A POLICY TOOLKIT FOR PRACTITIONERS

Businesses Of The State (BOS) and Private Sector Development

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Acronyms

ACED	Anti-cartel Enforcement Database
ALP	Anti-Competitive Laws and Policies
ASA	Advisory Services and Analytics
BOOT	Built-Own-Operate-Transfer
BOS	Businesses of the State
BOT	Build-Operate-Transfer
BTI	Bertelsmann Transformation Index
CEE	Central and Eastern Europe
CPSD	Country Private Sector Diagnostics
DSA	Debt Sustainability Assessment
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
EBRD	European Bank for Reconstruction and Development
ECA	Europe and Central Asia
ESG	Environmental, Social, and Governance
EFI	Equitable Growth, Finance, and Institutions
FCI	Finance, Competitiveness, and Innovation
FDI	Foreign Direct Investment
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
GP	Global Practice
HHI	Herfindahl-Hirschman Index
ICA	Investment Climate Assessment
ICT	Information and Communication Technologies
IDB	Inter-American Development Bank
IEG	Independent Evaluation Group
IFC	International Finance Corporation

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Acronyms

IMF	International Monetary Fund
iSOEF	Integrated State-owned Enterprises Framework
KPI	Key Performance Indicators
LICs	Low-income Countries
MCPAT	Market Competition Policy Assessment Toolkit
MDB	Multilateral Development Bank
MENA	Middle East and North Africa
MFD	Maximizing Finance for Development
NACE	Statistical Classification of Economic Activities in the European Community
OECD	Organization for Economic Cooperation and Development
PMR	Product-market Regulation
POE	Privately-owned Enterprise
PPP	Public-Private Partnership
PSD	Private Sector Development
PSO	Public Service Obligations
ROE	Return on Equity
SOE	State-Owned Enterprise
SWF	Sovereign Wealth Fund
TIC	Trade, Investment and Competitiveness
WB	World Bank
WBG	World Bank Group

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This note builds on the framework proposed by Goodwin, Kikeri, and Sanchez-Navarro (World Bank Group 2021) and the Market, Competition Policy Assessment Toolkit (MCPAT) developed by the Global Markets, Competition and Technology Unit. It is also aligned with and extends the Integrated State-owned Enterprises Framework (iSOEF), Module 1 (markets and competition) and develops new guidance concerning policy options for reforms. This note is one of the policy tools developed by the Advisory Services and Analytics *State Footprint In Markets: Database and Indicators for SOE Reform*, funded by the Competitiveness for Jobs and Economic Transformation, a World Bank Group Umbrella Trust Fund.

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Overview

Firms with state participation -Businesses of the State -are major players in many economies, with an increasing share of them also becoming important players globally. State ownership can shape and influence markets through other channels beyond direct control and majority participation, which can also have implications for the private-sector development. This toolkit takes a broader view at the state presence in markets by not only looking at majority owned State-Owned Enterprises (SOEs), but also at minority as well as direct and indirect holdings, by central and subnational governments, referred to in this toolkit as "Businesses of the State" (BOSs).[1] Estimates across more than 90 countries suggest that Businesses of the State (BOSs) account for a significant share of economic activity equivalent to 17 percent of gross domestic product (GDP) on average. BOSs have become increasingly important global players. Their share of the world's 2,000 largest firms doubled to 20 percent over the last two decades, particularly in emerging and developing economies. During the COVID-19 pandemic, the role of the State in markets even further increased in response to the crisis, including through direct support or increased state shareholding.

In light of the importance of state as a market player in the global economy, this toolkit provides guidance on how to conduct a systematic diagnostic of the state footprint with the objective to assess market dynamics and identify areas of reforms to foster private sector investment, economic growth, and job creation. It leverages new and comprehensive data, the World Bank (WB) Global Businesses of the State Database (BOS Database)[2] and analytics that provide the most extensive picture of State presence in markets. As such, this toolkit helps to obtaining a full landscape of state presence in markets, highlighting potential risks to private sector development, and proposing the most pertinent reform options.

The rationale for state ownership as well as the instruments for reform can vary on the nature of the markets in which BOSs operate, and this toolkit provides guidance on how to tailor reform options. The rationale for and the responsibilities assigned to BOSs differ across jurisdictions and by sector where they operate. This toolkit builds upon the WB sector taxonomy (Dall'Olio and others, 2022b) to provide guidance on how to tailor the reform options *for*

1. This toolkit differentiates between Businesses of the State (BOS) and State-owned Enterprises (SOEs). When using the term "BOS" (Businesses of the State), we refer to all firms in which either national or subnational governments (single or multiple agencies) owns directly or indirectly 10% or more and that are engaged in the market production, operate for a financial gain and are legally independent (Dall'Olio and others, 2022a). On the contrary, the term "SOE" is used when referring to existing literature and empirical work that uses that term, and when referring to country specific "SOE" policies and reform agenda that are aligned to the country's own definition, which is often limited to firms owned by the central government, with direct state ownership of 50 percent or more.
2. For further information about the methodology for developing this database, refer to Dall'Olio and others (2022a).

fully competitive sectors that could be served efficiently by the private sector, for instance, manufacturing of food or textiles; *partially contestable sectors*, characterized by some form of market power, externalities, or other market failures such as passenger or freight rail transport; and *natural monopoly sectors*, whose market structure is characterized by economies of scale and subadditivity costs such as energy transmission.[3]

Whatever the rationale for the presence of state ownership in markets, policymakers and analysts should also be cognizant that when the state acts as an owner of businesses, it can have profound implications for investment and growth. Although BOSs can play a critical role in the market creation or taking a pioneer role to reach segments or markets where traditional private channels are not viable, the presence of BOSs can also potentially create an uneven playing field amongst market players, hinder business dynamism, crowd out private sector investments, and impact productivity and ultimately economic growth. Furthermore, state companies might underperform both in terms of their service delivery as well as financial performance with the latter bearing risks for contingent fiscal liabilities for the State and resource misallocation.

This toolkit offers a flexible approach structured in three stages, which can be deployed sequentially or separately depending on the business' needs and context of reform. ***Stage I*** provides a sound understanding of the State's footprint in the economy, the BOSs' performance, and assess their economic rationale in the specific country and economic context. ***Stage II*** serves to understand the potential effects of BOSs on private sector development through potential market distortions and helps users to unveil specific policies and regulatory barriers and indicative risk factors or "red flags" to private sector development (PSD). Finally, ***Stage III*** provides the user with a hands-on decision-making framework to identify potential reform options through a wide range of instruments ranging from competition advocacy up to full state divestiture that can be considered to support private sector dynamism in markets with BOS presence.

As State ownership does not necessarily solve market failures per se, private sector ownership is not a panacea either; ultimately market incentives are what matter for effective PSD reforms in sectors with BOS presence. Even when fully privatized, if the right regulatory conditions and incentives to perform are not in place, the results of BOS reforms might be limited. Incentives and market conditions matter for implementing effective BOS reforms that can foster PSD. Regardless the ownership decision (either public, private, mixed, permanent, or temporal), BOS reforms always need to ensure that the market discipline is in place, there is proper separation of ownership and regulation functions, and regulations are properly enforced to ensure effective reforms. Furthermore, this toolkit highlights the importance of strengthening competition policy and market institutions to guarantee a level playing field and tackle potential anti-competitive conducts.

This tool can be applied both for economy-wide and sector-specific assessments under different policy scenarios. Countries engaged in ***economy-wide reforms*** aiming for transition towards a market-oriented approach can follow the three stages to get a holistic view to understand the state footprint and rationale in each sector or entity (Stage I), assessing the potential distortions (Stage II) and finally identifying options of reform (Stage III). In the event of ***incremental reforms or a sectoral approach***, this toolkit can identify sectoral priorities shedding light on reforms with high-potential gains or with higher risks for distortions (Stage I). Finally, for ***countries that have conducted comprehensive reforms***, but still feature lack of productivity, weak private sector-led growth and performance, this toolkit can serve to unveil potential bottlenecks for guiding toward a next-phase of reforms. In this case, users can start by exploring potential high-risk issues and restrictive policy measures (Stage II) to identify pending areas of reform.

This practitioner's note aims to support policy practitioners to identify opportunities of reform in sectors with BOS presence through a varied menu of policy alternatives to foster private sector-led growth and enhance private capital mobilization. The reform options range from corporate governance, regulatory reforms, PPPs to ownership and divestiture measures. This tool covers both economy-wide and sector-specific issues and provides guidance on which policy instrument could be more relevant and effective for boosting private sector development depending on the sector of operation. This tool also provides guidance on how to prioritize and design reforms.

3. The typology of markets follows the WB sector taxonomy to differentiate economic activities based on their intrinsic characteristics, and market failures. For more details, please see Dall'Olio and others (2022b).

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Introduction

This Toolkit provides guidance on how to conduct a modular diagnostic of the State participation in markets with the objective to assess market dynamics and identify areas of reforms to expand private sector investment, economic growth, and job creation. It leverages new and comprehensive data, the World Bank (WB) Global Businesses of the State Database (BOS Database)[4] and analytics that provide the most extensive picture of State participation in markets. As such, it highlights potential risks to private sector development and proposes the most pertinent reform options. Competition, market concentration, and market dynamism issues are generally ownership agnostic – high market concentration by private companies can be as bad as state monopoly. Yet, the State presence potentially creates additional risks that need to be identified and managed, in particular in competitive and contestable sectors where the private sector can potentially play a larger role.

This toolkit takes a broader view at the state presence in markets by not only looking at majority owned State-Owned Enterprises (SOEs), but also at minority as well as direct and indirect holdings, referred to in this toolkit as "Businesses of the State" (BOS). The State footprint in markets is not limited to majority owned or controlled companies by the state, which are often denoted as State-Owned Enterprises. The presence of the state is also widespread through other forms including multi-agency, minority participation, indirect ownership[5], or even presence across borders, which also matter for local, regional, global markets and private sector development (PSD). While historically and across many academic sources, SOEs are often narrowly defined as those firms in which governments have a majority stake, or in which governments exercise control, this Toolkit refers to the *Businesses of the State (BOS)* to acknowledge and capture firms that can be either directly or indirectly owned by the government, at national or subnational level, with at least 10 percent government participation. In this sense, the concept of SOEs will be only employed when referring to evidence from the literature to national policies and government interventions, or other WBG documents that apply the term of SOEs.

The key message for policy makers reforming BOS is that market incentives matter even more and beyond ownership. As such, BOS reforms require a comprehensive approach that goes beyond traditional privatization or divestiture. This note provides guidance on how to do so

4. For further information about the methodology for developing this new database, refer to Dall'Olio and others (2022a).
5. Firms owned by the government through another firm. For instance, government owns A, and A owns B, so B is an indirectly owned by the State.

by: connecting the outcomes of diagnostics with policy options for reform; identifying entry points for policy dialogue at the country level; and providing the principles for prioritization of competing policy priorities and options. More specifically, this Note equips the policy practitioner with the right tools to answer these key questions:

i. How can the real extent of the State footprint in markets be determined?
ii. How can the economic rationale of BOS be assessed?
iii. How can one identify those sectors where BOS presence can pose a risk to private sector development?
iv. What other policies and regulations might exacerbate the risks of crowding-out the private sector in the presence of BOS?
v. How can the private sector play a role in improving the functioning of markets in sectors with BOS presence?
vi. What reform options are there beyond ownership transformation, in particular when privatization is not feasible or not supported by the government?
vii. How can the priorities for reform be defined and tailored for different sectors? What are the success factors of such reforms?

This Note complements and is aligned with existing tools for state-owned enterprise (SOE) assessment. This Note is aligned with the principles of existing WBG tools such as the integrated SOE Framework (iSOEF)[6] (Module 1 – SOEs and the markets) of the Equitable Growth, Finance, and Institutions (EFI), and the Market Competition Policy Assessment Toolkit (MCPAT) (forthcoming). It also responds to the IEG (World Bank 2020a) recommendations to mainstream competition and market analysis into SOE-related operations to improve effectiveness of reforms.

This document includes four sections. Section I explains how the State presence in markets is relevant to growth and development. It includes a discussion of why assessing firms with State participation, and the regulatory policy environments in which they operate, is a critical part of any efforts to foster private sector development. It also presents new evidence from the World Bank (WB) BOS Database in over 90 countries. Section II describes the analytical framework for assessing the role of the State in a systematic manner. As such, it includes a risk assessment tool to better understand whether the presence of the State in certain sectors represents a potential risk to private sector development, as well as how other policy interventions could exacerbate those risks. Section III discusses how to derive reform options and pre-conditions for effective results. It also examines how to sequence the approach based on the BOS landscape and the preceding risk assessment. Section IV provides a list of resources that can support this work.

6. This toolkit provides complementary value to the iSOEF module 1 (markets and competition) by i) bringing new evidence on the state footprint in markets and understanding on the channels of state involvement that go beyond majority participation, as discussed in the EFI SOE Working Group, ii) unveiling and differentiating potential market distortions based on the type of sectors where BOS operate, iii) specifying options and sequence of reform that can foster pro-competitive markets, even when divestiture or ownership measures are not feasible.

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State Participation in Markets and Private Sector Development

Firms with state participation are major players in many economies, with an increasing share of them also becoming important players globally. According to the World Bank Global Businesses of the State (BOS) database, BOSs account for a significant share of economic activity equivalent to 17 percent of gross domestic product (GDP) on average.[7] Moreover, according to the WBG IEG report (2018) they account for 20 percent of global investments and drive 11 percent of the global foreign direct investment (FDI) inflows. SOEs have also become increasingly important global players. Their share of the world's 2,000 largest firms doubled to 20 percent over the last two decades, driven by SOEs in emerging and developing economies. The SOEs' global assets are worth US$45 trillion in 2020, that is, about half of global GDP, according to the International Monetary Fund (IMF) (IMF, 2020). SOEs control many valuable and strategic assets, including 70 percent of the global oil and gas production assets and 60 percent of the global coal mines and coal power plants (under SOE management) (EBRD, 2021).

During the COVID-19 pandemic, the role of the State in markets increased in response to the crisis, including through direct support to BOSs. During the COVID-19 pandemic, governments globally provided more than US$ 700 billion in support to BOS. In 30 percent of cases, the additional funding was combined with increased State ownership or control.[8] Government support was often intended to allow BOS to overcome revenue shortfalls and enable continuity in service delivery. For example, this included support to state-owned utilities, as global electricity demand contracted by about 5 percent in 2020 as a result of lockdowns and an associated reduction in energy consumption (Apfalter and others 2020). However, these support measures were not limited to majority owned BOSs and have important implications for private sector development, especially when no clear conditions or set of principles guide the proper allocation of those resources, thus upsetting the playing field. In some cases, BOSs received support without a clear rationale and objective for intervention. This included firms that were facing financial losses even before the crisis, or those without proper mechanisms to reduce the risks of favoring politically connected firms.

7. This includes 43 countries for which the number of firms with state participation (BOSs) report more than 65% of financial information as of 2019.
8. For instance, the €9 billion capital injection to Lufthansa was conditioned to increase the German government stakes from 14 to 20 percent. The government finally sold its shares in the company in September 2022. (World Bank SOE Policy Tracker).

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Rationale for State Participation in Markets

The rationale for and the responsibilities assigned to SOEs differ across jurisdictions. The IMF (2020) proposes six possible rationales for state ownership: (1) support for national economic and strategic interests; (2) supply of goods and services; (3) support for social objectives; (4) ensure continued national ownership of enterprises; (5) perform business operations in a natural monopoly setting; and (6) create a state-owned monopoly where market regulation is deemed inefficient. Cordelli (2020) presents further evidence that underlines the important role of the state in guarding public interests as it fulfils core government functions, such as management of prisons, education, or health care. Heath and Norman (2004) identified five general categories of responsibilities, or political expectations, imposed on the SOEs (box 1). These responsibilities are not exclusive and often reinforce each other. For instance, through the ownership of enterprises, many States sought to pursue social goals, such as sustaining employment and generally substituting for under-developed welfare systems (OECD 2005).

BOX 1: GENERAL CATEGORIES OF RESPONSIBILITIES COMMONLY IMPOSED ON SOEs

Macroeconomic. SOEs can be pushed into counter-cyclical spending during recessions for a number of reasons, including the need to level out the business cycle; the need to create over-capacity and develop make-work projects to stem unemployment (and safeguard employment levels); and the need to keep inflation in check through wage and price controls. Moreover, the government can use SOEs to help it meet specific fiscal objectives (OECD 2005, p. 21).

National interest. SOEs are often seen as the "house stewards" of national industry, providing domestic firms with subsidized goods and services (especially energy), as well as guaranteed markets in which domestic suppliers take precedence over foreign suppliers. The SOEs are usually a strategic card of national interest. As such, they are the government's preferred channel for investment in sectors identified as national priorities. Alternatively, they may be used to support the development of fledgling industries or allow the state to shield off value chains from international competition by international firms

(for example, in agribusiness). The SOE vehicle is also used to keep industries, information and productive technology deemed essential to national security under state ownership and control. For example, SOEs can also advance national priorities, like energy independence or national defense interest.

Redistribution. The State relies heavily on SOEs to help achieve redistributive goals. This normally translates into refraining from the kind of price discrimination practices adopted by profit-maximizing private firms, thereby ensuring that the same services are delivered at the same price nationwide (for example, the national postal service).

Model employer. SOEs are cast in the role of model corporate citizens. As such, they are obliged to lead-by-example and to act as a pressure gauge for private firms. This means that SOEs often offer higher wage rates, superior benefits (for example, on-site daycare), and better job security. They may also hire more women or members of disadvantaged minorities.

Reduction of externalities. The production of positive externalities can be defined as the main social responsibility of a SOE, even though the need to control negative externalities leads the State to keep certain SOEs firmly in the public sector domain, above all, in the liquor and gambling industries, where state monopolies serve to prevent private misuse.

Source: Sorrentino (2020).

State ownership can be seen as a means of addressing market failures, for example, in forming a natural monopoly or in the provision of public goods. The economic literature justifies direct State participation in markets through SOEs as a mechanism for addressing specific market failures. In theory, markets that function competitively will attain allocative (Pareto) efficiency in the absence of any policy-related distortion. However, for markets in which certain environmental or product characteristics generate a market failure, competitive allocation alone does not maximize social welfare. Some markets suffer from intrinsic market failures due to the characteristics of the market structure, production processes, type of products or the environment in which they are produced. Market failures, for example, may arise from the exercise of significant market power as market participants benefit from technological or cost structure advantages. This is the case with natural monopolies, such as the distribution of water, where it would be too costly to build and maintain competing water distribution systems.

