Introduction

The state is a business owner through various ownership structures across a range of commercial activities. Stylized facts from the World Bank Global Businesses of the State (BOS) database provide new evidence on the state’s footprint across sectors and product markets. States have various motivations for establishing and maintaining ownership in markets. These motivations need to be addressed if policy recommendations are to be effective.

- The state’s footprint is large and goes beyond that of traditional state-owned enterprises (SOEs). Businesses of the state (BOSs) are large market players, with revenues equivalent to 17 percent of gross domestic product (GDP). They also account for an average of 5 percent of formal employment. This report extends the analysis of their footprint to encompass less visible forms of state ownership, such as minority stakes and indirectly owned firms, including those owned through sovereign wealth funds and special-purpose vehicles (see box 1.1 for definitions of the principal terms used).

- The state’s presence in competitive sectors is too large to ignore. It is widespread in competitive markets that the private sector could serve efficiently across manufacturing, wholesale, digital, and transportation sectors. These sectors account for the majority (more than 50 percent) of BOSs in 60 out of the 91 countries covered in the BOS database and across regions, although they are less prominent in Latin America and the Caribbean. The economic rationale for the state to own businesses is less justified in these markets. Moreover, the effectiveness of government ownership is further undermined in low-capacity and low-governance environments. Indeed, governments could adopt other instruments to address market and coordination failures. For example, they could instead improve the investment climate, including removing barriers to entry and improving fair competition, to support the growth of a dynamic private sector.

- There are multiple examples of good justifications and outcomes of BOSs, but examples of bad or ugly justifications and outcomes are common. Some justifications can be good, such as trying to solve market failures that constrain private investment or private service delivery. Some can be bad, such as trying to
BOX 1.1

Definitions of Key Terms Used in the Report

The following key terms are used throughout this report.

- **Businesses of the state (BOSs).** The term BOSs is used conceptually to discuss the participation of the state in markets as a direct stakeholder, including firms with minority state ownership starting at 10 percent, as well as its participation in firms that are indirectly owned by the state through another firm with state participation. Both central and subnational governments can participate in BOSs. The terms BOS database or BOS data refer to the World Bank Global Businesses of the State database, which provides empirical measures of BOSs (Dall’Olio et al. 2022a). The approach is consistent with the Organisation for Economic Co-operation and Development’s broad definition of a state-owned enterprise, which refers to any corporate entity recognized as an enterprise by national law in which the state exercises ownership (OECD 2015). See annex 1A. Yet this very broad definition can lead in practice to different accounting of firms in every country.

- **State-owned enterprises (SOEs).** The term SOE is traditionally used when referring to existing literature and empirical work that use the term and when referring to country-specific SOE policies and reform agendas that are aligned to a country’s own definition. These definitions are often limited to firms owned by the central government, with direct state ownership of 50 percent or more (IMF 2021). Depending on which of the two definitions is used in the report, all other firms are regarded as private firms. The report also differentiates state presence in business by the type of market, as defined in Dall’Olio et al. (2022b):

  - **Natural monopoly markets,** activities that exhibit economies of scale or subadditivity cost structures. In these markets, there is a strong economic rationale for state participation and SOEs. Examples include postal services and energy transmission.

  - **Partially contestable markets,** economic sectors characterized by some form of market power, externalities, or other market failures. This category also includes markets characterized by public goods, externalities, and asymmetries of information, in which under-provision would persist if only unregulated private firms operated in the market. Examples include banking services, airlines, power generation, and waste management.

