COUNTRY PRIVATE SECTOR DIAGNOSTIC

KNOWLEGDE NOTE:

Analysis of State-Owned Enterprises (SOEs) and opportunities for Private Sector Development in the context of CPSD

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Introduction

This knowledge note has been prepared to assist CPSD TTLs to identify and conduct the analysis of State-Owned Enterprise (SOE) issues in the development of CPSDs, with a focus on implications for private sector development. This note builds upon the integrated State-owned Enterprises Framework (iSOEF) (World Bank, 2019l) and provides further guidance with respect to the resources, evidence, and options of SOE reform that could inform some policy reforms in the context of CPSD. This knowledge note can also be employed by a broader audience beyond CPSD teams as an analytical tool to understand the challenges and opportunities for the private sector that complement the iSOEF and explore further options of reform for PSD.

The main authors of this document are Dennis Sanchez Navarro (ETIMT), Tanja Goodwin (ELCDR) and Sunita Kikeri (EFNFS), under the technical guidance of Martha Martinez Licetti (Practice Manager, ETIMT), Mona Haddad (Director, CCEDR) and Caroline Freund (Director, ETIDR). The team would like to thank the valuable inputs, support and comments from Jean Saint-Geours (SSAA1), Jan Orlowski (ETIMT) and Georgiana Pop (ETIMT).

This document denoted as the *knowledge piece* is part of a 2-piece product prepared by the EFI Global Markets and Technology Unit to expose CPSD TTLs to the challenges and potential distortions than can be created in presence of SOEs in different markets as well as different policy alternatives to foster productive private-sector participation beyond full ownership transfer. The 2-products correspond to this CPSD SOE knowledge note and the CPSD SOE policy assessment tool, which jointly should be considered as complementary documents for a comprehensive approach to address the challenges related to SOEs when promoting higher private sector participation in an economy.

Aligned with the iSOEF (World Bank, 2019) and following the IEG SOE evaluation the purpose of these two notes is to provide CPSD TTLs with an systematic, harmonized and yet flexible analytical framework, tools and practical examples to provide a comprehensive analysis and diagnostic for SOE reform (World Bank, 2020).[1] These notes will support CPSD TTLs to: i) determine the presence and economic relevance of SOEs, ii) explore their economic rationale, iii) explore the role of SOEs and potential effects of market's functioning, and iv) provide some routes for reform and mitigating factors as well as policy recommendations to enhance productive and efficient private sector investment and development. Furthermore, in case some governments are interested in expanding its presence in specific sectors, this guidance can provide CPSD TTLs with the set of criteria to minimize potential market distortions, analyze the potential benefits and risks as well as best practices to maintain a level playing field and foster private sector participation.

[1] The IEG SOE evaluation recommended the development and harmonization of diagnostic frameworks applied to SOE reform as well as include privatization and other alternatives of reform such as PPP for addressing SOE performance challenges. These notes respond to these IEG recommendations providing a comprehensive and systematic framework building upon sectoral diagnostic tools (e.g. INFRASAP) and the iSOEF (World Bank, 2019l) and framing those tools to promote private sector options including privatization, PPPs and other SOE challenges (World Bank, 2020, p. 37)

The second piece denoted as the *SOE policy assessment tool* provides a methodological and empirical approach with specific tools and resources, which articulated with the iSOEF, can be employed by the CPSD team to determine the presence of SOEs, assess potential distortions building upon the competitive neutrality principles and propose mitigating measures that the governments could implement in a country-specific context based on the concepts and framework proposed in this *knowledge note.*

These documents will support CPSD teams to identify opportunities of policy reform (e.g. regulatory changes) to enable private sector participation and provide the pre-conditions to attract higher investments across sectors in the economy. However, these documents focus on the analysis of economy-wide and sector-wide enablers rather than firm-specific issues. Therefore, these notes do not constitute and should not be employed as a tool to inform or determine the eligibility of investment decisions in specific SOEs. For that purpose, the IFC SOE Directive (IFC, 2020) and the IFC Board reference document (IFC, 2017) provide specific criteria and set out the factors for consideration for proposed IFC investments in SOEs to determine whether such investment fulfills IFC mandates (IFC, 2020, p.2).[2]

Furthermore, since the selection of the sectors to proceed with a more detailed approach or specific options of reform could vary depending on the level of development, socio-political context, and prioritized sectors as part of the CPSD elaboration process, the CPSD SOE knowledge and SOE assessment tool provide a flexible and comprehensive set of tools that could be applicable in different sectors under a common conceptual framework. However, to respond to sector-specific issues and proceed with sectoral deep dives, the CPSD teams could explore complementary tools for such as the INFRASAP 2.0 to assess strategic infrastructure sectors such as energy and digital (WBG, 2020). In particular, the INFRASAP tools will complement the analysis proposed in these guidance notes by highlighting the main connectivity and performance challenges in the sector as well as investment gaps.[3] Similarly, for the digital sector, the there is a specific questionnaire that could contribute to explore specific issues in the sector developed by the Digital Development team.

Finally, CPSD teams could explore further resources for the implementation of specific alternatives of reform proposed in this document in the SOE Corporate Governance Toolkit (World Bank, 2014), the modules 1 to 5 of the iSOEF, including the analysis of SOFIS (module 5), the PPP Legal Resources Center and other resources developed by IFC and the Infrastructure Finance, PPPs and Guarantees Global Practice, and the Public-Private Infrastructure Advisory Facility (PPIAF), among others. [4] [5] [6]

[2] The IFC counts with a preliminary list of due diligence questions to document the degree in which investments meet the criteria referred to the section 9(c) of the Directive on Investments in SOEs. (IFC, Preliminary Due Diligence Questions, 2019).

[3] The InfraSAP2.0 is an extended core diagnostic of the World Bank developed by the Infrastructure Vice-Presidency to provide a comprehensive and consistent approach to evaluating the infrastructure situation in a country. INFRASAP2.0 tools can be explored in the following link: https://worldbankgroup.sharepoint.com/sites/ppp/isap/Pages/index.aspx

[4] The toolkit for improving corporate governance in SOEs can be found in: https://openknowledge.worldbank.org/bitstream/handle/10986/20390/9781464802225.pdf?sequence=1&isAllowed=y

[5] WBG-IFC public-private partnership portal and additional resources can be consulted at https://www.worldbank.org/en/topic/publicprivatepartnerships/overview#3

[6] The PPIAF resources and further tools to strengthen policies, regulations and institutions that enable sustainable infrastructure with private-sector participation can be found in: https://ppiaf.org/

SOE – CPSD Knowledge note

The role of state-owned enterprises in the market and options of reform for fostering private sector development (PSD)

EXECUTIVE SUMMARY

State-owned enterprises (SOEs) are important economic actors in domestic and global markets, and especially in transition economies where they accounted for 20-30% of the GDP in 2011. Worldwide, SOEs account for 20% of total investment, 5% of the employment, and 12% of the manufacturing global trade. In 2014, one of every four companies in the Fortune Global 500 was an SOE.

The presence of SOEs can - but does not *per se* - translate into market distortions or prevent private sector investment. When there is a clear economic rationale for SOE operation (i.e. compensating for market failures such as natural monopolies, externalities, public goods) efficient market outcomes can be achieved through regulation and governance.[7] However, significant market distortions may surge and deter private investment when SOEs participate in sectors that could be efficiently provided by the private sector and whenever SOEs exploit the link with the government to gain an undue competitive advantage over its private peers. These distortions may translate into inefficient market outcomes that impact consumers, industries, competitiveness and development (e.g. shortages, under-developed infrastructure, high logistic costs for exporters, barriers for digital adoption, etc.)