State ownership is viewed as a tool to address such market failures, restore allocative efficiency, provide affordable services, provide counter-cyclical investment, and foster innovation. SOEs are also viewed as a tool to provide public goods and services where there are high positive social externalities, for example, social benefits from education.[9] However, there is limited to no viability to provide these goods on a commercial basis (Lin and Milhaupt, 2013). SOEs can also be viewed as a tool to enhance access to affordable services and utilities, as well as to compensate for otherwise anti-cyclical investment (Bai and others, 2000; Florio, 2013; Matuszak and Kabacinski, 2021). Furthermore, the literature points to the important role of SOEs in innovation, including their potential role in climate action. In this regard, SOEs could help to bridge the investment gap in climate action, another market failure.[10] They could also accelerate the low-carbon transition (see box 2). It is important to note that state ownership is one potential instrument among other policy options of State intervention in markets to address these market failures[11]. The State role in markets is also taking new forms through Sovereign Wealth Funds (SWFs). However, this dimension is not covered by this Toolkit, as the underlying market dynamic and regulatory conditions fundamentally differ.

9. OECD 2017 and Vickers and Yarrow (1991) highlight that SOEs might play a role when unregulated/free allocation of markets alone would not maximize social welfare.
10. The problem of climate change involves a fundamental failure of markets. Those who are responsible for damages due to climate change by emitting greenhouse gases (GHGs) generally do not pay. Negative externalities of climate change are currently not priced-in, thus creating an uneven playing field. As such, low-carbon solutions are often not competitive, as the carbon cost of high-carbon technologies is not accounted for.
11. State ownership is not an exclusive mechanism to address these market failures, but rather an instrument among different policy tools that can include regulations (for example, to discipline a private monopoly), and subsidies (for example, vouchers to ensure access and affordability), among others.

BOX 2: EXAMPLES OF THE ROLE OF SOEs IN INNOVATION AND CLIMATE ACTION

Innovation. Recent literature points to the important role of SOEs in innovation. According to Le and others (2021), SOEs would innovate more than private firms in the five Asian countries where the study compared the performance of SOEs with that of private enterprises. Success in innovation transformed Japan into one of the world's leading economies and technology powerhouses. Private firms in general and equity-financed small firms, in particular, have proven adept at developing new ideas and bringing them to the market. However, in contrast to SOEs, these private firms face a range of obstacles when they seek to bring new products and processes to the market. Thus, public policies are needed to mitigate this problem by reducing the structural challenges and financial difficulties facing such innovative firms so that national innovative capacity can be strengthened.

Climate action. Singapore's wholly state-owned investment company integrates climate-related objectives into its strategy and drives these objectives through engagements with portfolio companies. It has sought to embed sustainability and Environmental, Social, and Governance (ESG) considerations into its investment decision-making and management. It does so by using various tools to assess a possible climate transition impact, such as setting an internal carbon price to inform investment decisions. It is also committed to reducing net portfolio emissions to half of 2010 levels by 2030, while also working toward net zero emissions by 2050. To further accelerate decarbonization solutions and accelerate global efforts to achieve a net zero economy by 2050, this firm has established a partnership with Blackrock. An initial funding of US$ 600 million will deploy private capital with a focus on early-stage growth companies targeting next-generation renewable and mobility technology, as well as building and manufacturing sectors to drive decarbonization, resource efficiencies, and material and process innovation.

Source: Le Thai-Ha and others (2021), National Research Council (2009), and OECD (2022).

Not all BOS are equal, and the rationale for state ownership might vary on the nature of the economic activity where they operate. The extent of market failures and the presence of certain market characteristics allows for the differentiation of three types of markets: natural monopolies, partially contestable, and competitive (Dall'Olio and others, 2022b). The WB taxonomy helps in categorizing BOS by understanding the economic rationale for state ownership as well as in tailoring potential reforms.[12] Although the specific provision of a sector can vary depending on the country size and context, the purpose of the WB sector taxonomy is to be country-agnostic to understand the underlying economics on how markets operate and what kind or market failures they might exhibit and categorize the activities into:

- ***Natural Monopoly***: Activities that exhibit economies of scale, or sub-additivity cost structures. Under this market technology, the most cost-efficient provision is reached when provided by a single market player. Thus, for these sectors, there is a strong economic rationale for State participation. Examples include postal services and energy transmission.
- ***Partially Contestable***: Activities that exhibit significant fixed costs for entry may reduce the number of competitors in the market (that is, oligopolistic markets). This category also includes activities characterized by public goods, externalities, and asymmetries of information. In this instance, inadequate provision would persist if only unregulated private firms operated in the market. Some examples include banking services, airlines, power generation, and/or waste management.
- ***Competitive***: Activities in which incumbents and entrants have access to similar information and production technologies, and where the provision of good and services that are private (that is, rival and excludable) and production activities do not generate significant

12. The differences in the policy alternatives are based on the type of sectors and risk assessment. These are described in detail in section III.

externalities. Hence, these markets are fully contestable (that is, they are more likely to behave competitively). As such, there is no clear economic rationale to justify the specific participation of BOS in this type of activity. Some examples include the manufacturing of food, the accommodation industries, and wholesale and trade.

State ownership is one, among multiple policy alternatives, for government intervention in markets, which can serve for achieving similar objectives while mitigating risks of market distortions. Following the sector taxonomy, the framework presented in figure 1 provides a structured decision tree to better understand the appropriateness of BOSs in an economy (Putniņš 2020). This framework can serve to assess alternatives to state ownership by analyzing five questions.

1. ***Is there a substantial market failure?*** In the presence of market failure, government intervention, including the use of a BOS firm, has the potential to increase social welfare. However, in the absence of a substantial market failure, production should be left to the free market. This is because, in such cases, there are no substantial benefits from government intervention, yet there is technical inefficiency, a potential for government failure, as well as distortions that can decrease welfare.
2. ***If there is a substantial market failure, can it be resolved with regulation or targeted taxes/subsidies?*** Decades of international experience indicate that private enterprises driven by profit incentives can provide goods and services more efficiently than BOS, which can be subject to weak governance arrangements, soft budget constraints, conflicting and ambiguous objectives, and a lack of accountability. When it is possible to mitigate a market failure using regulation, taxes, or subsidies, it is often preferable to do so, thereby leaving production to the private sector.
3. ***If regulation or taxes/subsidies are not feasible solutions to a substantial market failure, are there substantial hurdles/costs in defining the quantity and quality of the good or in enforcing a private sector provision contract?*** Private sector contracting, when feasible, is often preferred to direct government provision because the private sector tends to be a lower cost producer, that is, it operates with higher technical efficiency. However, private sector contracting is not feasible when it is not possible to define and measure the quantity/quality of the good, or when the costs of establishing and enforcing a private sector provision contract are excessive. In such situations, direct government provision is the only practical option.
4. ***If direct government provision is the most feasible option, to what extent is there: (i) an economic market for the good; (ii) a set of well-defined, straightforward goals for intervention; (iii) a relatively large emphasis on financial objectives; and (iv) a need to be innovative?*** BOS are better suited to situations in which an economic market for the outputs exists; when the goals for government intervention are relatively simple; when a relatively large emphasis is placed on financial objectives relative to non-financial ones; and when there is a need to be innovative.
5. ***In using a BOS firm to correct a market failure, do the welfare losses from government failure, rent-seeking, and government intervention-induced technical/allocative inefficiency exceed the welfare losses due to the market failure?*** BOSs presence can have several consequences for individuals, markets, and private sector firms. Their technical inefficiency can result in a loss of social welfare if the gains from correcting the market failure are not sufficient to offset the loss in efficiency. Therefore, there is an important trade-off that policy makers need to be aware of. The presence of BOS, like any other government intervention, can induce unproductive or even destructive rent-seeking behavior among individuals and private sector firms. Finally, BOS can crowd out private sector investment, even when private sector firms are more efficient. This is due to various implicit or undue advantages of state ownership. If the welfare losses due to these negative consequences exceed the welfare gains from correcting the market failure, welfare maximization requires not operating the BOS and allowing the market failure to persist.

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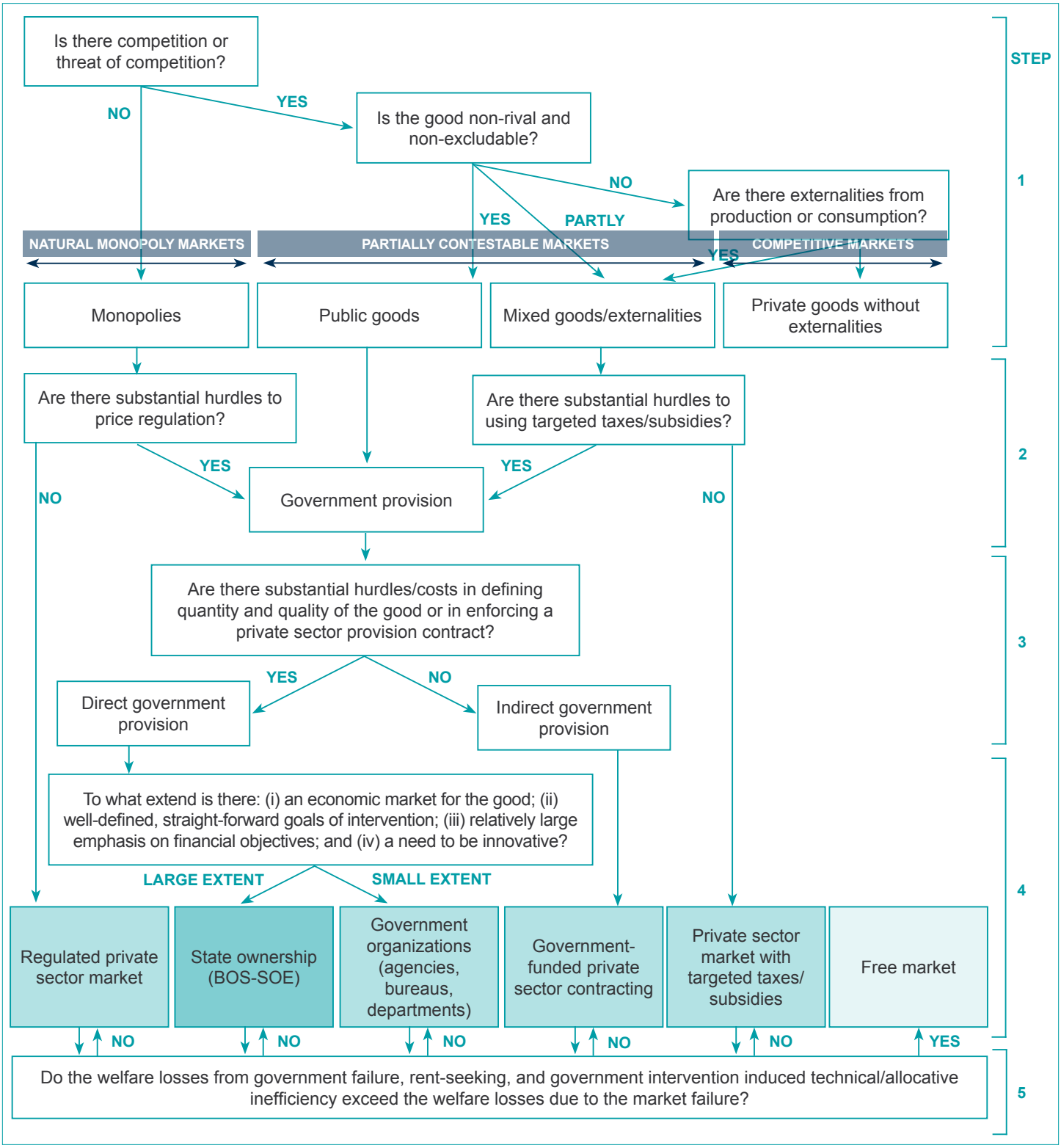
Figure 1: Framework for Assessing the Economic Rationale of BOS



Source: Putniņš (2020). The authors included in the Figure the 3 type of markets: competitive, partially contestable, natural monopolies..

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Risks Related to State ownership in Markets

According to the literature, firms with state participation often underperform both in terms of their service delivery as well as financial performance with the latter bearing risks for contingent fiscal liabilities for the State and resource misallocation. Firms with state participation tend to underperform private sector enterprises, as confirmed by several empirical studies across sectors.[13] Recent evidence also suggests such performance gaps vary depending on the level of state participation and sector type.[14] BOS can be highly profitable and promote investment in research and development (World Bank 2023b). Nonetheless, BOS presence can still hamper PSD when those financial gains are resulting from protectionism and government financial support. SOEs can also lead to a misallocation of resources due to soft budget constraints, frequently requiring budget support and ultimately resulting in bailouts to failing companies (Kornai and others 2003; Melecky 2021; World Bank 2023a).[15] All of this has fiscal consequences for the State, often resulting in considerable contingent liabilities, which the taxpayer ultimately has to pay for in the end (Bova and others 2016). When SOEs fail to achieve the desired improvements to social welfare, these reasons are collectively referred to as 'government failure' (Grand 1991).

The presence of BOSs can potentially create an uneven playing field amongst market players, hinder market dynamism, and deter private investment

BOSs can benefit from explicit and implicit advantages, which inhibits competition, promotes misallocation of resources, lower market-based incentives to improve technical efficiency, disincentivizes private sector entry and investment.[16] BOSs can impact productivity and misallocation of resources ('between channel') due to explicit preferential access to capital in the form of subsidies, loans, or access to inputs, land, and infrastructure at lower costs (See box 3). Some explicit advantages can also potentially prevent the exit of loss-making BOS or sustain low rates fostering the survival of less productive firms ('selection channel').[17] For instance, in two-

13. Evidence suggests that compared to private ownership, government ownership relates to an inferior performance (Bajo, Primorac, and Zuber, 2018; IMF 2019a; Wang and Shailer 2018). Such SOEs are also more prone to experience financial distress than their private peers (Melecky, 2021). See also Megginson and Netter 2001. Some evidence also suggests these differentials might be minimized in the context of control of corruption.
14. The largest differentials in performance between BOS and privately owned enterprises (POEs) firms that are fully owned or majority owned by the state, directly owned, and operate in competitive markets Sanchez-Navarro 2023 (forthcoming)
15. Fiscal Costs and Risks from Infrastructure. Flagship Report, https://ppiaf.org/activity/global-fiscal-risks-infrastructure-era-high-debt-vulnerabilities-phase-ii
16. While acknowledging that the presence of the private sector can also lead to an uneven playing field, if not properly regulated, some features can favor the dominant position of certain actors or even asymmetrical access to funds to politically connected firms — even without State participation.

thirds of Europe and Central Asia (ECA) countries assessed by the European Bank for Reconstruction and Development (EBRD) in 2020, the SOEs were allowed to operate at levels of return on equity (RoE) below 5 percent. In half the countries, the RoE of SOEs was even negative, indicating that the SOEs were loss-making (EBRD 2020). Moreover, BOSs might be shielded from private competition through implicit measures such as import tariffs, limits to entry, price or margin regulations, among others (World Bank, 2023b). As a result, these companies could achieve disproportionally larger participation in the market and form a barrier to hinder private sector engagement.[18] By offering wage premiums or preferential contractual conditions to their staff and executive, SOEs can also contribute to labor market distortions, thereby making it difficult for private operators to find staff (IMF 2019a; IMF 2019b).

BOX 3: EXAMPLES OF LACK OF COMPETITIVE NEUTRALITY.

Evidence from Competitive Neutrality Assessments reveals some examples of how firms with state participation can benefit from different treatment that can disrupt the playing field.

Lower interest rates: SOEs in Belarus, Egypt, Moldova, and Romania can benefit from reduced interest rates or subsidized interest loans. In The Gambia, SOEs have access to preferential interest rates for loans linked to infrastructure investments.

Preferential treatment regarding public procurement: In Egypt, SOEs are exempt from public procurement (direct agency-to-agency contracting is permitted). In the Middle East and North Africa (MENA) region, many procurement laws reduce the competitive nature of tenders. For example, this can include requiring national content, giving explicit preferences, issuing overall exemptions from the public procurement rules, and/or granting specific benefits to SOEs. In Sri Lanka, state agencies can contract directly with established suppliers instead of holding a tendering process, as seen in the electricity generation and highway development sectors.

Source: World Bank Global Competition, Markets and Technology Unit, based on country-specific competitive neutrality assessments.

Private sector development can also be impeded by market distortions that emerge when governments act as market players and regulators. When the State intervenes as a market player and regulator, some rules can be employed to shield the BOS firm from competition, thus limiting private entry and investment. For instance, when the State is both an incumbent and regulator, it can impose license requirements to potential entrants or regulate prices that are too low for private companies to operate (for example, energy prices below recovery cost in the Dominican Republic).[19] Additionally, BOSs can be shielded from competition or granted comparative advantages through other regulatory instruments (for example, import monopolies for tea in Tunisia). When there is no clear separation of obligations for a BOS firm as a service provider or as a regulator, this can translate into risks of having BOSs designing rules that unduly favor its own commercial activity vis-à-vis its private peers. For instance, the government could favor BOSs granting exclusivity contracts for supplying specific sectors (for example, procurement processes), thereby giving special voting power in regulatory committees where prices are determined, or alternatively when BOSs are in charge of providing entry licenses. These measures could allow BOS firm to gain a significant market share and crowd-out private firms. Similarly, when a BOS firm has a regulatory role, it could create undue requirements for private operators (for example, production quotas), thereby eroding competition from private companies to obtain higher revenues. These policy measures can ultimately grant BOSs undue comparative advantages that disrupt the playing field.

17. BOS are often less likely to exit the market when they underperform compared to private peers, which can also restrict the space for more efficient firms to enter into the market (Cusolito and Maloney, 2018)
18. In addition, SOEs can displace the private sector by providing goods or services that the private sector could provide under more effective regulatory frameworks.
19. World Bank 2023d. Dominican Republic Country Economic Memorandum.

The presence of BOSs in competitive markets is the least justified and it poses the highest risks of creating market distortions. Competitive markets could be provided efficiently by the private sector. Yet, evidence from the WB Global BOS database reveals that more than half of BOSs operate in fully competitive sectors, that is, those with limited rationale for state ownership and where the risks of displacing private investment are higher (box 4). BOSs in competitive markets generate more than 40 percent of the BOS' revenues and employment. In Cameroon, Chile, Costa Rica, the Dominican Republic, Lesotho, and Vietnam, 20 percent of total revenues come from competitive manufacturing activities. In some cases, BOSs also have legal or de facto monopolies in markets that could otherwise operate under competitive conditions or be fully provided by the private sector (for example, fertilizer provision in The Gambia, meat production in Botswana, and cardboard production in Bolivia).

BOX 4: THE TRUE EXTENT OF THE STATE AS MARKET PLAYER: EVIDENCE FROM THE WORLD BANK GLOBAL BUSINESSES OF THE STATE (BOS) DATABASE

The WB Global BOS Database reveals that state participation is widespread in competitive markets such as manufacturing, wholesale and accommodation that could be served by the private sector. In most countries analyzed, BOS in competitive markets account for more than half of the total firms with state participation, and almost half of the revenues and formal employment.

