OVERVIEW

THE BUSINESS OF THE STATE

WORLD BANK GROUP

Overview

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Contents

Boxes

Figures

Table

Foreword

State participation in economic activity is not new. Ownership or control of commercial firms by the government is more widespread in countries with a history of central planning, but it can be found around the world. In recent years, we have observed a renewed upswing in the use of state-owned companies to achieve various objectives.

The reasons for this renewed enthusiasm for state firms among country policy makers are diverse, and some have clear merit—at least conceptually. State-owned enterprises have been traditionally mobilized to tackle natural monopolies and strategic sectors with national security implications, and to ensure universal access to services. These roles could become more valuable at a time when new technologies are strengthening network effects and widening digital divides.

Other, new roles are receiving attention as well. By minimizing layoffs, increasing investment, or waiving the payment of utility bills, state-owned enterprises might have cushioned the impact of the global financial crisis and the COVID-19 pandemic. Also, with so many businesses of the state operating in the energy, transportation, and construction sectors, their social orientation could in principle be tapped to drive decarbonization efforts. And with geopolitical tensions on the rise, state ownership in strategic sectors may seem integral to national de-risking strategies.

But can the business of the state really deliver on these ambitious agendas? Answering this question is challenging because data-driven research on state-owned enterprises has been sparse for the past quarter century.

This new report aims to help fill this knowledge gap. It does so by taking a fresh look at the commercial footprint of the state around the world, unpacking its changing institutional modalities, analyzing its implications for economic dynamism at the firm and sector levels, and assessing its track record on the macroeconomic and environmental fronts.

State-owned firms have characteristics that make them intrinsically different from private firms. They usually face a softer budget constraint and a more lenient regulatory environment; they also have social mandates going beyond a narrow profit motive. Whether these characteristics lead to better or worse aggregate outcomes depends on how they interact with the market imperfections and institutional failures of the broader economy.

The report builds on strong empirics. Its preparation involved the assembly of a new database of 76,000 firms with state ownership covering 91 countries, the analysis of detailed firm-level data from 14 of them, and leveraging of regulatory reviews in 66 countries. The report is also innovative in considering all firms with at least 10 percent ownership by any government organization, not just those with majority ownership by the central government.

The results show that over time the footprint of the state has become much vaster than previously thought, but also much more diffuse. The often-sprawling business of the state includes a large number of commercial firms in which the state has a minority stake but is still influential. Moreover, state ownership rights are often held by subnational governments, other state-owned enterprises and holdings, and sovereign wealth funds, including from other countries.

In most countries, the private sector is prevalent in industries such as food, construction, and hospitality, among many others. Thus, it was surprising to see through the findings of this report that almost 70 percent of the businesses of the state operate in these types of competitive markets. Careful regulatory analysis also reveals that, even in these competitive markets, firms with state ownership are often granted exclusive rights, protected by quotas, and exempted from economywide laws.

The firm-level analysis, in turn, shows that firms with state ownership are generally less dynamic than comparable private firms. And they often affect the overall performance of the sectors they operate in by reducing entry by new firms, thus weakening competition and long-term growth.

As for their social objectives, firms with state ownership pay significantly higher salaries than comparable private firms—even after controlling for the characteristics of their workers. And those in the energy, transportation, and construction sectors tend to be less "green" than their private sector counterparts.

The patterns just described are not universal. In every area, the report highlights examples of businesses of the state successfully addressing important development issues. But it also shows that the good, the bad, and the ugly coexist, at times within the same country.

At a more practical level, the report proposes a 10-point scorecard to help determine whether a specific business of the state could be part of the solution . . . or is rather part of the problem. Some of these points refer to the characteristics of the firm itself, others to that of the sector it operates in, and yet others to the broader institutional environment. Based on the responses, an aggregate score can be computed for each state-owned firm.

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OVERVIEW

Introduction

Debates over the role of the state in business are not new, but there is a growing interest among policy makers in leveraging state-owned enterprises (SOEs) to attain development goals, and the stakes are high. The state, as an owner of businesses, is both competing and collaborating with the private sector at the firm level, market level, and economywide. Whether in the end it crowds private economic activity in or out has profound implications for investment and growth.

The drivers of this renewed interest in SOEs can only be speculated upon, and they are most probably diverse. Around the world, effective responses to major economic disruptions—from the global financial crisis to the COVID-19 (coronavirus) pandemic to natural disasters—have often involved SOEs spending more, undercharging or temporarily not charging for their services, or restoring damaged infrastructure. Action to reduce greenhouse gas emissions and address climate change will almost certainly have to involve SOEs, given their heavy presence in sectors such as energy, transportation, agriculture, and raw materials—and it could be facilitated by their public service mandate. Moreover, recent geopolitical tensions have brought national security concerns to the forefront, encouraging some policy makers to assert control of key networks and strategic inputs.

When thinking about relying on SOEs to attain development goals, policy makers in different countries are sensitive to various considerations. But beyond the specifics, it seems that they increasingly perceive SOEs as part of the solution, rather than as part of the problem.

The key issue this report discusses is when is this perception correct, and when could it lead to costly dead ends? Or, put differently, what are the complementary policies and institutions that are needed for SOEs to deliver the good economic outcomes that are hoped for? And if the right circumstances are not in place, and cannot be established quickly, what else should governments do?

Answering these questions is challenging for two reasons.

First, although state presence in the economy is not new—and is not likely to end—the way the state is engaging in commercial activities is evolving. According to the

definition in OECD (2015, 16), "any corporate entity recognised by national law as an enterprise, and in which the state exercises ownership, should be considered as an SOE." But what this means in practice is not straightforward.

When the definition above was translated into data, SOEs were traditionally understood to be commercial enterprises with majority (if not total) state ownership by the central government (IMF 2020). However, state ownership increasingly involves diverse stakeholders, from line ministries to subnational governments and from sovereign entities to other SOEs. On top of this heterogeneity, partial privatization has led to a greater reliance on minority state ownership. And, in parallel, various forms of indirect state control have emerged.

The state may be less visible in these structures than in the traditional majority ownership by the central government, but the structures are not necessarily less effective in terms of state control. For example, the state can still exert decisive influence on the decisions of an enterprise through "one share, one vote" rules, or by using veto power, or by appointing board members (Bognetti 2020; Megginson, López, and Malik 2021a, 2021b).

Moreover, there is a growing internationalization under way, with companies fully or partially owned by the state expanding operations in overseas markets, and governments increasingly using vehicles such as sovereign wealth funds to invest in foreign firms. Collectively, state-owned investors, including public pension funds and state-owned banks, have become the third-largest holders of financial assets globally, after only banks and insurance companies (Megginson, López, and Malik 2021a, 2021b). As a result of this internationalization process, commercial enterprises in one country may be controlled—partially or totally—by the state of a different country.

These new developments make the overall state ownership more multilayered and the true level of state control and influence more complex to assess than in the past. Because these new forms of ownership are seldom captured in a systematic way, the true state footprint has become more invisible and the frontier between state-owned and genuinely private firms more blurred.

In this report, the broader set of commercial enterprises that have the state as an important stakeholder are called businesses of the state (BOSs). Compared to the standard definition of SOEs, this set also includes firms with minority, indirect, or subnational ownership.

A second reason why answering the questions addressed by this report is challenging is that there has been relatively little analytical work on SOEs for several decades now, with the effects of emerging forms of state ownership being among the least studied. The dearth of recent studies is even more striking in a context in which new mandates—such as addressing climate change—are being vested on these enterprises.

In the 1980s and 1990s, at the time of structural adjustment programs, most analytical work focused on privatization—including alternative divestiture mechanisms (World Bank 2020). This was followed by research on how to unbundle infrastructure services in the presence of significant returns to scale or network externalities (Megginson and Netter 2001). And then considerable attention went into mechanism design for public-private partnerships, including timebound concessions and management contracts (Kikeri and Kolo 2005).

Robust economic theory often underpinned these analyses. However, their implementation proved challenging because of politicization of the process, weak institutional and competition frameworks, and lack of conducive policy and regulatory environments.

Thus, in some European countries, privatization conducted at discount prices created a class of powerful oligarchs, turning public opinion against it (Nellis 2001). In parts of Latin America, the successful unbundling of infrastructure services was subsequently undone by newcomer governments (Andres et al. 2008). And, from Buenos Aires to Manila, private concessions for urban water became a source of acrimonious political tensions and were eventually canceled (Kikeri and Kolo 2005).

The mixed record of this long history of efforts at reform obviously calls for humility, which is why over the past couple of decades the focus has shifted from divesting state ownership to strengthening its corporate governance. The key idea is that improving public service delivery and resource allocation requires SOEs to be managed more like private firms. By following similar professional standards and practices as their private counterparts, the argument goes, SOEs should become more efficient and the fiscal burden to support them would be reduced. This is why most of the recent analytical work on SOEs has been on the underlying rules, processes, and institutions that should govern the relationship between enterprise managers and government owners (World Bank 2014).

This report makes three contributions to the ongoing debates on SOEs.

First, it leverages a new and very detailed firm-level data set of enterprises—not only SOEs—in which the state is a stakeholder. The cross-country data fill an important data gap, help assess the true extent of BOSs in a very large number of middle- and low-income countries, and provide a clearer picture of the state's footprint along a series of dimensions—including the number of enterprises, their revenue, and their employment. The firm-level data allow analysis of how business performance and sector dynamics are affected by various forms of state ownership.

Several stylized facts emerge from the analysis of these new data. The broad BOS definition used more than quadruples the number of firms identified as having state ownership compared to earlier estimates. The share of sectors with state involvement is also much higher than previously thought, and BOSs are surprisingly common in areas

such as manufacturing and hospitality services. And indirect forms of ownership by the state have become widespread, accounting for half of BOSs' total revenues and one-third of their employment.

Other stylized facts refer to the performance of enterprises themselves. BOSs have lower levels of productivity than private firms with similar characteristics, and the growth rate of their employment is generally lower as well. But they pay higher wages. A greater state presence in commercial activities is also associated with lower aggregate productivity and reduced firm entry, as reflected in fewer young firms, or a lower share of economic activity accounted for by young firms.

A second contribution of this report is to propose a clear analytical framework to think about the consequences of relying on BOSs to attain specific development goals. Such a framework does not have the theoretical complexity of the analyses underpinning mechanism design for privatization, or public-private partnerships. However, by identifying the key differences between BOSs and private enterprises, and the way these differences interact with the rest of the economy, this framework helps understand when relying on BOSs may lead to the desired outcomes and when it is likely to fail. The report also puts in perspective the choice of state intervention as a market player as opposed to adopting other policy instruments to address market failures in competitive markets.

An important difference between BOSs and wholly private enterprises is that the former often face a softer budget constraint. The support they receive from governments may take multiple forms, from permanent subsidies to temporary transfers to capital injections to debt bailouts. This easier access to resources may help attain social goals in the short term, such as making access to services affordable. But it often leads to an uneven playing field with private firms and undermines the incentives for BOSs to become more efficient—both harming longer-term economic prospects. Moreover, BOSs receiving state support tend to become dependent on it, undermining their service delivery and economic viability over time, as well as creating explicit and implicit fiscal costs and more public debt.

BOSs also tend to be granted more advantageous regulatory treatment relative to private firms. They may enjoy preferential access to inputs, be protected from new entrants, or be allowed to exercise monopoly power. This more lenient treatment may have an economic rationale in a few strategically important activities, but it is difficult to justify in competitive sectors.

Importantly, BOSs differ from privately owned firms in that they are mandated to deliver on social goals. The argument in this case is that relying exclusively on the private sector would lead to underdelivery. But, in reality, many BOSs also appear to cater to other nonprofit objectives that are clearly less socially desirable, such as artificially supporting greater employment or using better salaries and benefits for political patronage.

The third contribution is to identify the circumstances under which the distinctive features of BOSs lead to better or worse aggregate outcomes. The approach in this case is akin to a second-best analysis, in which the imperfections of private markets and the peculiarities of BOSs may offset or reinforce each other, so that more state ownership may lead to better or worse aggregate outcomes.

This ambiguity makes it clear that the report does not take an ideological stance on BOSs being good or bad on their own. However, the report also discusses that the first-best policy response rarely requires mobilizing state ownership. Fiscal and regulatory policies can tilt the incentives faced by private firms so that they provide universal access to services or help protect the environment. And, when confronted with macroeconomic fluctuations, fiscal policy and monetary policy are better suited to stabilizing an economy than a softer—and costlier—budget constraint for BOSs.