The presence of SOE is widespread across sectors, including fully commercial sectors. About 80% of emerging and developed economies have at least one SOE involved in enabling sectors with natural monopoly characteristics (e.g. electricity transmission, water, railroad infrastructure, telecom fixed networks). However, SOEs are also present in fully commercial sectors: 30% of emerging and developing economies report SOEs in manufacturing, business activities, accommodation, food and beverage services, where there is no clear economic rationale for SOE operation and can potentially crowd-out private firms.

There are a wide variety of other indirect government interventions that are often associated with SOE presence that can potentially distort the functioning of the markets and have severe implications for the viability and profitability of private companies. Subsidies, tax credits, or government aid do not necessarily translate into market distortions that deter the private investment, but it is the preferential access granted to SOEs that ultimately turns into barriers for PSP. Examples of these policies that tilt the playing field in favor of SOEs include reduced-interest rate loans, subsidies, tax exemptions, reduced fees to access essential infrastructure and inputs. Likewise, distortions may also arise from the regulatory framework when SOE are exempt of specific legal requirements (e.g. bankruptcy or antitrust law) and from situations when the government acts simultaneously as market-player and regulator. This can translate in asymmetric rules that unduly favor the SOE commercial activity vis-à-vis its private peers (e.g. undue licensing requirements, FDI constraints) eroding the competition to obtain higher revenues. Therefore, the more balanced the conditions for accessing resources and the more symmetric the legal requirements between SOEs and the private sector, the lesser the potential distortions created in the market. Competitive neutrality principles are key to unveil and assess potential distortions that might affect private investors.[8]

Over the last three decades, different mechanisms to promote private sector participation, often in the form of divestiture, have been implemented to mitigate market distortions in presence of SOEs. Traditionally, privatization has been associated with change of ownership through divestiture, which shifts the partial or full ownership of the SOE from the government's hands to private investors. However, promoting PSP requires a broader approach beyond ownership.[9] CPSD teams should focus on SOE reforms that restructure the market incentives even if that does not necessarily imply a change of ownership. 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 investment (e.g. low changes in incentives when implementing

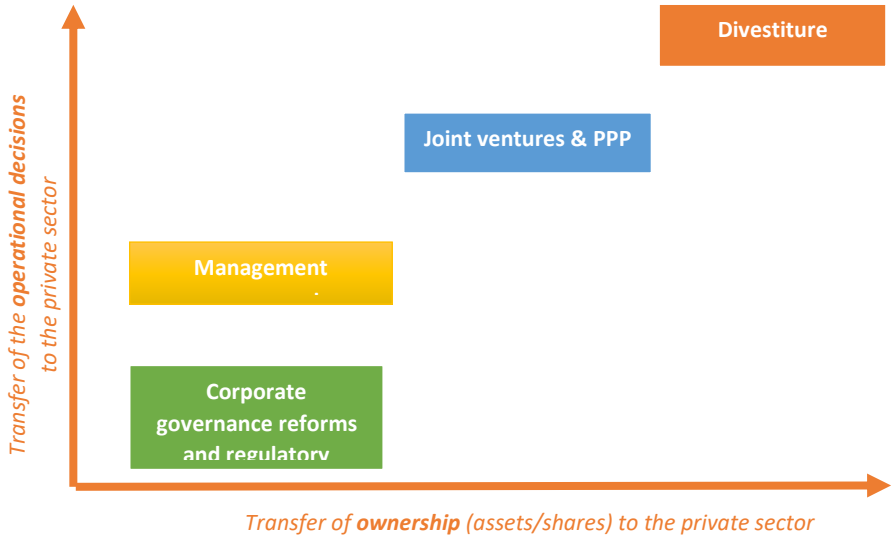
[7] Clear economic rationale for SOE presence refers to situations where the state intervenes directly because: (i) there is **no-commercial viability** for the economic activity and private companies might not be able to cover the costs (e.g. rural roads, postal services in remote areas), (ii) the sector can be defined as a **natural monopoly** (e.g. electricity transmission, gas, fixed-line telephony), (iii) the economic activity is characterized by **negative externalities** (e.g. fossil fuel) that can lead to overproduction or resource depletion; (iv) the economic activity is characterized by **positive externalities** (e.g. road infrastructure, health); (v) the good provided is a **public good** (excessive costs for excluding some actors and the use of the good does not depletes the supply to other actors).

[8] These principles refer to (i) the separation of **commercial vs. non-commercial** activities of the SOEs, including for example situations where the SOE is also the market regulator; (ii) the definition of a **market-consistent rate of return** to justify a long-term retention of assets; (iii) **regulatory neutrality** such that SOEs are subject to similar legal rules and market discipline vis-à-vis their competitors, (iv) **taxation neutrality** such that SOEs are subject to tax liability, and do not receive advantages or preferential treatment that is not available for their competitors, (v) **debt neutrality**, which requires that government businesses are subject to similar borrowing costs and honor their debt arrangements under prudent investment decisions, (vi) **access to state-aid** is not granted to SOEs in preferential terms, and (vii) transparent **procurement** mechanisms to allow private companies to participate in bids on equal terms vis-à-vis SOEs.

[9] More than 10,000 worldwide privatization transactions occurred between 1990-2008, mostly in infrastructure and financial sectors. About 53% of the total privatization efforts occurred in the form of divestiture between 2000-2008, followed by management arrangements (11.3%), joint-ventures and PPPs (8.5%).

service contracts, voucher privatization or manager buyouts in table 1). For instance, a fully private company that is politically connected could still benefit from preferential access to subsidies or government-backed loans, prevent competition and deter private investment even though is no longer an SOE.

Understanding the range of mechanisms to promote PSP and recover market-based incentives - beyond ownership transfer - expands the policy alternatives for SOE reform. To restore market-incentives and foster contestable and efficient market, SOE reforms can promote the role of the private sector as a competitor of an SOE, as a manager of SOE, as a temporary owner-manager, or as a long-term owner-manager of an SOE. Privatization alternatives ranging from lower to higher ownership and managerial transformation are: (i) regulatory and institutional reforms that allow private competitors to enter and expose SOE to competition pressure, (ii) management and partnership arrangements (e.g. management contracts, concession), (iii) PPP and joint ventures, and (iv) full/partial divestiture.



Understanding the economic rational and market characteristics where an SOE operates is the starting point for determining the instrument of reform. First, CPSD teams should determine the presence and economic relevance of SOEs in the economy (i.e. number of SOEs, in which sectors are they present, their size in terms of employment, GDP, etc.) and differentiate them by sector type. [10] A clear definition of the sector and segments of operation of SOEs will allow CPSD teams to assess in which extent there is an economic rationale that justifies an SOEs and prioritize the reforms.[11] Once the sector and segments are determined, the CPSD teams will be able to determine whether the SOEs operates in natural monopolies (e.g. utilities or energy transmission), contestable sectors (e.g. airlines) or fully commercial sectors (e.g. freight transport) where private participation would be viable. [12] The larger the participation of SOEs in contestable and commercial sectors, the higher the likelihood of creating distortions and crowding out private investment.