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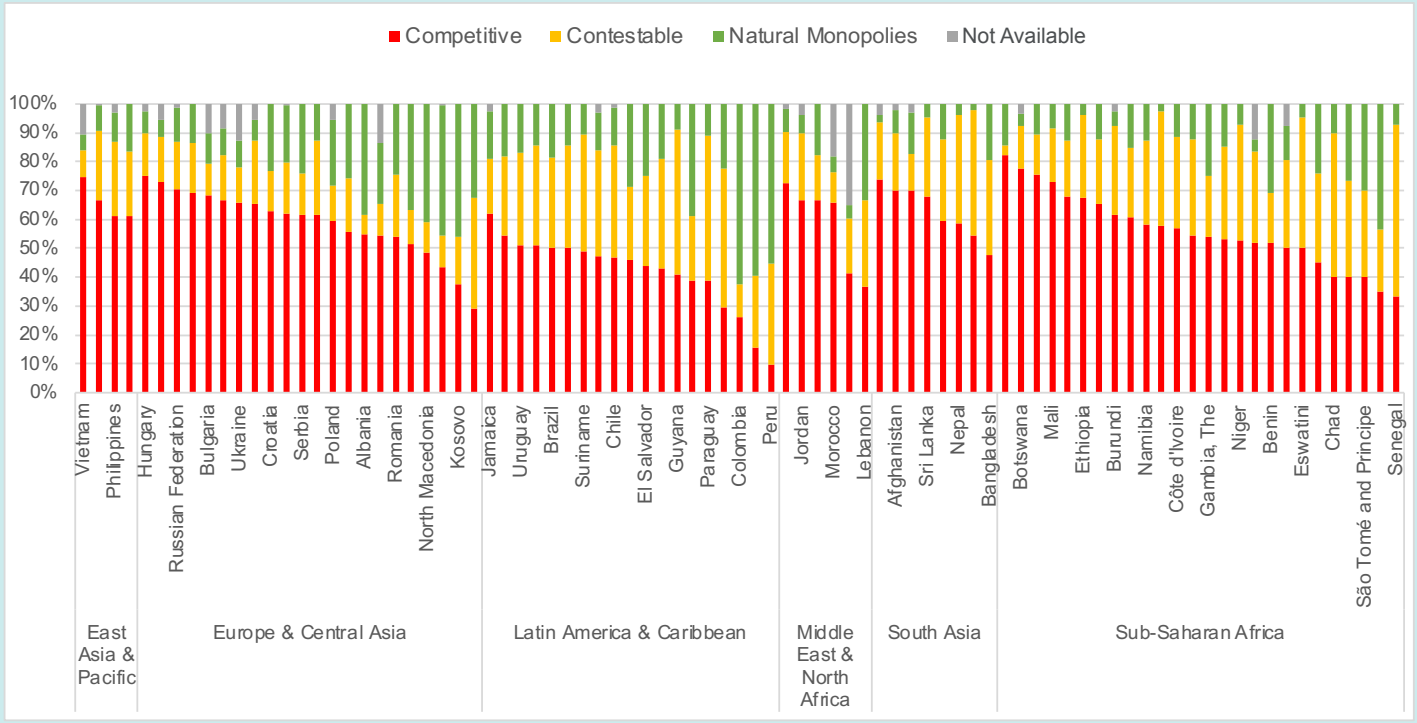
Figure 2. BOS Distribution by Type of Market of Operation as of 2019



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

The potential risks of state ownership on private sector development have been highlighted in several World Bank Group's Country Private Sector Diagnostics (CPSDs). CPSDs assess opportunities for and constraints to private sector-led growth. In 29 of these CPSDs (out of a total of 32 published CPSDs by the year 2021), SOEs and associated competition effects are cited to be the main barrier for private sector development. Lower productivity of SOEs was also found to be associated with lower economic growth more broadly (Önder and Özyıldırım 2010; Liu and Zhang 2018; Wang and Wang 2013; Szarzec and others 2021). It was also associated with cross-border market distortions (Kowalski 2013).

BOS presence can affect the performance of value chains and have implications across borders

BOSs can impact competition through upstream and downstream relationships and vertical integration. To understand the true extent of the BOSs footprint in the economy, it is crucial to consider also indirect ownership stakes in other firms. Based on the WB Global BOS database, the inclusion of indirectly owned firms increases the number of firms with a State presence by at least 32 percent. In some countries, such as Egypt, Jordan, and Vietnam, almost 80 percent of firms have an indirect State presence through large holding groups.[20] Uncovering these ownership links unveils potential impact of state participation across the value chain and potential implications for interrelated sectors (figure 3).[21]

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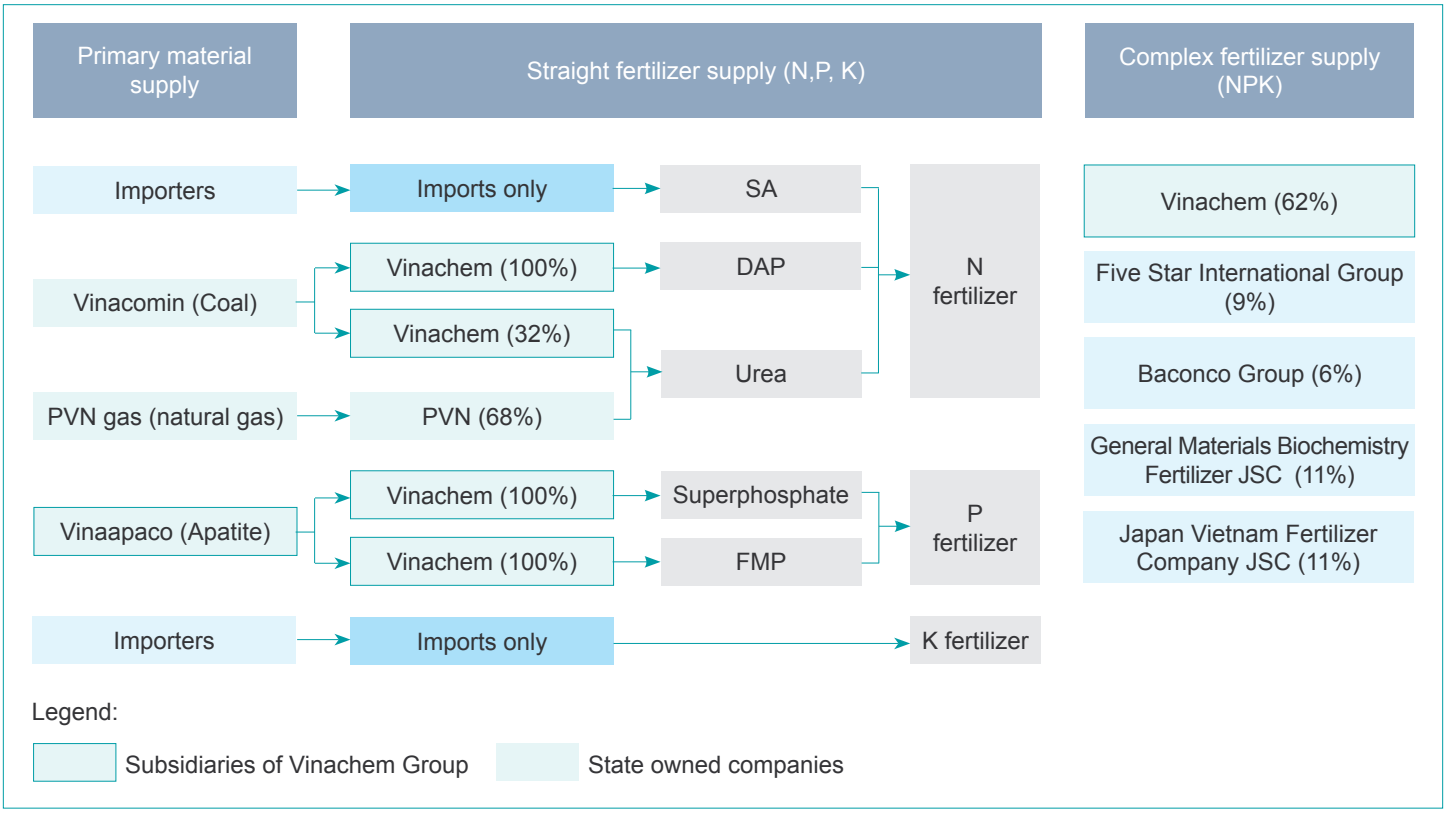
Figure 3: Example of Large State-owned Conglomerate with Upstream and Downstream Integration across Subsidiaries in Vietnam



Note: Estimated market shares, based on companies' production capacity as of 2018.
Source: World Bank Global Competition, Markets and Technology Unit using FTP (2015).

20. Interestingly, large BOS' in Vietnam are conglomerate groups. As such, they also control subsidiaries in upstream sectors. For instance, BOS companies have access to key inputs, such as chemicals for production of fertilizers.
21. It shows an example of the Holding Company for Tourism, Hotels and Cinema, that owns subsidiaries in the construction of other civil engineering projects, as well as hotels and similar accommodations. This company also owns indirect subsidiaries in the same sector (including hotels and similar accommodations).

These market distortions and potential negative effects on private sector development can ultimately undermine the performance of entire markets and sectors, impacting downstream industries. As a result of underperforming BOSs and the lack of private sector participation due to market distortions, economies can experience higher prices; shortages of inputs and final products; reduced productivity; limited infrastructure investment; and low coverage of essential services. The distortions in enabling sectors, such as power generation, transportation (for example, maritime freight), water, digital infrastructure, and (air)ports, can impair the development of other potential sectors and export locomotives (for example, agribusiness, manufacturing, tourism, and digital services).

- For example, the dominance of BOSs in Indonesia in the telecommunications sector has translated into a lack of nationwide broadband backbone connectivity, and underdeveloped last-mile fiber-optic and broadband networks. This represents an obstacle for the development of the digital economy (World Bank 2019a).
- In Bangladesh, public power plants cannot generate electricity as specified in terms of power and thermal efficiency. As a result, daily shortages are common.
- In Rwanda, the high costs, reliability, and low coverage of the electricity service (only 35 percent have access to electricity) are also potentially correlated to the presence of BOS' in the power sector.

Finally, the distortions associated with BOS could affect the competitiveness of a country — and even have spillover effects on global markets when these companies act as exporters or through subsidiaries located in foreign markets. For example, in Ethiopia, exporters and importers experience shipping costs that are on average 30 to 50 percent higher due to BOS participation in multi-modal transportation services. As a result, Ethiopian companies face higher costs for importing inputs and shipping to foreign markets, thereby reducing their competitiveness in both domestic and foreign markets. Similarly, in South Africa, the operation of a BOS firm simultaneously as port operator and regulator has created a significant conflict of interest, as well as a risk of anticompetitive behavior (for example, through excessive pricing and exclusionary practices). In this regard, port fees are recorded as being 88 percent higher than the global average (Nyman and Koschorke 2019; World Bank Group 2019). Further evidence from the World Bank Anti-cartel Enforcement Database (ACED)[22] also reveals that BOS participate in hard-core cartels and agreements that can have cross-border implications. For instance, in Tunisia, the BOS firm responsible for the manufacture of fertilizers and basic chemicals colluded with another competitor to impose market restrictions to entry of competitors, as well as output restrictions. This, in turn, had implications for prices in Egypt, Syria, and Tunisia.

22. This is a WB initiative that collects the set of public decisions by competition authorities concerning investigations concluded for hard-core cartels across 75 jurisdictions worldwide. This dataset was developed by the World Bank Competition, Markets and Technology Global Unit.

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How to Conduct a Comprehensive Assessment and Identification of Potential Risks for Private Sector Development?

This Toolkit provides a modular approach when analyzing state participation in firms, including its market effects; as such, it also identifies options for reform to foster private sector-led growth. Three key steps are involved in a comprehensive assessment of markets with state participation, namely the necessity to: (i) determine the landscape and assess the economic rationale of businesses with State participation; ii) unveil the potential sources of market distortions that can disrupt the playing field between privately-owned enterprises (POEs) and BOSs, or hinder the entry of POEs; and iii) identify some routes for reform and policy recommendations to enhance productive, contestable, and efficient markets for private sector development (PSD) and economic growth more generally (Figure 4).

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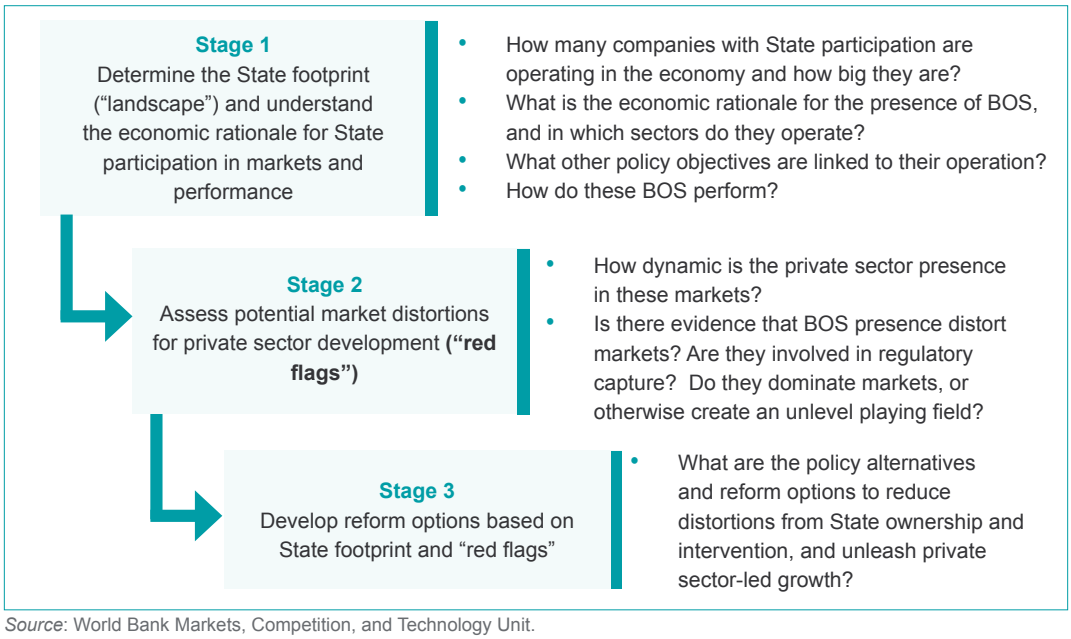
Figure 4: How to Build a Systematic Approach to BOS-SOE Reforms to Foster Private Sector Development



Source: World Bank Markets, Competition, and Technology Unit.

Stage I: Understanding the State Footprint in the Markets and its Economic Rationale

The objective of Stage I is to obtain a sound understanding of the full landscape of BOS in the economy, their performance, and the economic rationale in the specific country and economic context. This stage is structured into three steps, which are described below and are summarized in table 1.

STEP 1.1 UNDERSTAND THE SCOPE OF MARKETS WITH BOS PRESENCE AND ECONOMIC RELEVANCE

The starting point consist of having a grasp of the extent to which BOSs take part in the economy to understand the scope of the state ownership and potential implications of reform. The World Bank's Global BOS database and dashboard can serve as entry point for the assessment of the State footprint. It provides key indicators at an aggregate level to measure in how many markets BOSs are present, and how much they account in terms of the economic activity and employment.[23] Some key indicators to consider are:

- **Share of markets with BOS presence**: Measuring how many markets have at least one BOS firm serves to understand the extent of state ownership. Using the evidence and distribution provided by the World Bank's Global BOS database suggests countries with more than 15 percent of the total economic activities with state ownership represent a relatively high share.[24]
- **BOS' revenues as a percentage of GDP**: Similarly, evidence from the World Bank's BOS database suggests that BOS's revenues above 20 percent of GDP represent a relatively high share that could be a potential source of risk for the economy.[25] Such cases warrant special attention regarding the economic relevance of these BOS, their potential market distortions, as well as the potential fiscal implications.
- **BOS' workers as a percentage of formal employment**. BOS also act as important employers, albeit with important variations across regions. Evidence from over 90 countries in the WB Global BOS database shows that, on average, BOSs provide 5 percent of formal jobs, and, at times, even up to 30 percent. Countries with a share of employment above 6 percent of total formal employment can be considered high when compared across countries.[26] Future reform measures would have to factor in the extent of BOS employment, in case labor retrenchment is required as part of the reform process.

STEP 1.2 ASSESS THE ECONOMIC RATIONALE FOR BOS PRESENCE IN MARKETS IDENTIFIED

The larger the presence of BOS in the competitive markets, the more likely the risks for crowding out private investment, especially when the regulations and market conditions to ensure a level playing field are not in place.[27] The second step consist of analyzing the type of markets where BOSs operate and assess their economic rationale. This can be done by implementing the market taxonomy introduced before (section 1, page 16).[28] This will reveal the extent of BOSs operating into competitive, partially contestable, and natural monopolies markets and their risks involved (see table 1). For instance, in contestable and natural monopoly markets, the presence of BOS carries with it the risk of underperformance and associated inadequate service delivery when not properly regulated. This can impede private sector development, and potentially result in fiscal risks. In this stage, it is critical to also assess whether BOSs have non-commercial or policy mandates that can potentially impact their

23. Information for countries covered by the WB Global BOS database followed a standard and global methodology to ensure comparability. Additionally, the information collected was reviewed by WBG country teams and was validated in most cases by government counterparts. In some countries, given the political situation, the final step of government validation was not feasible. For more details refer to Dall'Olio and others (2022a).
24. The share is computed as the number of economic activities (NACE classification at the 4-digits) in which there is at least one BOS over the total of 563 economic activities considered under the BOS market taxonomy (Dall'Olio and others, 2022b).
25. The thresholds of the indicators are defined based on percentiles (percentile 30, percentile 70) of the distribution observed across 91 countries included in the World Bank's Global BOS Database whose coverage is above 65 percent in the respective variable (employment or revenues). Then, the top and bottom 30 percent in the distribution were identified. For example, the percentile 30 of BOS revenues as a percentage of the GDP is 9 percent, and the percentile 70 is 18 percent. Benchmarks for BOS performance, for example, RoE and leverage and liquidity are based on IMF (2021).
26. The thresholds (cut-points) are defined based on percentiles (percentile 30, percentile 70) of the distribution observed across 91 countries included in the World Bank's WB Global BOS Database whose coverage is above 65 percent for labor information. The indicator is computed as total workers in BOSs over total formal employment from the International Labor Organization as of 2019. Percentile 30 and 70 for employment information are 1.4% and 5%, respectively.
27. The government can also intervene in the markets indirectly through market regulation. In this Note, the direct role of the State is analyzed as a market player. However, the forthcoming WBG MCPAT complements this Note by providing a full overview of other mechanisms whereby the State can influence markets.
28. The taxonomy (Dall'Olio and others, 2022b) provides a classification of 563 economic activities (NACE 4-digit) into natural monopolies, contestable and competitive sectors. It can be implemented once determined the main activity of the company(s) of interest.

performance or incentives to operate within the bounds of a level playing field. In case firm-level data is available, for example, economic census data, manufacturing surveys, relative market shares of BOSs, and possibly of their POE peers, additional indicators can be estimated to assess the level of market concentration in markets where BOS are present.