That said, BOSs are unlikely to go away, so the report concludes by discussing the circumstances under which relying on them can be viable. It first notes that a prerequisite to relying on BOSs is to have transparent and reliable information on their finances and performance, which is not always the case. But there are also characteristics of the BOSs themselves, of the markets they operate in, and of the broader economic environment that can make a significant difference in the expected outcomes.

Based on the degree of information transparency and on these three layers of characteristics, the report proposes a simple scorecard to help decision-makers assess whether they should expect good, bad, or ugly outcomes.[1] The scorecard is simple in that it gives equal weight to each of the 10 indicators it includes and allows for some subjectivity in their measurement. But the replicability of the scores should lead to healthy debates on whether and how to rely on BOSs, and hopefully create the impetus for reforms that would eventually support better aggregate outcomes.

A Spreading Business of the State

The mere decision of what to call an SOE can be the source of heated conversations. And these are not just hair-splitting arguments among statisticians: the criteria used for measurement do matter for both economic analysis and policy guidance.

Given the steady emergence of more indirect and less visible forms of state ownership, a broad definition is used in this report. In what follows, BOSs include all firms with at least 10 percent ownership by a public sector entity. This is regardless of whether the public entity is the central government, a local government, or another company—operated domestically or across borders (Dall'Olio et al. 2022b). Only a subset of these firms matches traditional definitions of SOEs, which have focused on direct, majority ownership of domestic firms by the central government.

Building on this broad definition, a novel database—the World Bank Global Businesses of the State (BOS) database—was especially assembled for this report.

It allows assessment of the prevalence and nature of BOSs across a large number of countries. Connecting this BOS database with a firm census, which follows firms with different forms of state ownership over time in selected countries, allows a comparison of economic performance with fully private firms as well as an assessment of BOSs on sectoral performance (box O.1).

The analysis of this database and other country firm-level census data show four important stylized facts:

1. State Participation in Markets Is Widespread, Especially in Competitive Markets

The cross-country BOS database, through its expanded definition and its greater geographic coverage, more than quadruples the number of firms identified as having state ownership compared to earlier estimates. As a result, the share of sectors in which firms with state ownership can be found expands considerably, relative to the standard SOE definition (figure O.1).

The state's footprint in the economy can be measured through the revenue of the enterprises it owns, normalized by gross domestic product (GDP) to get a sense of scale. (Value added would be a preferable indicator, but information on inputs is not widely available.) Based on this measure, BOSs' revenues are equivalent to 17 percent of GDP on average.[2]

Although SOE definitions vary by country, the gap between BOSs and SOEs is nonetheless informative. This gap is relatively important across all regions and income levels, but it is wider in some of the larger economies. The gap is most significant in countries in Europe and Central Asia, which is not surprising given their long history of central planning. Beyond this region, India, Indonesia, and Viet Nam also stand out. Elsewhere, the gap is significant in a few economies from Latin America and the Caribbean (especially Argentina, Brazil, and Colombia), the Middle East and North Africa (the Arab Republic of Egypt), and Sub-Saharan Africa (South Africa and Uganda).

The BOS database also reveals that the state's presence is widespread in competitive markets, such as manufacturing, hospitality, and retail—all activities that can be served efficiently by the private sector. This finding contradicts the standard perception, based on traditional SOE definitions, that state participation is concentrated in natural monopolies and network industries (such as energy, telecommunications, and transportation), or the financial sector.

In reality, competitive markets account for almost 70 percent of BOSs. When adding partially contestable markets, such as utilities among others, these shares reach 82 percent. In some countries, such as Brazil, Costa Rica, Côte d'Ivoire, Jordan, and Senegal, more than 30 percent of total BOS firm revenues come from manufacturing activities alone.

BOX 0.1

A Novel World Bank Global BOS Database

The new World Bank Global Businesses of the State (BOS) database assembled for this report is the most comprehensive data set on businesses of the state across 91 countries and covers most four-digit sectors in the standard Statistical Classification of Economic Activities in the European Community (NACE). These sectors range from agriculture to mining and quarrying to manufacturing to wholesale trade and services. The financial sector is included as well. However, education, human health and social work, public administration, pension funds, libraries and cultural patrimony activities, activities of households as employers, and activities of extraterritorial organizations are excluded from the cross-country database.

In all, about 76,000 enterprises with state ownership of 10 percent and more were identified in the 91 countries covered by the database. These firms were identified at the central and subnational levels and include subsidiaries (Dall'Olio et al. 2022a). The BOS database includes information on revenues and employment. These data are more comprehensive for about half of the countries. The cut-off date for the BOS data used for this report was February 2023.

It should be noted that the Russian Federation alone accounts for 36 percent of these enterprises, so many of the analyses in the report are replicated excluding it, to avoid distorting the results. Nevertheless, the BOS database still underestimates the full presence of the state because it does not (yet) include all the ownership links through sovereign wealth funds, and businesses of the Chinese state, including through the Belt and Road Initiative.

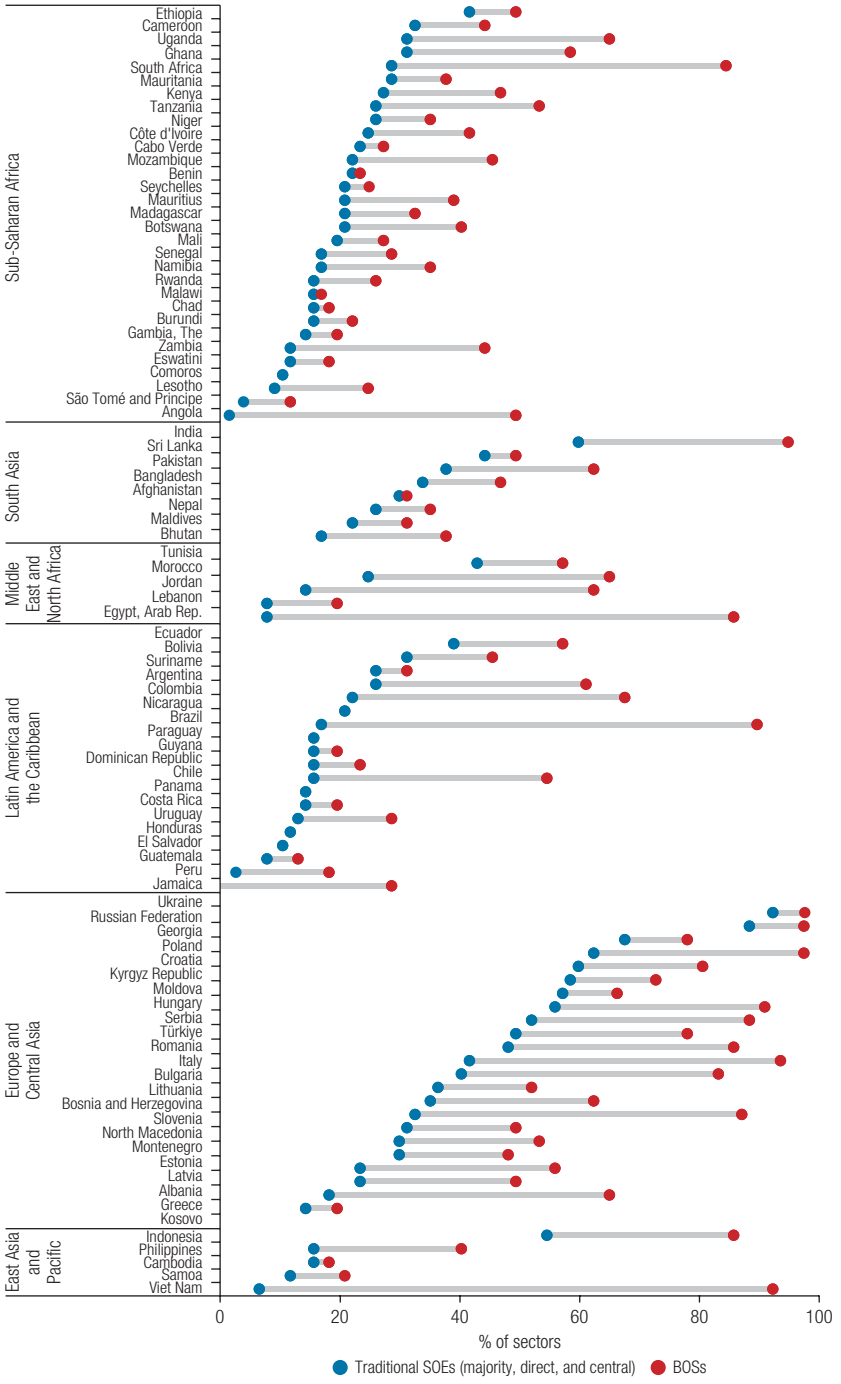
The Global BOS database assembled for this report can be further disaggregated along several meaningful dimensions. One of them refers to the extent of market competition firms face or could face given the inherent features of the respective economic activity (Dall'Olio et al. 2022b). In this respect, it is important to distinguish between natural monopoly markets (where it is not economically viable for more than one firm to operate, as in some infrastructure sectors), partially contestable markets (economic sectors characterized by some form of market power, externalities, or other market failures such as underprovision of services, like aviation and banking), and competitive markets (such as the manufacturing of food products and apparel).

Another informative breakdown of the Global BOS database is by the sectoral intensity of greenhouse gas emissions. High-emitting sectors include mining, oil, gas, and the chemical industry (including production of petrochemicals, fertilizers, and plastics); some manufacturing activities (pulp and paper, cement, steel, and aluminum); transportation (rail cargo and passenger, air, freight and logistics, sea, and water transportation); selected agricultural activities (cattle farming, rice growing, and logging); and power generation.

The report focuses on the economic efficiency of BOS firms in the real sector, whether they tend to be more, or less, productive than private firms, as well as the impact of state presence on market dynamics. The role and specific performance of state-owned financial institutions, including state development banks, are not covered in this report. Therefore, the recommendations included in this report are not attributable to such institutions.

FIGURE O.1 The Footprint of the State in Commercial Sectors Is Bigger than Traditionally Thought

Percentage of sectors with BOSs and SOEs in selected countries, by region



Source: World Bank Global Businesses of the State (BOS) database.

Note: The horizontal axis reports the share of sectors in which firms with state ownership are found out of 77 NACE two-digit code sectors. The blue and red markers use the SOE and BOS definitions of state ownership, respectively. When information on ownership is not available, it is assumed that the BOS firm is centrally owned. BOSs = businesses of the state; SOEs = state-owned enterprises.

Globally, about one-fifth of BOSs operate in high-emitting sectors. But, again, slightly more than half of these BOSs can be found in competitive markets with a weaker economic rationale for state participation, like the growing of rice, the raising of dairy cattle, the manufacturing of cement, or the casting of steel and iron.

The gap between BOSs and SOEs is larger in extractive industries and smaller in power generation. The former account for 27 percent of BOS firm revenues in high-emitting sectors and the latter for 37 percent. However, from an employment perspective, transportation is the most significant of the high-emitting sectors, accounting for half of all BOS firm employment. By contrast, extractive industries account for only 4 percent of employment in high-emitting sectors.