  - **Competitive markets,** activities in which incumbents and entrants have access to similar information and production technologies and in which the provision of goods and services that are private (that is, rival and excludable) and production activities do not generate significant externalities. Thus, these markets are fully contestable (more likely to behave competitively), and there is no clear economic rationale to justify the specific participation of the state in this type of activities. Examples include manufacturing of food, accommodation industries, and wholesale and retail trade.

play an unduly large role in “strategic” sectors beyond national security purposes, which could be served more efficiently by the private sector. And some can be ugly, such as allowing political patronage or corruption. More transparency and more evidence on the effectiveness of meeting ownership objectives are needed to inform reform priorities.
The New State Footprint

This report leverages for the first time the new World Bank Global BOS database for 91 countries, capturing a broad state footprint across firms and markets. Compared to the traditional definition of SOEs, often characterized as majority directly owned by the central government, the new BOS database expands the universe to businesses in which the state’s share is more than 10 percent—whether owned directly or indirectly through another company or owned by a local or central government. These businesses can be operating both domestically and across borders (Dall’Olio et al. 2022a). This expanded recognition of state presence in business and markets blurs the boundaries between BOSs and privately owned enterprises. Traditionally, state participation in markets was captured more systematically in natural monopoly and partially contestable markets, such as utilities, network industries, and the financial sector, and was seen less often in competitive markets, such as manufacturing, hospitality, and retail. Compared with earlier databases on SOEs, the BOS database acknowledges a broader state presence. Its greater country coverage quadruples the number of firms to about 76,000 BOSs identified as having state ownership across 91 countries (see annex 1A). This report presents the most comprehensive picture of the state’s current footprint, including after waves of full and partial privatization and the more recent resurgence of state capitalism.

The state’s footprint is much larger when considering firms with state participation beyond the traditional SOEs, as revealed by the BOS database (figure 1.1). BOSs are present in more sectors in Europe and Central Asia countries, with several countries having BOSs in more than 50 percent of sectors (defined at the two-digit Statistical Classification of Economic Activities in the European Community—NACE—code). Beyond Europe and Central Asia, the Arab Republic of Egypt, India, Indonesia, South Africa, and Viet Nam stand out as having BOSs in a large share of sectors. Taking into account the new definition of BOSs adds a few economies from Latin America and the Caribbean (Argentina, Brazil, and Colombia), the Middle East and North Africa (Egypt and Morocco), and Sub-Saharan Africa (South Africa and Uganda) where the presence of BOSs is far more extensive than that of traditional SOEs.

The new data show that BOSs are large, key market players that generate substantial revenues for governments. Despite long-standing privatization agendas, the state has a large presence in many countries. The cross-country average of BOSs’ revenues relative to GDP is equivalent to 17 percent—a lower bound because revenues are not reported for all BOSs in many countries. In Bhutan, the Russian Federation, the Seychelles, Slovenia, and Viet Nam, BOSs’ revenues constitute more than 30 percent of GDP (figure 1.2). On average, BOSs also account for 5 percent of formal jobs—and much more in some countries, such as the Comoros, with 30 percent, and Bosnia and Herzegovina and the Seychelles, with up to 12 percent (figure 1.3). The density of BOSs
FIGURE 1.1 Sectors with at Least One BOS Firm versus Traditional SOEs in Select Countries, 2019


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; SOE = state-owned enterprise.
is also higher in countries with a history of central planning and in high-income countries, including small island countries such as the Seychelles.

Minority ownership, including at the subnational level, prevails for a quarter of the companies in the BOS database. The companies with minority participation are split almost evenly between those with a blocking minority of 25–49.9 percent ownership and
those with only minority participation (10–24.9 percent). And, on average, for 30 countries with good data, minority-owned BOSs represent up to 50 percent of revenues and 30 percent of employment generated by all BOSs (figure 1.4). In some economies—such as Eswatini, Madagascar, Mozambique, São Tomé and Príncipe, Slovenia, Türkiye, and Viet Nam—more than 20 percent of firms with state participation have blocking minority stakes. Minority ownership is more frequent in finance, mining, manufacturing, and quarrying. Even with minority participation, the state can intervene and influence decisively, for example, with veto power and “one share, one vote” appointments of board members.

Indirect ownership is often multilayered, which makes quantifying and assessing the true level of state control over these businesses more complex. In the BOS database, the number of firms with state participation increases by about 35 percent when firms indirectly owned by the state, including at the subnational level, are considered as BOSs. In some countries—such as Botswana, Egypt, Jordan, Mauritius, Mozambique, Uruguay, and Viet Nam—more than 60 percent of BOSs have an indirect state presence. And state ownership can originate from several state owners, from line ministries to other central and local government entities. About 8,000 BOSs across 91 countries have more than one owner. Even in countries with centralized management and oversight entities such as Angola or Peru, some entities go beyond their purview. For instance, PETROPERU, the largest fully owned BOS firm in Peru, which operates in the distribution of fuels, does not fall under FONAFE, the institution in charge of monitoring SOEs.

