX	Petróleo/Gas	122,995.5	-13,006.1	156,584.4	-14,167.7	2	-10.57%	-8.31%	n/d
3	PDVSA	VEN	Petróleo/Gas	116,256	19,853	218,424	75,828	3	17.08%	9.09%	26.18%
4	PETROBRAS DISTRIBUIDORA	BRA	Petróleo/Gas	37,115.6	910.1	8,292.1	5,080.3	8	2.45%	10.98%	17.91%
5	ECOPETROL	COL	Petróleo/Gas	32,516.2	6,945.4	59,317.4	37,343.2	9	21.36%	11.71%	18.60%
6	COMISIÓN FEDERAL DE ELECTRICIDAD	MÉX	Energía eléctrica	24,352	-2,872	86,049	13,458.8	14	-11.79%	-3.34%	-21.34%
7	PETROECUADOR	ECU	Petróleo/Gas	16,334.5	6,229.6	6,882.6	3,180.1	22	38.14%	90.51%	195.89%
8	CODELCO	CHI	Minería	14,956.3	1,114.6	33,355.2	12,407.6	25	7.45%	3.34%	8.98%
9	YPF	ARG	Petróleo/Gas	13,810.4	785.4	20,780.8	7,358.8	31	5.69%	3.78%	10.67%
10	ELETROBRÁS	BRA	Energía eléctrica	12,032.1	-2,683.6	59,073.4	25,823.3	38	-22.30%	-4.54%	-10.39%
11	ENAP	CHI	Petróleo/Gas	11,210.7	134	6,274.1	230.6	45	1.20%	2.14%	58.11%
12	GRUPO EPM	COL	Multisector	6,530	844.9	19,915.3	11,464.7	78	12.94%	4.24%	7.37%
13	CORREIOS E TELÉGRAFOS	BRA	Logística	6,314.9	138.9	4,233.7	1,575	83	2.20%	3.28%	8.82%
14	KALUZ (2)	MÉX	Multisector	6,243.6	138.6	12,840.3	4,850	86	2.22%	1.08%	2.86%
15	YPFB (1)	BOL	Petróleo/Gas	6,059	1,397	n/d	n/d	88	23.06%	n/d	n/d

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Annex 2. The Largest SOEs in LAC (continued)

Sub ranking 2013	Enterprise	Country	Sector/ heading	Sales 2013 in US\$ millions	Net profit 2013 us\$	Total assets 2103 US\$ millions	Net wealth 2013 US\$ millions	Ranking 2013	ROS	ROA	ROE
16	PETROPERÚ	PER	Petróleo/Gas	5,455.6	32.9	2,620.5	1,020.7	102	0.60%	1.26%	3.22%
17	SABESP	BRA	Sanitarias	4,830.4	821.1	12,069.6	5,519.8	119	17.00%	6.80%	14.88%
18	COPEL	BRA	Energía eléctrica	3,918.8	457.9	9,865.7	5,400.5	148	11.68%	4.64%	8.48%
19	ANCAP	URU	Petróleo/Gas	3,884.4	n/d	2,854.8	1,161	149	n/d	n/d	n/d
20	ITAIPIÚ BINACIONAL	BR/PY	Energía eléctrica	3,800.4	1,188.9	17,113.7	100	153	31.28%	6.95%	1,188.90%
21	CODELCO DIV. EL TENIENTE	CHI	Minería	3,502.4	378.8	5,030.4	n/d	165	10.82%	7.53%	n/d
22	RECOPE (1)	C.RI	Petróleo/Gas	3,160.3	-13.6	1,207.3	648.6	184	-0.43%	-1.13%	-2.10%
23	AEROPUERTOS Y SERVICIOS AUXILIARES	MÉX	Puertos/Aeropuertos	3,022.5	-24.1	1,357.2	711.8	197	-0.80%	-1.78%	-3.39%
24	SEGURO SOCIAL DE SALUD - ESSALUD	PER	Salud	2,903	294.2	2,821	2,308	205	10.13%	10.43%	12.75%
25	TRANSPETRO	BRA	Naviero	2,825.9	394.6	3,493.6	2,062.8	210	13.96%	11.29%	19.13%
26	CODELCO DIV. CHUQUICAMATA	CHI	Minería	2,819	130.6	4,774.6	n/d	211	4.63%	2.74%	n/d
27	CODELCO DIV. R. TOMIC	CHI	Minería	2,585.1	372.2	2,362.4	n/d	235	14.40%	15.76%	n/d
28	AUTORIDAD DEL CANAL DE PANAMA	PAN	Puertos/Aeropuertos	2,376.5	1,195.9	9,293.5	7,270.9	254	50.32%	12.87%	16.45%