SOE reforms should prioritize efforts on removing barriers to PSD in commercial and contestable sectors, especially when SOEs account for a significant share of employment and value-added. Alternatives of reform without ownership transformation in this sector include regulatory reforms to expose SOEs to market competition, introduction of competitive neutrality principles, and adoption of corporate governance principles to increase transparency and accountability. This option is often employed when there is an interest in improving SOE performance, in the absence of political consensus to pursue a transformation of ownership. When opting for ownership transformation, the most suitable solutions for these sectors are divestiture measures (e.g. auctions,

[10] Across EFI, there is a current global engagement effort to create a worldwide database (forthcoming) to provide firm-level information as well as harmonized and cross-cutting indicators on SOEs including share on employment, GDP and type of SOEs identified by country.
[11] A decision tree for validation the economic rationale of SOEs is provided in the SOE guidance note.
[12] A taxonomy for classification of sectors with presence of SOEs is provided in the SOE guidance note.

direct sale, stock offering, liquidation, capitalization). However, these measures need to be complemented by vertical separation, antitrust law enforcement and regulatory changes to eliminate barriers to entry or rules that reinforce dominance of SOEs and distorts the playing field. The CPSD team can identify the regulatory changes required through an assessment of the competitive neutrality principles to highlight imminent risks and red flags.[13]

SOE reforms should follow in contestable sectors, particularly in those with moderate barriers to entry that tend to feature oligopolistic structures. These sectors can pursue SOE reforms through regulatory changes to expose the SOE to competition allowing private sector to enter (e.g. greenfield reforms), management arrangements (e.g. concessions), and divestiture measures. Besides the complementary measures mentioned for commercial sectors, when opting for management contracts, it is key to develop a regulatory framework that mitigate rent-seeking behavior (e.g. price regulation), strengthen the capacity for contract design, and implement close performance monitoring tools.

In presence of natural monopolies, public goods, or where there are geopolitical or national security objectives to be protected, the exposure of SOEs to private competition may be neither viable nor desirable. In this cases, political and safety interests might need to be protected through state ownership for guaranteeing the provision of essential services (e.g. defense, ports in FCV countries). Thus, SOE reforms can occur in the form of management contracts where the government retain the control over the assets but benefits from private sector operation, PPP or concessions that join resources to overcome financial or technical constrains. Natural monopolies can also be transferred to private investors through divestiture measures when not political objectives are related but need to be complemented with close regulation and antitrust enforcement to avoid abuse of market power.

Table 1. Role of the private sector and vehicles of privatization (ownership transformation vis-à-vis change in market incentives)

Role of the private sector	Alternative of reform	Vehicles of privatization	Suitable for…			Ownership transformation	Probability to restructure market-incentives and foster PSD	Complementary measures suggested
			Natural monopoly	Contestable sectors	Fully Commercial			
As competitor	Regulatory & Corporate governance reforms	Implement competitive neutrality principles and hard budget constraints		X	X	Low	High	Improve enforcement capability (e.g. competition authority, oversight entities) to follow-up market-based incentives are in place.
		Greenfield reforms		X	X	Low	High	
		Corporate Governance	X	X	X	Low	Medium	
As manager	Management arrangement	Service contracts	X			Low	Low	Regulatory framework that mitigate rent-seeking behaviors or private managers (e.g. price controls), regulatory changes to reduce influence of SOE over key market variables (e.g. SOE determination of prices), and close performance monitoring. Implementation of good corporate governance practices.
		Management contracts	X	X		Low	Medium	
As partner or temporary owner/manager	Joint-ventures & Public-Private Partnerships (PPP)	Concessions, Build-operate-transfer (BOT) and similar	X	X		Medium	Medium	Bidding procedures to ensure transparent and competitive selection of private partners. Regulatory framework of PPPs should be aligned with
		Joint ventures	X			Medium	Medium	

[13] See Tables 2 to 9 for specific questions, and guidance resources and key variables for validation exercise in the SOE guidance note.

								competitive neutrality principles. Implementation of good corporate governance practices.
As long-term owner and manager	Divestiture	**Auctions**	X	X	X	High	Medium	Unbundling commercial and non-commercial activities to foster private sector participation in different segments. Reforms in the regulatory framework to avoid abuse of dominant position of private monopolies. Competitive neutrality principles implemented to avoid undue comparative advantages of resulting privately-owned company.
		Direct sale	X	X	X	High	Medium	
		Stock offering	X	X	X	High	Medium	
		Liquidation	X	X	X	High	Medium	
		Management/employees buy-outs	X	X	X	High	Low	
		Free /low-cost distribution of shares	X	X	X	High	Low	
		Capitalization	X	X	X	High	Medium	

Source: FCI Markets and Technology Unit

1. SOEs definition, economic presence and rationale for their operation[14]

What is a State-Owned Enterprise (SOE)?

Definitions of SOEs vary, but in the context of private sector development two criteria matter most: state control and commercial activity. State control refers to the influence on managerial and operational decisions of an entity that the government can take beyond its role as a regulator. The state can influence the SOE's decisions as an owner (e.g. holding shares or assets of the entity) and/or through the decision process (e.g. voting power in the board). Not all publicly controlled entities affect the private sector through market interactions. Government companies might provide public goods such as national defense and street lighting that are essential for the society, but in which private initiative would not be viable because of the limited capacity to provide these goods in exchange of a fee.[15] The focus is therefore on entities that carry out commercial activities – that is, those entities that intervene in the marketplace and act as a firm by providing goods and services in exchange of a price or fee, in which the private sector could also do so.

State-owned enterprise is not a homogenous legal term across countries. The legal form and designation of an SOE varies substantially across countries. Some SOEs can be established as statutory corporations with their own legislative act or specific legal regime (World Bank, 2019). For instance, SOE are defined in Azerbaijani as public interest entities (PIEs), in Mozambique as public enterprises and shareholding companies (World Bank, 2016), in Rwanda as corporate entities recognized by national law as an enterprise in which the state exercises ownership (World Bank , 2019k). In some cases, SOEs could take the form of state corporations but also include regulators or administrative agencies with some commercial activities.

An analysis of SOE in the context of private sector development should therefore abstract from the country-specific legal terminology and define SOEs in terms of government control and commercial activity. The definition proposed by the OECD in 2015 (See *Box 1*) indicates that independently of the legal or corporative form (e.g. central, federal, or limited liability, joint stock), the purpose of the company (e.g. provision public goods or commercial services), and the ownership structure (e.g. full, majority or significant minority), an SOE is an entity in which the government can exert some power or influence over the managerial and operational decisions of a firm. Similarly, the WBG's integrated SOE framework (iSOEF) proposes three specific conditions to validate whether an entity is an SOE: (i) the government exert control through shares, legal instruments or any other means, (ii) the entity holds legal and financial autonomy, and (iii) the entity operates in a market for goods or services that could be provided by a private company.[16] These conditions are proposed from the perspective of the potential market distortions a SOE can create in the market and are therefore suitable for Country Private Sector Diagnostics.

[14] This section is aligned with the iSOEF and particularly with Module 1 related to SOEs and the Markets (World Bank, 2019f)

[15] The private sector would not provide a good or service when a fee or price cannot be charged since certain consumers or groups of people cannot be restricted to access it (i.e. non-excludable condition) and the consumption of the good/service does not reduce its availability for others (non-rivalrous condition).

[16] Control often refers to the ultimate beneficiary/owner of an absolute majority of voting shares, but it can also be exercised by other means. For instance, holding shares with special voting rights (golden shares) which can outvote other shareholders, holding the largest block of voting shares such that the remaining shareholders are unable to coordinate to prevent the state from directing the company -de facto control-, or entering into contractual agreements with other shareholders that in combination with the shares give to the state the power over the company. (World Bank, 2019l)

Box 1. SOE definitions

Definition of State-owned enterprises (SOE)

Broad definition (OECD, 2015)

Any corporate entity recognized by national law as an enterprise, and in which the state exercises ownership should be considered as an SOE including joint stock companies, limited liability companies and partnerships limited by shares. Statutory corporations, with legal personality established by a specific legislation should be considered as an SOE if their purpose and activities are of a largely commercial nature and engage economic activities. An economic activity is one that involves offering goods or services, on a given market and which could, at least in principle, be carried out by a private operator in order to make profits.

Source: OECD (2015), OECD Guidelines on Corporate Governance of State-Owned Enterprises, 2015 Edition.