**FIGURE 1.4  Revenues, Employment, and Number of BOSs, by Ownership Level, 2019**

![Revenues, Employment, and Number of BOSs, by Ownership Level, 2019](image)


*Note: Includes 30 countries for which there are data available for at least 75 percent of the firms; unconsolidated firm-level data. Numbers given in the bars for revenues and employment are the total percentage for each ownership category. Numbers given in the bar for number of BOSs are the total number of BOSs in each category. BOSs = businesses of the state.*
The state also takes an indirect stake in firms through sovereign wealth funds (SWFs), creating opportunities for more fiscal discipline but also raising the risks of less transparency. SWFs are currently not included in the BOS database and thus not included in the analytical work in this chapter. Several low- and middle-income countries have SWFs, with the primary objectives of creating intergenerational wealth and protecting and stabilizing fiscal balances from excess volatility in revenues from nonrenewable commodity exports (box 1.2). Among the top 100 SWFs, there are several established by low- and middle-income countries, including Egypt, Ethiopia, Mongolia, Rwanda, and Viet Nam, although 80 percent of these top 100 SWFs are found in high-income and upper-middle-income countries, with Australia, China, the United Arab Emirates, and the United States leading by number of SWFs.

**BOX 1.2**

**The Rise of Sovereign Wealth Funds**

Sovereign wealth funds (SWFs) started primarily in countries with significant natural resource exports, including oil and gas. They have various objectives, including financial returns, intergenerational equity, and macroeconomic stabilization (Divakaran et al. 2022; Gelb et al. 2014). SWFs have grown from less than US$1 trillion in assets under management in 2000 to more than US$11 trillion in June 2022; public pension funds exceeded US$23 trillion in May 2022 (figure B1.2.1) (Megginson and Malik 2022). Collectively, these state-owned investors have become the third-largest holders of financial assets globally, after banks and insurance companies.

**FIGURE B1.2.1 Number of Sovereign Wealth Funds and Value of Assets under Management, 2000–22 (June)**

![Graph showing the number of SWFs and assets under management from 2000 to 2022.](https://globalswf.com/)

*Source: Megginson and Malik 2022, using data from https://globalswf.com/ as of June 2022.*

*Note: SWFs = sovereign wealth funds.*

(Box continues on the following page.)
The number of private firms and BOSs with SWF ownership has increased in the past decade. Between 2010 and 2020, SWF ownership at the 50 percent level grew more than ninefold, from 1,000 to more than 10,000 firms. Using an ownership threshold of 10 percent uncovers an additional 50,000 subsidiaries in 2020 (figure B1.2.2). The median number of subsidiaries owned by SWFs at least doubled over the 10 years, from 20 to 45 subsidiaries (50 percent threshold) and from 89 to 277 subsidiaries (10 percent threshold).

Most of the increase in the number of businesses of the state with SWF ownership at 10 percent is driven by China and Singapore. By contrast, SWFs in Malaysia and the United Arab Emirates have consolidated their ownership at 50 percent.

SWFs have increased their investment in businesses of the state over time. They owned 446 unique businesses of the state in 2010 and about 2,600 by 2020.

(Megginson, López, and Malik 2021). SWF investments shifted over time from high-income to upper-middle-income economies (box 1.2). Subsidiaries from upper-middle-income economies represented 26 percent of SWF subsidiaries in 2010 and 41 percent in 2020. Over the same period, the share of high-income economies in SWF ownership dropped 17 percentage points. The 68 SWFs with data in Orbis invest primarily in competitive markets. Irrespective of the ownership threshold, more than 50 percent of SWF ownership is in competitive markets.
Since 2000, the bulk of SWF stock purchases have been cross-border transactions (Megginson, López, and Malik 2021). Most countries are investing largely in domestic markets, but SWFs from the Republic of Korea, Kuwait, Qatar, Singapore, Spain, and the United Arab Emirates seem to own predominantly large assets abroad. Other countries with SWF investments abroad include Bahrain, China, Ireland, Kazakhstan, Malaysia, Norway, Saudi Arabia, and the United States. This globalization of BOSs is also closely associated with the rise of China as a global investor (box 1.3).