The market taxonomy and the framework presented earlier in figure 1, provide a structured framework to assess the economic rationale for BOSs in an economy. Assessing the rationale at least for the major BOSs in an economy, if an assessment is not possible for all BOSs, is a vital input to designing adequate reform options during Stage III, together with information on the operational and financial performance of BOSs (see subsequent section), and the impact of BOSs on markets. The assessment of the economic rationale of BOSs is essential to understand better the risks of crowding out the private sector. This assessment helps in understanding the trade-off between the state ownership vis-à-vis private participation. It also serves to explore less distortive mechanisms to achieve policy objectives. Some of the policy objectives of a BOS, including the provision of public goods, can be transferred to the private sector when the hurdles and costs for such contracts are low. Subsidies, targeted taxes, and well-regulated private monopolies can also be alternatives to consider. The ultimate goal will be to propose the best policy alternative to minimize unintended, adverse consequences on private sector development.

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Table 1: Indicators of the State Footprint, Economic Rationale and BOS Performance with Indicative High-risk Benchmarks for Private Sector Development

Stage 1					
Key Indicators to Analyze	Measure	Benchmark Used to Assess Risks for Private Sector Development			Potential Sources
		High	Medium	Low	
1.1 Determining the State footprint in the markets – the BOSs "landscape"[29]					
Share of markets with BOSs presence	Number of markets with at least one BOS over the total economic activities[30]	>15%	5-15%	<5%	World Bank Global BOS Database, iSOEF country assessments, IMF reports. More resources are listed in the section IV.
BOSs' revenues as a percentage of GDP	Share of BOS revenues as a percentage of GDP	>20%	10-20%	<10%	
BOSs' employment as a percentage of formal employment	Share of BOS in total formal employment	>6%	2-6%	<2%	
1.2 Understanding the economic rationale for BOSs presence (that is, market failures)					
Type of activity and economic rationale for BOSs' participation in the economy	Share of BOS by type of sector: natural monopolies, partially contestable, and/or fully competitive.	BOSs in fully competitive markets, where economic rationale for State ownership is less clear	BOSs in partially contestable sectors (that is, externalities)	BOSs in natural monopolies	World Bank Global BOS Database, Ministry of Finance, iSOEF country assessment IMF reports, in combination with the World Bank sector taxonomy
Revenues generated by BOS operating in fully competitive sectors among total BOS.	Share of revenues of BOS in the competitive sectors	>43%	21-43%	<21%	

29. The thresholds for this subcomponent are estimated based on the evidence and distribution provided by the World Bank's BOS database.
30. The NACE classification used for this analysis includes 563 economic activities at the 4-digit level.

Commercial and policy mandates and less distorting alternatives (see details in subsection – assessment of rationale for State participation)	BOSs have public obligations (PSO) (for example, subsidies to fertilizers) while also operating as market players (for example, as importers of fertilizers), and the law contains no operational or financial safeguards to minimize the risks of cross-subsidization or conflict of interest.	BOSs have both commercial and non-commercial functions, without proper compensation mechanisms or separation of accounting functions.	BOSs have both commercial and non-commercial functions, but accounting separation is implemented.	BOSs only operate Public Service Obligations (PSO) or commercial activities separately.	Competitive neutrality assessments, CPSDs, iSOEFs, sectoral studies.
1.3 Assessing the performance of BOSs[31]					
Number of BOSs with low cost-recovery	Average rate of cost recovery[32]	<1	1-1.5	>1.5	Ministry of Finance; centralized bodies for SOEs oversight; reports from multilateral organizations; World Bank BOS Database; iSOEF; and CPSDs.
Number of BOSs with low profitability	Average return on equity (RoE) of BOS.	<0%	0-8%	8-15%	
Soundness of debt / BOS leverage	Average debt to Earnings before interest, taxes, depreciation, and amortization (EBITDA) ratio.	>3	1.5-3	<1.5	
Number of BOSs in competitive sectors operating with losses in competitive sectors.	Share of BOS in competitive sectors operating with losses.	>27%	8-27%	<8%	

Sources: BOS database, IMF SOE Health Check Tool (IMF 2021), IMF (2019b) and Renteria and others (2018).

STEP 1.3 ASSESS THE BOSs' PERFORMANCE

In this step, it is important to assess the financial performance, the market dynamism, and service delivery. This stage provides a comprehensive assessment of the financial health of BOSs, the functioning of markets where they operate and the review of service delivery and investments.

1.3.1 REVIEW OF THE FINANCIAL HEALTH OF THE BOSs' PORTFOLIO

First, it is important to assess the financial health of BOSs at the portfolio level by identifying financial difficulties that could lead to market distortions or fiscal risks, both requiring attention in subsequent reform efforts. According to the *IMF's SOE Health Check Tool* (IMF 2021), SOEs can be classified into risk categories based on their outcomes

31. Thresholds are based on the IMF SOE Health Check Tool (IMF 2021). Note that these thresholds are meant to be used as a first approximation of the quality of performance of BOS at the portfolio level. A high share of BOS that have been categorized as "high risk" along several of these dimensions suggests a strong issue with BOS' underperformance, which can have both negative fiscal implications and be a potential source for market distortions. Further clarifications regarding the use of these benchmarks can be found in the text (page 16). For the assessment of individual BOSs, it is recommended to use sector-specific benchmarks that can be derived using statistical approaches (IMF 2021).
32. Total revenues (excluding government grants) / Cost of goods sold plus other operating expenses.

for the selected set of financial indicators against specified benchmarks or thresholds. This approach can be useful as a first approximation to understanding which share of BOSs is exposed to performance risk (at the portfolio level). A high share of BOSs categorized as "high risk" along several of these dimensions suggests an issue with underperformance, which can be both a source of negative fiscal implications and market distortion.[33] A government's tolerance of continued underperformance puts the stated owned firm at a comparative advantage. For example, SOEs may be allowed to accumulate arrears in tax payments, or they be allowed to operate at a profitability level that is well below market average (IMF 2019).

The phenomenon that BOS-SOEs are allowed to operate at low performance levels, accumulating debt and therefore requiring budget support is often collectively referred to as "soft budget constraint". Managing BOS-SOE under soft budget constraints bears the risk of delaying reform measures to the point that bailing out inefficient BOS-SOEs results in large fiscal deficits, at times even suppressing privatization revenues due to fire-sale effects and high interest rates caused by budget deficits (Guriev 2017). Financial performance indicators of BOSs may not reflect the actual financial health of the company, as subsidies may lower losses (or even increase profits), or public service obligations impose costs that reduce profit margins that other peer companies may not have to fulfill. It is, therefore, important that benchmarking of financial indicators take such data into account. Generally, performance benchmarking is more straightforward in competitive sectors where firms are less likely to serve public service obligations. Whenever available, such benchmarking takes place in the basis of comparable firms in aspirational peer economies.[34] Key indicators to measure the financial soundness of the BOS portfolio are:

- ✔ ***Cost Recovery and Return on Equity.*** Cost-recovery reflects whether a BOS firm is generating sufficient revenues to cover its operating costs. A BOS firm that has a cost recovery indicator of less than 1 is not breaking even at an operating level (that is, before taking financing costs and taxation in account). Hence, entities with a cost-recovery indicator of less than 1 are classified as high risk, whereas entities with a cost recovery indicator above 1.5 are classified as low-risk (IMF 2021). The return on equity (RoE) measures the ability of a firm to generate profits using its shareholding capital. Ideally, BOS should generate risk-adjusted returns commensurate with other investments, or at least equivalent to the government's cost of borrowing. In this regard, if the government sold its shareholdings, sovereign debt could be repaid. BOS are therefore classified in the low-risk category if they generate returns that cover the risk-free interest rate paid by the government on its 10-year debt (again, this will vary by country, and it is assumed as a rule of thumb to be 8 percent). When the RoE of BOS exceeds average returns of the domestic stock market (this will vary by country, but it is assumed as a rule of thumb to be 15 percent), they are considered well performing. BOSs realizing negative RoE will gradually reduce their equity and increase their leverage, thus contributing to solvency problems in the future. Consequently, loss-making SOEs are categorized as high risk (IMF 2021).[35] These indicators can serve to identify how many BOSs from the total portfolio are operating below recovery costs or with negative returns (see table 1).
- ✔ ***Soundness of debt (leverage) – Debt to EBITDA Ratio***. The debt to EBITDA indicates the ability of a firm to service any debt it holds. The EBITDA is a proxy for the cash a company can generate in a year from its operations. Therefore, the indicator signals the number of years it would take for the company to generate sufficient cash to pay off all its debt. A higher indicator indicates a more indebted company, where there is a higher risk that it may not be able to service its debt. The risk thresholds in table 1 have been based on levels used by the rating agency Standard & Poor's (S&P) for a similar metric (IMF 2021). Implementing this assessment could flag the share of BOSs that have higher financial exposure to cover their financial commitments.
- ✔ ***Share of loss-making BOSs.*** Understanding how many BOSs operate with financial losses can serve to prioritize areas of reform, particularly when those operate in competitive sectors. BOSs often accumulate direct debt, as well as hidden debt in the form of arrears to social security or tax arrears. In addition, BOSs may produce contingent liabilities in terms of future pension payments, albeit without the underlying assets (pension funds). The extent of debt accumulated by the BOSs needs to be

33. When BOS-SOE debt turns into public debt.
34. "Aspirational" peer economies are economies that the economy which is subject to assessment envisages to develop into.
35. Some BOS-SOE can underperform when performing also public service obligations without proper compensation mechanisms. Therefore, it is critical to understand other non-commercial functions developed by the entities when assessing BOS performance overall.

put into perspective as part of the country's overall debt levels. Data concerning debt levels is available from the World Bank International Debt Statistics or from the IMF. To be able to judge the risk associated with the debt of BOSs, it is necessary to put the debt level of the country in perspective, particularly vis-à-vis the country's GDP. Using the IMF's benchmarks allows for an assessment of the risks associated with certain debt levels.[36] Accordingly, in countries with "critical" or "unsustainable" debt levels, fiscal risk from BOSs calls for urgent attention. In this context, it is advisable to also factor in the debt sustainability assessments (DSAs), conducted by the IMF. These will highlight the cases where debt or contingent liabilities will threaten the economic development of a country.

By implementing these financial health indicators, it can determine the percentage of BOSs "at high risk" to reveal potential fiscal and operational risk, as well as highlight potential sources of market distortion (table 1). In case this assessment can be burdensome for all BOSs, the analysis should be conducted for a country's major BOS at a minimum and should prioritize on BOSs linked to those sectors where the economic rationale for state operation is less clear (that is, the fully competitive sectors). Assessing the financial performance over time, to the extent that data are available, will provide insights into the persistence of performance challenges. It may also shed light on whether ongoing reform efforts are successful.[37]

Poor performance of BOS in the competitive sectors is a particular serious warning indicator. Not only does poor performance potentially result in fiscal risks for the State (in form of direct fiscal support and contingent liabilities), the presence of poorly performing BOSs in the competitive sectors can also deter private investments. Continued underperformance of BOS-SOEs might suggest they operate under "soft budget" constraints, thus altering their incentives to operate on commercial bases as projects or investments are refinanced, funded, or backed by the government (Kornai 1986).

1.3.2. ASSESS MARKET'S DYNAMISM

In-depth comparison of firm level productivity and growth of BOSs vis-à-vis private firms can complement the financial benchmarking and generate valuable insights on market dynamism and state ownership. Determining the state footprint provides a somewhat "static" view of the extent of the state's engagement across sectors and resulting risks for markets. The above-described assessment of financial performance of BOSs can therefore be complemented with an assessment of market dynamism. In case firm-level and granular data are available for private firms, this can serve to estimate firm-level productivity and growth, entry and exit rates of sectors with BOS presence, as well as concentration measures.[38] Such an analysis can point at a potential productivity and performance gaps between BOSs and POEs and can help better understand how the extent of BOSs' presence affects private firms' behavior. Examples of such assessments have been conducted in the Country Economic Memorandum (CEM) of Moldova, CEM for the Dominican Republic, and WBG BOS flagship report (box 5).

BOX 5: USING FIRM-LEVEL DATA TO ANALYZE MARKET DYNAMISM AND STATE OWNERSHIP – EXAMPLES

Moldova Country Economic Memorandum (2023). Moldova has a high density of State-Owned Enterprises (SOEs). In addition, SOEs in Moldova are larger, pay higher wages, and are less productive than private firms, even in the sectors where SOEs are leaders, and especially in competitive sectors. Their presence is associated with misallocation in the economy—sectors with larger SOE presence have higher misallocation. Also, sectors with larger presence of SOEs seem to be on average more concentrated and have lower entry. However, SOEs can only explain a part of the misallocation observed in the economy, which might be also resulting from overall market inefficiencies.

36. According to the IMF, fiscal risk is low ("healthy") of the country's debt-to-GDP if max 60% and max 3% deficit. "unhealthy in the long term", if 60-120% debt-to-GDP if the deficit is below 3%, or 0-60% debt-to-GDP with a 3-6% deficit; "critical levels": min.120% debt-to-GDP if the deficit is below 3%, OR 60-120% debt-to-GDP if the deficit is above 3%, OR 0-60% debt-to-GDP if the deficit is above 6%; and "unsustainable" if the debt-to-GDP exceeds 120% in combination with having a deficit above 3%.
37. For instance, monitoring the performance of these indicators to corporatized companies or recent firms with new corporate governance arrangements can shed light on the effectiveness of some reforms over time.
38. Examples of such information include economic census data, enterprise surveys, manufacturing surveys, tax administrative records, among others.

Dominican Republic Country Economic Memorandum (2023). This analysis sheds lights on the impact of BOS presence in markets on the firm dynamism and potential barriers for productivity growth. Combining information from the WB Global BOS database and the tax administrative records, the evidence suggests that markets with higher BOS presence tend to be more concentrated, exhibit a higher exit of private firms, and are relatively less productive.

World Bank 2023 Businesses of the State report (2023): This report assessed, inter alia, how the extent of BOS' presence affects private firms' behavior that operate in the same sectors; it also analyzed the rates of entry, investment, and reallocation in those sectors over time by privately-owned firms. With regard to firm entry, this analysis found that the greater the state presence in a sector the lower is firm entry in Romania and Türkiye, and the lower the share of young firms in Brazil, Ecuador, and Vietnam. Looking at other measures of dynamism revealed that greater state presence can constrain dynamism. For example, in Vietnam, greater state participation is associated with less net job creation less job reallocation, particularly in the private sector, similar to Brazil which also showed less job creation.

Source: World Bank (2023b), World Bank (2023d), World Bank (2023f).

1.3.3 SERVICE DELIVERY

In addition to BOSs' financial performance, it is vital to understand the performance of their operations and service delivery. High-performing BOSs can potentially bring vital contributions to private sector development by, for example, providing crucial infrastructure services in the enabling sectors, such as telecom, energy, and port's management. Therefore, assessing BOSs performance in the enabling sectors will shed light on their contribution to private sector development. The amount of BOSs investments in infrastructure is a useful yardstick when compared to the overall infrastructure investment gap, as well as the targets of the respective infrastructure investment plan of the country.

An assessment of the investment volume in infrastructure by the BOSs should be complemented by an assessment of the quality and affordability of service delivery. It is worth noting that when BOSs are highly profitable, particularly above their private peers, it can also be a risk factor for private sector development because those advantages can be the result of undue protections or preferences granted to BOSs over their private sector competitors (See Stage II).. For this reason, it is also important to conduct a proper benchmark analysis of BOSs performance across sectors by operational performance measures. As an example, benchmarking comparisons on the prices as well as quality of the services including, for instance, the frequency of the service of passenger and cargo transportation (air, rail, and maritime), punctuality or delays at the (air)ports, potential interruption of services (for instance, blackouts) and costs for exporters of using key logistic services can serve to measure the performance of BOSs.

Stage II: Assessment of Potential Distortions for Private Sector Development in Markets where BOSs are present

Stage II aims to provide a sound understanding of the potential effects of BOSs on private sector development (PSD) through potential market distortions. The presence of BOSs can impact entire markets; crowd out private investments; and impair private sector development as well as the country's overall economic growth. Stage II introduces a range of indicators that are useful in attaining a high-level understanding of the potential source of market distortion linked to the role of BOSs. This high-level assessment is then complemented by a more detailed analysis of (i) policies and regulations that limit entry or reinforce dominance, such as limits on the number of firms, exclusive rights or reserved sectors to BOSs; ii) rules that facilitate risks of collusion or increase the costs for private competitors to compete against BOSs (for example, through price controls or quotas); and (iii) rules that that discriminate or protect vested interests (for example, preferential access to essential inputs for BOSs).

The joint OECD-World Bank Product Market Regulation (PMR) indices allow for a first high-level assessment of the potential role of the State footprint in the markets. The PMR database provides synthetic indicators that are internationally comparable to measure the regulatory barriers faced by private investors.[39] These indicators provide a measure related to the entry barriers and competition dynamics in a specific country (economy-wide indicators), as well as within a specific sector (sectoral indicators). In addition, these indicators allow for an assessment of the extent to which those barriers are related to distortions induced by government participation. As illustrated in Figure 5, the subcomponents of the PMR indicate the extent to which barriers for the private sector could derive from public ownership, including the direct control over enterprises and involvement in key enabling sectors (for example, network sectors).