2. Indirect and Complex Forms of State Ownership Are Remarkably Common

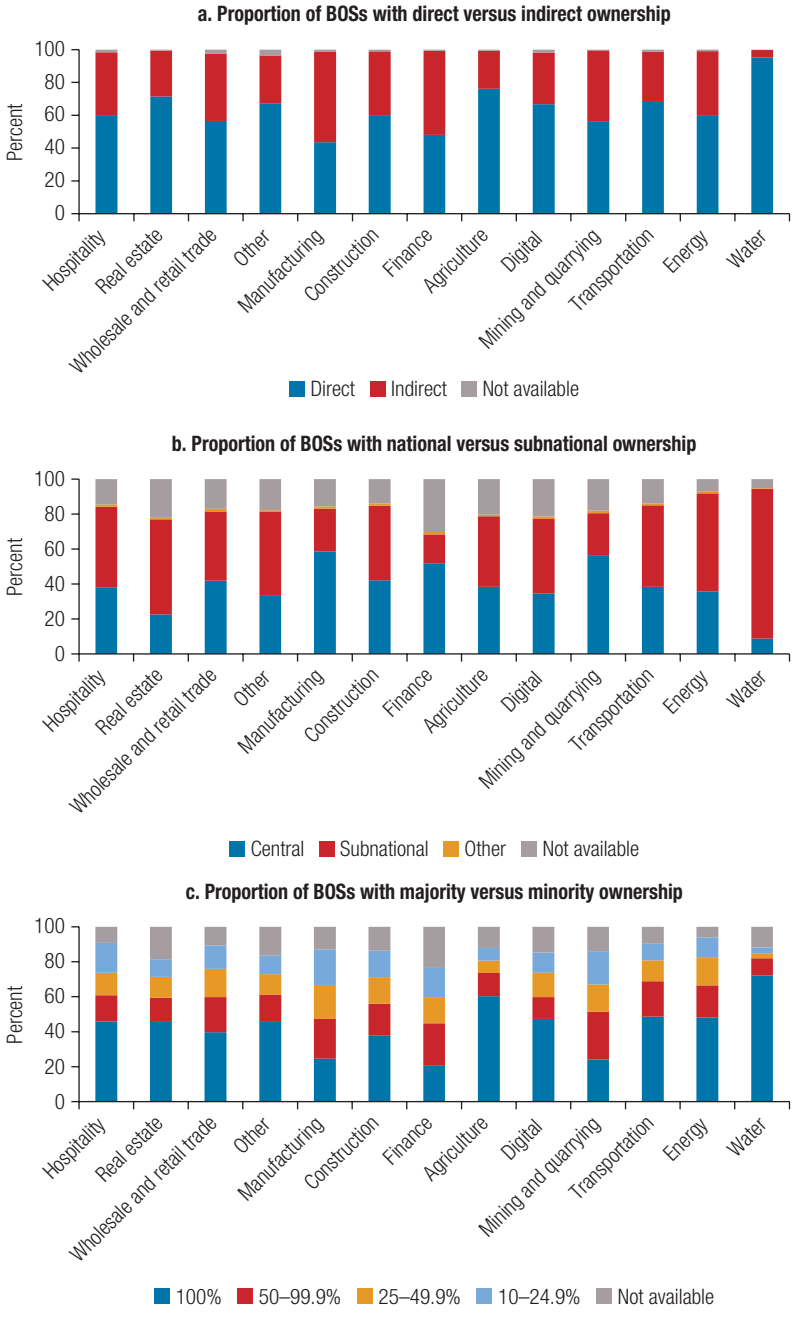
The Global BOS database documents how extensive indirect, subnational, and minority ownership by the state is (figure O.2). Although wholly and majority-owned firms remain more prevalent in numbers, enterprises with minority state ownership generate half of BOSs' total revenues and one-third of their employment. In countries such as Eswatini, Madagascar, Mozambique, São Tomé and Príncipe, Slovenia, Türkiye, and Viet Nam, the state has blocking minority stakes under country corporate law in more than one-fifth of BOSs. And, in Botswana, Egypt, Jordan, Mauritius, Mozambique, Uruguay, and Viet Nam, more than 60 percent of BOSs have an indirect state presence.

On average, 46 percent of BOSs operate at the subnational level, with the share being higher in Europe and Central Asia and in Latin America and the Caribbean. In Colombia, over 87 percent of about 700 companies with state participation are linked to subnational governments. Many subnational BOSs operate as providers of local utilities; however, many are also present in competitive markets, such as real estate, hospitality, and manufacturing. By contrast, BOSs operate mostly at the central level in countries affected by fragility, conflict, and violence.

Reporting lines have also become more blurred. About 8,000 enterprises in the BOS database have more than one owner. Indirect ownership of BOSs through subsidiaries is significant too. On average, among 30 countries with good data coverage, mixed ownership accounts for 60 percent of all BOS firms' revenues and 40 percent of their employment. Indirect state presence is especially important in Botswana, Egypt, Jordan, and Viet Nam.

Some 70 percent of the BOSs identified in the BOS database are corporatized, and thus potentially managed as commercial enterprises. However, the share falls below 50 percent in the Middle East and North Africa, as well as in Bolivia, Ecuador, Ethiopia, Lebanon, Moldova, and Serbia. And, even in countries with centralized management and oversight, some BOSs fall beyond the state's purview. For instance, Petroperu, the

FIGURE O.2 Indirectly and Minority-Owned BOSs Account for Much of State Ownership, 2019



Source: World Bank Global Businesses of the State (BOS) database.

Note: Indirectly owned BOSs are owned by the state through another company; directly owned BOSs are owned by a government or state agency. Minority-owned BOSs have state ownership of 10–49.9 percent; majority-owned BOSs have state ownership of 50–100 percent. Subnational BOSs are owned by a subnational government entity; national BOSs are owned by the central government. BOSs = businesses of the state.

largest SOE in Peru is not under Fonafe, the government institution in charge of monitoring SOEs.

More than two-thirds of countries have BOSs with a presence abroad. In all, over 7,200 BOSs run operations across borders through subsidiaries or indirectly owned companies. About 40 percent of these companies originate in Italy, but Angola also has over 400 subsidiaries in a diverse set of sectors across 52 countries. Other economies with a strong foreign presence are Botswana, Costa Rica, Greece, India, Jordan, Mauritius, and Slovenia. The top destinations of foreign investments by BOSs are the United States, the United Kingdom, Brazil, and Spain.

Several BOSs are owned by sovereign wealth funds, especially in resource-rich countries that aim at better managing revenue windfalls across generations. The median number of subsidiaries owned by such funds at least doubled over 10 years, from 20 to 45 subsidiaries when using the 50 percent state ownership threshold, and from 89 to 277 subsidiaries at the 10 percent threshold level used by the cross-country BOS database. Most of the increase was driven by Singapore and China, whereas Malaysia and the United Arab Emirates have consolidated their ownership above the 50 percent threshold. Moreover, sovereign wealth funds have increased their investment in BOSs over time. They owned 446 unique BOSs in 2010 and about 2,600 by 2020.

3. BOSs Tend to Be Larger and Pay Higher Wages Compared to Their Private Counterparts, and Their Performance Depends on the State Footprint

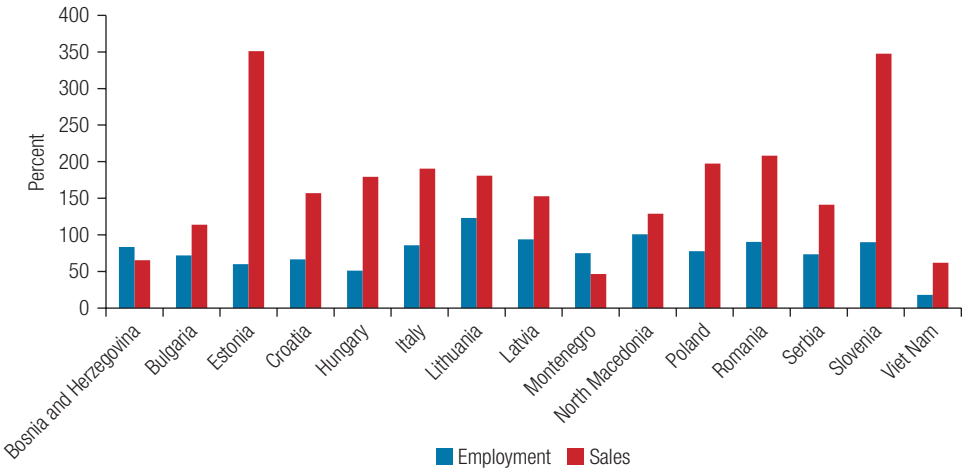
New empirical analyses conducted for this report using a cross-country panel data set for 14 eastern and central European countries, and five country studies using census data, show that BOSs are generally larger and more capital intensive than their private sector counterparts (figure O.3). Importantly, the relative performance of BOSs varies with the extent and nature of state ownership. BOSs with substantial private ownership are generally more efficient than those with majority or sole state ownership. And BOSs that are indirectly owned by the state are often more efficient than those that are directly owned.

Overall, BOSs generate higher revenues, employ more workers, and pay higher wages than private firms in the same sectors. This is true in all 5 countries for which census data at the firm level are available, as well as in the 14 countries in eastern and central Europe with panel Orbis data. Where data on assets are available, BOSs also tend to have higher rates of capital per worker.

A wage premium is found in almost all countries, ranging on average from 3 percent to 22 percent. Across countries the premium is higher for firms that are fully

FIGURE O.3 BOSs Are Much Bigger than Privately Owned Firms in Terms of Employment and Sales

Relative size in terms of employment and sales for BOSs compared to private firms, selected countries, 2019



Source: Original figure for this report.

Note: This figure shows that for Romania, for example, sales in BOSs are on average more than double those in private firms (within the same two-digit NACE code and controlling for firm age and country). BOSs = businesses of the state; NACE = Statistical Classification of Economic Activities in the European Community.

or majority-owned by the state. Among firms with minority state ownership, there is not a significant premium.

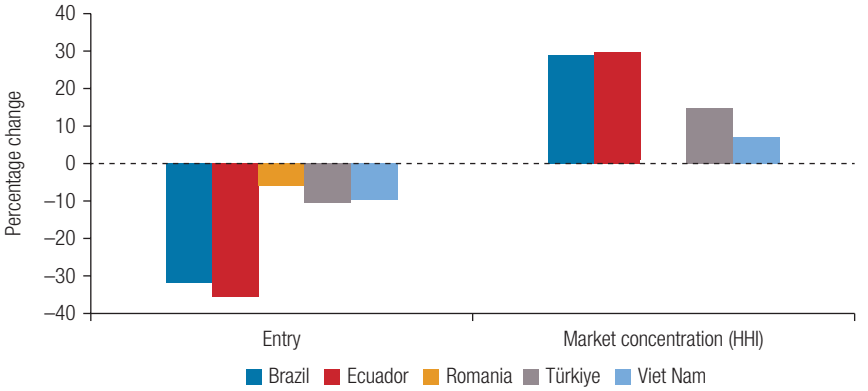
Paying higher wages could be consistent with BOSs having social goals, or with incumbent workers capturing rents, or simply with BOSs attracting higher-quality workers. In Brazil, the only country with census data providing information on both employers and formal employees, controlling for differences in workers' quality reduces the wage premium from 18.5 percent to 4.5 percent, but it does not make it disappear.

4. Sectors with a Larger State Footprint Are Less Dynamic

The analyses conducted for this report also show that a greater state presence in commercial activities is associated with lower aggregate productivity for most countries. The effects are not just statistically significant: in many cases they are large, especially in competitive markets. This result could be expected, given that BOSs underperform their private counterparts. However, effects at the sector level are more consistent across countries than are the effects at the level of individual firms, suggesting that there are additional forces influencing sector dynamics.

FIGURE O.4 A Stronger State Presence Is Associated with Lower Firm Entry and Higher Market Concentration

Percentage change in entry rate of new firms and in market concentration when the BOS firm is present in sectors, selected countries, various years 2007–19



Sources: Akcigit and Cilasun 2023 (Türkiye); Cirera, Brolhato, and Martins-Neto 2023 (Brazil); Dauda, Pop, and Iootty 2023 (Romania); Ferro and Patiño Peña 2023 (Ecuador); and Hallward-Driemeier, Aterido, and Tran 2023 (Viet Nam).

Note: This figure shows that in Brazil, for example, doubling the state's share in a sector is associated with 30 percent less entry. Entry is based on the rate of entry of new firms in Romania and Türkiye and on the share of revenues accounted for by young firms (under age five) in Brazil, Ecuador, and Viet Nam. Market concentration is measured using the Herfindahl-Hirschman index (HHI). The years covered vary by country: 2016–19 for Brazil, 2011–19 for Ecuador and Romania, 2015–19 for Türkiye, and 2007–19 for Viet Nam. All effects are statistically significant except for market concentration in Romania.

One such force is reduced firm entry (figure O.4). In four of five countries with census data, a greater presence of the state is associated with either fewer young firms (Romania and Türkiye) or a lower share of economic activity accounted for by young firms (Brazil and Viet Nam). Across all five countries, doubling the state's share in a sector is associated with 5–30 percent less entry, with the impact being larger in competitive sectors. Conversely, in the case of Viet Nam, the rolling back of state presence was associated with more substantial firm entry.

A related consideration is the effect on market structure. Again, in four of the five countries, a greater state presence is associated with higher market concentration, independent of the sector. And, across all five countries, doubling the state presence in a sector is associated with up to a 30 percent higher concentration.