**BOX 1.3**

**Globalization of BOSs and the Rise of China as a Global Economic Power**

In 2000, China’s gross domestic product (GDP) at market prices was US$1.2 trillion, equal to only about 3.6 percent of world GDP; by 2020, these values had reached US$14.7 trillion and 17.4 percent.

Although China’s foreign investment expanded exponentially between 2005 and 2017, infrastructure has been a major area of intervention for Chinese businesses of the state (BOSs) (figure B1.3.1, panel a). Between 2005 and 2022, China’s foreign spending in construction totaled US$868 billion across the 139 countries, mostly lower-middle-income, upper-middle-income, and resource-rich countries across the Middle East and North Africa, South Asia, and Sub-Saharan Africa. Major recipient countries include Bangladesh, Nigeria, Pakistan, the Russian Federation, Saudi Arabia, and the United Arab Emirates. Foreign spending increased almost 10-fold from US$9.3 billion in 2005 to US$84 billion at its peak in 2017, before dropping during and after the pandemic. China primarily targeted three sectors: energy, transportation, and real estate. The foreign spending was contracted mostly by wholly or majority-owned state-owned enterprises. From 2005 until 2022, 218 firms were contractors for China’s foreign construction spending. Among them, the top 10 contractors by spending received 60 percent of the total amount across all years.

**FIGURE B1.3.1  China’s Foreign Investment, 2005–22 and 2013–22**

(Box continues on the following page.)
Globalization of BOSs and the Rise of China as a Global Economic Power (continued)

FIGURE B1.3.1 China’s Foreign Investment, 2005–22 and 2013–22 (continued)

b. Share of foreign investment, by region, 2005–22

c. BRI foreign construction spending, by income group, 2013–22

d. BRI foreign investment for top 20 recipient countries, by country, 2013–22

Note: BRI = Belt and Road Initiative.
State Presence in Competitive Markets

The state has a large presence in competitive markets. BOSs are widespread in competitive markets and sectors (manufacturing, wholesale, and accommodation) that the private sector can serve efficiently (figures 1.5 and 1.6). The World Bank Global BOS database adopts a novel disaggregated sector taxonomy to classify BOSs on the basis of industries’ technological features and market failures (Dall’Olio et al. 2022a). Almost 70 percent of the businesses owned by the state operate in competitive sectors, and in 30 countries with high firm-level data coverage for both revenue and employment, they generate more than 40 percent of total BOS firm revenues and employment (figure 1.7). In Brazil, Costa Rica, Côte d’Ivoire, Jordan, and Senegal, more than 30 percent of BOS firm revenues come from manufacturing activities. In some cases, BOSs even have legal or de facto monopolies in sectors that could be operated under competitive conditions or be fully provided by the private sector (cardboard production in Bolivia, meat production in Botswana, fertilizer provision in The Gambia).

Competitive markets span a wide spectrum of real sectors and are also found within traditionally broadly defined natural monopoly and partially contestable markets, such as network and utility sectors. Among network sectors (such as energy, telecommunications, and transportation), water is a pure case for a natural state monopoly, including for subnational governments. But other sectors, such as transportation, energy, and digital services, have subactivities that the private sector can provide (figure 1.8). For instance, in the digital sectors, computer programming and data processing are fully competitive, whereas wired telecommunications is a natural monopoly. Many BOSs in competitive markets are present not only at the central level but also at the subnational level. This more granular market and geographic classification is important for identifying their presence, distinguishing the policy and reform agenda, and avoiding treating all sectors and BOSs as one size fits all.