(continued on next page)

Annex 2. The Largest SOEs in LAC (continued)

Sub ranking 2013	Enterprise	Country	Sector/ heading	Sales 2013 in US\$ millions	Net profit 2013 us\$	Total assets 2103 US\$ millions	Net wealth 2013 US\$ millions	Ranking 2013	ROS	ROA	ROE
29	CELESC	BRA	Energía eléctrica	2,079.9	84.9	2,402.4	912.4	296	4.08%	3.53%	9.31%
30	ELETRONORTE	BRA	Energía eléctrica	2,072.9	-469.7	3,595.7	67.3	300	-22.66%	-13.06%	-697.92%
31	ISA	COL	Energía eléctrica	1,872.7	225.2	13,295	3,874.8	338	12.03%	1.69%	5.81%
32	UTE	URU	Energía eléctrica	1,841.4	316.7	6,112.5	4,612.3	346	17.20%	5.18%	6.87%
33	CODELCO DIV. ANDINA	CHI	Minería	1,836.6	155.5	4,119.7	n/d	348	8.47%	3.77%	n/d
34	FURNAS	BRA	Energía eléctrica	1,832.2	-349	9,877.8	4,771.3	350	-19.05%	-3.53%	-7.31%
35	CHESF - CIA. HIDROELÉTRICA DO SÃO FRANCISCO	BRA	Energía eléctrica	1,749.5	-199	7,314.2	4,826.2	368	-11.37%	-2.72%	-4.12%
36	CESP	BRA	Energía eléctrica	1,666.6	-83.4	6,477.8	3,977.4	387	-5.00%	-1.29%	-2.10%
37	ENAMI	CHI	Minería	1,611.8	-67.8	1,140.8	521.7	402	-4.21%	-5.94%	-13.00%
38	COPASA	BRA	Salud	1,593.7	179.2	4,007.7	2,278.4	410	11.24%	4.47%	7.87%
39	CEDAE	BRA	Sanitarias	1,510.9	124.4	5,418.8	2,119.4	429	8.23%	2.30%	5.87%
40	INFRAERO	BRA	Puertos/ Aeropuertos	1,294	-1,133.3	940.9	253.1	488	-87.58%	-120.45%	-447.77%

Nota: n/d= no disponible.

Please provide Translation in ENGLISH

Annex 3. Performance Contracts

Performance contracts were established to improve the efficiency of SOEs and to set forth the responsibilities of the contracting parties. Performance contracts were introduced more than 25 years ago, with the support of the World Bank and the International Monetary Fund, in an attempt to improve SOE results, specifically the fiscal problems typical of SOEs. The contracts have been used in many countries and are still used in India, Bulgaria, Paraguay, South Africa, and Turkey, among others.

Performance contracts are signed between the government and the board of directors of the SOE or its managing director or president. They establish the SOE's goals and the board of directors' freedom to pursue them. These normally include financial, political, and social objectives. Achievement of goals varies depending on the case, which makes comparison difficult. The contracts are advantageous because they encourage dialogue between the government and the SOEs and enable intentions to be translated into measurable objectives. Furthermore, and just as importantly, the commitment and the responsibilities of both parties are made clear.

The reality, however, is that the success of this type of contract has been limited, basically because they have been implemented in isolated cases rather than within a policy framework or as part of comprehensive actions to reform the SOE sector. Thus, for example, negotiations over these contracts in Senegal took three years because the basic principles under which SOEs must operate had to be agreed upon first. The question was not addressed in a preliminary or a combined way (Shirley, 1998).

Comprehensive SOE reform should be reflected in a strategy that includes plans for all of the aspects necessary for its success, from regulation to corporate governance and the institutions of governance of the State, and makes explicit the government's intention to carry it out. This type of reform implies difficult decisions and even power struggles within the administration. However, if it is not undertaken in this way, the government could lose credibility with the public, the private sector, and the SOEs themselves. The lack of government credibility when these types of contracts have only been signed in isolated cases has detracted from their effectiveness. Establishing the objectives has also been deficient on many occasions—as in the case of the growth goals—which has sometimes led to investments in unprofitable businesses. Frequently, the government has failed to keep its side of the bargain without being penalized; in others, the lack of understanding between the parties for various reasons has extended the negotiations and procedures and has also seriously reduced their effectiveness. In cases of SOEs with overly commercial objectives, there is less need for these contracts, because the market, by providing sufficient competition, will regulate its behavior with the aid of tangential government intervention with regard to investments and borrowing.