Ownership definition (OECD, 2018)

SOE is an entity that exercises the power, ability of responsibility to (i) appoint boards of directors, (ii) set and monitor objectives, and (iii) vote to company shares on behalf of the government.

Source: OCDE (2018) Ownership and Governance of State-Owned Enterprises: A compendium of National practices.

IFC (2017)

State-Owned Enterprise (SOE): a legal entity that is majority owned or controlled by a national or local government whether directly or indirectly.

Source: IFC Directive: Investments in SOEs.

World Bank (iSOEF, 2019)

An entity is considered as an SOE if:

i) It is controlled by the state (whether legally, through ownership of shares, or other means)
ii) It is legally and financially autonomous from the state such that has legal personality, specific rules of operation under a legal regime and own revenues or sources of funding
iii) It operates in a market for good or services that could, in theory, be provided by a private company.

World Bank (2019). Integrated State-owned enterprises framework (iSOEF).

Why do SOEs matter?

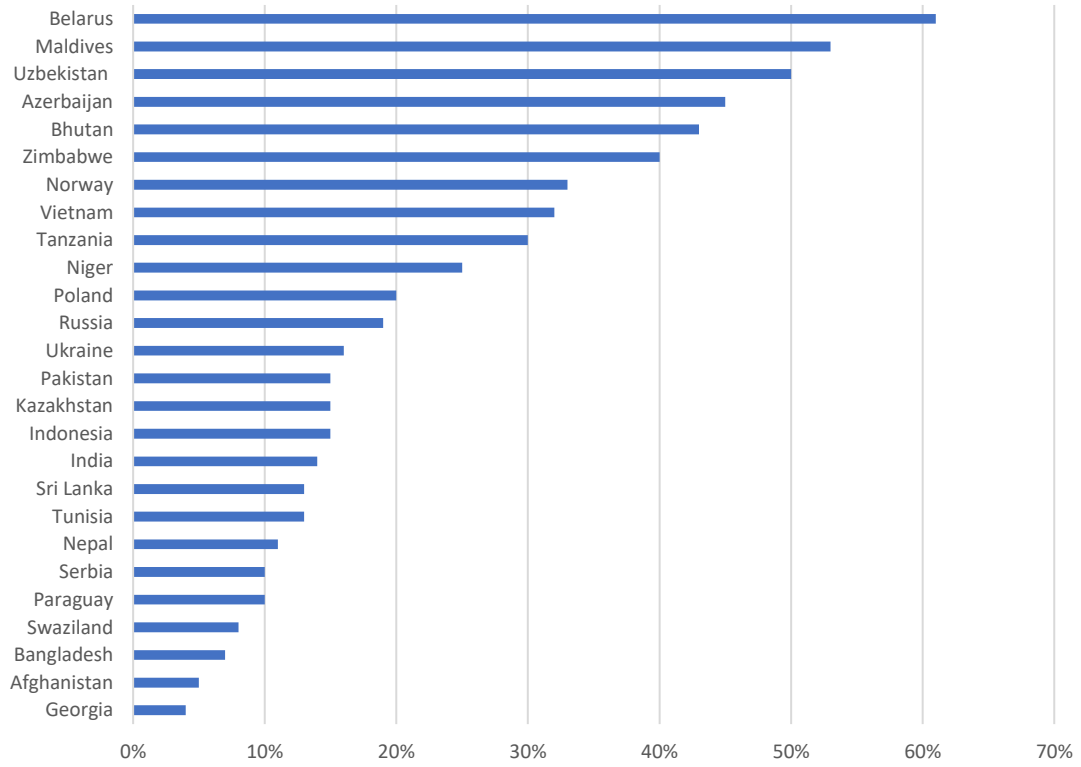
SOEs are relevant actors in domestic and global markets, and especially in transition economies where they account for 20-30% of GDP in 2011 (World Bank, 2019c)**.** SOEs worldwide account for 20% of total investment, 5% of the employment and up to 40 percent of the output in some countries (World Bank, 2014). In 2013, SOEs in manufacturing accounted for 12% of the global trade (Kowalski, 2013). In 2014, one or every four firms in the Fortune Global 500 companies was an SOEs (Pricewaterhouse-Coopers, 2015).[17] Recent estimates suggest that the net worth of SOEs worldwide reached USD 3.6 trillion in 2017

[17] In 2005, less than 9% of the SOE companies were included in the Fortune Global 500 list.

(Kim, 2017). Country level information indicates that in Belarus, Maldives, Uzbekistan, Azerbaijan, Bhutan, and Zimbabwe, SOEs revenues accounted for more than 40% of GDP in 2016 (see Figure 1). Similarly, SOEs employed more than 15% of the labor force between 2015-2017 in China, Uzbekistan, Maldives and Azerbaijan (World Bank, 2017c) (World Bank, 2019) (Sultan, 2014).[18]

SOEs also absorb significant public resources, including through subsidies, loans, and transfers from the State. SOEs may require a significant fraction of public resources flowing to firms. In Cameroon, SOEs absorbed nearly 13% of the GDP in subsidies and transfers in 2015 (World Bank, 2018). In Niger, the total debt and tax arrears related to SOEs operation accounted for 25% and 1% of GDP in 2017, respectively (World Bank, 2019g). Unprofitable or loss-making SOEs can also require capital injections, transfers or government-backed loans, which are often recorded as national debt. In emerging markets, state-owned enterprises debt represents a significant share of all emerging market debt securities issued externally (IMF, 2019). At country-level, the total SOE debt account for 7% of GDP in Angola and Mauritius, and 12% in Cameroon (World Bank, 2019g) (Sultan, 2014). In Chad, SOEs accounted for about 53% of the non-oil GDP in 2017 (World Bank, 2019b).

Figure 1. Value added generated by SOEs expressed in GDP (%) selected economies, 2014-2018



Note: The values correspond to the latest observation available over the period 2014-2018

Source: Selected economies based on literature review and SOE repository prepared by MT staff, including WBG ASA, lending operations, and external sources as (OECD, 2017).

[18] Estimates MT staff based on literature review (2015-2018).

What is the rationale for the operation of SOEs in the markets?

Economic and political reasons may justify that the government intervenes in the market as owner of strategic assets and carrying out commercial activities. Surveys conducted among OECD countries (OECD, 2018a) and in Central, Eastern and Southeastern European region (IMF , 2019) revealed that governments have different rationales for state ownership such as: i) creating a state-owned monopoly where market regulation is deemed inefficient; ii) providing public goods and services; and iii) supporting public/social policy objectives or national interests.[19] The economic rationales for the operation of SOEs usually relate to solving market failures, while political reasons involve the pursuit of development objectives or protection of national interests. SOEs can also be justified when there is no commercial viability for private sector participation, such that private companies might not be able to cover the costs of service provision with user-fees since the demand is not enough for a minimum efficient scale, or where pure private sector options might be limited. In those cases, SOEs could 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. Additionally, in the presence of public goods or where there are geopolitical or national security objectives to be protected, the private investment and private competition might not be neither viable nor desirable (e.g. defense, ports in FCV countries).

From the economic perspective, in presence of market failures, market-determined production or allocation of goods and services does not maximize welfare and therefore might require the intervention of the government. Market failures include natural monopolies, negative or positive externalities, or public goods (See Box 2). For instance, some industries are characterized by the presence of subadditivity costs, where the minimum costs of the production of a good or service is achieved by having a monopolistic producer. Some segments of enabling sectors present these characteristics (e.g. water, electricity transmission). Under these conditions, an unregulated private monopolist would not provide the socially optimal price or quantity. In other sectors, covering the costs of service provision with user-fees is not viable, as the demand is not enough for a minimum efficient scale (rural roads, postal or telecommunication services in remote areas). The operation of enabling sectors with this type of characteristics is in some occasions granted exclusively to the state, as in Bolivia, where the constitution explicitly establishes the state monopoly for electricity, water, among others (World Bank, 2019l).