Almost a quarter of countries with a high share of BOSs in competitive markets also have low government effectiveness (figure 1.9, top left quadrant). Furthermore, in more corrupt countries, the performance of SOEs, both in profitability and in productivity, is significantly worse relative to that of SOEs in other countries (Baum et al. 2019). Corruption is likely to have a deeper impact on how SOEs operate given the close relationship between the state (bureaucrats, politicians) and the company. The corruption risks associated with BOSs are also heightened because many of these businesses operate in sectors with large economic rents or monopoly power.
FIGURE 1.5  BOSs across Markets and Countries, 2019

Note: BOSs = businesses of the state.
FIGURE 1.6  BOSs, by Sector, Averaged across Countries, 2019

Source: World Bank Global Businesses of the State (BOS) database; 91 countries.
Note: BOSs = businesses of the state.

FIGURE 1.7  Revenues, Employment, and Number of BOSs, by Type of Market, 2019

Note: The average across 30 countries with more than 75 percent coverage for revenues and employment variables; unconsolidated firm-level data. Numbers given in the bars for revenues and employment are the total percentage for each market category. Numbers given in the bar for number of BOSs are the total number of BOSs in each category. BOSs = businesses of the state.

Rationale for State Presence in the Economy

The motivations to establish and maintain BOSs persist despite waves of privatization and governance reforms. In a recent Delphi survey, most respondents agreed that guaranteeing affordable access to basic services and goods, development of infrastructure, and the existence of strategic interests are valid justifications for the presence of BOSs in the economy (Vagliasindi, Cordella, and Clifton 2023). Indeed, policy makers and experts justify the presence of BOSs in the economy by assigning them multiple mandates, both economic and noneconomic (box 1.4).
FIGURE 1.8  BOSs, by Type of Market, Averaged across Countries, 2019

Beyond the economic rationales for BOSs, there are diverse motivations as to why BOSs are formed and participate in economic activity. The economic rationales for the operation of BOSs usually relate to solving market failures (natural monopolies, negative or positive externalities, or public goods). Other motivations include government control over strategic sectors or protecting and advancing legitimate national interests (Bernier, Florio, and Bance 2020). Traditionally, noneconomic objectives can be broadly classified as development policy mandates or as the use of BOSs for political interests. The persistence of BOSs and their popular use as a means to achieve certain mandates are also shaped by the historical context of a country (for example, central planning), despite recent waves of full or partial privatization and governance reforms. BOSs can also play a role during crises through countercyclical spending or safeguarding employment levels.

The state footprint in an economy can reflect on the country’s stage of development and economic model. It often remains prominent in countries with a history of central planning in their early phase of industrial development. For example, in countries in Eastern Europe and in Viet Nam, the state has receded after waves of privatization but is still present as a minority owner and at the local level. Some countries have justified the use of SOEs to create national and global champions in strategic industries as a means of controlling critical globally integrated supply chains and technologies. China’s reliance on and support for state-owned or state-influenced “national champions” in key industrial sectors has prompted many observers to conclude that the country is explicitly adopting a variant of the state capitalism model.
FIGURE 1.9  Correlation between Share of BOSs in Competitive Markets and Government Effectiveness, 2019


Note: BOSs = businesses of the state.
Economic Rationale for State-Owned Enterprises

In the presence of market failures, some characteristics of goods and services might justify the presence of state-owned enterprises. The following are some key questions to ask when assessing the economic rationale of state-owned enterprises:

- **Public goods.** Is the good or service provided a public good? If the good is nonexcludable (excessive high costs are required for excluding some actors from accessing or using a good or service) and nonrivalrous (use of the good or service does not limit the use or depletes the supply for other actors), the private sector may not provide the goods or services because it cannot charge an individual fee or it is unprofitable to do so. Government provision directly through state-owned enterprises or public administration, indirectly contracting private sector companies (when possible), or jointly contracting (such as through public-private partnerships) are potential solutions to these market failures. Quality and contract enforcement capacity are critical to determine the potential venue of intervention. Defense, street lighting, and research on seed varieties are examples of goods and services with these characteristics.