There is also evidence of less labor reallocation when the presence of the state in a sector is significant. This is so across the 14 pooled countries in eastern and central Europe, as well as in Romania and Viet Nam, whereas in Brazil, Ecuador, and Türkiye the relationship is not statistically significant.

The impact of state ownership on other dimensions of market dynamism is more muted. In particular, the empirical analyses do not reveal any systematic association

between state presence in a sector and rates of investment by BOSs, or by average private firms in that sector due mainly to country heterogeneity and different policy and regulatory frameworks.

Why State Ownership Matters

The broadening of state participation in commercial activities, and the emergence of complex ownership arrangements, calls for revisiting the role of the state in business. Whether this role is positive or negative remains a topic of hot conceptual debates. But rather than relying on first principles and trying to prove that state ownership is good or bad in general, this report embraces an empirical approach to shed light on the circumstances under which positive or negative outcomes prevail.

Empiricism alone is not sufficient, however. In interpreting the four findings described above, it is important to keep in mind that how much the state chooses to own and which sectors and firms it invests in are not random events. Governments seek to be proactive because they want to address apparent or evident market imperfections or for political economy considerations. Economic rationales for and final effects of SOEs are market-specific.

Given the potential selection biases, the four stylized facts uncovered are descriptive in nature, not necessarily entailing true causation. To make sense of them, a tractable analytical framework is needed. The framework used in this report is inspired by second-best theory (Lipsey and Lancaster 1956).[3]

Real-world economies are characterized by multiple market imperfections and institutional failures that government interventions seek to correct. State ownership of commercial enterprises is one important instrument in the government's toolkit. However, BOSs are also characterized by features that distinguish them from private firms. How these features affect aggregate outcomes critically depends on how they interact with market imperfections and institutional failures in the rest of the economy. Because distortions may neutralize or amplify each other, a basic result of second-best theory is that government interventions may not have the same consequences as in a first-best world.

To various degrees, depending on countries and sectors, BOSs are characterized by at least three distinguishing features: (1) they are often supported by fiscal resources, explicitly or implicitly; (2) they tend to benefit from a more favorable regulatory environment, and may even influence it; and (3) maximizing profits is not their only, or even their main, objective. These features, in turn, have important implications.

A Soft Budget Constraint

BOSs' accounts and government fiscal structures are often intertwined, although not necessarily in a direct or transparent way. Indeed, many governments provide direct monetary transfers to BOSs, particularly BOSs fulfilling public service obligations, or to their customers through explicit subsidies or tax exemptions. The transfers can also be indirect, taking the form of privileged access to land, subsidized credit, or essential infrastructure services. And they may be implicit, as when governments offer debt guarantees in good times or bailouts and recapitalizations in bad times (La Porta and Lopez-de-Silanes 1999; Vickers and Yarrow 1998).

In the literature on SOEs, this combination of direct, indirect, and implicit transfers of resources is known as a soft budget constraint (Kornai 1986). Softness may be a permanent feature; for example, the government may consistently subsidize the price of services provided by BOSs to offset their high cost to the population. But it can also be seasonal, as when BOSs are called on to contribute to countercyclical investment and employment policies during periods of crisis.

No doubt, there can be benefits associated with this more flexible access to resources by BOSs. For example, in the case of utilities, permanent subsidies to electricity and drinking water—if well targeted—could favor households of more modest means and support better social outcomes. Similarly, following natural disasters—such as floods and earthquakes—the soft budget constraint may allow BOSs to maintain or recover basic services in times of hardship.

However, there are also costs associated with these potential benefits, and they can be significant. For example, the total operating expenditures of 135 infrastructure SOEs in 19 countries averaged 3.1 percent of GDP between 2009 and 2018. These expenditures were partially supported through fiscal injections amounting to 0.24 percent of GDP for power and roads, 0.12 percent for airlines and airports, and 0.04 percent for railways (Herrera Dappe et al. 2023). And this is without counting the value of privileged access to land, services, or credit.

The actual amount of the transfers could be one order of magnitude bigger than these figures suggest, because resources are often channeled through the demand BOSs face. For example, there may be tax breaks on electricity consumption, or on natural gas for residential heating, or on exploration for oil. In 2022, subsidies to the consumption of energy—a sector with a heavy state presence—were estimated at about 1 percent of GDP (IEA 2023). The figure would be much higher if the environmental and health costs of fossil fuel energy consumption were added to the subsidies themselves (IMF 2021).

Emerging forms of state ownership make the total bill associated with the soft budget constraint even more blurred. In countries with significant natural resource exports,

governments are increasingly taking stakes in firms through sovereign wealth funds. Globally, assets under management by these funds have grown from less than US$1 trillion in 2000 to over US$11 trillion in 2022 (Megginson and Malik 2022). Sovereign wealth funds have a variety of objectives, but their bountiful resources clearly represent an advantage for the beneficiary BOSs (Divakaran et al. 2022; Gelb et al. 2014).

Relying on BOSs to counter economic fluctuations has reduced fiscal space. Data collected for the World Bank Subsidies and State Aid Tracker show that, during the recent COVID-19 pandemic, many governments deployed fiscal programs that far exceeded state support to firms during the global financial crisis of 2007–08. In many developing countries, public debt levels were already high to begin with, but in some they have reached unsustainable levels because of these large-scale countercyclical policies (Freund and Pesme 2021). With emergency support to BOSs having a high likelihood to become sticky, a further build-up of fiscal risks and sovereign debt crises cannot be ruled out.

The soft budget constraint can thus have important economic downsides. The transfers received by BOSs need to be financed, which requires higher tax rates either in the present or in the future, because the additional public debt needs to be serviced. Higher tax rates penalize economic activity and can be expected to crowd out private sector employment and investment. This cost is more widespread and diffuse than the benefits from the soft budget constraint, but it is not less real.

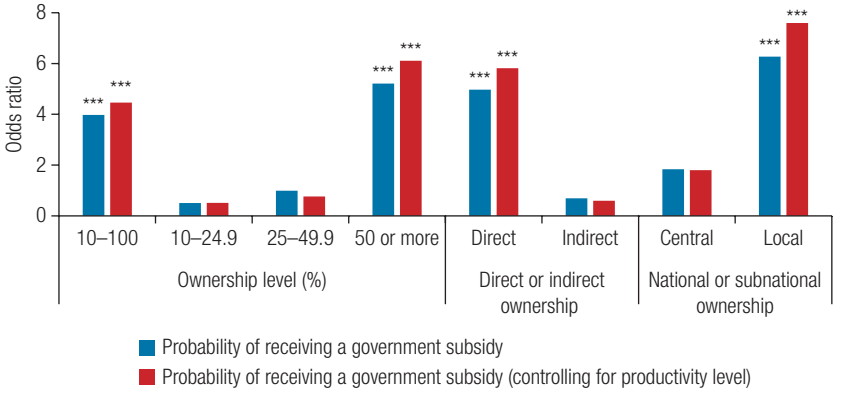
The soft budget constraint has other important implications for economic efficiency. Resource transfers to BOSs result in unfair competition with private sector firms. For example, in Romania, BOSs are, on average, four times more likely to receive government subsidies than private firms, irrespective of their productivity levels (figure O.5). The odds for BOSs with majority, direct, or local state ownership receiving subsidies are even higher.

Even in the absence of direct transfers, state participation can have a signaling effect to businesses and partners indicating that the firm is backed up by the government, providing it with a clear comparative advantage (Dewenter and Malatesta 2001; Nguyen, Do, and Le 2021; Shleifer 1998; World Bank 1995).

And, even when government support is allegedly provided to all firms, as was often the case during the COVID-19 crisis, transfers can be tilted in ways that affect the level playing field. The nature of government support can be different as well. For example, during the COVID-19 crisis, government purchase of equity was the most frequent measure for schemes targeted to BOSs, followed by grants and loan guarantees. Private firms, however, rarely benefited from purchase of shares and debt alleviation, suggesting that government support was on more generous terms in sectors with higher levels of state ownership.

FIGURE O.5 Government Subsidies Favor Firms with State Ownership: The Case of Romania

Probability of a BOS firm receiving a subsidy relative to a private firm, 2011–19



Source: Dauda, Pop, and Iootty 2023.

Note: This figure shows that in Romania BOSs are, on average, four times more likely to receive government subsidies than private firms. Asterisks represent significance levels. Indirectly owned BOSs are owned by the state through another company; directly owned BOSs are owned by a government or state agency. Minority-owned BOSs have state ownership of 10–49.9 percent; majority-owned BOSs have state ownership of 50–100 percent. Subnational BOSs are owned by a subnational government entity; national BOSs are owned by the central government. BOS = business of the state.

One of the most detrimental consequences of the soft budget constraint is to undermine the incentives faced by BOSs. Because of direct, indirect, and implicit government transfers, BOSs can afford to be less efficient, to provide higher wages and benefits to their workers, and to delay potentially painful adjustments in the event of adverse shocks (Pop and Connon 2020). Continued support may also be linked to increased risk taking and moral hazard by BOSs (Dam and Koetter 2012; Hryckiewicz 2014; Marques, Correa, and Sapriza 2018; OECD 2010; Poczter 2016).

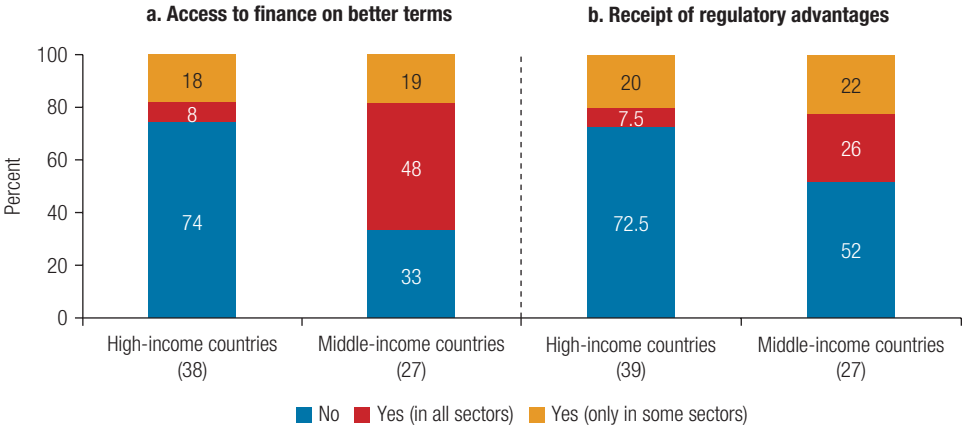
A Favorable Regulatory Environment

In order to fulfill their mandates, BOSs are often granted advantageous treatment relative to private firms, such as preferential access to inputs and market protection from new entrants, thereby preserving dominant positions and increasing the costs to compete or discriminating against other firms. Governments may also provide implicit advantages, such as market rules and policies that in principle apply to all market players but in practice protect the position of BOSs or dampen competition in markets in which BOSs are present. SOEs frequently receive such advantages, particularly in middle-income countries as confirmed by the product market regulation data (figure O.6).

The economic rationale for this more favorable regulatory treatment varies across sectors. State involvement seems to be more easily justified in some infrastructure sectors, where a combination of high entry barriers and positive externalities may

FIGURE O.6 SOEs Often Receive Advantageous Treatment

Advantages available to SOEs over private firms, by country income level



Source: Organisation for Economic Co-operation and Development (OECD) product market regulation (PMR) questionnaires, 2018; OECD and World Bank PMR questionnaires, 2013–22.

Note: PMR indicators measure the regulatory barriers to firm entry and competition in a broad range of key policy areas. SOE = state-owned enterprise.