The PMR indicators offer valuable benchmark comparisons to assess the effect of State participation on market competition and private sector development more broadly. The PMR indices allow for an assessment of the level of restrictions to competition stemming from State control. The PMR index provides a measure of the restrictiveness of certain areas of regulation to competition, including restrictions due to: (i) State control, (ii) trade and investment barriers, and (iii) barriers to entrepreneurship. For example, the CPSD for South Africa (2019) used the PMR index to assess the effects of SOE on the market (box 6). It is important to note that PMR indicators provide limited coverage for low-income countries. In countries for which PMR data is not available, teams can use a subset of PMR questions[40] to collect the necessary data.[41]

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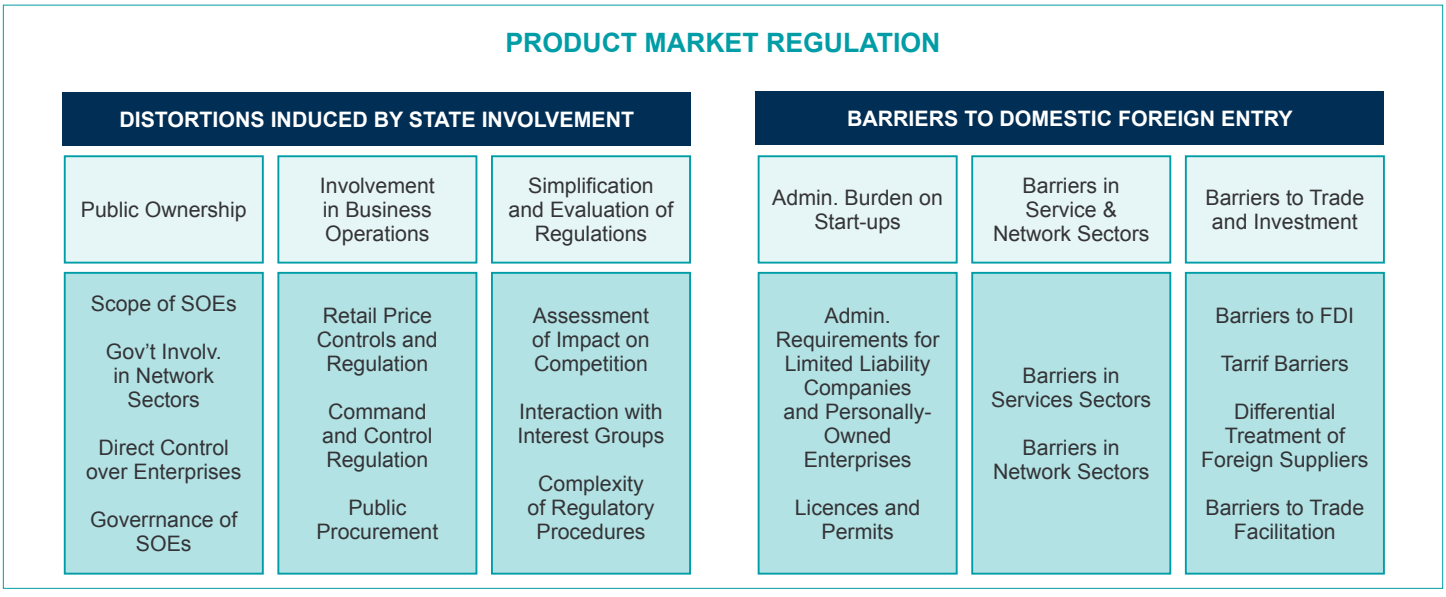
Figure 5: Product Market Regulation Indicators for Assessing the Potential Impact of SOE Presence in the Economy



Source: OECD (2018)

39. It provides an assessment of the rules as 'de jure' in the law but does not measure enforcement or implementation.
40. The questionnaire for the 2018-2022 OECD-World Bank Group PMR indicators is available at: https://www.oecd.org/economy/reform/OECD%202018%20PMR_questionnaire.pdf
41. When reviewing PMR data or similar data collected for purposes of a market assessment, teams should also complete the questions set out in the Market Regulation Checklist and Competitive Neutrality and Subsidies Checklist, which can be shared by the authors of this Note upon request.

BOX 6: COUNTRY PRIVATE SECTOR DIAGNOSTIC (CPSD) FOR SOUTH AFRICA: USING THE PMR INDICATORS TO ASSESS THE EFFECT OF BOS ON MARKET COMPETITION AND PRIVATE SECTOR DEVELOPMENT

Based on the PMR index, the CPSD for South Africa (2019) concluded that 47 percent of the restrictions to competition were related to State control, thus performing relatively worse than its peers. Restrictions to competition through SOEs in South Africa included aspects such as the scope of SOE involvement in the economy, direct government control of enterprises, price controls, and the use of command-and-control regulations. Restrictions to competition are of particular concern in competitive sectors. For example, of the 27 sectors examined under the PMR, South Africa has SOEs presence in 17, which is higher than the OECD average and some African peers. Factoring in indirect SOE ownership as well reveals the strong presence of SOEs in the competitive sectors. Based on the World Bank's Global BOS database, the team found that in South Africa, the 22 primary BOSs had 82 subsidiaries between them. The majority (57 percent) of these and their subsidiaries operate in competitive sectors where there is no a clear economic rationale for BOSs' involvement based on the existence of a market failure. These include manufacturing, travel agencies, storage, and wholesale trading.

Source:World Bank Group (2019).

In addition to the PMR indicators, the Bertelsmann Transformation Index (BTI) provides further information about the risks for private investors related to the lack of competition due to the BOSs' presence in the economy. The BTI measures the quality of democracy, market economy and political management across 129 developing and transition countries (Bertelsmann Stiftung 2018). Among the sub-indicators for computing the consolidated transformation index, the BTI measures the organization of the market and competition, which provides a proxy for the risks faced by private investors related to the presence of monopolies, price controls, anti-monopoly policies, as well as the presence of government-related operations and market-based competition. These indicators can inform the potential risks faced by private investors related to government participation in the marketplace (See figure 6). For instance, in Morocco, the indicator of market-based competition and findings reveals that market competition is hampered by control of large state-entities where no investment (foreign or domestic) is possible, given that the government has a monopoly. This includes sectors such as phosphates, waste management, wholesale fruit and vegetable distribution, postal services, water, and electricity supplies (Bertelsmann Stiftung 2018).

Third, the Global Competitiveness Index (GCI)[42] offers valuable insights into the market efficiency and can help corroborate emerging findings suggesting market distortions by BOSs. Global competitiveness indicators are available online and offer an easily accessible snapshot of what the most problematic factors are for doing business in a country.[43] It does so by providing a score for issues ranging from the government bureaucracy to undue government influence in the economy to restrictive regulations, and so on. The indicators are clustered into six pillars, with each providing a subset of indicators measuring specific aspects. The most relevant indicators for the BOSs assessment are: (a) Pilar 1 related to public institutions, corruption, and undue political influence, (b) Pillar 6 related to good market efficiency, including domestic and foreign competition, market dominance, and the effectiveness of anti-monopoly policies, and (c) Pillar 7 on labor market efficiency. While the Global Competitiveness Indices do not allow for an assessment of the contribution of BOSs to market distortion or inefficiency, they may be useful in corroborating the findings from the preceding BOSs assessment.

42. The GCI and BTI are perception indexes, whereas the PRM is based on how regulatory provisions favor (*de jure*) or limit competition.
43. Data is available at: https://tcdata360.worldbank.org/

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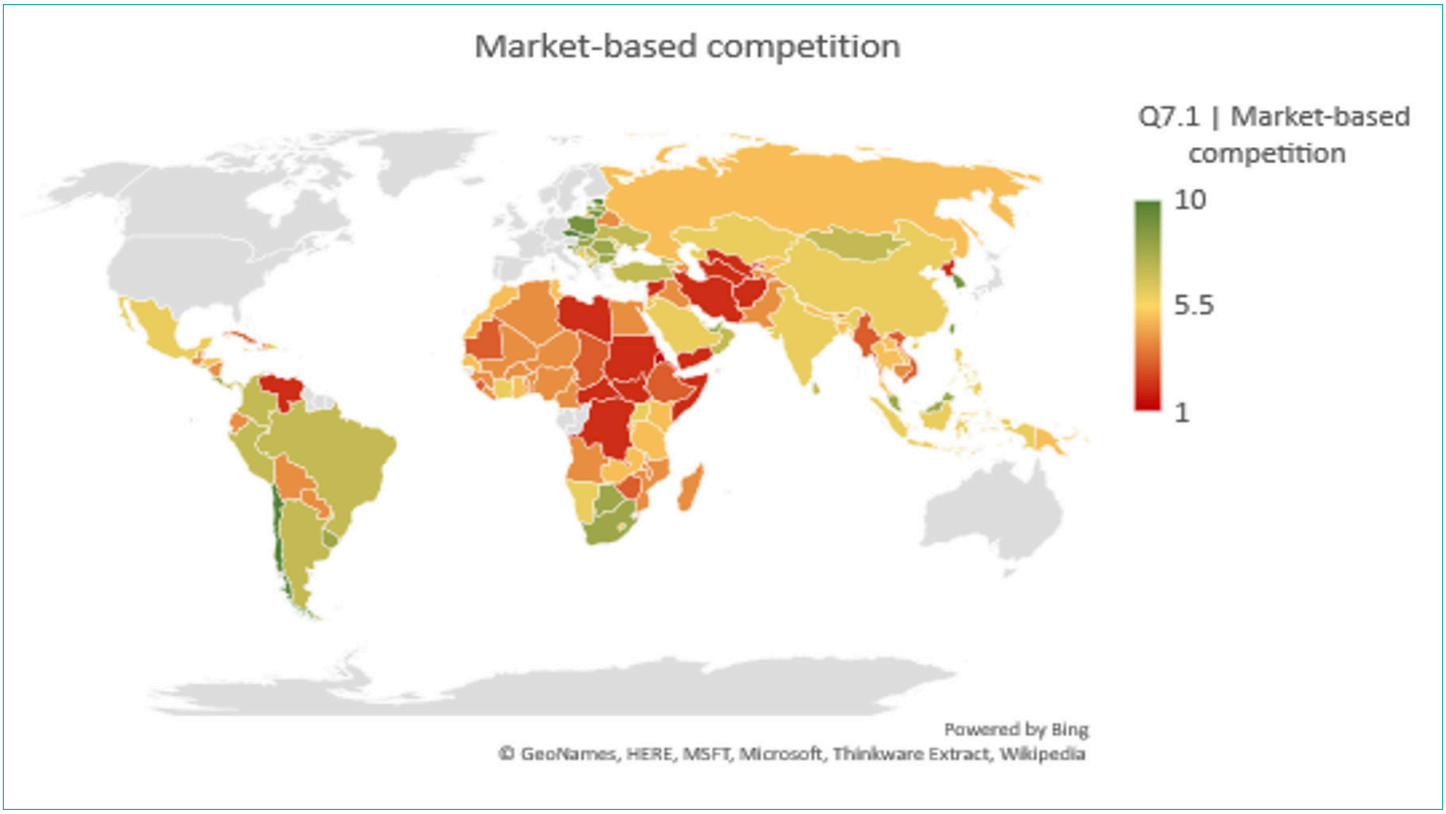
Figure 6: Market-based Competition Index



Source: World Bank Markets, Competition and Technology Unit elaboration based on Bertelsmann Stiftung 2018.
Note: Index ranges from 1 to 10. Higher values indicate relatively lower competition barriers faced by private investors.

In addition to the overall assessment of the extent of market distortion by BOSs through the PMR, BTI and competitiveness data, teams should proceed with a more specific analysis of policy and regulatory barriers to private sector development due to the presence of the State. Following the WBG's Markets and Competition Policy Assessment Tool (MCPAT), this stage requires to analyze three potential sources of market distortions that may provide preferences to or protection for BOSs, including: (i) rules that limit entry or reinforce dominance; ii) rules that facilitate collusion or increase the costs for private competitors to compete with BOSs; and (iii) rules that that discriminate or protect vested interests. The MCPAT framework allows for a comprehensive assessment of both explicit and implicit regulatory protections, and potential privileges granted to BOSs that can increase the risks of displacing the private sector. As such, it helps to assess the policies and rules shaping the business environment for BOSs and private actors, which in turn shapes incentives and market discipline for each. For this purpose, teams can explore three types of policy interventions as described below and summarized in Table 2.

STEP 2.1 UNVEIL RULES THAT ARE CONDUCIVE TO LIMITING ENTRY OR REINFORCING MARKET DOMINANCE.

This review aims to detect potential rules or regulations that limit the number of firms, deter entry of private investors, or grant exclusive rights or reserve sectors to BOSs. Monopoly rights and absolute bans (for example, reserved markets to BOSs by the constitution) can block the entry of the private sector in certain sectors. These measures are even applied to sectors that could be open to competition,

thereby de facto providing some monopolies to the State. These measures include bans on permits, temporary or geography exclusivity, limits on the number of firms, and other entry restrictions (for example, BOSs granting licensing for potential competitors). Legal barriers and conflict of interest can also be detected at this state in the event that BOS act both as market player and a regulator determining the rules for entry of potential competitors.

STEP 2.2. IDENTIFY RULES THAT FACILITATE COLLUSION OR INCREASE THE COSTS OF THE PRIVATE SECTOR TO COMPETE

Even when private counterparts overcome barriers to entry and succeed in becoming a market player alongside a BOS firm, investors can face additional hurdles to compete. For this reason, it is key to unveil potential rules that facilitate collusion or increase the costs to compete with BOSs in the marketplace and that distort the level playing field. Such hurdles can ultimately impact feasibility and profitability of the private sector. Some examples include policy interventions in the form of price or margin controls (for example, prices/rates fixed by authorities), limits on discounts, or quotas that can increase the costs paid by private firms to compete. Another risk factor includes the need for the private sector to have BOSs' endorsement or authorization to serve certain markets.

STEP 2.3. ASSESS POTENTIAL POLICY INTERVENTIONS AND RULES THAT DISCRIMINATE OR PROTECT VESTED INTERESTS.

Some policy interventions can unlevel the playing field among competitors providing preferential treatment or undue advantages to certain market players. The discriminatory application of rules or standards based on ownership or location (for example, FDI constraints, high import tariffs or quotas), a lack of competitive neutrality, and rules benefiting incumbents can shield BOSs from potential private sector entry. Fair competition between BOSs and private operators can be undermined when the former have preferential access to resources, such as capital (for example, through reduced interest loans, capital injections, tax-credits, subsidies, accelerated depreciation), land (for example, through the allocation of strategic territories or locations for operation, or favorable lease contracts), labor (for example, through subsidies to cover wage-related costs), or infrastructure assets (for example, airports, ports, undersea cables, and so on). Moreover, private investors may find that the access to those factors is in fact operated or controlled by the BOSs. Furthermore, uneven law enforcement including, for instance, BOSs being exempt from the competition law, tax law, procurement law or sectoral rules can reduce the compliance costs for BOSs and unlevel the playing field. BOSs may also benefit from some sector- or product-specific rules, giving them a competitive advantage of their privately owner peers. Identifying these issues required teams to take a sectoral lens. This calls for a multisectoral team composition and a well-orchestrated collaboration across World Bank Group Global Practices (GPs) and its private sector arms, IFC and MIGA. It also implies that teams need work with sectoral ministries and agencies, beyond central government counterparts who often are located in competition authorities or oversight and sectoral agencies. Additional guidance regarding how to conduct an in-depth assessment of specific sectors (including upstream- and downstream-related sectors) or market dynamics in the context of the BOS assessment can be found in Annex 2 "Sector Deep Dives —Analyzing market structure and market dynamics".

The implementation of Steps 2.1 to 2.3 is key to detect which pre-conditions and complementary reform options are needed when proposing and implementing BOSs reforms. These findings will point to the direction of policy recommendations needed to address potential sources of market distortions (Stage III). Rules that might not be conducive to proper market functioning or unlevel the playing field should be a key component of the BOSs reform program. This will flag which pre-conditions are needed before engaging into more profound BOS reforms. For instance, when discussing divestiture measures, teams should also consider what are the market rules that can deter entry or growth of the private sector both in the event of BOSs continuing or leaving the market since ownership changes can be a necessary but not sufficient condition for achieving impactful reforms.

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Table 2: Most Important Issues in Unveiling Risks for Private Sector Development in markets with BOS presence

STAGE 2. 2.1 Some policies and regulations that are conducive to limiting entry or reinforcing dominance					
Key Issues to Analyze	**Red Flags (increase risks for market distortions and displace the private sector)**	**High Risk**	**Medium Risk**	**Low Risk**	**Potential Sources**
Constitution or high-level regulation provide exclusive rights (full or partial reserve) to BOSs.	By law, BOSs are granted the legal monopoly to operate in competitive sectors (for example, imports of inputs, or manufacturing).	BOSs are granted legal monopolies in competitive sectors.	Private companies are allowed to enter, although with participation caps (shareholding caps).	No economic sector is restricted to private entry.	Competitive neutrality assessments, CPSDs, iSOEF, and PMR.
Regulations that limit the number of firms in sectors with a BOS presence.	There are restrictions on the number of firms able to enter and operate in the market.	Yes, the number of firms is limited in competitive sectors (sector taxonomy)	Number of firms in contestable sectors is limited (sector taxonomy)	No, there are no regulatory restrictions to limit the number of firms.	Competitive neutrality assessments, CPSDs, and regulatory assessments.
BOSs are vertically integrated in upstream/ downstream sectors, with access to critical inputs, which are restricted to potential private competitors.	High level of vertical integration that could favor control of essential inputs or distribution channels.	Large presence of conglomerate groups with indirectly owned firms that are vertically integrated.[44]	BOSs are vertically integrated, but regulatory framework and enforcement are in place to mitigate potential anticompetitive behaviour.[45]	BOSs are not participating in the downstream sectors.	World Bank Global BOS Database MoF reports, sectoral studies, IMF reports.
Legal barriers and conflict of interest of the BOSs and regulatory functions.	The BOS firm is simultaneously the sector regulator and market player with influence to determine prices, production quotas, entry licenses, etc.	BOSs are sectoral regulators and have unilateral power to grant permits to private entrants.	BOSs intervene indirectly as regulator (for example, as board members of the regulator council) and can influence decisions regarding prices, production quotas, and licenses.	There is an independent sectoral regulator, and the BOS firm does not participate in decisions and is subject to the regulation.	Competitive neutrality assessments, CPSDs, and regulatory assessments, policy ALP questionnaire (forthcoming). You can use the WBG sources in the following row.

44. Risks increase as this vertical integration allow performing simultaneously activities in natural monopolies and competitive sectors (for example, bundled railway infrastructure with passenger services).
45. This includes the development of the Competition Law, presence of strong and independent sectoral regulators, as well as proper separation of accounting, reporting and compensation mechanisms.