- **Positive externalities.** Is the sector characterized by positive externalities? In this case, the social returns of providing a good or service exceed the private returns, because the production benefits other members of society. Under this scenario, the private sector either does not have the required profitability to enter the market or could underproduce when operating. One solution in this case is to subsidize goods with positive externalities (Pigovian tax). Some sectors such as rail and road infrastructure, education, and health exemplify these externalities.

- **Negative externalities.** Is the sector characterized by negative externalities? In this case, the total cost of providing a good or service exceeds the private costs and imposes unintended costs on other members of society. Thus, provision by the private sector could result in overproduction, resource depletion, or overexploitation. To mitigate this market failure, the state could impose taxes on and regulate the quantity of goods or services produced. Fisheries, coal mining, and fossil fuels are examples of sectors with these characteristics.

- **Natural monopolies.** Does the market exhibit subadditivity of costs? In this case, the costs are minimized by concentrating production in a single firm. As discussed earlier, this single market player could, in theory, be a private or a public enterprise. Some enabling sectors include segments with natural monopolies such as electricity (transmission), gas, postal services, and high-speed broadband networks.

- **Commercial viability.** Is this activity commercially viable? If it is commercially viable, then the state should not be involved. If the state is still involved in the activity—for example, for revenue generation or “strategic” purposes—then it should make sure that the company does not benefit from any preferential treatment and that no barriers exist to the entry of the private sector (see chapter 3).

that earlier Asian pioneers used successfully in their take-off phases. Other nations, such as Brazil, India, Russia, and Singapore, have also risen to global prominence, with business sectors dominated or heavily influenced by government-controlled companies.

Motivations for having BOSs can vary, and the justifications for these motivations have varying strength and validity. Some justifications can be good, such as trying to solve market failures that constrain private investment or private service delivery. Some can be bad, such as unduly using BOSs in “strategic” sectors beyond national security purposes and using them to ensure global market power and unlevel the playing field—or when the activity would be commercially viable for private companies without government investment. For example, SOEs are being used to secure the provision of critical materials and control global supply chains. Some justifications can be ugly—such as using BOSs as instruments for political patronage whereby elected officials at the national, state, and local levels of government use appointments in BOSs to reward the people who help them to win and maintain office (OECD 2023). It is easier for corrupt politicians to intervene in publicly owned firms—especially when transparency and accountability are weak—and they have an incentive to do so, because they will benefit from the rents without bearing the costs (Boycko, Shleifer, and Vishny 1996).

While there are multiple examples of good justifications and outcomes of BOSs, examples of bad or ugly justifications and outcomes are common. A key challenge is that SOEs often have multiple mandates, which create conflicting incentives for their behavior. At the same time, SOE performance is often not monitored effectively against these objectives because of institutional weaknesses, capacity constraints, and conflicts of interest by the state as regulator, as law enforcer, and simultaneously as owner of SOEs. This report provides new empirical evidence and examples of the positive and harmful impacts of state ownership, illustrating the mechanisms that lead to the “good, the bad, and the ugly” (Laeven and Valencia 2010). More transparency and more evidence of the effectiveness of meeting objectives are needed to inform reform priorities.

An open question remains: Can BOSs play a catalytic role and crowd in private sector investment, particularly in competitive sectors? In a few cases, the presence of the state in competitive sectors can be justified by development goals. But it is crucial that governments consider other policy instruments and reforms (for example, removing market distortions and improving the investment climate, including at the subnational level) that can support the entry and growth of the private sector through other less distortive interventions. The mere absence of the private sector in these markets does not justify the creation of BOSs.
Annex 1A World Bank Global BOS Database

What Counts as a Business with Ownership by the State?

The database’s approach is consistent with the Organisation for Economic Co-operation and Development (OECD) definition of a state-owned enterprise:

Any corporate entity recognized by national law as an enterprise, and in which the state exercises ownership, should be considered as an SOE. … Also, minority ownership by the state can be considered as covered by the Guidelines if corporate or shareholding structures confer effective controlling influence on the state (e.g. through shareholders’ agreements). (OECD 2015)

Here, for a BOS firm, the lower threshold for state ownership is 10 percent, with comparisons made across categories of 10–24.9 percent, 25–49.9 percent, majority participation of 50 percent or more, and full participation of 100 percent. Both direct and indirect ownership links are included, as are holdings by subnational governments. Health and education activities are excluded. The OECD reports about 2,400 self-declared centrally owned SOEs across 38 economies. Comparisons across countries covered by both databases underscore the gaps (see figure 1A.1 for differences in data for select countries). Information on the methodology, sources, and coverage is available in Dall'Olio et al. (2022a).