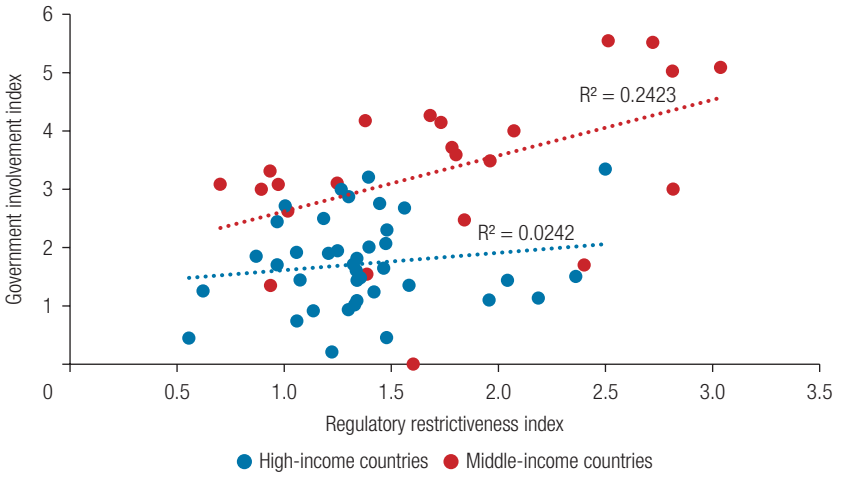
deter private participation. In the energy sector, this logic would apply, for example, to transmission, which is a natural monopoly, whereas generation can be deemed partially contestable.

At the other end, sectors such as hospitality, real estate, and trade have less justification for regulations enshrining state participation. Nevertheless, it is not unusual to find legal or de facto monopolies in sectors that could otherwise be operated under competitive conditions by the private sector. Examples include meat production in Botswana, cardboard production in Bolivia, and fertilizer provision in The Gambia. In such cases, the regulatory advantage of BOSs is associated with unfair competition with private firms.

These less defensible regulatory advantages typically reflect a conflict of interest. As a policy maker the government has a broader responsibility toward the public. Its regulation of the market and its enforcement of competition law should thus aim at increasing economic efficiency and ensuring a fair distribution of its benefits. However, as an owner of BOSs, the government has an interest in maximizing their revenues and distributing them in politically advantageous ways.

These conflicting roles raise the possibility that the state may make decisions that advantage BOSs over their competitors. Blurred lines between public interest and financial gain call for a careful review of the regulatory environment in which BOSs operate. This is especially needed in competitive markets, where there is not a strong economic rationale for state participation. And the review needs to go beyond the letter

FIGURE O.7 Restrictive Market Regulations Are Correlated with State Ownership
State involvement and restrictive regulations, by country income level, 2018



Source: Analysis of the Organisation for Economic Co-operation and Development (OECD) product market regulation (PMR) indicators and the OECD and World Bank PMR indicators; OECD PMR questionnaires, 2018; OECD and World Bank PMR questionnaires, 2013–22.

Note: PMR indicators measure the regulatory barriers to firm entry and competition in a broad range of key policy areas. The data cover energy, communications, and transportation in 39 high-income countries and 23 middle-income countries. The government involvement index measures the degree of state ownership and government control. The regulatory restrictiveness index measures barriers to competition resulting from the presence of anticompetitive regulation or the absence of pro-competition regulation.

of the law, because the state may not adequately protect against anticompetitive behavior or prevent undue exercise of market power by the businesses it owns.

In high-income countries, the state has been replacing direct participation in network sectors (such as energy, communications, and transportation) with indirect interventions, putting in place regulations that would enable private entry and expansion (figure O.7). In middle-income countries, governments have also moved to private ownership but still lag advanced economies on the necessary regulations to support sound market competition and hold dominant firms in check.[4]

A hint at the regulatory advantage BOSs may benefit from is protective tariffs, a restrictive trade policy instrument applied to sectors that are competitive by nature. In more than half of the countries for which product market regulation data are available, tariffs are higher in sectors where BOSs are present, compared to sectors where all domestic suppliers are private firms.

Regulatory advantages in competitive and partially contestable markets can be expected to have a negative impact on economic performance. Even in the absence of financial support by the state, the perception that BOSs could have an easier time getting procurement contracts, or avoid having to meet full regulatory standards, could

discourage more efficient private sector firms from entering the market and lower capital mobilization (Shleifer 1998; World Bank 1995).

Regulatory advantages also challenge standard performance measures. For example, a positive relation between state ownership and profitability has been found in sectors where state dominance is high and competition is low (Liljeblom, Maury, and Hörhammer 2020). Firms in which the state holds a golden share have also been found to be more profitable (Kočenda and Svejnar 2003). However, it is not clear whether this higher profitability is driven by efficiency or by government support (Le and Buck 2009; Yu 2013).

Country-level studies provide hints that regulatory advantage is at play. In China, the larger the market share and market power of SOEs is, the lower is the probability of entry of more productive private firms (Brandt, Van Biesebroeck, and Zhang 2012). And, in Poland, SOEs are found to have less financial liquidity and lower inventory management than their private sector counterparts, yet their return on assets is higher (Kabaciński, Kubiak, and Szarzec 2020).

Nonprofit Objectives

State involvement in business is often associated with delivering development objectives, such as providing universal services, contributing to the social contract through employment, expanding access to finance, or driving the energy transition. These motivations are generally perceived by the public as valid justifications for the presence of SOEs in the economy (Vagliasindi, Cordella, and Clifton 2023).

Defensible economic arguments for BOSs not to focus only on their profitability include addressing market failures that could lead to an undersupply of specific goods or services, tapping positive externalities and offsetting negative ones, exercising government control over strategic sectors for national security purposes, and catalyzing investments in new markets when there are first-mover constraints (Bernier, Florio, and Bance 2020; Chang 2002; Mazzucato 2011; Millward 2011).

There is some evidence that BOSs effectively deliver on social goals. For example, in China, SOEs perform better than private firms for pollutants covered by government targets and they perform similarly for the unregulated pollutants (Wang, Liu, and Zhan 2022). The difference suggests that BOSs can be responsive to policy requirements.

However, this example may not necessarily be the norm. A deep dive into the cement industry conducted for this report using annual company and industry data shows that BOSs in the high-emitting cement sector exhibit significantly higher carbon dioxide emissions than their private peers, particularly among the top 10 companies. And in renewable energy, a sector in which commercially viable solutions are available,

investments have been driven by the private sector. These findings complement existing research that shows that SOEs in the energy sector are also often financially challenged and have weaker environmental performance than their privatized peers (Asane-Otoo 2016; Harrison et al. 2019; Meyer and Pac 2013). More generally, BOSs' ability to raise resources for new less-carbon-intensive investments or climate adaptation can be constrained by government-imposed prices and their poor financial performance.

The mechanisms at play are informative about the true motives of BOSs. Across 46 countries, a significantly negative relationship exists between market concentration and investments in renewable energy, suggesting that large utilities use their market power to keep out competitors that engage in renewable energy generation (Prag, Röttgers, and Scherrer 2018). This may reflect a determination to maintain the value of sunk-cost investments in fossil fuels by avoiding—and potentially opposing—investments in renewable generation capacity.

A more realistic view of BOSs must therefore recognize that their nonmonetary goals are not necessarily aligned with the public interest. Their jobs represent an important source of political patronage, and their workers may have sufficient leverage to capture higher wages and benefits. Rather than minimizing emissions or ensuring universal service, BOSs could well maximize their own payroll.

The Good, the Bad, and the Ugly

The differences between BOSs and private firms are not in themselves good or bad. Depending on how these differences are leveraged by policy makers, and how they interact with market imperfections and institutional failures in the rest of the economy, BOSs can support good, bad, or ugly aggregate outcomes, which explains why making a case in favor of BOSs, or against them, would be misguided. The relevant question is under which circumstances can good, bad, or ugly outcomes be expected.

From Effective to Wasteful Resource Mobilization

The COVID-19 pandemic illustrated how budget resources can be quickly mobilized through BOSs to address crises or natural disasters. Thus, in Brazil and Indonesia, state-owned aircraft manufacturers were requested to produce ventilator prototypes (World Bank 2021). In El Salvador, the government allowed a three-month deferral of utility payments without having utilities cut off and approved a one-time US$300 subsidy to approximately 75 percent of all households in the country. In Colombia, free water access was provided for over 1 million people without payment. In Serbia, all citizens were granted deferral of the payment of energy bills without surcharges. And, in Angola and Nigeria, governments negotiated with utility companies not to shut off energy supply for nonpayment and to introduce more flexible payment plans.

Temporary financial support to large BOSs may also stabilize employment during crises, thus cushioning social impacts (Kopelman and Rosen 2014). For example, during the COVID-19 crisis, few BOSs furloughed or fired their staff (IMF 2021). As a result, their employees were significantly less likely to have lost their jobs or to have seen their incomes reduced, compared to their private sector counterparts (EBRD 2020). By financially supporting large and at times critically important BOSs, governments may thus have prevented deeper declines in aggregate demand.

However, temporary support was also provided to private firms during the COVID-19 crisis, and some governments went out of their way to avoid discriminating against them. For example, a majority of countries provided resources to airlines to help them navigate the downturn. Yet, to ensure a level playing field, in Norway state support was granted to all airlines holding a Norwegian air operator certificate, and in Sweden to all airlines having a Swedish commercial air transportation license, irrespective of their ownership (Pop and Coelho 2020).

Such evenness was not the norm, however. Out of 112 state support schemes for the air transportation sector in 66 countries, almost 40 percent exclusively targeted BOSs. Among monetarily quantified relief measures for airlines provided by governments or government-backed entities, BOSs received 68 percent of the support, compared to 32 percent for private airlines (Martinez Licetti, Sanchez-Navarro, and Perrottet 2020). And several studies have challenged the view that BOSs performed better than private firms during the COVID-19 crisis (Bortolloti, Fotak, and Wolfe 2022; Herrera Dappe et al. 2023; Jie et al. 2021).

From Market Discipline to Uneven Playing Field

Governments can instill competitive behavior in BOSs through adequate competition legislation and regulation. To avoid the abuse of dominance by vertically integrated public incumbents, governments may limit entry of BOSs into market segments where competition is possible.

Merger control has been another important tool to limit the anticompetitive effects of market consolidation. In Hungary, the competition authority blocked the acquisition by the national telecommunications company of a small regional telecom operator that later grew to become a European player. Similarly, in Namibia, the acquisition of the second-largest mobile operator by the largest public telecom incumbent was allowed on the condition of separating the management and shareholding of both companies.

Good practices also call for BOSs not to act as regulators and market players at the same time. For example, a conglomerate owned by the government of Singapore is the direct owner of many commercial companies at home and abroad. Among

other firms, it owns a golden share in Singapore Airlines, a prestigious and successful air carrier. However, this conglomerate is not involved in market regulation, nor in the management of Singapore's international airport, which serves as the airline's main hub.

Unfortunately, examples of BOSs benefiting from regulations that distort competitive markets and affect private sector development are numerous throughout the world. For example, in Nepal, a fully owned BOS that accounts for 63 percent of dairy product output benefits from bans on foreign direct investment and on imports of competing products. And, in Ethiopia, shipments require the letter of credit issued by a fully owned BOS, giving this BOS the monopoly on shipments, especially imports.

Other examples include those where the regulatory role is carried out by the BOSs themselves. In South Africa, a BOS firm that is the owner and operator of all major commercial ports also acts as the port sector regulator. In Ethiopia, a BOS firm that is the sole importer of fertilizer in the country is directly involved in its price regulation and market allocation. In Kenya, a BOS firm involved in seed research and production sits on the regulatory committee that makes decisions about permits and certifications required for private peers. And, in Viet Nam, a BOS firm that is one of several market participants in the oil and gas sector can by law influence investment decisions for all firms in the industry. Similar examples can be reported for Angola in relation to cement and for Serbia for intercity bus transportation. In some cases, beyond a regulatory role, the challenge is conflict of interest. In Egypt, the telecommunications regulator falls under the authority of the ministry in charge of communications and information technologies, which also owns 80 percent of the biggest telecom operator.

From Virtuous to Disturbing Nonprofit Objectives

Because of their public service mandates, BOSs can be levers for governments to effectively advance societal goals despite the lower profitability associated with them. This unique ability to internalize development objectives has been manifest in the energy transition, as countries strive to meet their commitments on climate change mitigation and adaptation. However, government effectiveness can be undermined when BOSs are used to achieve other goals such as revenue generation or employment, creating tensions between mandates.

For example, in less than 15 years, a vertically integrated BOS utility in Uruguay led a dramatic reduction in the country's carbon footprint. By the end of 2019, Uruguay not only supplied 98 percent of its total electricity consumption out of clean energy sources but had also become a net exporter of energy to neighboring Argentina and Brazil. Still, despite potentially having one of the lowest generation costs in the world thanks to its clean generation matrix, the utility's electricity was

among the most expensive for both households and firms. This is the result of a different—nonprofit—objective of this BOS, namely to raise revenue for the government (World Bank 2022).