SOEs are not a solution *per se* to such market failures, but a common choice of government intervention. In principle, *indirect* government intervention in such markets through economic regulation can be sufficient to achieve an efficient outcome. Economic regulation of a private monopoly can simulate competitive outcomes. A private sector operator can be given a concession, subject to regulation to ensure it faces incentives to operate efficiently and cannot exercise its market power. In activities that lack commercial viability, private sector actors can be allowed to compete for the minimum transfer or subsidy needed to offer the service. Prices and conditions for such universal service obligations by private firms can then be regulated and these activities can be separated from other commercial activities by the

[19] Examples of this analysis can be found in several of the documents prepared by the Competition Policy Team. The extensive list of resources is attached to the bibliography of this note including but not limited to (Miralles Murciego, Roberto Martin, Ore Monago, & Zipitria, 2018), (Pop, Martinez Licetti, Gramegna Mesa, & Dauda, 2019), (Aprahamian , et al., 2015), (Pop & Corthay, 2018).

same market player. However, depending on the regulatory and oversight capacities, as well as design failures in privatization in the past, many governments instead opt to intervene *directly* in the market through state ownership and commercial activity.[20]

SOEs can provide goods or services characterized by positive or negative externalities. In presence of externalities, the social cost of providing a good/service differs from the private cost of provision. Therefore, provisions by private firms could result in underproduction or over exploitation of goods or resources. Sectors characterized by negative externalities are, for example, fisheries or telecommunications (e.g. excessive exploitation, misuse of radioelectric spectrum), where the private sector could end up with overproduction. On the other side, road and railway construction, postal services and digital connectivity are examples of industries characterized by positive externalities, where the private sector could either underproduce or not enter into the market (World Bank, 2019c). Again, there are solutions to such failures that do not require state-ownership of commercial activities, such as subsidies, taxes, competitive assignment of limited exploitation quota etc. Instead, SOEs are a common response to such market failures.

SOEs also provide public goods. Public goods are non-excludable and non-rivalrous goods or services. The private sector would not provide a good or service when a fee or price cannot be charged since certain consumers or groups of people cannot be restricted to access it (i.e. non-excludable condition) and the consumption of the good/service does not reduce its availability for others (non-rivalrous condition). Street lighting, seed breeding, farming research are examples of these type of public goods.

From the political perspective, SOEs are also used to pursue specific development objectives and national interests. SOE operations may support policy objectives such as guaranteeing employment, promoting exports, protecting vulnerable or isolated populations and regions, or promoting nascent industries. In these cases, even though the development goals are economically and socially desirable, it is often argued that the private sector would not provide them unless there is some state involvement in the markets. For example, the French government retained 26% of the shares of Thales (a former SOE) since the company is a major actor in the defense sector and a critical source of employment and export revenues (World Bank, 2019l). In the context of underdeveloped capital markets and weak intellectual property systems, private investors might face higher risks or suboptimal profitability deterring them from entering into the market despite the large potential of an industry (OECD, 2017). In those cases, as in Vietnam, SOEs act as venues for developing capital-intensive industries in the absence of the private sector (World Bank, 2011).

In some cases, political criteria require the *ownership* of productive assets by the government. The assets of some economic activities are sensitive from a geopolitical or national security point of view and therefore require the state to exercise ownership and control rights over the production or service delivery process.

However, the presence of SOEs is not limited to industries where there is an economic rational, but they also operate in commercial sectors including export locomotives that could be efficiently provided by

[20] Direct provision of goods and services by government companies is also justified as a potential solution to mitigate the coordination costs and risks associated with delivering activities under alternative institutional arrangements with private firms (Brown & Potoski, 2003)

the private sector under market-based dynamics. In fact, SOEs are often involved in export locomotive industries that could be fully served by the private sector. Although to a lesser extent than in enabling sectors, SOEs are common in sectors that could be considered fully commercial. In such industries, the private sector can operate profitably under market-based conditions and barriers to entry are relatively moderate or low.[21] For instance, most emerging and developing economies report SOEs in industries such as manufacture of refined petroleum, business activities and accommodation, and food and beverage services. These sectors are potential export locomotives. Similarly, in Kenya, the government is involved in economic activities where there is no clear rationale for its operation, private participation is viable, and where internationally the probability of having an SOE is less than 40 percent including retail trade (e.g. supermarkets), accommodation, manufacturing of food products and beverages (e.g. sugar and wine) (World Bank, 2019j).

[21] Examples of fully commercial sectors are: Manufacture of refined petroleum products, accommodation, food and beverage service activities, manufacture of fabricated metal products, machinery and equipment, construction, wholesale trade, incl. motor vehicles, manufacture of basic metals, building and repairing of ships and boats, freight transport by road, among others. Product Market Regulation indicators (OECD) does not cover certain commercial sectors or export locomotives such as agribusiness, light manufacturing (e.g. apparel), among others.

Box 2. Economic Rationale for the operation of state-owned enterprises

Economic rationales for SOE

In the presence of market failures, some characteristics of the goods and service might explain the presence of SOEs. Some key questions to assess the economic rationale of SOE are the following:

- ✓ **Commercial viability**: Is this activity commercially viable*?*

In this case, private companies might not be able to cover the costs of service provision with user-fees since the demand is not enough for a minimum efficient scale. Some examples include rural roads, postal or telecommunication services in remote areas.

- ✓ **Natural monopolies**: *Does the market exhibit sub-additivity of costs?*

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

- ✓ **Negative externalities:** *Is the sector characterized by negative externalities?*

In this case, the total cost of the provision of a good or service exceeds the private costs and imposes unintended costs on other members of the society. Hence, when provided by the private sector, it could end up in overproduction, resource depletion, or overexploitation. Taxes and quantity regulation on goods or services in presence of these externalities can mitigate this market failure. Fisheries, coal mining, fossil fuels are examples of sectors with these characteristics.

- ✓ **Positive externalities:** *Is the sector characterized by positive externalities?*

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

- ✓ **Public goods**: *Is the good or service provided a public good?*

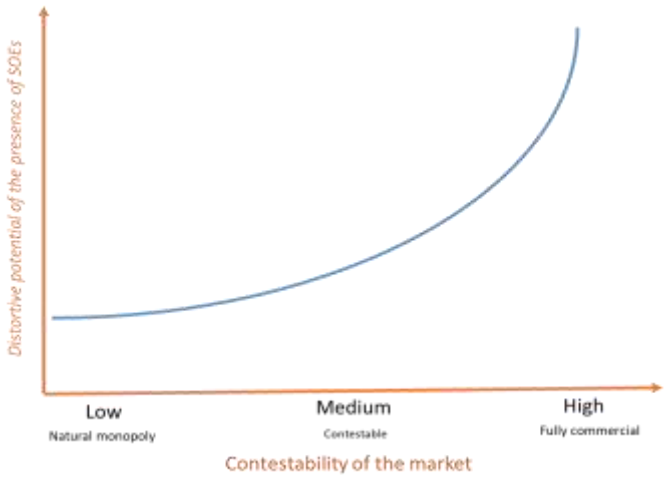
In case the good is non-excludable (i.e. excessive high costs required for excluding some actors for accessing or using a good/service) and non-rivalrous (i.e. the use of the good or service does not limit the use or depletes the supply for other actors), the private sector may not provide the goods or services because it cannot charge an individual fee or it is unprofitable to do so. Government provision directly through SOE or public administration, indirectly contracting private-sector companies (when possible), or jointly (e.g. PPP) are potential solutions to these market failures. Quality and contract enforcement capacity are critical to determine the potential venue of intervention. Defense, street lighting, research on seed varieties are examples of goods and services with these characteristics.