2.2 Some rules that facilitate collusion or increase the costs of the private sector to compete against BOS					
Key Issues to Analyze	**Red Flags (increase risks for market distortions and displace the private sector)**	**High Risk**	**Medium Risk**	**Low Risk**	**Potential Sources**
Price controls	Price controls are in place and are proposed/enforced by the BOSs.	Prices are regulated (cap, minimum) for goods/services in the market and BOSs propose and/or enforce them.	There are price controls set by independent regulatory agencies under clear and objective criteria.	No price controls are in place in sectors with BOS presence.	Competitive neutrality assessments, CPSDs, regulatory assessments, policy ALP questionnaire (forthcoming).[46]
Production quotas	Quotas or production requirements are in place and/or imposed by BOSs.	Quantities produced are regulator and BOSs propose and/or enforce them.	There are quotas for production set by independent regulatory agencies under clear and objective criteria.	No production quotas are in place in sectors with a BOS presence.	Competitive neutrality assessments, CPSDs, regulatory assessments, ALP questionnaire.
Association of membership and BOS endorsement needed to enter or negotiate in the market.	BOSs provide an endorsement for participation of private peers in the market and trade associations.	Private firms require BOS' endorsement and authorization to enter or negotiate in the market.	BOSs participate on the Board of trade associations, and can set requirements for private peers.	BOSs do not intervene in any decisions or trade associations that grant entry to competitors.	Competitive neutrality assessments, CPSDs, and regulatory assessments.
2.3 Policy interventions and rules that discriminate or protect vested interests					
Import restrictions that shield the sector from external competition.	Import restrictions imposed on private competitors of BOS.	Import quotas/tariffs apply to private competitors, but not to BOSs.	Only sectors with a strong economic rationale (for example, security, defense) are restricted to imports of the private sector.	No import restrictions are in place.	Competitive neutrality assessments, CPSDs, iSOEF, ALP questionnaire.
FDI caps or bans that discriminate against foreign firms.	FDI restrictions that shield BOSs from private competition.	FDI is banned in the sectors with a BOS presence, including the competitive sectors.	FDI caps for the private sector, but public-private partnerships (PPPs) are possible with the BOS (partial participation).	No FDI restrictions.	Competitive neutrality assessments, CPSDs, iSOEF, ALP questionnaire.
Asymmetric access to productive resources – capital.	BOSs have access to concessional terms for loans/capital (for example, reduced interest rates, longer repayment periods).	BOSs can access loans at below-market rates.	BOSs can have access to concessional loans only under specific conditions, which are analyzed by the competition agency to mitigate potential distortions.	BOSs have access to capital/loans through commercial loans under similar conditions as their private peers.	Competitive neutrality assessments, CPSDs, iSOEF, ALP questionnaire.

46. The Anti-Competitive Laws and Policies (ALP) questionnaire is a WB global effort led by the Global Markets, Competition and Technology Unit to collect information on anti-competitive laws and policy regulations across 20+ sectors in sectors with BOS presence.

Asymmetric access to productive resources – land.	BOSs have preferential access to land (for example, below-market prices) (de facto or de jure).	BOSs can access land at below-market prices as compared to their private peers.	BOSs can have access to land with preferential terms, but only under specific conditions, as analyzed by the competition agency (for example, advocacy concept).	BOSs are required to apply under the same set of rules for allocation of land as their private peers.	Competitive neutrality assessments, CPSDs, iSOEF, ALP questionnaire.
Asymmetric access to productive resources - State aid.	BOSs can obtain preferential access to State aid that is not available to their private peers.	BOSs can receive direct transfers or State aid not available to private peers.	BOSs can have access to State aid under clear and objective criteria, with the review of the competition agency.	BOSs are subject to the same rules as private peers vis-a-vis access to State aid.	Competitive neutrality assessments, CPSDs, iSOEF, ALP questionnaire
Application and enforcement of the competition law on BOSs.	BOSs or certain sectors where BOS operate are excluded from the competition law.	BOSs are exempted from the competition law.	Only a few network sectors are excluded from the competition framework.	All BOSs are subject and enforced to competition regulation. No difference based on ownership.	Competitive neutrality assessments, CPSDs, iSOEF, ALP questionnaire.
Regulatory neutrality: tax neutrality.	BOSs are not subject to the tax law or benefit from preferential treatment, exemptions, or different compliance costs.	All BOSs are exempted from corporate tax or value-added tax.	Only BOSs in natural monopolies are excluded from the application of the tax act.	All BOSs are subject to the same tax regulation (rates, enforcement) as their private peers.	Competitive neutrality assessments, CPSDs, iSOEF, ALP questionnaire.
Regulatory neutrality: procurement law.	Governments may be able to procure goods and services through BOSs without following procurement rules and competitive tender processes.	Governments can purchase goods and/or services from BOSs without following the procurement law.	BOS are subject to the same procurement rules, but there are exemptions and the rules are not properly implemented.	Any market provider (private or BOS) follows similar procurement rules and those are implemented.	Competitive neutrality assessments, CPSDs, iSOEF, ALP questionnaire.

Source: World Bank Markets, Competition, and Technology Unit.

Stage III: Policy Reform Options to boost private-sector-led growth

Governments can implement different solutions depending on the level of ownership and managerial transformation that is preferred or most appropriate, given the particular market dynamics at play. When reforming sectors with BOS presence, a wide range of policy instruments can be deployed beyond divestiture measures to foster private sector development. Options of reform range from competition advocacy, pro-competition regulatory reforms, corporate governance reforms, BOS-SOE restructuring, to public-private partnerships (PPPs) and full state divestiture (figure 7). All of them have in common that they support private sector dynamism in markets where the state participates.

Solutions will also depend on the potential for market distortions in that sector or market segment, the performance of the firms with State participation, and the country-specific context. This toolkit proposes a new framework where the private sector can have multiple opportunities to engage and benefit from BOSs reforms. This approach goes beyond privatization and broadens the type

of instruments for reform that can be used by governments to foster private sector-led growth. At a high level, reforms to restore market-based incentives and foster contestable and efficient markets focus on promoting the private sector as:

i. **A market player (competing alongside BOSs),** by abolishing and reforming policies and regulations that otherwise inhibit private entry and investment in relevant market segments, or regulatory provisions that grant specific protections and privileges that upset the playing field. This is particularly relevant in competitive and partially contestable sectors.
ii. **A manager of a BOS firm**, as a temporary owner-manager of state-owned assets through concessions or PPPs. This can fill important investment gaps and bring-in private sector investment in sectors with high perception of risks or uncertainty including the development of new technologies (for example, green energy production).
iii. **A long-term owner-manager** through divestiture measures.

Policy practitioners should be aware that ownership changes are, however, neither a necessary nor a sufficient condition for reforming sectors with BOS presence. Just as state participation in markets does not necessarily solve market failures per se, private sector ownership is not a panacea either. Reforms that privatize BOSs or open state-dominated markets to private participation can create new opportunities for collusion if liberalization is not accompanied by effective anticartel enforcement. Therefore, BOS reform programs should also encompass regulatory changes such as eliminating price controls or measures that can facilitate collusion among competitors (World Bank, 2021). Reforms should also start by setting the pre-conditions for proper market functioning. This includes removing rules that limit or deter entry of the private sector such as legal monopolies or FDI bans, even before discussing divestiture options. This will maximize the potential to attract private investment effectively.

What it is critical for maximizing the potential gains of BOS-SOE reforms for growth and PSD, it is that the right market incentives are in place and that policies, regulations, institutions and market discipline ensure a level playing field between market players, including between incumbents and new entrants. Even when fully privatized, if the right regulatory conditions and incentives to perform are not in place, the results of BOS reforms might be limited. The incentives for BOSs or private firms to reach their best potential are shaped by the rules in the market including corporate governance, performance contracts, pro-competition regulation, strong institutional capacity, proper enforcement and monitoring.

To ensure a level playing field, complementary regulatory reforms should be considered. Pro-competitive government interventions in the form of economic regulation can stimulate greater efficiency and maximize the potential gains of reform. For example, corporate governance reforms paired with restructuring for BOS-SOEs and regulatory reforms can lessen entry barriers to the private sector and increase BOSs incentives to improve performance — even without transferring any ownership or management to the private sector. Other sectors, including partially contestable activities, such as (air)ports and telecommunications infrastructure may be better suited to reforms that facilitate management and partnership arrangements with the private sector (for example, PPPs, management contracts, and concessions). These options can bridge investment gaps through private investment and benefit from private sector efficiency, talent, skills, and expertise while allowing the government to either retain partial ownership of the assets or regulating the private operators to ensure a public sector interest.[47] Finally, divestiture measures, including full or partial privatization, are an alternative for fully competitive markets with typically low barriers to entry, in which the economic rationale for BOSs presence is less clear. Aligned with the recommendations of the IEG evaluation (World Bank 2020), this Note proposes a cascade approach to BOSs reforms. Specifically, it offers clients options to mobilize private financing and expertise through a full range of private sector solutions including, but not limited to, ownership reform. Figure 7 provides an overview of the various policy instruments and brief explanations under which circumstances they are most suitable. More details of each policy instrument are described in box 7.

47. For example, in the case of Senegal (water) and some countries in the Latin America and Caribbean region (railways), despite no ownership changes (that is, the government retaining the property of the assets and infrastructure), the private sector was able to play an important role in shaping better market dynamics. It did so by acting as manager and investment partner, improving the functioning of the SOEs' through concession contracts.

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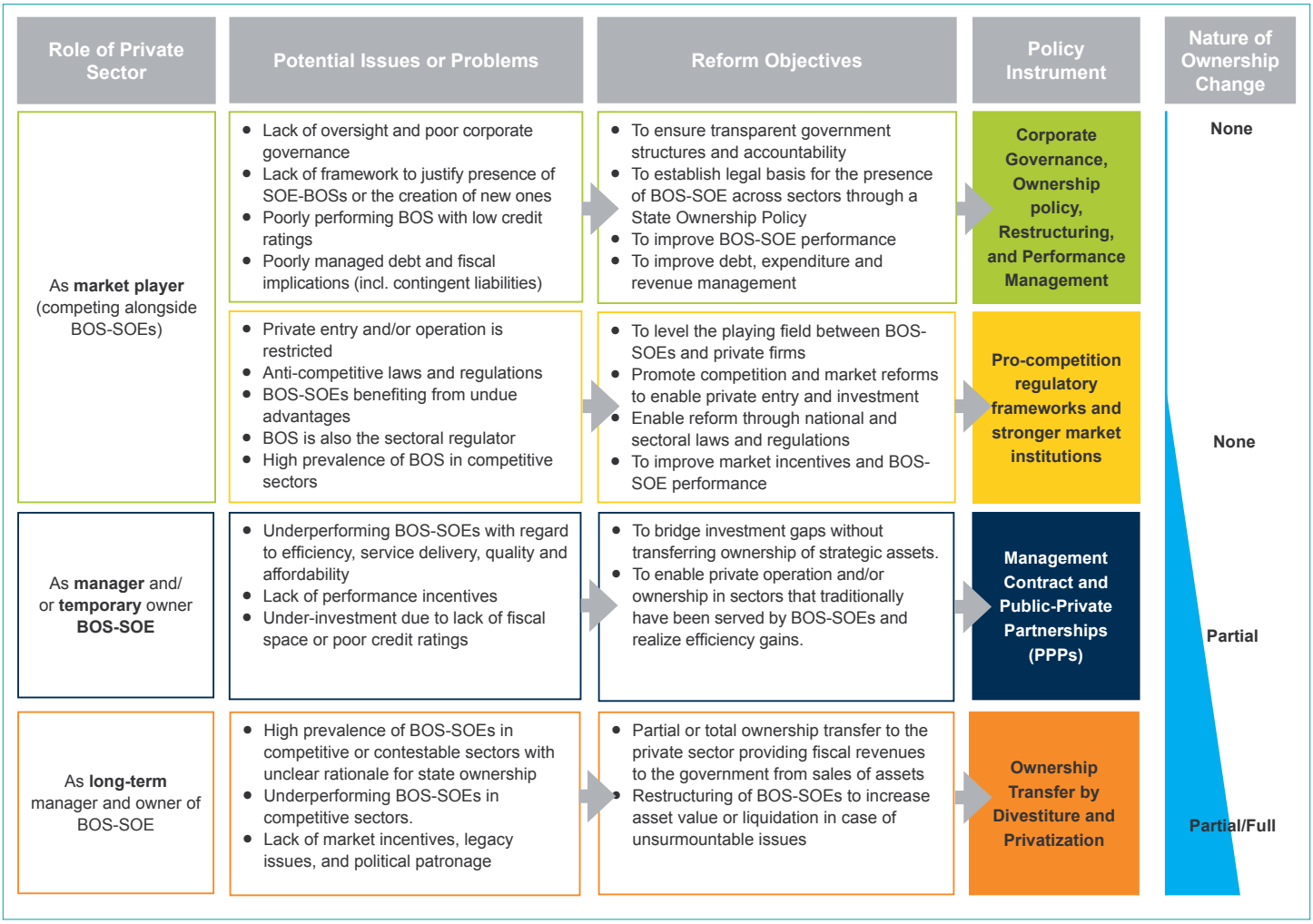
Figure 7. BOS Reform Policy Options Based on the Main Issues Identified



Source: World Bank Markets, Competition, and Technology Unit.

BOX 7: MENU OF POLICY OPTIONS FOR BOS REFORM

Corporate governance reforms, restructuring, and state ownership policy (ownership remains unchanged): When the government intends to retain ownership in the BOSs, corporate governance reforms are a useful way to force BOSs to improve their performance, mitigate market distortions, and attract private investors and entrants into the market. Improved corporate governance practices can redefine the rules of operation for BOS and increasing transparency and accountability. The first step in such reform effort can be to adopt a *State Ownership Policy* with clear articulation of the rationale for the state's engagement in certain markers. For example, Norway, Sweden, Denmark, New Zealand, and Finland have such policies. The governments of these countries periodically review and disclose its rationale for the continuing state ownership and any changes. In Finland, for example, the latest ownership policy, issued in 2016, focuses on the benefits of state ownership in the emergence of new markets or when a sector is undergoing radical reforms such that new methods and practices in the market place are needed. Such policies help also regulate how the state intervenes in SOEs. For example, New Zealand, confines its interventions in wholly owned state-owned enterprises to four areas: strategic plan (including performance levels), dividend levels, board appointments, and taking necessary remedial steps with SOEs that fail to meet agreed performance targets (Wong, 2018). Additionally, corporate governance reforms can improve performance and transparency by (i) introducing key performance indicators (KPI); (ii) promoting the separation of the policy and oversight functions from the commercial functions (for example, through an independent regulator); (iii) encouraging the autonomy of the management (for example, through a board-balanced structure); (iv) professionalizing boards and management; and (v) promoting disclosure and reporting of financial obligations, audits, and procurement procedures.

Regulatory frameworks and stronger market institutions (ownership remains unchanged): Proper rules in the markets and enforcement is another critical mechanism to improve incentives, private capital mobilization, and performance in sectors with BOS presence. Some regulatory provisions such as price controls, production quotas, FDI bans, can shield certain markets with BOS presence from domestic or foreign competition. These measures as well as preferential treatment to BOS-SOE can deter entry of private investors and undermine firm dynamism. To level the playing field and enable private entry and capital mobilization, reforms should embed competitive neutrality principles to ensure BOS and private sector compete on equal basis regardless ownership. For this purpose, at the minimum reforms need to consider (i) unbundling commercial and non-commercial functions to improve performance and proper compensation mechanisms, and (ii) remove barriers that can restrict PSD in sectors with BOS-SOE presence. These barriers include ***rules that limit entry or reinforce dominance*** of BOS-SOEs such as restrictions on the number of competitors in the market, monopoly rights and bans for entry, particularly in competitive sectors; ***rules that can facilitate collusion or increase the cost of the private sector to compete*** such as price controls, production quotas, ***and rules that discriminate and provide preferential treatment*** or undue advantages to BOS-SOEs vis-à-vis private peers such as concessional lending, or preferential prices/access to inputs. Pro-competition regulation needs to be accompanied by strong market institutions such as a functioning competition agency and sectoral independent regulators that are key to ensure the enforcement of such rules. These reforms can also be effective mechanisms to improve BOS-SOE performance in response to stronger market incentives.

Management contracts (ownership remains unchanged): Delegating operational decisions to private investors for a specific timeframe can spur efficiency gains as the BOS firm obtains access to sector-specific expertise, innovative management, and sound operational practices. Under management arrangements, the government transfers the responsibility for the delivery of goods or services to a private counterpart, while also granting the freedom to choose the means for meeting the targets. Management contracts can take multiple forms depending on the duration, legal status of assets, and degree of private contractor responsibility; however, they are often a solution where there is limited appetite to transfer assets to private owners. BOS reforms through private management require a sound regulatory framework that limit the rent-seeking behavior of private operators in contestable sectors or among private monopolists.

PPPs and concessions (partial and temporal transfer of ownership): Public-private partnerships are another mechanism to catalyse BOSs reforms and foster private investment for long-term and large-scale projects where pure, private solutions and financing are not possible. Unlike managerial agreements, under a PPP the government could transfer, often partially or temporally, assets or stakes to the private sector. Through PPPs, the private sector can take an active role in financing infrastructure and developing projects, while also sharing the risks with BOSs. Some activities that can crowd-in private participation include: (i) the designing (engineering work) of initial concept, (ii) the building or reparation of assets, (iii) the financing (partial or total) of the capital expenditures, (iv) the maintenance of the assets over the life of the contract, and (v) the operation of the underlying assets or associated services. Thus, PPPs can attract private investment and expose BOSs to market-based dynamics, while also promoting the development of enabling sectors that are key for boosting private sector development (for example, port infrastructure, digital backbone infrastructure, and so on). However, to achieve these objectives, PPP contracts should allow for both domestic and foreign private companies to compete for the contract under a level playing field, given the prevailing conditions in the market.

Divestiture (full or partial transfer of the ownership and management): Divestiture involves the transfer of both assets and operations of a BOS to private investors. The allocation of assets and decision-making power can take different forms depending on the trade-off between the profit orientation and the political and economic costs. For instance, offering free or low-cost distribution of shares facilitates the transition of ownership and minimizes the social costs of layoffs (for example, through vouchers to employees). However, it impacts substantially the government revenues, and it might not considerably change the market incentives, if owned by former managers or employees. On the other side, auctions and direct sales might increase the government proceeds, but face important challenges to cope with political and social costs (for example, workers and civil opposition). Depending on the degree of involvement of the government and linkages with day-to-day management, this approach could provide private owners with autonomy to operate under market-based incentives. However, transparency and accountability risks may remain in the absence of complementary good corporate governance reforms. Even in the event of a full transfer of assets to private operators, this does not necessarily translate into a distortion-free business environment for private competitors. Thus, complementary regulatory measures are also required to ensure a level playing field particularly in fully competitive sectors. It would help to mitigate further obstacles that could prevent entry or competition from other private counterparts. Strong market institutions such as an operational and independent competition agency and sectoral regulators are also key.

Source: World Bank Markets, Competition, and Technology Unit based on WBG (2021) and Wong (2018).

3.1 CROSS-CUTTING PRINCIPLES FOR DESIGNING BOS-SOE REFORM

Certain cross-cutting institutional and regulatory pre-conditions should be in place to enable an effective BOS-SOE reform process. This include ensuring both private and public operators in markets are subject to the same market discipline, mitigating potential conflict of interest of the state by separating regulatory functions into independent agencies, and ensuring proper enforcement is in place and applicable to all market players.