Tensions between mandates for BOSs can be found elsewhere. Mexico's first three clean energy auctions, held in 2016 and 2017, were seen as an unqualified success, bringing major new solar and wind developers into the market and delivering stunningly low prices. However, in 2021, the energy reform that had helped spur the country's early clean energy growth was rolled back. The changes were intended to benefit Mexico's fossil fuel–dependent BOS utility, which was no longer required to purchase energy for basic supply via auctions, and could instead buy from its own power plants, even if the energy generated is dirtier and more expensive (Vagliasindi 2023).

BOSs around the world are often less virtuous than their governments' climate change commitments may suggest. In South Africa, for example, generation by the 100 percent state-owned monopolist electricity company relies on coal, the production of which often dominates local economies and provides highly desirable jobs (Ruppert Bulmer et al. 2021). Generation projects based on solar and wind energy have been awarded after fierce competition, and their generation cost is 40–50 percent cheaper than those of the new state-owned coal-fired plants (Montrone, Ohlendorf, and Chandra 2022). However, these projects were delayed by the state-owned utility.

Similarly, in Indonesia, about three-quarters of coal production is purchased by a 100 percent state-owned electricity company that owns 73 percent of installed generation capacity. The nonprofit objective in this case seems to be social, because coal mining jobs pay more than most other sectors and employment is highly concentrated in two remote regions (Ruppert Bulmer et al. 2021). Employment objectives can openly clash not only with environmental goals but also with health and safety considerations.

Finally, the reliance on BOSs in the energy transition should not deter private investment. Across the world, the private sector has been the major driver of investment in renewable energy generation. To decarbonize the energy sector, many countries will have to liberalize markets, pursue ambitious BOS reforms, and create level playing fields between private and state-owned actors.

When Are Good Outcomes More Likely?

While state business ownership is likely to continue, what it accomplishes very much depends on how BOSs interact with the rest of the economy. The features that distinguish them from private firms—a softer budget constraint, a more favorable regulatory environment, and nonprofit objectives—may make them useful tools for economic policy.

But these features may also get compounded with the economy's market imperfections and institutional failures and come at a cost in terms of growth and jobs. The impact of state participation in markets on an economy is therefore shaped by the type of public-private ownership characterizing BOSs, by the structure of the markets they participate in, and by the broader policies and institutions that regulate state ownership.

At the Enterprise Level

State ownership can take multiple forms. How large the share of a firm's equity belonging to the state is, which agencies or bodies exercise the rights associated with such share, and how those agencies or bodies influence day-to-day decisions at the enterprise level all matter for BOS performance.

As revealed by the empirical analysis conducted for this report, minority state-owned firms often perform better than those with majority or sole state ownership. There is also some evidence that firms that are directly owned have lower growth rates than those owned indirectly. These regularities suggest that a greater detachment of state authorities from BOS firm management—leaving more wiggle room for their private partners to make business decisions—is associated with greater efficiency.

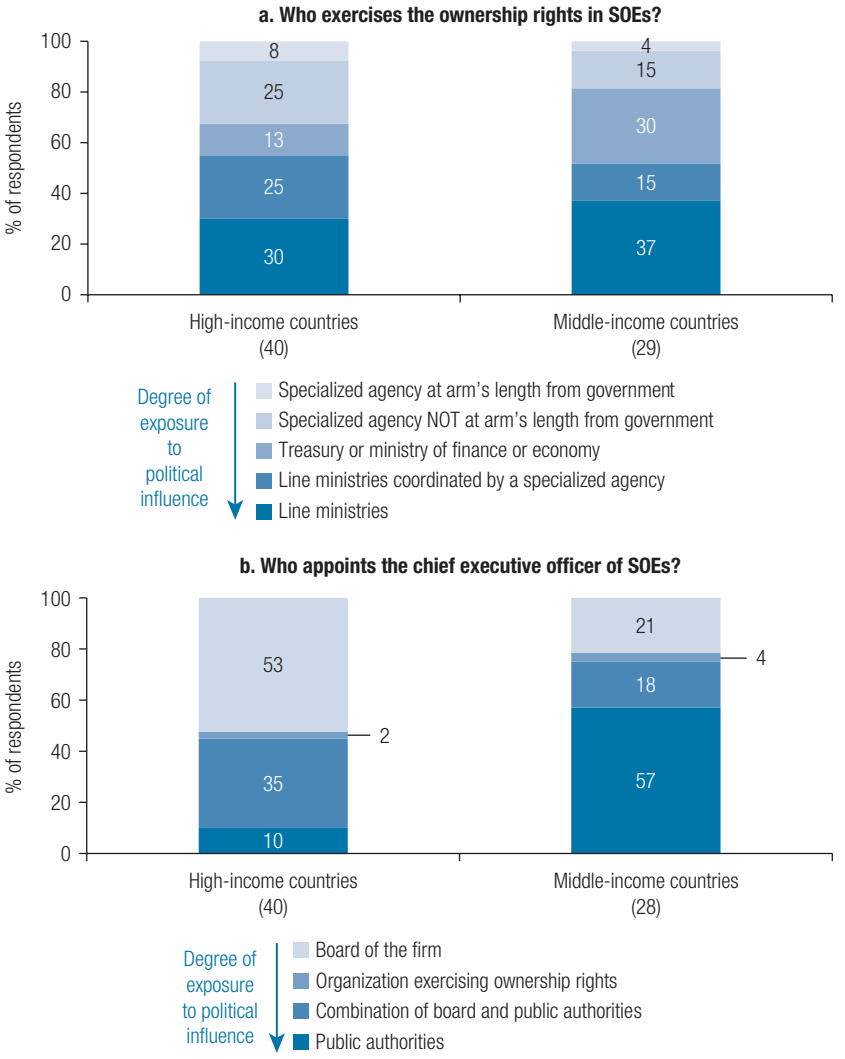
Which state agency or body is in charge is relevant too. The exposure of BOSs to state influence is greatest when ownership rights are exercised by a line ministry and lowest when they are exercised by a specialized agency that operates at arm's length from the government.

However, across a sample of 69 countries for which information is available, only a small percentage use arm's length specialized agencies. Instead, more than half of the countries have line ministries in charge, with the proportion being higher in relatively less developed countries. Higher-income countries are also more likely to have safeguards to ensure that BOS firm chief executive officers are appointed by board members rather than by public authorities, which reduces the likelihood that day-to-day decision-making will be influenced by government (figure O.8).

Politicians are not the only possible source of influence on BOSs. Pressures to depart from their intended mandates may also arise from the inside. BOSs provide some of the most coveted jobs in developing countries. In many cases, their employees are covered by protections against termination or pressures to perform akin to those enjoyed by civil servants. Their salaries and benefits—from annual leave to health care to old-age pensions—tend to be more generous than in the private sector.

These privileges may be attributed to the willingness of the government to set higher standards as a reference for aspirational private sector employers. But they are as likely to stem from insider pressure, aimed at capturing the rents made possible by the soft

FIGURE O.8 How State Ownership Rights Translate into Managerial Decisions



Source: Organisation for Economic Co-operation and Development (OECD) product market regulation (PMR) questionnaires, 2018; OECD and World Bank PMR questionnaires, 2013–22.

Note: PMR indicators measure the regulatory barriers to firm entry and competition in a broad range of key policy areas. SOE = state-owned enterprise.

budget constraint and by the market power provided to BOSs by natural monopolies and a favorable regulatory environment.

Measuring the wage premium associated with employment in BOSs raises methodological challenges, because their workers may differ in unobservable ways from private sector workers (Arnold 2022; Bales and Rama 2002; Gindling et al. 2020). However, the regulatory framework applying to a BOS firm provides some hints to the potential for rent capture by insiders. This potential is higher the more protected

BOS firm jobs are, and the less likely it is that the BOS will be allowed to go bankrupt and close operations.

Measures that subject BOSs to market discipline and competitive neutrality can improve BOSs' performance, while achieving their public service obligations. In Morocco, the government makes agreements with BOSs on key performance indicators and scope of activities called *contract program*s (Article 7 of Law 69-00). In the case of the national airline, these contract programs provide incentives to respond to market forces and drive the company toward profitability, while offering adequate compensation for its public service obligations.[5]

At the Sector Level

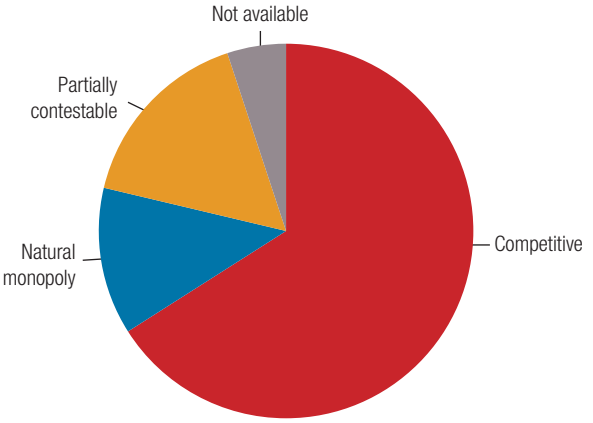
Around the world, BOSs operate in a range of sectors that differ both in their market structure and in the way competition among market players is regulated. In some sectors, fixed costs and returns to scale are such that only one firm—the natural monopolist—can be expected to operate. In others, there is potentially more than one supplier, or at least the incumbent can be challenged by new entrants. In principle, BOSs are more prevalent in natural monopolies and in sectors with public service obligations. But the cross-country BOS data assembled for this report show that this is not the case.

Across the 91 countries covered by the BOS database, the vast majority of BOSs operate in competitive or partially contestable markets (figure O.9). Because BOSs in natural monopoly markets tend to be larger and more capital intensive, the share accounted for by competitive or partially contestable markets is highest when the metric chosen is number of firms and lowest when it is the employment level.

Unless market regulation ensures a level playing field, a strong BOS firm presence in competitive or partially contestable markets runs the risk of undermining private sector entry, favoring market consolidation, and slowing down innovation. An analysis of the World Bank's latest data collected on anticompetitive laws and policies across 10 countries and seven key economic sectors shows that regulatory restrictions are more frequent in sectors with BOSs. Restrictions are found in three out of four sectors with a BOS presence. For example, BOSs often benefit by being granted exclusive rights, being protected by quotas and price controls, being involved in regulating the sector, and being exempt from economywide laws. Where these explicit and implicit advantages are combined, BOSs may enjoy full control over the market in which they operate.

The challenge for regulators is to foster efficiency and prevent the exercise of excessive market power. Whether they can do so depends on how the regulatory environment handles the potential conflict between the state as a regulator in the public interest and the state as a self-interested market player. Anticompetitive regulations are less likely when regulations are designed and enforced by a specialized agency that operates

FIGURE O.9 Most Business Activity by the State Is in Competitive or Partially Contestable Markets



Source: World Bank Global Businesses of the State (BOS) database; 91 countries.

at arm's length from BOSs. This kind of separation is unfortunately less frequent in middle-income countries than in high-income countries.

The conflict between the state as a regulator and as a business owner disappears when BOSs operate in foreign markets, whose competition rules are set abroad. Internationalization can thus become an explicit policy to expose BOSs to market discipline and to improve their global competitiveness. About 70 percent of countries in the BOS database have state-owned companies with a presence abroad, with operations across borders run through subsidiaries or indirectly owned businesses—including sovereign wealth funds. These companies are in principle subject to greater market discipline than BOSs operating exclusively within borders. However, these firms should not benefit from government subsidies and credit guarantees, which would tilt the playing field in their favor abroad.

At the Economywide Level

Good outcomes are more likely when other parts of the government machinery help BOSs keep focused on their mandates while preventing them from creating unwarranted risks for the rest of the economy. For example, a soft budget constraint may help BOSs attain their objectives quickly, but an excessively loose constraint may undermine their drive for efficiency and end up imposing a disproportionate burden on taxpayers. Similarly, oversight exercised at arm's length may give BOSs the flexibility they need to be nimble, but weak oversight may result in the accumulation of hidden debts and contingent liabilities. And not trying to influence day-to-day decisions may avoid political interference, but not intervening at all may reduce incentives for good performance by managers and workers.