Source: Authors elaboration based on (Putniņš, 2015) and iSOEF (World Bank, 2019l)

Which sectors have which rationale for SOE participation?

The intrinsic characteristics of economic sectors and sector segments provide different economic rationales of SOEs and are related to the potential distortions associated with SOEs. SOEs can create distortions that would prevail if the sector were only provided by private sector firms. In the presence of market failures and the absence of regulatory intervention, both public and private firms would generate market outcomes that imply a loss of social welfare in comparison of a regulated scenario. However, in fully commercial sectors, private firms competing under a market mechanism can reach socially optimal price and output levels. SOEs are much less likely to achieve this given the lack of the same direct accountability mechanisms as individual shareholders represent.[22]). Hence, the contestability of the market in which the SOE operates is related to the likelihood of creating or exacerbating market distortions (Figure 2). For instance, markets with low levels of contestability social (total) welfare is maximized when concentrating the production in a single or few firms, although it does not necessarily imply to be provided by an SOE. Such firm(s) would need to be strictly regulated no matter the ownership type.[23] On the other side, in the absence of anti-competitive behavior, contestable sectors with private and profit-maximizing firms can reach an efficient equilibrium that maximizes welfare.[24] Here, participation of SOEs are most likely to create distortions – that is, deviations of the otherwise efficient equilibrium.

Figure 2. Relationship of contestability of the market and distortive potential of SOEs.



Source: authors elaboration.[25]

[22] For instance, evidence suggests that compared to private ownership, government ownership relates to an inferior performance (Wang & Shailer, 2018; Bajo, Zuber, & Primorac, 2018; IMF, 2019) and is more prone to experience financial distress than their private peers (Melecky & Sharma, 2019

[23] In this case, sector regulation (e.g. price controls) is key to mitigate the potential abuse of dominance of the monopolist in the market and limit the ability of the monopolist (either public or private) to exert market power and define unilaterally the market outcomes (e.g. prices, coverage, quality, etc.)

[24] Contestable markets refer to those where there are no barriers to entry or exit, all firms (incumbents and potential entrants) have access to the same production technology, there is perfect information on prices for all consumers and firms and entrants can enter or firms can exit before incumbent firms can adjust prices (OECD, 1993).

[25] This is a stylized graph to illustrate the concept of higher distortive potential related to fully commercial sectors. It reflects the potential for distortions, and actual distortions may only materialize under specific conditions such as a dominant position of the SOE. It is based on the presumption that the difference in market outcomes between a scenario an SOE and a scenario without an SOE is likely to be greater in fully commercial sectors than in natural monopolies, other things being equal.

A taxonomy of sectors is proposed based on different levels of contestability of the market and segments within those sectors. The taxonomy is based on the economic activity and market characteristics where the SOE operates. This taxonomy provides a simplified approach to determine the typology of sectors in which SOEs operate based on the intrinsic market characteristics, but the actual market structure might vary depending on the economic and socio-political context and also could evolve with the technological disruptions. For instance, a sector such as mobile telecom services tend to follow oligopolistic structures as result of the presence of sunk costs and economies of scale, but still in some countries it could be provided by a single operator (i.e. de facto a monopoly).[26] Similarly, technological disruptions and innovation will allow to create and transform subsegments into more contestable markets.[27] The first category refers to natural monopolies. In this case, the intrinsic market and technological characteristics imply that the costs for the provision of a good or service are minimized by concentrating the production in a single firm (i.e. subadditivity of costs). These economic activities imply significant barriers for private investors since the entry of additional market players will increase the costs and promote a sub-optimal result. Examples of these economic activities refer to fixed-line networks and basic letter services, distribution of energy, operation of railroad infrastructure, airport infrastructure, air traffic control, and most of the functions performed by local utilities (e.g. water collection, sewage, etc.).

The second type of sectors refers to those that have markets with some degree of contestability. This category includes network industries with large fixed costs and technological barriers to entry. These industries may be served efficiently by more than one firm depending on market conditions such as demand structure and market size (e.g. electricity distribution). It also includes industries that can be served efficiently by more than one firm, even if network and scale effects generate high levels of market concentration (e.g. air transport services). These oligopolistic structures will incorporate intrinsically some barriers for private sector development, which could be exacerbated by the presence of an SOE. For example, an SOE could leverage the state ownership link to set rules to reinforce its dominance in the market or limit entry (e.g. bans, permits, temporary exclusivity) or promote collusive outcomes coordinating with other state-owned companies in a specific sector. Examples of these sectors are telecommunication services, energy distribution, passenger transport (air, water, maritime), natural resource exploitation activities and financial services.

The third category refers to SOEs operating in fully contestable and commercial markets. In these industries, firms can operate profitably and barriers to entry are moderate or low. These sectors correspond mainly to the provision of goods and services that are private (i.e. rival and excludable), which can be provided in profitable conditions by private companies, and do not create significant externalities in their provision.[28] In this case, competition and market dynamics could discipline the agents to avoid them to obtain and abuse market power. Hence, there is no clear economic rationale to justify the specific participation of SOEs in these type of activities (iSOEF, 2019). Examples of these activities are

[26] Among others, several studies carried out by the Competition Policy Team have differentiated between natural monopoly sectors and those where competition is viable.[26]

[27] A more detailed taxonomy and correspondence table for each economic activity (NACE classification 4-digits) is added as part of the CPSD guidance documents (See Excel annex for the full taxonomy).

[28] Consumers or groups of people could be restricted to access (i.e. excludable condition) and the consumption of the good/service reduces its availability for others (i.e. rival condition).

manufacturing, construction, retail and wholesale trade, accommodation and food services, administrative and support services, real estate activities, arts, entertainment.

SOEs operating in a specific sector can perform activities in different segments or markets that exhibit different characteristics and therefore different risks for creating market distortions. The correct specification of the economic activities performed by an SOE and contestability of the segment of operation is critical for assessing potential distortions in the market. It is key to determine the specific segments in which the SOE operates beyond the broad economic sector as the market distortions and ability of SOE to influence the market outcomes vary accordingly. Moreover, the more vertically integrated are these segments by a single entity, the larger the risks of distortions. For example, within network sectors, there are segments such backbone infrastructure that are prone to monopolistic structures, but also retail internet and mobile services that allow entry of private investors. If an SOE controls both, then the risk for creating barriers for private investors will increase. Table 1 shows the proposed taxonomy of SOEs disaggregating the economic activity by segments and relative contestability. Table 2 illustrates some examples of sectors where presence of SOEs has been identified in former CPSDs.

Table 1. Taxonomy of SOEs based on the economic activity and contestability of the markets.