How Is It Possible to Identify a Business with Ownership by the State?

Similar to a genealogical tree, the database starts from the entities denoted as public authorities according to the type of entity in each country and then recreates all relationships at different degrees (denoted as ownership layers) for all companies, applying the 10 percent ownership threshold at each stage. The public authorities analyzed do not include sovereign wealth funds, international investors (such as BlackRock), or multilateral organizations (such as the International Finance Corporation). See table 1A.1 for a comparison of the World Bank Global BOS database to other SOE databases.

What Sectors Are Included?

The database includes most four-digit Statistical Classification of Economic Activities in the European Community (NACE) sectors, ranging from agriculture, mining and quarrying, and manufacturing to wholesale and services. The financial sector is included. Education, human health and social work, public administration, pension funds, and libraries and cultural patrimony activities, activities of households as employers, and activities of extraterritorial organizations are not included.
FIGURE 1A.1  Total Number of BOSs and SOEs for Select Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>World Bank BOS</th>
<th>OECD SOE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>370</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Türkiye</td>
<td>39</td>
<td></td>
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<tr>
<td>Argentina</td>
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<td></td>
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<tr>
<td>Estonia</td>
<td>66</td>
<td></td>
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<td>Chile</td>
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</tr>
<tr>
<td>Lithuania</td>
<td>128</td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td>32</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Based on World Bank Global Businesses of the State (BOS) and Organisation for Economic Co-operation and Development (OECD) data.

Note: For comparison purposes, figure shows countries covered in both the World Bank Global BOS and the OECD databases. BOSs = businesses of the state; SOEs = state-owned enterprises.

Which 91 Countries and Regions Does the Database Currently Cover?