In the end, the overall quality of governance in a country is bound to determine whether BOSs deliver good, bad, or ugly outcomes. Preventing an excessively loose budget constraint requires good fiscal institutions that are able to transfer resources to BOSs when justified, but to condition support on performance and to assess that targets are indeed being met. Avoiding situations in which BOSs need to be bailed out requires solid debt management capabilities so that their liabilities and risks can be evaluated in real time. And providing incentives for the management of BOSs to perform as expected requires strong accountability mechanisms, including the ability to reward or dismiss those in charge of delivering, from chief executive officers to technical cadres and workers.

There is some evidence pointing to the important role played by the broader institutional setting in which BOSs operate. Thus, widespread gaps in BOS firm performance across Europe and Central Asia have been attributed to a large extent to differences in governance (IMF 2019). Across 30 countries in this region, the effect of BOSs on economic growth in the period 2010–16 has been found to be neither positive nor negative in general, but the sign depends on the countries' institutions. The impact is more beneficial when institutions are strong and more detrimental when they are weak. These effects become statistically significant in the low- and high-end tails of institutional quality (Szarzec, Totleben, and Piątek 2022). And whether BOSs are leaders or laggers in climate action depends on enabling factors, including sound institutions and regulations (Isungset 2022; Talukdar and Meisner 2001).

Finally, the institutional capacity and the implementation of competitive neutrality across markets matter when transitioning BOSs to private sector players. Governments have several measures at hand to implement this transition effectively for the benefit of consumers and businesses (box O.2). Effective pro-competition regulation of incumbents that were former BOS monopolies is essential to facilitating an adequate transition.

BOX O.2

The Subsidiarity Principle of Business of the State and Market Reforms: The Case of Peruvian Telecommunications Markets

According to the subsidiarity principle, the state plays a subsidiary role in the provision of economic activities. This principle is grounded in both economic and social considerations. The state's resources are limited and must be assigned to the most valuable objectives. The principle of subsidiarity represents a limit to state action in the market, as it establishes that the state can only intervene in the market with a business of the state firm if the private supply is insufficient or nonexistent. If private agents are interested and capable of supplying goods and services to attend demand, then the best means for the state to intervene in those markets is by supervising

(Box continues on the following page.)

BOX 0.2

The Subsidiarity Principle of Business of the State and Market Reforms: The Case of Peruvian Telecommunications Markets *(continued)*

and controlling the behavior of those private agents. Meanwhile, the direct intervention of the state focuses on (1) supplying essential goods and services that will not be provided by private agents, that is, the social role of the state driven by distributive and welfare objectives; or (2) those activities that, according to the country's highest rank laws, cannot be performed by the private sector. In parallel, complementary regulatory reforms are implemented for goods and services to be provided in a competitive manner. Deregulation is also implemented in such a way that the business environment gives incentive for entry and operation of a competitive private sector.

In line with this principle, in Peru, during 2001–02, Indecopi's Free Competition Commission analyzed state-owned enterprises (SOEs) in a variety of sectors, including the postal service, commercial aviation, ship building, and the commercialization of coca leaves, which helped reform these sectors and bring private investment. Similarly, for the case of the opening up of the telecommunications sector, a strong regulatory and institutional framework was established to guarantee a proper transition from the SOE dominant player. The concession contract for the provision of telecom services was granted to a private player, initially for a five-year period, including a national monopoly in fixed telephony and domestic and international long distance.

During this period, the concessionaire was to expand and improve fixed telephony service, public service telephony, and universal service obligations in rural areas. Competition was permitted in other services, including mobile telephony, pay phones, beepers, and cable television. Additionally, the contract set specific investment goals to build the infrastructure (new lines) and thus decrease the price and increase the quality of service for consumers. The concession contract included an explicit competition clause. The clause stipulated that the concessionaire was obliged not to abuse its dominance position, not to engage in tying practices, not to discriminate in allowing other service providers access to the network, and to eliminate cross-subsidies between long distance and local telephony services. The telecom regulator played a fundamental role in the transaction. It participated in all the final stages of the privatization and renewal of contracts to make sure that the contract adhered to competition principles.

This resulted in successful bidding for the concession, over US$2 billion (almost four times more than the minimum asked price), an additional 1.19 million phone lines in the first five years, reduction of cross-price distortions between services (that is, rebalancing of rates) with a recomposition of the structure of operating earnings, completion of calls from 35 percent to over 95 percent, digitization of the network from 30 percent to over 90 percent, significant reduction in the cost and time of installing a phone line (from more than US$1,500 and several years to get a fixed line), more efficiency in the number of employees, and reduction in the allocation of its costs to wages and salaries, which was estimated at about 40 percent. The impact on consumer welfare was also significant. An important regulatory improvement after privatization was the guidelines established by the ministry and regulator for the full opening of the market, setting up rules for new market concessions to competing firms, tariff policies such as application of the total factor productivity factor to reduce rates, cost-based models to set interconnection rates, interconnection policy, access to infrastructure and essential facilities, new obligations for expanding network connectivity and its penetration, spectrum access, network digitization and quality of service, and revision of compliance with competitive regulations.

Sources: Congreso de la Republica del Perú 2002; Government of Peru Decreto Supremo 020-1998-MTC; OECD 2004; Torero 2002; Torero et al. 2003; UNCTAD 2004.

A Practical Guide for Policy Makers

The new evidence generated for this report, together with the findings from previous studies, provides guidance on whether and how to rely on BOSs as a tool for development policy. This is a time when policy makers around the world seem increasingly upbeat about the contribution state ownership can make to development objectives. Offering a few clear principles and some practical checks to implement them could help make the most out of BOSs, while at the same time highlighting the potential risks and proposing the most pertinent reform options to improve expected outcomes.

By relying on the broad BOS definition used in this report, this guidance should also help policy makers bring to the surface the least visible parts of the state's involvement in business, and hopefully trigger healthy country-level discussions on the most appropriate way forward.

First-Best Policies Rarely Require State Ownership

When deciding whether to rely on BOSs to attain specific development objectives, a first question concerns the economic rationale for the state's involvement in business. According to the subsidiarity principle, the state's duty is to perform only those socially valuable tasks for which private supply is not feasible or is clearly insufficient. From this perspective, BOSs should not displace private businesses that are fully capable of meeting social needs.

The first step in any protocol related to BOSs should therefore be to identify the least distortive policy alternative to attain specific social goals. This requires understanding the trade-off between the benefits from state ownership and its potential unintended consequences, recognizing that state participation in the production of goods and services is not always necessary to solve market imperfections or address institutional failures.

For example, BOSs can be used as a countercyclical policy tool, helping to stabilize delivery and employment during downturns or mitigating negative shocks. However, the first-best instruments to cushion economic fluctuations are fiscal and monetary policy. In a downturn, governments can spend more on physical infrastructure and social programs, and they can transfer resources to households to support their consumption. Monetary authorities can also use interest rates and banking regulation tools to facilitate access to credit for firms.

Encouraging BOSs to expand their activity may seem compelling as well, especially because they most often pay higher wages and offer more stable job opportunities and are therefore seen as providing better jobs. However, because BOSs face less budgetary discipline and less competitive pressure than their private sector counterparts, resources are likely to be used less efficiently than if they were directly channeled to households

or firms. Besides, the greater scale of BOSs' activity may be politically difficult to unwind after the downturn is over, eventually absorbing significant public resources.

BOSs can also be used as an industrial policy tool, solving some market failures in emerging sectors and jump-starting economic activity in laggard areas. However, other policy instruments are likely to achieve the same goals with lower risks of resource waste or political capture. Subsidies can make private firms internalize the positive network spillovers they generate in emerging sectors, or their positive externalities in laggard areas. Direct support to universities may compensate for the difficulties in appropriating the benefits from basic research. And advance purchase commitments may make private innovation efforts toward social goals become profitable.

In principle, BOSs could step in and tap their own resources to offset the losses from sectoral and local spillovers, incomplete property rights on new ideas, or sunk costs on risky innovation projects. But there is no guarantee that they will be as efficient as private firms in undertaking these tasks. With a softer budget constraint, a more favorable regulatory environment, and weak incentives to perform, BOSs may not be sufficiently nimble to identify the projects with the strongest economic potential, and to adjust and change course along the way as needed. Accountability, incentives, and expectations about return are typically different between private and public ownership of capital.

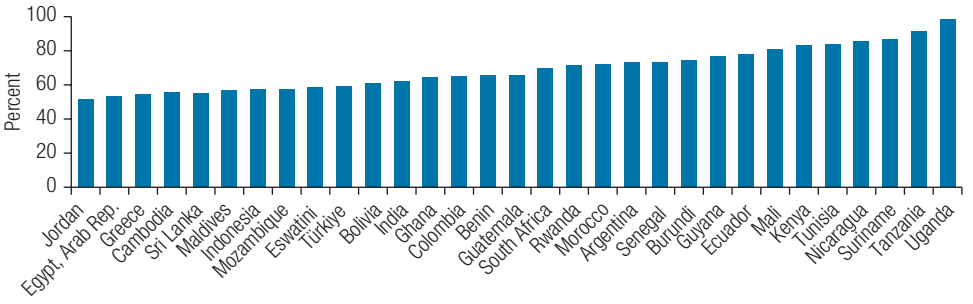
Finally, BOSs are often used to deliver on socially valuable tasks that are not privately profitable, such as providing service coverage for lower-income households and those in remote areas, or advancing the decarbonization of the economy. However, the financial resources needed to accomplish goals could be channeled through the demand side rather than the supply side. Universal service coverage may be mandatory for utilities, with the budget filling the gap where it is unprofitable. And taxes, subsidies, and standards can provide incentives for the adoption of green technologies by the private sector.

The question in this respect is whether the public resources devoted to these social goals will be more effectively used if they are channeled through BOSs than through private firms. When it comes to service delivery, there is a risk that public utilities will be overstaffed relative to their private counterparts, and that their responsiveness to customers will be lower. As for climate-related goals, BOSs may be large and operate in network sectors (such as energy, telecommunications, and transportation), but they are still just a few economic units, whereas taxes on carbon emissions or standards for carbon-saving technologies apply to all firms.

Toward Greater Transparency on Companies with State Ownership

The cross-country BOS database assembled for this report underscores the significant information gaps that remain on the extent of state ownership of firms, on the support these firms receive—explicitly or implicitly—and on their performance. Even at the central level, some countries do not have information on the number of jobs or revenue

FIGURE O.10 State Footprint Is Often Unknown Due to Lack of Information
Share of BOSs not reporting employment data, select countries



Source: World Bank Global Businesses of the State (BOS) database.
Note: BOSs = businesses of the state.

generated by companies with state investments. For example, 31 countries in the database lack employment information for half or more of their BOSs (figure O.10). Data are even more scattered in relation to other indicators, such as fiscal transfers or outstanding debt, which are necessary to get a full reading of the state's footprint in the economy. And data are frequently unavailable for BOSs that do not directly report to the central government.

More transparency on BOSs is essential to ensure accountability, to support a level playing field at the sector level, to allow for a sustainable fiscal situation at the aggregate level, and to provide confidence to private investors.

More transparency is especially important in countries with a large state presence, with conglomerate groups whose operations are not easy to grasp, and with sovereign wealth funds. To understand the true extent of the state footprint in commercial sectors, it is indeed crucial to consider indirect ownership stakes in other firms, across markets, and in value chains. Uncovering these ownership links should unveil upstream and downstream relationships and vertical integration issues that can inhibit competition and create fiscal risks.

Making BOSs' operations transparent requires the full and timely disclosure of their financial reports. But it is also important to gain a clear picture of the advantages granted by the state to each BOS firm in the form of direct transfers, consumption or production subsidies, tax exemptions, and other preferential treatment. Transparency also involves the explicit costing of the public service obligations for each company with state ownership, as well as an assessment of its contingent liabilities.

A Scorecard to Predict Outcomes and Identify Risks

Although state ownership of commercial businesses is rarely the first-best policy response to any development challenge, governments still choose to rely on their BOSs

to attain social goals. For example, first-best policies may be difficult to implement for technical reasons, and putting them in motion may take time for political reasons. Given that BOSs are ubiquitous in developing countries, using them as a second-best policy tool could be defensible.

Whether good outcomes can be expected from this choice, and the ensuing risks contained, depends on the characteristics of the BOSs and on the way they interact with the rest of the economy. Therefore, it is worth assessing the strengths and weaknesses of individual BOSs before deciding to rely on any of them for economic policy.