Sector		Segment	*Type 1 Natural monopolies*	*Type 2 Contestable sectors*	*Type 3 Full Commercial*
Network Sectors	Telecom	Backbone and towers infrastructure	X		
		Fixed-line network	X		
		Fixed-line services		X	
		Mobile services		X	
		Internet services		X	
		Post - Basic letter services	X		
		Post - Parcel Services		X	
		Post - Courier Services			X
	Energy	Generation		X	
		Transmission	X		
		Distribution* (supply)		X	
	Railways	Operation of railroad infrastructure	X		
		Passenger transport		X	
		Freight transport		X	
	Air and aviation	Airport operations, infrastructure	X		
		Air-traffic control	X		
		Passenger transport		X	
		Freight transport			X
	Water/Maritime	Operation of water transport infrastructure		X	
		Passenger transport		X	
		Freight transport		X	
	Road	Operation of road infrastructure		X	
		Passenger transport*			X
		Freight transport			X
Local Utilities	Gas	Distribution		X	

	Water	Collection, distribution	X		
	(District) Heating	Heating	X		
	Sewerage	Collection, treatment, disposal	X		
	Solid waste	Collection		X	
		Treatment and disposal	X		
	Others	Cemeteries, local services		X	
	Urban transport	Urban transportation services	X		
Natural resource exploitation	Oil, Gas and Mining	Upstream (exploration)		X	
		Midstream (liquif.)		X	
		Downstream		X	
Financial	Banking	Financial and insurance activities		X	
Other Public services	Other public services	Health		X	
		Education		X	
Commercial	Agri-business	Agricultural, forestry, fishing			X
	Manufacturing	Manufacturing (e.g. food, beverages, textiles, apparel, etc).			X
	Services	Construction			X
		Wholesale and retail trade			X
		Accommodation and Food Service Activities			X
		Professional, scientific and technical activities			X
		Administrative and support services			X
		Real Estate Activities			X
		Arts, entertainment			X
		Warehouses and logistics			X

Note: *Road transport refers to inter-urban transport. This taxonomy is aligned with similar taxonomy exercises applied by the Competition Team (Miralles Murciego, Roberto Martin, Ore Monago, & Zipitria, 2018) and analytics in the context of the CPSD (e.g. Morocco) (World Bank, 2019d)

Source: authors elaboration based on PMR sectors (OECD, 2018)

Table 2. Examples of presence of SOEs in former CPSDs

	Agribusiness	Manufacturing	Services
NEPAL	Seeds Fertilizer Dairy		Financial services
GHANA			Energy Financial services
KAZAKHSTAN	Wheat		
ANGOLA		Oil and refinery	Financial sector Construction Water Electricity Airline
ETHIOPIA	Fertilizer		Logistics Telecom Energy
KENYA	Agro-processing		Financial services Telecom Accommodation services
MOROCCO	Fertilizers	Metals	Accommodation services
BURKINA FASO			Water Electricity Postal services
COTE D'IVOIRE			Passenger Transport (airline) Television

Source: authors elaboration based on former CPSDs (World Bank, 2019j) (World Bank, 2019d)

Where are SOE predominantly present?

Recent estimates based on the PRM data suggest that the presence of SOEs is widespread in emerging and developing economies. The number of SOEs varies significantly across economies and sectors worldwide. As of 2015, countries such as Switzerland, Australia, Japan, and Austria reported less than 10 SOEs, meanwhile in China the number surpassed 51,000 companies.[29] Controlling by population size, Map 1 reveals a high variation in the number of state-owned companies across economies, suggesting a particular predominance of SOEs in countries located in the Europe and Central Asia region where the median country has 11 SOEs per million people, followed by countries in Sub-Saharan Africa, where 4 SOEs are found per million people.[30]

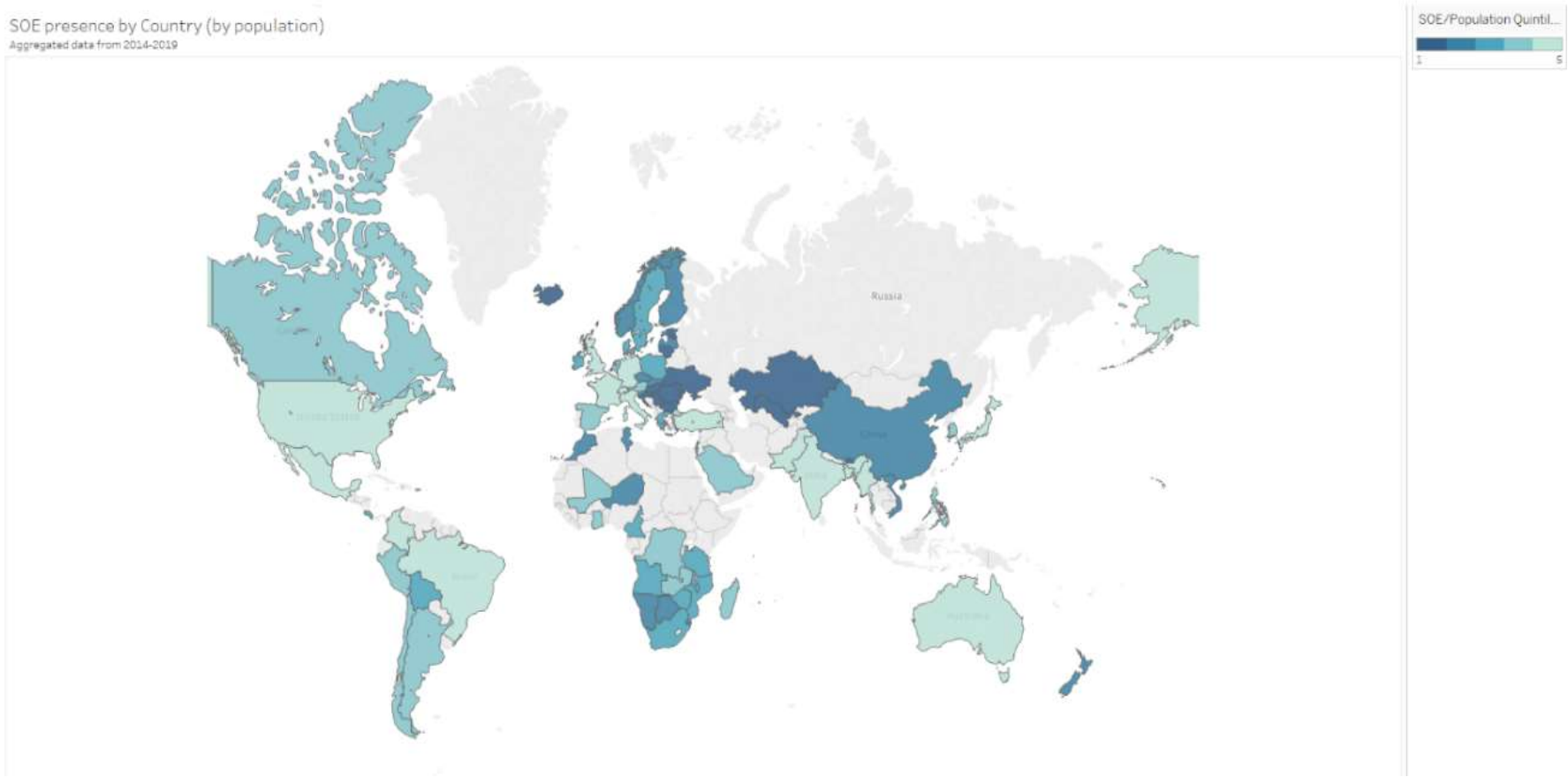
The presence of SOEs is widespread across sectors including fully commercial segments. SOEs are often major players in enabling sectors especially in infrastructure (e.g. railways, airports), network (e.g. telecommunications), and traditional utilities sectors (e.g. water, electricity transmission).[31] As illustrated in Figure 3, recent estimates based on PMR suggest that more than 80% of both emerging and developed economies have at least one SOE involved in industries of electricity transmission, road transport, post services, and airport operation (OECD, 2018).

[29] These estimates are based on WBG documents by MT staff and (OECD, 2017) using local classifications and the number of SOEs declared, which could not correspond to the real extent of SOEs.

[30] There are limited sources of information that compile SOE presence worldwide. The map was built based on a literature review from WBG ASA and loans, as well as renown external sources as the landscape for SOEs prepared by OECD (2017), but it was not possible to recover data comprehensively for all countries and regions.

[31] In 2017, 66% of the worldwide investment in infrastructure projects was supported by SOEs (World Bank, 2017). In sectors as oil and gas, SOEs own 90% of the reserves and 55% of the production (World Bank, 2020).