- **East Asia and Pacific.** Cambodia, Indonesia, the Philippines, Samoa, and Viet Nam
- **Europe and Central Asia.** Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Georgia, Greece, Hungary, Italy, Kosovo, Kyrgyz Republic, Latvia, Lithuania, Moldova, Montenegro, North Macedonia, Poland, Romania, Russia, Serbia, Slovenia, Türkiye, and Ukraine
- **Latin America and the Caribbean.** Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Suriname, and Uruguay
- **Middle East and North Africa.** Egypt, Jordan, Lebanon, Morocco, and Tunisia
- **South Asia.** Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka
- **Sub-Saharan Africa.** Angola, Benin, Botswana, Burundi, Cabo Verde, Cameroon, Chad, the Comoros, Côte d’Ivoire, Eswatini, Ethiopia, The Gambia, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Rwanda, São Tomé and Príncipe, South Africa, Senegal, the Seychelles, Tanzania, Uganda, and Zambia.
<table>
<thead>
<tr>
<th>Indicator</th>
<th>World Bank Global BOS database</th>
<th>World Bank (2021 infrastructure data)&lt;sup&gt;a&lt;/sup&gt;</th>
<th>IMF&lt;sup&gt;b&lt;/sup&gt;</th>
<th>ADB&lt;sup&gt;c&lt;/sup&gt;</th>
<th>EBRD&lt;sup&gt;d&lt;/sup&gt;</th>
<th>EU&lt;sup&gt;e&lt;/sup&gt;</th>
<th>OECD&lt;sup&gt;f&lt;/sup&gt;</th>
<th>IDB&lt;sup&gt;g&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of countries</td>
<td>91 low- and middle-income countries</td>
<td>19</td>
<td>20</td>
<td>9</td>
<td>25</td>
<td>28 (European Union only)</td>
<td>40</td>
<td>18 (Latin America and Caribbean only)</td>
</tr>
<tr>
<td>Number of enterprises captured</td>
<td>87,000+ firms with state participation</td>
<td>135 SOEs</td>
<td>10,000 SOEs</td>
<td>12,742 SOEs</td>
<td>17,600 SOEs</td>
<td>950 SOEs focusing on sectors: electricity, gas, and railways</td>
<td>2,467 SOEs for 39 OECD countries; 55,341 for China</td>
<td>1,019 SOEs</td>
</tr>
<tr>
<td>SOE definition</td>
<td>Unified definition across countries (10%+ ownership), including the full ownership tree; centrally and locally owned SOEs and BOSs</td>
<td>50%+ participation</td>
<td>At least 25% participation</td>
<td>At least 50.01% participation (default of Orbis global ultimate owner)</td>
<td>At least 25% participation</td>
<td>For analysis purposes: at least 20% ownership</td>
<td>As defined by local authorities and survey respondents, including majority (50%+ participation) and minority participation (from 10% to 49%); centrally owned only</td>
<td>As defined by local authorities and survey respondents</td>
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<tr>
<td>Sectors</td>
<td>NACE four-digit sectors; all sectors, including financial sector as well as real sector (for example, agriculture, manufacturing) and services. Excludes health, education, and public administration</td>
<td>Infrastructure assets in power and transportation sectors</td>
<td>Only one-digit sectors (only total values by sector, not firm-level data)</td>
<td>All sectors</td>
<td>Nonfinancial SOEs to prevent distortion</td>
<td>Nonfinancial SOEs</td>
<td>Only one-digit sectors (only total values by sector, not published firm-level data)</td>
<td>Nonfinancial SOEs</td>
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<th>ADB³</th>
<th>EBRD⁴</th>
<th>EU⁵</th>
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<td>Financial performance, benchmarked against that of privately owned enterprises, ownership structure, and productivity</td>
<td>Financial performance</td>
<td>Financial performance of SOEs</td>
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<td>SOE surveys of authorities</td>
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Source: Dall’Olio et al. 2022a.

Note: ADB = Asian Development Bank; BOSs = businesses of the state; EBRD = European Bank for Reconstruction and Development; EU = European Union; IDB = Inter-American Development Bank; IMF = International Monetary Fund; NACE = Statistical Classification of Economic Activities in the European Community; OECD = Organisation for Economic Co-operation and Development; SOEs = state-owned enterprises.

b. IMF 2021.
d. EBRD 2020.
g. Musaccio and Pineda 2019.
Notes

1. The definition of an SOE varies by country. Majority, direct ownership by the central government is chosen as the benchmark definition because it captures common features in many countries and is the focus of most of the literature on SOEs.

2. BOSs in the Russian Federation represent 36 percent of the database, so Russia is singled out when it distorts the average results.

3. Ideally the measure of BOSs’ footprint would be based on value added rather than revenues, but information on inputs is not widely available. “Revenues” are normalized by GDP to get a sense of scale; the actual share of value added in the economy that these firms account for will be smaller.

4. Blocking minority refers to owners with shareholding between 25 and 49 percent.

5. Other databases compile national or regional SOE data but provide limited scope and coverage of countries globally because of the lack of harmonized definition of SOEs across countries and lack of data transparency. Thus, a comprehensive, global cross-country database that identifies SOEs and their financial data has never been compiled. Efforts so far have been limited to certain regions, and coverage of low- and middle-income countries has been lacking. See annex 1A.

6. Similarly, within the energy sector, the transmission and distribution of energy are natural monopolies, whereas the production of electricity can be partially contestable.

7. For example, the central government of China—the world’s largest steel-making country—recently established an SOE designed to manage the mining and inflow of iron (Taylor 2022). China also approved the merger of three of China’s biggest rare earth metals BOSs, allegedly creating the world’s second-largest rare earth minerals producer (Chang 2022). Meanwhile, the government of Canada issued a new policy applying the Investment Canada Act to investments by foreign SOEs in Canada’s critical minerals sectors and supply chains. The policy also applies to private investors with close ties to foreign governments (Hersh, Patel, and Wasielewski 2022).

References