In any case, the importance of these contracts should not be underestimated. Their initial intention was honorable and, although their impact has left much to be desired, they have certainly managed to introduce some discipline into SOE management. Moreover, in countries such as Paraguay, in which a defined institutionality for monitoring SOE management was practically

nonexistent, performance contracts represent clear progress—although if limited to this measure alone, it might not be sufficient. If further progress is made, the contracts could represent an intermediate step toward a more solid structure that can achieve more institutionality and independence.

For performance contracts to be effective, they must be in line with current legislation and must

analyze the need to establish additional and enforceable rules and the way in which these are related to the directives on corporate governance. Other elements to be clearly defined are the shareholder's objective; the SOE mandate; the objective results, with their measurement and monitoring criteria; the authority necessary to approve the actions; the processes for appointing members of boards of directors, and the data requirements, among other elements.

Annex 4. The SOE Pillars, the Ecosystem, and its Reforms

Analysis of SOEs can be divided into three pillars: (i) legislative and regulatory framework; (ii) operational efficiency; and (iii) governance, both corporate and of the State. The three pillars are intimately interrelated, and operational efficiency will basically be a result of the two remaining pillars. This separation will enable political, regulatory, financial, and management issues to be identified and eventually tackled.

With regard to the legal and regulatory framework, not only must the regulations that directly affect SOEs as a consequence of their owner be analyzed but also the regulations that affect the way they operate and those necessary to ensure optimal efficiency. Consequently, there are two types of regulations: those exclusive to SOEs—such as a law on SOEs—and those not exclusive to SOEs but that apply to them. These regulations relate to:

- Transparency
- Competition
- Employment
- Fiscal and financial

As part of operational efficiency, financial indicators will be analyzed, as will compliance with social objectives in terms of quality, coverage, and price, and form of financing. Fiscal risks and their causes will also be analyzed.

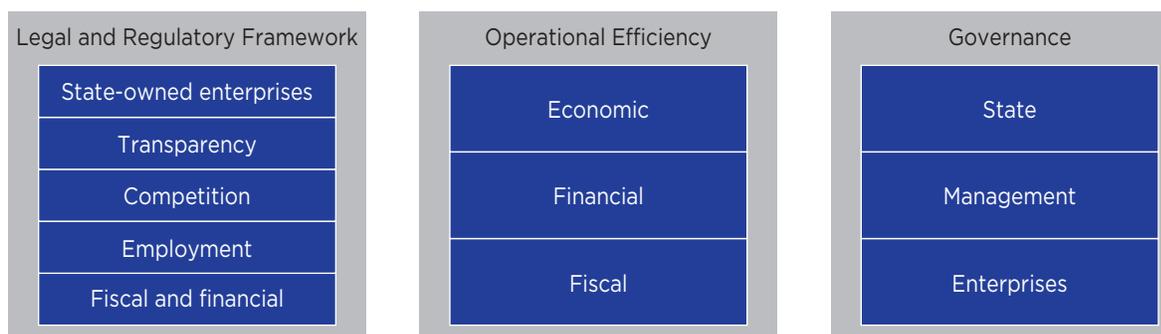
Within the governance pillar, a distinction must be drawn between governance of the State and corporate governance. With regard to the former, the following aspects, among others, must be analyzed:

- Who is the owner?
- What are the owner's functions and goals?
- What is the management structure, what kind of training is provided to those in responsible positions, what coordination exists with other actors, and what does all this imply?

Within corporate governance the following issues will be addressed, among others:

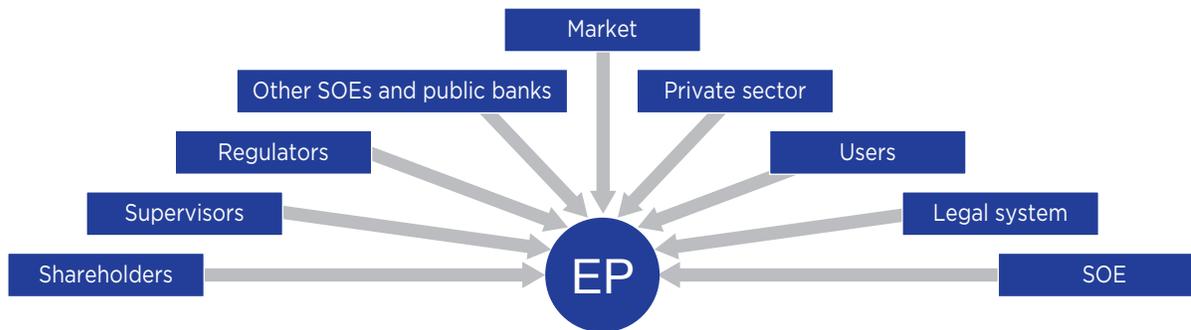
- Boards of directors: constitution, appointments, structure, committees, remuneration, training, and induction programs

PILLARS OF STATE-OWNED ENTERPRISES



Source: Enrique Moreno de Quevedo Sánchez.

THE STATE-OWNED ENTERPRISE ECOSYSTEM

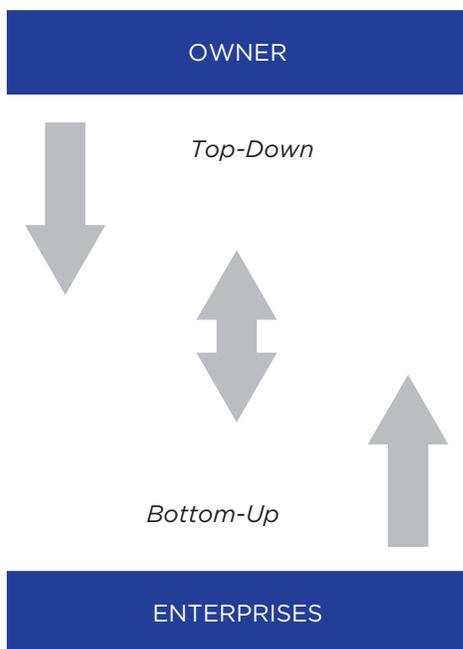


Source: Enrique Moreno de Quevedo Sánchez.

- The degree of independence, transparency, and coordination
- Supervisory and regulatory agencies
- Management
- Cross-cutting policies
- Monitoring and evaluation
- Information systems

Once the ingredients of each pillar have been studied, the actors must be analyzed, and the necessary ones identified to establish practices that must be implemented or improved in pursuit of optimal operation of the entire ecosystem. Analysis of the existence or lack of actors of the ecosystem, their needs, obligations, and

REFORMS OF STATE-OWNED ENTERPRISES



- Regulatory reforms:
 - Transparency
 - Competition
 - SOEs
 - Ownership policy
 - Governance of the State
 - Centralization
 - Liquidation and privatization
 - Supervisory bodies
 - Reserve funds
 - Information systems
- Uniform legal forms
- Administrative boards
- Management
- Reclassification of SOEs
- Corporate governance code
- Social or commercial objectives
- Cross-cutting policies
- Training

Source: Author's elaboration.

responsibilities, and each component of the pillars will provide an exhaustive and detailed assessment of the status quo of the SOEs and will determine the possible reforms and actions that should be carried out to improve efficiency.

The SOE ecosystem goes beyond the relationship between owner and SOE. For SOE operation to be fluid, transparent, and efficient, every actor that has a relationship with the SOE must be taken into consideration. Moreover, it must be understood that some of them exercise multiple functions. For example, the government is simultaneously the representative of the shareholders, the regulator, and the enforcer of regulations, while the citizens are both owners and users. These dichotomies must be considered when analyzing the shortcomings in each pillar and designing suitable reforms.

To tackle the necessary reforms in the SOE sector, it is essential to carry out a prior comprehensive assessment of both the actors and the

pillars. Once the necessary actions have been defined, a long-term plan must be drafted and the actions prioritized according to each country's situation, degree of maturity, needs, and political possibilities. Each country is in a different situation, and a balance must be struck between the desirable and the achievable at each stage without losing sight of the long-term goal. Therefore, in many cases, top-down reforms can be undertaken. This may imply radical regulatory reforms that require broad consensus and strong political will. At the other extreme are bottom-up reforms or actions. These are non-disruptive actions that will not cause political friction, but that have short-term operational effects and can raise awareness in the group and lead to greater efficiency. One example could be establishing a joint procurement policy for certain goods and services. There are no universal measures. Actions should be part of a comprehensive plan that leads to the final objective of achieving an efficient and transparent public sector.

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