The findings in this report suggest that governments should systematically set targets and measure the performance against them of individual BOSs along four major dimensions: (1) transparency, (2) firm characteristics, (3) the structure of the market in which they operate, and (4) the broader institutional environment. Table O.1 presents an illustration of a simple scorecard that can be adapted to each country context and BOS firm, complemented with specific key performance indicators (KPIs). KPIs go beyond financial performance indicators and should include efficiency measures. Efficiency KPIs measure the degree of efficiency in using resources (labor, management, and capital) to generate output and revenue (for example, labor productivity and utilization of production capacity).

This scorecard should be implemented in the context of the following five guiding principles for governments to engage with BOSs: (1) develop a nationwide mapping of BOSs under various line ministries and agencies and in different sectors to monitor performance and fiscal costs; (2) apply the subsidiarity principle (focus direct participation only on markets where private supply is insufficient or nonexistent—see box O.2); (3) put in place strong institutions to regulate markets, ensure separation between commercial and noncommercial roles of BOS firms, and address the risk of capture by insiders; (4) ensure competitive neutrality of regulations and policies and their enforcement, including labor regulations, as well as direct and indirect support, between BOS firms and privately owned firms; and (5) prepare phase-out strategies for BOSs not needed anymore.

A practical way to conduct this assessment is to give a rating ranging from 0 to 10 to each of the indicators under the four headings in the table. By construction, the sum of these ratings is a score ranging from 0 to 100. The larger the aggregate score, the higher the probability that good outcomes will be attained and the lower the risk of bad—or even ugly—consequences for the rest of the economy.

This aggregate score is not a statistically rigorous predictor, but rather a heuristic tool. The assessment methodology assumes that all 10 indicators carry the same weight and that credible ratings can be produced for each of them, which is of course questionable. But the methodology has the advantage of being replicable, so that different experts, think tanks, or researchers in a country can produce their own BOS firm

TABLE 0.1 A Scorecard of the Strengths and Weaknesses of Individual BOSs

Dimension	Indicator	Rating
Data transparency and performance monitoring	1. Financial reports are timely, reliable, and publicly available. Direct and indirect government support is quantified and systematically monitored. Debt and its service are adequately documented. BOSs' efficiency and performance with specific key performance indicators (KPIs), execution of performance contracts, and achievement of other goals (for example, sustainability and resilience) are monitored. KPIs include the return on equity and equity/assets ratio, dividend policy, share of employment, portfolio value, labor productivity, and utilization of production capacity.[a]	0–10
Company characteristics	2. State ownership rights are exercised by a specialized agency rather than by a line ministry. The BOS firm has a competitively selected private partner with a stake in its performance. Board members representing the state are appointed based on professional rather than political criteria.	0–10
	3. The management of the BOS firm is appointed based on professional rather than political criteria. Sound corporate governance principles are followed. The personnel of the BOS firm are subject to the same labor regulations that apply to private firms. Dismissal for underperformance is feasible.	0–10
	4. The commercial and noncommercial activities of BOSs are clearly separated, and the costs of each activity can be properly identified and allocated. The commercial activity of BOSs yields rates of return like comparable private businesses over a reasonable period to prevent private sector competitors from being undercut.	0–10
Sector characteristics	5. The sector is a natural monopoly or is characterized by positive or negative externalities. Some potential for contestability by private entrants exists.	0–10
	6. The agency in charge of regulating the sector operates at arm's length from the company. Efficiency, equity, and security are its most important goals.	0–10
	7. Effective competition policies apply to the sector. Mergers leading to anticompetitive effects are prevented, and abuse of significant market power is penalized. Regulatory neutrality applies (for example, equal treatment for corporate and commercial law).	0–10
Institutional context	8. Transfers of resources from the government are linked to well-specified mandates. The BOS firm is not automatically supported if it underperforms. The compensation paid by the public authorities to the BOS firm for the delivery of public service obligations is transparent and limited to the minimum necessary to avoid cross-subsidization. Mechanisms of adjustments and compensation should balance out the BOSs' preferential access to finance through state-owned banks or government guarantees. The transfers to BOSs are assessed, monitored, and captured in published subsidies data.	0–10
	9. The buildup of contingent liabilities by the BOS firm and its potential to create systemic risk are adequately assessed, regularly monitored, and captured in overall contingent liabilities disclosures.	0–10
	10. There is reasonable control of corruption in the country, including disclosure of beneficial ownership for procurement contracts. The chances that the BOS firm will be used for private gain are limited. The access of the BOS firm to public contracts and their overall treatment during public procurement is open, transparent, and nondiscriminatory.	0–10
Overall	Aggregate score	0–100

Source: Original table for this report.

Note: BOSs = businesses of the state.

a. A good practice is to evaluate the fulfillment of individual BOSs against financial and nonfinancial targets set by the state-owner and disclosure of noncommercial assistance (OECD 2022).

rankings, compare the results, and identify where disagreements lie. And this replicability, in turn, should allow for some research on which indicators are associated with better outcomes in practice.

By itself, this discussion could make the business of the state in a country more visible and help build consensus on the strengths and weaknesses of its various BOSs. The rating exercise would also provide guidance on whether specific BOSs could or should be used for policy purposes. And it would help identify the areas where further policy reforms are needed to maximize the chances that good outcomes will be attained.

A Sunset Path When Bad Outcomes Are Likely

Rating the strengths and weaknesses of individual BOSs allows for a triage of reform options. Those with a high score can be used as policy instruments when first-best options are out of reach or take time to implement. BOSs with intermediate scores may call for action to improve their overall rating through measures ranging from improving their corporate governance to strengthening the independence of the regulators for the markets they operate in.

The weakest scores across the 10 indicators should guide the identification of the most appropriate reform measures for each of them. The implementation of such measures should be guided by a set of reform principles that apply across markets. But measures would also need to be tailored to the types of markets where BOSs operate—in competitive, partially contestable, and monopoly markets.

In many cases, however, the prospect for individual BOSs to reach a decent rating in the short to medium term may be slim. Given the reported overreach of state ownership into economic activities, especially in the aftermath of the COVID-19 crisis, charting a sunset path for these weak BOSs should be a central tenet of development policy. Options in this case range from divestiture and greater private sector involvement to outright closure.

Private actors can be mobilized through various mechanisms. Management contracts retain state ownership but delegate operational decisions to private investors for a specific period. They are particularly useful when service delivery involves a public good for which the delivery is relatively straightforward to monitor, as in the case of waste management. Public-private partnership arrangements and concessions transfer assets or stakes to the private sector. They are especially well suited for BOSs in sectors such as transportation, power generation, or telecommunications.

A common feature of these mechanisms is to bring private skills and expertise into companies with state ownership. Concessions and especially public-private partnership arrangements also attract private investment. In all cases, however, an element

of subsidization may be needed to cover universal service obligations and positive externalities from the activity of the BOS firm, if any. Regulation may also be needed to ensure that the public interest is safeguarded as management or ownership is transferred to private actors.

In all cases the design of a sunset path should be geared toward strengthening market discipline. The rich experience accumulated with the privatization of state assets is valuable for identifying good practices but also common pitfalls (box O.3). Embedding competition considerations within the process itself and monitoring the market ex post can ensure that the intended outcomes are achieved.

BOX O.3

Lessons from Privatization Episodes around the World

Until around 2005, privatization efforts were dominated by governments in Europe selling utilities, telecoms, airlines, and energy companies; but more recently it is governments in emerging markets that have been divesting stakes in national oil companies, manufacturers, infrastructure assets, and, especially, banks. Europe's share of global privatization proceeds decreased from roughly half around 1999 to less than 25 percent by 2009. More recently, Brazil, China, India, the Russian Federation, and Türkiye have become major privatizers—although the United States led globally for a few years by selling bank stakes acquired during the global financial crisis (Megginson, López, and Malik 2021a).

A review of businesses of the state (BOSs) reform episodes in seven countries, conducted for this report, sheds some light on the motivation for these efforts. The countries covered were Costa Rica, Ethiopia, Kazakhstan, the Republic of Korea, Pakistan, Serbia, and Uzbekistan; and the episodes considered focused mainly on privatization and accountability between the 1970s and the 2000s. The reforms' main goals were to address fiscal burdens and risks, to contain political influence and vested interests, to fight corruption, and to respond to citizens' demand for better service delivery. In several cases, there was also a will to increase the space for the private sector.

As for the mechanisms used, China has been unique in privatizing BOSs by allowing them to raise capital by selling newly issued primary shares to investors. State ownership is thus diluted indirectly by increasing the total shares outstanding rather than by having the state sell its shareholdings to investors. This approach significantly increased the size and liquidity of China's stock market. Sales have been relatively small in other emerging markets. This might reflect partial divestment strategies but could also result from multiple tranches of public share offerings spread over several years with the goal to not overwhelm the stock market's absorptive capacity and to maximize long-term sale proceeds (Megginson and Malik 2022).

On the one hand, data confirm that privatization did reduce losses and improve financial performance. However, success varied across sectors and gains were unevenly distributed. The main beneficiaries were generally the new owners, and losses were often suffered by workers, consumers, and other stakeholders. There were also legitimate concerns about opacity and corruption in privatization processes (ADB 2020).

(Box continues on the following page.)

BOX 0.3

Lessons from Privatization Episodes around the World *(continued)*

On the other hand, improvements to BOS oversight and governance did not consistently lead to better performance. For example, six state-owned airlines whose corporate governance was strengthened with World Bank support continued to face challenges. Over time, experiences such as these led to the growing recognition that traditional corporate governance reforms are not a replacement for facilitating market discipline and creating sustainable business models.

A major concern in charting a sunset path for weak BOSs concerns their personnel. The performance of these companies may be underwhelming, but their jobs remain coveted because of the higher pay, better benefits, and stronger job security. And they tend to be overstaffed. In places where BOSs are significant employers, entire communities may be affected.

In Brazil, for example, employer-employee matched data that allow controlling for individual characteristics show that relative wages declined by about 10 percent in the first two years after privatization (Arnold 2022). In Sweden, they fell by about 4 percent in the first two years and by 9 percent during the third and fourth years (Olsson and Tåg 2021). In Viet Nam, matching privatized firms with similar ones that were not privatized shows a significant initial decline in employment, followed by a somewhat lower but still sustained decline in the following years (Hallward-Driemeier, Aterido, and Tran 2023). And, in Poland, the reduction in coal mining jobs generated persistent economic challenges in the surrounding communities (Ruppert Bulmer et al. 2021).

Not adequately addressing the associated losses may be perceived as unfair and may also undermine the political viability of reforms. This requires paying explicit attention to the scale and composition of public sector downsizing, the amount of compensation to be provided to redundant workers, and the support affected communities may require (Rama 1999).

Notes

1. The good, bad, and ugly categorization is borrowed from Laeven and Valencia (2010).
2. Revenues based on 43 countries with high firm-level data coverage.
3. The general theorem for the second-best optimum states that, if there is introduced into a general equilibrium system a constraint that prevents the attainment of one of the Paretian conditions, the other Paretian conditions, although still attainable, are, in general, no longer desirable. In other words, given that one of the Paretian optimum conditions cannot be fulfilled, then an optimum situation can be achieved only by departing from all the other Paretian conditions. The optimum situation finally attained may be termed a second-best optimum because it is achieved subject to a constraint that, by definition, prevents the attainment of a Paretian optimum.
4. The product market regulation indicators were designed and collected by the Organisation for Economic Co-operation and Development for some countries and jointly collected with the World Bank for other countries.
5. Royal Air Maroc is in charge of connecting certain parts of the country by maintaining unprofitable routes for which it receives compensation from the regions; however, regions can enter into these types of agreements with other carriers.

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The state, as an owner of businesses, competes and collaborates with the private sector, and this involvement has profound implications for investment and growth. Governments actively participate in commercial markets in different forms, from controlling the production of goods and services to investing in firms as a minority shareholder. The impact of state participation on an economy's growth depends on the type of public-private ownership, the types of markets, and the importance of those markets in the economy. The impact also depends on how policies and institutions regulate both the businesses with state ownership and the markets in which they are active.

The Business of the State uses new evidence covering 91 countries from the World Bank's Global Businesses of the State database to highlight the distinction between businesses of the state and traditionally understood state-owned enterprises. The report analyzes how different ownership forms across sectors and institutional settings affect private investment, productivity, technology adoption, and job creation. It also analyzes how government participation in markets influences the ability of economies to respond to shocks, from pandemics to climate change. The report proposes a clear analytical framework for understanding the consequences of relying on businesses of the state to attain specific development goals.

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