- **Ensure similar market rules and discipline for incumbents and potential entrants, including BOSs:** Should Stage II raise concerns regarding BOSs benefitting from preferential government support or uneven enforcement, reform efforts need to embed competitive neutrality principles across BOS-related laws, regulations, and policies to avoid direct or indirect preferential treatment for BOSs (for example, access to inputs, land, loans, and government subsidies, public procurement, tax and competition exemptions). A competitive neutrality assessment is required to identify such challenges economy-wide and/or at the sector-level (see Stage II). The priority is to ensure a level playing field such that regardless ownership (either direct or indirect by the state, majority or minority owned, foreign or domestic), firms in similar economic activities are subject to symmetric rules and enforcement. This may require a revamping of the state-aid framework, developing inventories of state subsidies and transfers to foster transparent mechanisms including objective criteria and processes.

- **Separate the functions of the state as regulator and market player into independent bodies to mitigate potential conflict of interest.** Responsibilities for BOS-SOE oversight and market regulation should not lie with BOS-SOEs or any other entities or actors that are involved in the day-to-day management of BOSs' commercial activities. Such a separation of powers and responsibilities can mitigate the risks of BOSs intervening in markets in a way that inhibits private entry and investment (for example, through board members defining prices and requirements to entry). This applies even for minority owned companies by the state that still might have potential influential power over the firms. Measures to limit conflict of interest and independence of the regulators are essential to ensuring the proper functioning of markets, as well as minimum influence from the State.
- **Strengthening the competition regulatory framework and enforcement to ensure a level playing field:** It is essential to include BOS-SOEs under the provisions and oversight of the competition agency and sectoral regulators as well as accountability mechanisms. This is key to provide a strong signal for private sector investors on their potential to enter and compete in a level playing field. This will also require stronger institutions and capacity building, independence, and strengthening of the enforcement tools of the competition authority and sector regulators. Beyond the regulatory changes, an effective enforcement will be critical to deter potential anticompetitive practices and ensure proper implementation of the regulations.

3.2 GUIDANCE FOR PRIORITIZATION OF BOS-SOE REFORMS

Based on the assessment of the BOS-SOE landscape across the natural monopoly, contestable and competitive sectors (Stage I), and of the respective market distortions (Stage II), a country-specific reform package can be designed. As opposed to proposing a 'one size fits all' type of reform, this toolkit serves to guide policy reforms based on evidence and a systematic assessment of potential risks of market distortions in markets where BOSs are present. As such, it offers a set of criteria building on the risk-factors assessed during Stage I and II to guide policy makers in the design of the reform package and priority sectors. Figure 8 suggests areas for prioritization raking from 0-pre-conditions needed to 7-reforms in natural monopoly sectors based on the potential risks for displacing the private sector. The full list of instruments and complementary measures to ensure effective BOSs reform are described in the Annex 3.

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Figure 8. Suggested Instruments and Prioritization for BOS Reform Based on Risks of Displacing the Private Sector and Type of Markets

<table>
<tr><th colspan="2" rowspan="2">Findings from...</th><th>Competitive (high priority)</th><th>Partially Contestable (medium priority)</th><th>Natural Monopoly (low priority)</th></tr>
<tr><td>Ex. Manufacture of textiles, basic chemicals.</td><td>Ex. Passenger air transportation</td><td>Ex. Energy transmission</td></tr>
<tr><td>Stage I</td><td>Loss-making (financially inviable)</td><td>1. Divestiture (Liquidation)</td><td>4. Corporate governance and debt restructuring followed by potential divestiture</td><td>7. Corporate governance or management arrangements including key performance indicators (KPIs) and assessment of costs of public service obligations.</td></tr>
<tr><td>Stage I</td><td>Financially viable and healthy</td><td>2 Divestiture (Auction, direct sale)</td><td colspan="2">5. Management or service contracts with key performance indicators (KPIs)</td></tr>
<tr><td>Stage I</td><td>Underperforming service delivery and lack of performance incentives</td><td>3. Divestiture (Auction, direct sale)</td><td colspan="2">6. PPPs and management contracts with key performance indicators</td></tr>
<tr><td>Stage II</td><td>Explicit or implicit rules restrict entry of the private sector</td><td colspan="3" rowspan="2">0. Pre-conditions: Regulatory reforms to ensure a level playing field and remove restrictions that hinder private sector development accompanied by stronger institutional capacity for implementation and enforcement of market rules.</td></tr>
<tr><td>Stage II</td><td>Explicit or implicit rules provide an undue comparative advantage to BOSs.</td></tr>
</table>

Source: World Bank Global Markets, Competition and Technology Unit

Aiming at boosting PSD, policy practitioners can start BOS reforms by reducing state footprint in competitive markets. Following the cascade approach, BOS reforms and operations should complement and crowd-in private sector activity, while also minimizing distortions in competitive markets. As discussed before (Stage I), a high predominance of BOSs operating in competitive markets can signal higher risks of displacing the private sector. Therefore, markets with BOSs' presence that can be denoted as competitive or viable for private sector participation should be considered as a priority of reform. In particular, reforms should aim at reducing the state footprint in competitive sectors where BOSs operate with significant losses vis-à-vis peers and ensuring that market rules are in place to ensure a level playing field.

Subsequently, reforms can address partially contestable sectors and natural monopoly sectors linked to key enabling sectors for PSD, targeting those that are not financially viable or healthy. Depending on the financial soundness of the BOSs and market conditions, reforms can start by introducing corporate governance reforms or management contracts with key performance indicators in partially contestable sectors. Finally, reforms in natural monopoly sectors should follow, particularly once regulatory conditions, market institutions, and enforcement capabilities of the competition agency and sectoral regulators are strong to control potential rent-seeking and anti-competitive behavior.

3.3 PRINCIPLES TO SEQUENCE REFORMS.

Policy interventions need to be adequately sequenced to ensure success. Sequence of BOS-SOE reform matter for achieving the expected results. From a process perspective, reforms require a proper preparation of the pre-conditions as well as post-reform measures. Figure 9 summarizes key factors of success that can guide policy practitioners and complement the economy-wide principles proposed above, particularly when opting for divestiture/privatization as the reform strategy.[48]

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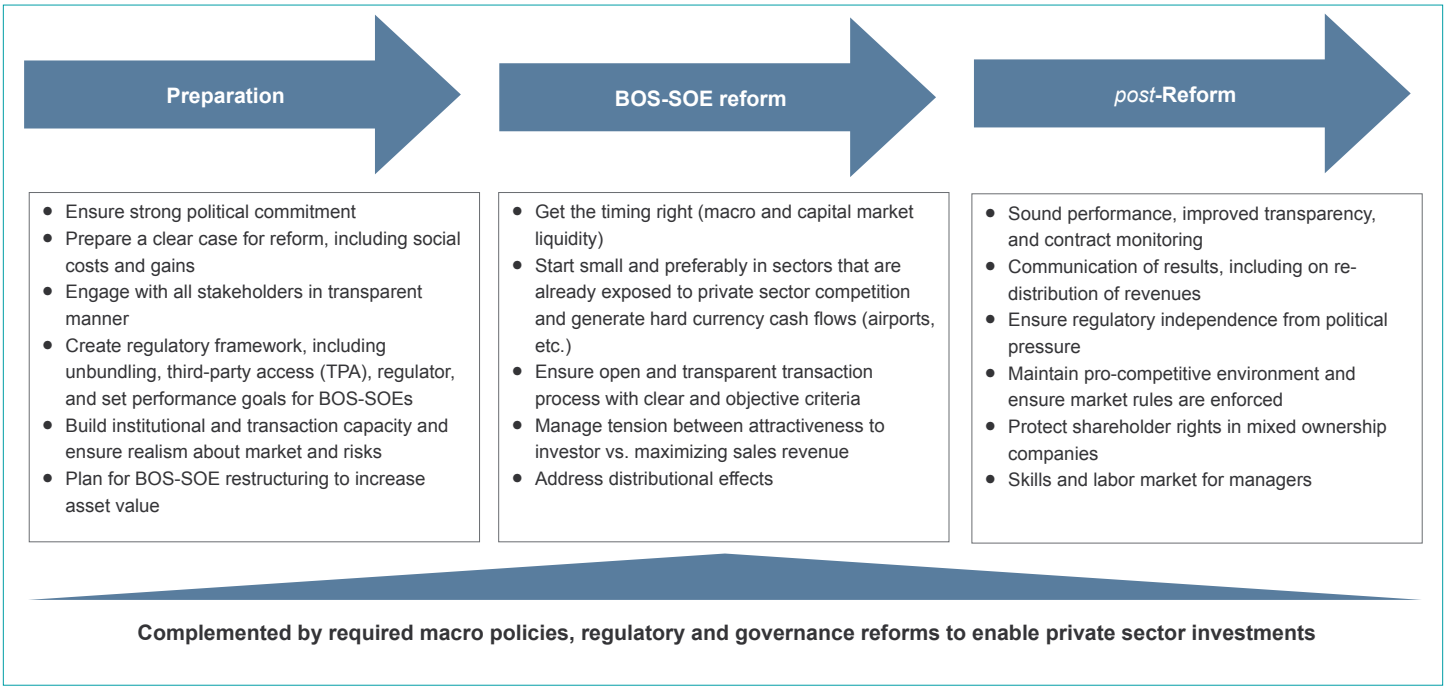
Figure 9. Success factors for BOS-SOE reform and privatization



Source: Global Markets, Competition, and Technology Unit based on Estrin and others (2018), Lazzarini (2022) and IEG (2020).

48. For a more extensive discussion on privatizations, please refer to the underlying resources or World Bank Group (2021).

3.4 SECTOR-SPECIFIC RECOMMENDATIONS

Furthermore, specific instruments for reform and complementary measures need to be tailored to the type of sector in which BOSs operate. Specific guidance concerning the options for each sector-type are listed below.

- **Competitive markets:**
  - **Ensure competitive markets have effective regulatory and policy reforms in place to create a level playing field.** A large presence of BOSs in the competitive markets, like steel or cement, highlights the potential risk for crowding out of private investments because their businesses can readily be operated by private investors as well. It can even have detrimental effects on the other actors in the sector when the regulations, governance, and market conditions and institutions are not in place to ensure a level playing field between state- and privately-owned companies. As a starting point, governments could, therefore, reform rules in competitive markets, starting with those with low barriers to entry and a weak economic rationale for State ownership. Any barrier that shields BOSs from private entry, for example, imports monopolies, legal monopolies, or that increase the operating costs to private firms should be abolished. Competition authorities can use competition advocacy tools, such as market assessments, to identify the most restrictive regulations in such sectors and promote reforms that enable private sector participation.
  - **Even when BOSs in competitive markets report high profits, it is essential to confirm those financial gains are resulting from operating in a genuinely competitive environment** at a level playing field together with the privately-owned competitors.
  - **Separate commercial functions from public service obligations-PSOs (unbundling):** In case BOS-SOEs not only operate commercial businesses, for example, the production of fertilizers, but also fulfill a public service obligation, for example, distributing fertilizer into remote rural areas at rates that are affordable for subsistence farmers, it is important to identify and separate the costs and revenues of those areas first. In a second step, public service obligations should be separated from commercial activities and clearly defined by law and compensated. At the very least, account unbundling is required to ensure that the allocation of public funds for PSOs is not cross-subsidizing commercial activities and potentially distorting pricing mechanisms. Related to this, there should be: (i) official cost-allocation mechanisms to guide account unbundling; (ii) methodologies for the purpose of calculating the compensation paid by the government for PSO delivery; and (iii) BOSs should be required to achieve a commercial rate of return on their commercial activities (to avoid the undercutting of private suppliers in the same markets).
  - **Reduce the State participation in competitive markets, following the subsidiarity principle.** If the analysis in Stage II reveals that BOSs in competitive sectors exhibit poor financial performance and suboptimal service delivery, then the most pragmatic reform option is likely to restructure those BOSs into businesses that can be turned around and made profitable (for instance, through governance and management reforms) and those that cannot. For those business lines deemed unprofitable, divestiture (full or partial) or liquidation is likely the most sensible option. Divesture (either full or partial) may be desirable to transfer loss-making BOSs in competitive sectors to private owners, where neither externalities nor the public good nature of services calls for BOS involvement. The subsidiarity principle may be a useful tool in assessing (ex-ante and ex-post), if State presence is adequate in a given sector (box 8). As mentioned above, it is important to keep in mind that regulatory reforms should be carried out to prevent the private sector from enjoying protections or preferential treatment. Therefore, competitive neutrality principles should be embedded in the regulation (that is, primary laws and relevant sector-specific provisions). This requires strong coordination with the competition authority, as well as with sectoral regulators, possessing the mandates to determine and enforce the market rules.

BOX 8: THE SUBSIDIARITY PRINCIPLE: AN ANALYTICAL TOOL FOR ASSESSING STATE PARTICIPATION IN ECONOMIC ACTIVITIES

According to this principle, the State has a subsidiary duty to perform only those tasks where private supply is not feasible. In this sense, BOSs should not replace or interfere in any manner with private businesses when they are fully capable of meeting a particular social need. Three key questions need to be answered to implement the subsidiarity principle:

1) whether there is indeed an unmet demand that cannot be satisfied by private firms;

2) why private providers are absent or have left the market, in particular due to the existence of competition barriers; and finally,

3) whether these barriers to competition can eventually be removed so that private companies can enter (or re-enter) the market, meet the demand, and eliminate the need to create a BOS at all.

The definition of relevant markets is a key tool to discover whether a firm faces competition in a given market. An analysis of the relevant market will determine whether consumers of a given product may satisfy their needs by switching to alternative products or suppliers. Subsequently, these markets are analyzed for the subsidiarity assessment for: (i) structural features of the market; (ii) barriers to entry that might be limiting competition; and (iii) demand characteristics that help in better understanding the potential for entry. *The Guidelines on the Implementation of the Subsidiarity Principles* (World Bank 2023e forthcoming) provide a step-by-step guide.

Sources: World Bank (2023e forthcoming).

- **Partially contestable markets:**
  - **Explore potential management contracts or PPP arrangements for BOS-SOEs operating in partially contestable markets.** BOSs in contestable sectors such as transportation, power generation, or information and communication technologies (ICT) infrastructure, among others, could also benefit from management arrangements or PPPs.[49] This would include concessions[50] to attract private investment and associated skills and expertise. Under PPP arrangements, typically more risk and responsibilities are transferred to the private investor, including rehabilitation or maintenance, as well as design, build and (time-bound) ownership of the asset, for example, under Built-Own-Operate-Transfer (BOOT) contracts. PPPs find their application in transport infrastructure (for example, toll roads) and services (for example, rail cargo), or power generation (for example, through Independent Power Producer [IPP] arrangements).
  - **Review the PPP framework and ensure adequate regulation is in place.** A review and reform of the PPP framework may be necessary to allow private investment as well as reforms that enable private entry (for example, removing rules that reserve markets to BOSs). Further oversight and open tenders are required to ensure a competitive and transparent process, including appropriate frameworks for unsolicited proposals (World Bank Group 2017). As PPPs can be a source of contingent liabilities, it is important to ensure that countries have in place a system to assess, record, and transparently manage contingent liabilities. Finally, adequate and predictable regulatory frameworks are essential to ensure predictability of PPPs' cash flow, and measure risks, while protecting the public interest and affordability of services. This may at time require shadow payments or targeted subsidies for vulnerable groups, which need to be properly accounted and disclosed.

49. A PPP is "a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance" (World Bank, 2017, p. 5). PPPs are different from management contracts as the latter typically involve no or very limited risk transfer. Management contracts are usually limited to the operation or service delivery. Under PPPs, the asset is often owned and is usually even built by the private investor. However, management contracts do not foresee a transfer of assets to a private party.
50. The concession is mostly used to describe a user-paying PPP.

- **Natural monopolies:**
  - **BOS-SOEs reforms in natural monopolies (for example, water distribution, transmission lines) can be supported through:** (i) enhancements in the regulatory and policy environment including the review of tariff models, least-cost development plans, regulatory and supervisory bodies, and so on; (ii) the BOS-SOE internal governance, operational and financial performance including strengthening governance, professionalization of the Board of Directors, the automation of business processes, achieving higher revenue collection, enhancing better credit ratings, key performance indicators; (iii) investments to improve service delivery. Alternatively, the service that these BOSs deliver can be transferred to private operators through PPPs (or other hybrid models) to improve performance. This would require careful regulation and an independent sectoral body to monitor and proper enforcement mechanisms.[51]
  - **Allocation of private monopoly rights should be based on open and transparent tenders such as competitive auctions and bids.** *Competition for the market* can attract multiple interested stakeholders and grant the rights to the provider with the best offer (for example, in terms of capacity, investment plans, and service delivery). Regulations to avoid abuse of dominant position of private monopolies (for example, price controls, performance indicators) and stronger enforcement mechanisms should be considered as an essential part of such reforms.[52] The rules and design of concessions to minimize negative effects in other markets (for example, access regulations, account separation in case of vertical integration, and even more when receiving compensation for public service obligations). Regulations will also be required to ensure that the public interest is safeguarded, as ownership and service delivery are transferred to private operators by integrating public service obligations of BOSs into regulatory and performance requirements.

3.5 KEY LESSONS AND SUCCESS FACTORS FOR REFORM

A key lesson for successful BOS reforms is that the change in the market incentives is what really matters to fostering private sector development, specifically by crowding-in the private sector in sectors with a BOS presence. The probability of the success of BOS-SOE reforms will be strongly related to the changes of the incentives provided to the firms to compete and how level is the playing field. It will require pro-competitive environment institutions and regulations that favor the entry and fair competition from the private sector, even when BOS remain in the market. Just as state ownership does not solve market failures itself, neither does private ownership. Ultimately, ownership reforms can be a necessary, but not a sufficient, condition to reshape the market incentives and foster private development. Therefore, to restore market-incentives and foster contestable and efficient markets, reforms can promote the role of the private sector as: (i) a competitor of a BOS firm, (ii) as a manager of a BOS firm or temporary owner, or as (iii) a long-term owner-manager.

Regardless the ownership decision (full or partial, permanent, or temporal), BOS-SOE reforms always need to ensure that the market rules and incentives are in place and properly enforced to ensure effective reforms. Even when opting for full divestiture, it needs to be accompanied by pro-competition product market regulation reform, as well as by the development of sound regulatory frameworks if it is to lead to more competitive, dynamic markets. International experience shows that opening sectors to domestic and foreign private investment and trade is a necessary complement to BOS restructuring and privatization in achieving dynamic growth and efficient market outcomes (World Bank Group 2020). This is mirrored by firm-specific experience as well. For example, exposing BOS operating as (de facto) monopolies in competitive sectors (or potentially commercially viable sectors) to private competition on a level playing field can reveal poor performance. At the same time, it can introduce market discipline to improve performance. For example, Mexico decided to expose its oil company, PEMEX, to private-sector competition after governance reforms alone did not yield the expected results. In the case of infrastructure, successful privatization requires: (i) a regulatory framework that unbundles potentially competitive activities; (ii) establishes the tariff regime; (iii) clarifies the service goals; (iv) develops cost minimization targets; and (v) creates or strengthens an agency to supervise the process. Free entry should be ensured whenever competition is possible. Particularly in lower-income countries, contracts, leases, and other ways of privatizing management are a transition to full divestiture measures.

51. Independence of the sectoral regulator and strong competition agencies are among the success factors for this alternative.
52. For example, strengthening the sectoral regulator and competition authority capacity.

Another lesson from global experience is that the transparency and integrity of the BOS-SOE reform process should not be compromised for speed. Evidence across a wide range of countries shows that bringing in the private sector yields benefits in terms of economic productivity and consumer welfare where there are no economy-wide distortions that hinder competition. In addition, the policy environment should be market-friendly, and a sound legal and regulatory system should be in place. Finally, the process itself should be managed in a transparent and open manner through competitive bidding and other means to avoid the concentration of assets in the hands of a small elite (World Bank Group 2020). Thus, all these elements should be considered and validated as part of a systematic and structural reform, even though it may take longer to achieve.

As part of the reforms, it is important to strengthen competition policy to discipline large incumbents, tackle cartels and abuse of dominance. Countries such as Brazil, Chile, Colombia, Mexico, Peru, and South Africa have set up effective anti-cartel programs in recent decades. Competitive neutrality principles are essential to ensure that any remaining BOSs compete with private firms on a level playing field. Australia's Competitive Neutrality Complaints Office and Romania's state-aid portal are examples of institutional set-ups used to safeguard and enforce these principles. Effective policies that tackle cartels and abuse of dominance are critical to ensuring that consumers gain from reforms. In competitive markets, laws that establish state monopolies or restrict private participation will need to be revised. Regarding key industrial or agribusiness inputs, one or several BOSs often control the production and distribution and are often protected by exclusivity rights. Thus, exclusivity rights may need to be amended or revoked. For example, to allow for private sector entry to the steel sector in Venezuela, subnational decrees, such as those in Lara and Guyana that restrict private sector participation, would need to be revoked or amended.

The socio-political and economic context will ultimately determine the viability of certain BOS-SOE reform alternatives. The alternatives proposed require analysis of the country-specific context (for example, size of market), such that the specific economic interventions and policy recommendations derived from the analysis consider the regulatory, oversight and institutional capacity in each case.

Some Resources that can Support the Analysis

This section briefly sums up the key resources and analytical tools to support the analytics proposed in this Note.

SOME RESOURCES FOR DETERMINING THE BOS-SOE LANDSCAPE IN MARKETS

The following resources can be consulted when trying to determine the BOS-SOE landscape in countries:

- **World Bank Businesses of the State (BOS) database and interactive dashboard (forthcoming):** A comprehensive set of cross-cutting and comparable indicators across countries covered on the state participation in markets. It provides indicators at the global, regional and country-level. This new evidence facilitates the rapid assessment and understanding of the state footprint, type of ownership structures, type of markets where the state operates as well as indicators related to their economic relevance and performance[53]
- **Integrated SOE Framework (iSOEF) Assessments[54]:** In countries where they have already been prepared, previous iSOEF assessments, particularly the 'SOE Landscape' section, can be a very valuable resource as a first overview of the BOS-SOE portfolio in a given country.[55]
- **Corporate governance and SOEs:** WBG Activities to Support SOE Governance Reforms are summarized and accessible through the Corporate Governance toolkit, including for diagnostics, technical assistance, and policy advice as part of development policy financing and advisory services and analytics.
- **BOS-SOE Analytics including CPSDs.** All published CPSDs can be retrieved and are in the public domain. These include assessments on market barriers for PSD in sectors with presence of BOS-SOE.
- **Product and Market Regulation (PMR) Dataset:** This dataset covers more than 70 emerging and developed economies over the period from 2007 to 2013. The indicators estimated in the

53. For more details of the methodology and taxonomy, you can refer to Dall'Olio and others (2022a; 2022b).
54. Please refer to some examples on the iSOEF assessment in The Gambia.
55. Materials related to the ISOEF and related studies are available at: https://worldbankgroup.sharepoint.com/sites/gsgCGFR/SitePages/Home.aspx

PMR are very helpful in determining the presence of BOS-SOEs on an economy-wide and sector basis. For instance, it can reveal whether state ownership is predominantly present in enabling sectors (for example, network sectors). This dataset has been developed through a joint effort by the OECD and the WBG (led by the Global Markets, Competition and Technology Team). However, the coverage for low-income countries is limited in the PMR. This can also be used for the second stage to assess the potential distortions linked to the presence of BOS in the markets. When PMR is not available, additional regulatory assessments could be done on sectors of interest following the WBG (forthcoming) *Anti-competitive laws and policies* (ALP) questionnaire to conduct a streamlined but rich assessment of potential distortions linked to state participation in markets.

- **FACTIVA and** EMIS: FACTIVA is particularly helpful for retrieving specific company names and the main economic variables for a specific country-sector, including both BOS-SOEs and private companies and listed or unlisted firms.[56] The EMIS provides firm-level financial indicators (for example, assets, liabilities, profit margins, and so on). As such, it includes information about the number of employees, shareholders, as well as industry benchmark values.[57] However, the coverage for low-income countries might be limited in these datasets.
- **SOE Corporate Governance Regional Studies and Country Diagnostics:** Some corporate governance regional assessments and country-specific diagnostics can provide an overview of SOEs for the country under consideration. This can include information about the SOE legal and regulatory framework, oversight arrangements, the boards of directors, and transparency and disclosure practices.

The following external resources may also be useful:

- **Ministry of Finance Fiscal Reports:** Fiscal and budget reports are a helpful source of information about the presence of SOEs and their participation in the use of public resources. For example, these reports will provide the names of the companies, budget allocations, tax allowances and/or subsidies granted, as well as the sector of operation.
- **Centralized bodies for SOE oversight:** In some countries, the oversight of the SOEs is centralized under one agency, a holding company or ministry (for example, in Israel, Italy, Peru, and Norway) or decentralized with a coordinating agency (for example, in Costa Rica and Lithuania). These centralized bodies can provide systematized reports of the presence of state-owned companies, their main economic activities, and key financial indicators needed for the analysis of financial performance. For larger SOEs, annual reports are important data sources that will help to conduct the assessment of SOE performance.
- **Reports from multilateral organizations:** The OECD and the IMF have prepared country-specific reports exploring different issues related to SOEs, such as the application of competitive neutrality principles and best practices of corporate governance. These organizations offer interesting compendia of national practices related to SOEs, as well as country-specific analyses that can provide detailed information about the presence and role of SOEs. For example, in 2017, the OECD published a report that compares the size and sectoral distribution of SOEs in OECD and partner countries, including an Excel dataset of the number of SOEs by country (OECD, 2017).[58] Similarly, the IMF conducted a survey and detailed analysis assessing the role of SOEs in Central, Eastern, and Southeastern Europe (IMF , 2019).

SOME RESOURCES TO IDENTIFY POTENTIAL ECONOMY-WIDE AND SECTOR-SPECIFIC DISTORTIONS

Policy practitioners can also refer to complementary tools to analyze the status of the competition and regulatory environment, potential sources of market distortions as well as tools for sector-specific guidance as follows:

- **World Bank Markets Competition Policy Assessment Toolkit -MCPAT (forthcoming)** that supports policy makers in realizing the advantages of competitive and well-functioning markets by setting the right conditions for markets to allocate resources efficiently. This toolkit provides a comprehensive analytical framework and guides how to assess the potential implications of policies in markets, how to address market failures, and mitigate distortions or unintended consequences.

56. The list refers to companies that have a fraction or all shares quoted on a stock exchange.
57. Access to these resources is available to WBG staff through the library portal (library/).
58. The report and Excel dataset can be retrieved from: https://www.oecd.org/daf/ca/size-sectoral-distribution-soes-oecd-partner-countries.htm.

- **Questionnaires to unveil potential market distortions and anti-competitive laws or regulations.** Complementary to the PMR questionnaire that focuses on network sectors, the Anti-Competitive Laws, and Policies (ALP) questionnaire developed by the World Bank helps to unveiling rules that might distort competitive sectors such as manufacture of fertilizers, cement, or electricity production, among others. The ALP questionnaire identifies potential risk factors and policies that can hinder private sector development in sectors with BOS-SOE presence. It unveils rules that might limit private entry, distort prices, and promote potential anti-competitive behavior. Furthermore, the iSOEF module 1 provides a checklist of key considerations to understand the potential impact of BOS-SOE distortions in markets.
- **Policy tracker of state-aid support amid the COVID-19 pandemic.** This provides information about the type of government support granted to the corporate sector during the COVID-19 pandemic including to firms owned by the state. As such, it serves to evaluate the channel and target sectors of state support including capital injections, subsidies, loans to BOS-SOEs during the pandemic.
- **Infrastructure and PPPs:** Further resources and tools for proposing BOS-SOE reforms in infrastructure sectors include the Infrastructure Sector Assessment Program (Infra SAP), World Bank Group – Public-Private Partnerships Legal Resource Center, the PPP knowledge lab and matrix to assess potential fiscal implications, among others.[59]

59. Additional benchmarking tools for preparing and managing PPPs can be found in: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/369621602050134332/benchmarking-infrastructure-development-2020-assessing-regulatory-quality-to-prepare-procure-and-manage-ppps-and-traditional-public-investment-in-infrastructure-projects

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Annex 1: World Bank's Global Businesses of the State (BOS) Database

What counts as a business with ownership by the State?

A firm is denoted as a Business of the State if it is owned directly or indirectly by a national or subnational government with 10% or more participation. Additionally, the World Bank definition (Dall'Olio and others, 2022a) requires that the firm is a legally separated entity, engaged in the market production and operating for a financial gain.

How is it possible to identify a business with ownership by the State?

Similar to a genealogic tree, the database starts from the entities denoted as public authorities according to the entity variable in each country. It then recreates all relationships at different degrees (denoted as ownership layers) for all companies by applying the 10 percent threshold at each stage Dall'Olio and others (2022a). The public authorities considered do not include sovereign wealth funds, international investors (for example, BlackRock), or multilateral organizations (for example, IFC).

Which sectors are included?

Most 4-digits Statistical Classification of Economic Activities in the European Community (NACE) sectors are included in the database and range from agriculture, mining and quarrying, and manufacturing to wholesale and services. The sectors not included are 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. The financial sector is included.

What type of markets are covered in the World Bank global BOS database?

Following the WB taxonomy, economic activities are classified based on market failures in three categories: (i) natural monopolies, (ii) partially contestable, and (iii) competitive (Dall'Olio and others, 2022b).

1. **Natural Monopoly Markets:** Markets in which it is not economically viable for more than one operator to provide the good/service. These sectors are characterized by high entry barriers that are the consequence of costly sub-additivity and economies of scale. Electricity transmission is an example.
2. **Partially Contestable Markets:** Economic activities in which it is economically viable for more than one operator to provide the good/service, but there exist market failures that may motivate direct provision through a SOE, such as (i) structural barriers to competition; (ii) externalities; and (iii) other market failures that may lead to under provision of a service. Aviation and banking are examples of these markets.
3. **Competitive Markets:** Sectors in which it is economically viable for more than one operator to provide the good/service, and there is not a strong economic rationale for state ownership. Inherent market features, such as cost structure or demand characteristics, make entry into these sectors largely unproblematic. Manufacturing of food and/or apparel are examples.

Which countries and regions are covered in the current analysis?

- **Middle East and North Africa :** Egypt, Arab Rep., Jordan, Morocco, Lebanon, Tunisia.
- **East Asia and the Pacific :** Cambodia, Indonesia, the Philippines, Samoa, and Vietnam.
- **South Asia Region :** Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.
- **Europe and Central Asia :** Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Georgia, Hungary, Italy, Kosovo, Kyrgyz Republic, Latvia, Lithuania, Moldova, Montenegro, North Macedonia, Poland, Russian Federation, Serbia, Slovenia, Türkiye, and Ukraine.
- **Latin American and Caribbean :** Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador Guatemala, Guyana, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Suriname, and Uruguay.
- **Africa :** Angola, Benin, Botswana, Burundi, Cabo Verde, Cameroon, Chad, Comoros, Côte d'Ivoire, Eswatini, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritania, Namibia, Niger, Rwanda, São Tomé and Principe, Senegal, Seychelles, Tanzania, and The Gambia.

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Annex 2: Sector Deep Dives: Analyzing Market Structure and Dynamics

Topic	Guidance Factors	Resources to Consult	Key Variables	Red Flags
Market structure	• **Determine whether there are private competitors in the sector with a BOS-SOE presence.** • **Determine which segments include the participation of BOS. For instance,** ▶ Input supply ▶ Production ▶ Delivery ▶ Import ▶ Wholesale ▶ Retail ▶ Infrastructure ▶ Service provision ▶ Last-mile delivery • **Verify whether the BOS are the largest market players (market share, if available).**	• Enterprise surveys, indicators of percentage of firms with at least 10 percent government/ State ownership. • Sectoral studies. • Competition authority reports. • Regulatory agency reports and resolutions. • Sectoral datasets with revenues, sales, and position in the market (for example, Global System for Mobile Communications Association (GSMA) for telecommunications operators).	• Identification of segments of SOE operations. • Number of private competitors in competitive or partially contestable markets. • Market share of the BOSs in different markets/segments of operation. • Market share of private competitors in different markets/segments of operation. • Concentration indexes (for example, Herfindahl-Hirschman Index [HHI], Four Firm Concentration Ration [CR4]), if available.[59]	• BOSs vertically integrated and participating in different segments of the sector value chain. • BOS is among the top-4 companies in markets highly concentrated based on the HHI index (if available). • No private competitors in contestable and competitive sectors.
Market dynamics	• **The evolution of the BOS market share over the last 5 years.** • **Entry of private firms (domestic or foreign) in the last 5 years.** • **Exit of private companies over the last 5-years.**	• Sectoral studies. • Regulatory agency reports. • Ministry of Finance reports. • Report of oversight bodies. • Competition authority reports. • Sectoral datasets with revenues, sales, and position in the market. • Enterprise surveys with the number of competitors by sector. • PMR indicators of competition by sector.	• Evolution of the market shares of BOSs over the last 5 years. • Number of new competitors (private) in the sector. • Exit of private companies in the sector.	• Market shares of BOSs have remained stable or increased. despite the entry of new competitors in the market. • Large exit of private companies over the last 5 years, with limited entry of private competitors. • New BOSs in the sector. • Limited entry of private companies despite the regulatory changes in the sector.
Entry barriers for private operators	• **The role of the BOSs as sector regulators can interfere in the entry of competitors (for example, by providing the licenses for private competitors).**	• PMR barriers index in service and network sectors. • PMR barriers index to FDI, treatment of foreign suppliers. • Ministerial decrees. • Reports from regulatory bodies. • Acts of creation of the BOSs. • Decrees of the functions of the BOS board members. • Sanctions by the Competition Authority on BOSs for anticompetitive practices.	• Sector segments where private competitors require the explicit authorization of BOSs to enter to the market. • Segments where private competitors require explicit clearance or documentation for the provision a specific location or consumer segment.	• BOSs are the regulator or the authority to issue the permits for providing licenses to private operators. • Private competitors require explicit clearance and documentation provided by the BOS to supply a market. • BOSs determine the access conditions (for example, fees, duration, priority access) to private operators.

Source: Authors' elaboration adapted from the MCPAT BOS Checklist and iSOEF (World Bank, 2019).

59. The Herfindahl-Hirschman Index (HHI) and N-firm concentration ratio (CR) (for example, CR3 for top-3 companies) can be computed by the CPSD teams based on the sector-specific information available. For example, sales,total revenues, number of subscribers, number of connections, and energy generation capacity can be employed for computing this concentration index. For further details see (OECD, 2018)

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Annex 3. Full List of Reform Vehicles Towards Private Sector Development

Role of the Private Sector	Policy Instrument	Vehicles for fostering Private Sector Development	Suitable for markets denoted as...			Nature of ownership change	Probability to improve market incentives and private entry	Pre-conditions and complementary measures
			Natural Monopoly	Partially contestable	Competitive			
As a market player competing alongside BOS-SOEs	Corporate Governance, Ownership Policy, Restructuring and Performance Management	Improve monitoring and independence through a separate oversight agency	X	X	X	None	Medium	✔Improve institutional and enforcement capability (for example, competition authority, oversight entities) to implement and monitor market-based incentives and performance.
		Promote corporate governance reforms (for instance, professionalization of board members)		X	X	None	Low	
		Key performance indicators (KPIs)	X	X	X	None	High	
	Pro-competition regulatory frameworks and stronger market institutions	Embed competitive neutrality principles in economy-wide and sectoral regulation		X	X	None	High	✔Promote separation and independence between regulatory and commercial functions. ✔Review the state-aid framework, develop inventories of state subsidies and transfers and improve transparency. ✔Strengthen institutional capacity of oversight entities, competition agency and sectoral regulators to ensure proper implementation and market discipline.
		Review/eliminate rules that limit entry of the private sector or provide preferential treatment to BOSs-SOEs vis-à-vis private peers.		X	X	None	High	
		Strengthen the competition regulatory framework, institutional and enforcement capacity to ensure a level playing field	X	X	X	None	High	
As manager or temporary owner of BOS-SOEs	Management Contracts and Public-Private Partnerships (PPPs)	Service contracts accompanied by adequate monitoring and sectoral regulation	X			None	Low	✔Implement regulatory frameworks that mitigate rent-seeking behaviors of private managers, reduce the influence of BOSs over key market variables (for example, determination of prices). ✔Implementation of good corporate governance practices, performance contracts and key performance indicators is necessary.
		Management contracts	X	X		None	Medium	
		Joint ventures and Public-Private Partnerships, including concessions, build-operate-transfer (BOT), or similar contractual arrangements	X			Partial	Medium	

As long-term manager and owner of BOS-SOEs	**Ownership transfer by Divestiture and Privatization**	Auctions	X	X	X	Partial/Full	Medium	✔Unbundling competitive and non-competitive activities to foster private sector participation in different segments (for example, separating electricity generation from transmission). ✔Reforms in the regulatory framework to discipline incumbents and avoid abuse of the dominant position of private monopolies. ✔Embed and implement competitive neutrality principles in economy-wide and sectoral regulation to ensure a level playing field. ✔Regulatory reforms to enable private entry in sectors formerly controlled by BOS-SOEs. ✔Procedures in place to ensure transparent and competitive tenders.
		Direct sale	X	X	X	Partial/Full	Medium	
		Stock offering	X	X	X	Partial/Full	Medium	
		Liquidation	X	X	X	Full	Medium	
		Management/ employee buy-outs or free distribution of shares.	X	X	X	Partial/Full	Low	
		Capitalization	X	X	X	Partial/Full	Medium	

Source: World Bank Markets, Competition, and Technology Unit.


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