Map 1. Number of SOEs declared by country (per million population) [32]

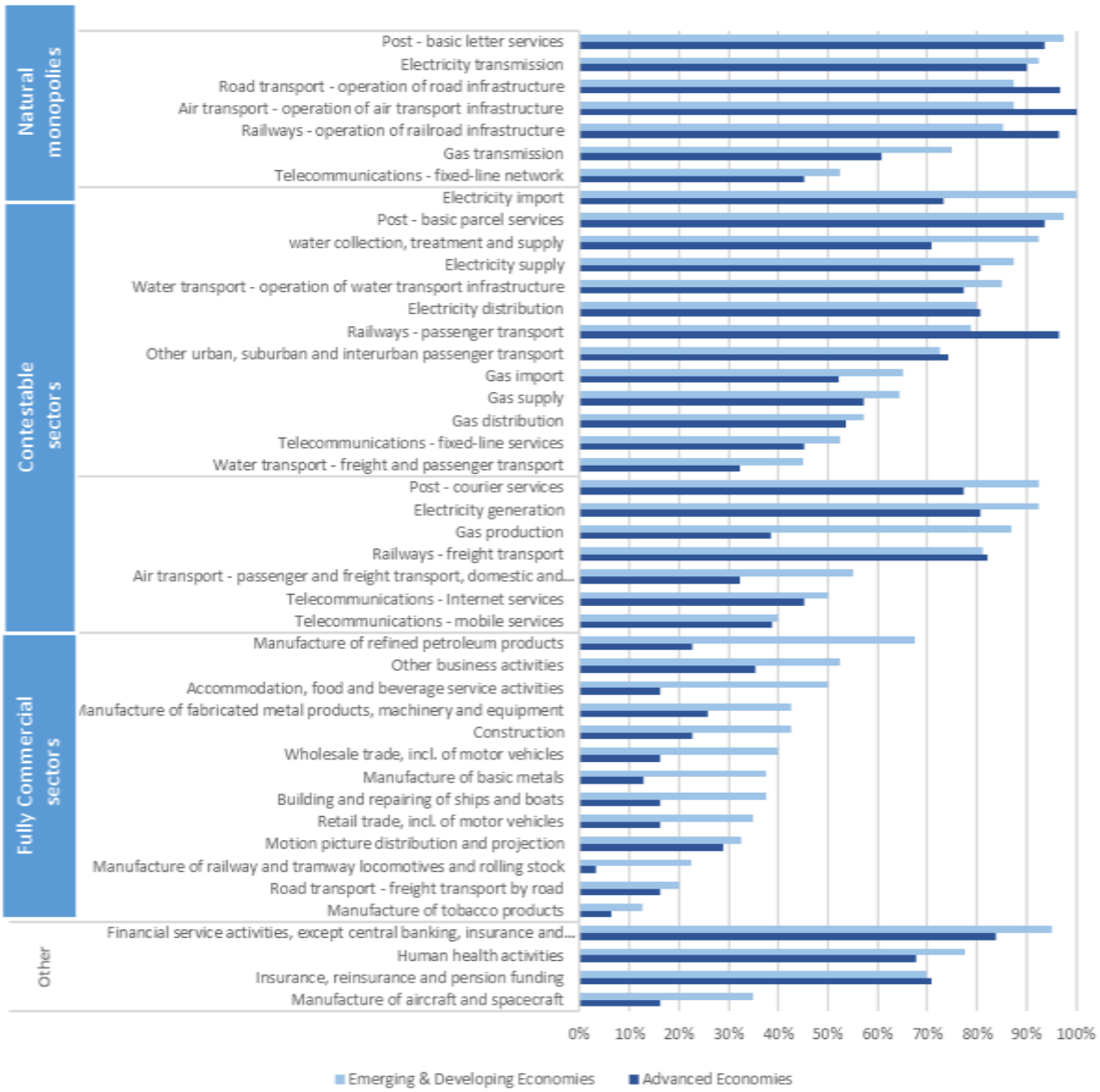


Note: As the definition of SOEs vary significantly across countries, the values reported might overestimate or underestimate the presence of these companies in some jurisdictions. The values presented the quintile of the distribution, such that the darkest blue refers to countries with the top 20% higher values of total number of SOEs declared controlled by population size.

Source: Markets and Technology Unit based on literature review (MT WBG-SOE repository) and (OECD, 2017).

[32] The lack of a harmonized and comparable dataset has been acknowledged by the iSOEF task force. Currently, there is an integrated effort across EFI to create a comprehensive firm-level database that will provide comparable and exhaustive indicators of SOEs worldwide. This map is indicative of the number of SOEs across the globe, but a more comparable exercise can be conducted once the EFI SOE global dataset is available.

Figure 3. Share of countries with SOE presence by sector (2013-2017)



Source: authors preparation based on OECD-WBG Product Market Regulation (PMR) indicators 2013 – 2017. Note: The Figure covers all 44 sectors included in the PMR database. Percentage (%) value represents number of countries in a given country type (Emerging & Developing vs. Advanced) reporting SOE in given sub-sector. The total value of sub-sectors (denominator of %) varies by country type, as some countries explicitly state "sector does not exist" in the PMR questionnaire. For example, for railway (passenger) only 33 out of 40 Emerging & Developing countries report having a railway (passenger) sector, and 26 countries have an SOE in the sector, giving 26/33=79%. Sectors in which less than 25 countries report having this sector are: Gas Production (Advanced: 13; Emerging:23); Gas Import (Advanced: 23; Emerging: 23); Electricity Import (Advanced: 15; Emerging:21).Further note that in the sector group defined as "typically competition viable", there are network and other economies of scale effects that commonly produce high concentration.

2. Role of SOEs and potential effects on markets and PSD[33]

What are the potential distortions related to the presence of SOEs in the markets?

The presence of SOEs *per se* does not necessarily translate into market distortions or prevent private sector investment, under certain circumstances SOEs could play a role to create markets. Under certain circumstances as discussed above, SOE intervention can have a legitimate economic rationale. In such cases, an SOEs can be considered as the venue for create markets where there is no commercial viability, solving market failures, provide public goods, and achieve socially desirable goals and promote economic development. When there is a clear rationale for their operation and the SOEs are well managed with complementary measures such as performance indicators and good governance practices, distortive effects on markets can be averted and presence of SOEs could be a pathway to further market creation. Even in contestable markets, distortions may not arise as long as, public and private companies compete as indistinguishable market players, and all agents face the same pressure of the market and regulatory discipline (i.e. competitive neutrality).[34] However, significant market distortions surge and impact private investment when the SOE can exploit its relation with the government to gain an undue competitive advantage over its private peers even in cases where the government holds a minority participation.

There are a wide variety of policies typically associated with SOEs that can potentially distort the functioning of the markets and have severe implications for the viability and profitability of private companies. Policies that tilt the playing field in favor of specific market players vis-à-vis their peers and create undue competitive advantages include credits, subsidies, or land allocation granted to SOEs under favorable conditions. Distortions can also emerge from the regulatory framework, tariff and price regulation, FDI and import restrictions, among others. In fact, the resulting distortions in the markets and the barriers faced by private investors can be the consequence of not only one of these policies, but the interaction of several of them.

Distortions commonly arise from SOEs being able to make losses or sustain low rates of return for longer than private peers, and access inputs at lower costs. The feasibility and continuity of investment plans of private entrepreneurs depend on expected revenues and cost structure. This same market discipline often does not apply to SOEs. First, SOEs are not always required to achieve a commercial rate of return or make investments with positive Net Present Value (NPV) to stay in the market (World Bank, 2019d). SOEs can operate even with high levels of indebtedness and sometimes be bailed out by the government. Similarly, the cost of the productive resources (e.g. labor, capital, land) are often lowered for SOEs through preferential access to subsidies, loans, and tax credits. SOEs may therefore achieve a disproportionally larger participation in the market at expense of private counterparts. This pose some challenges in terms of the performance of SOEs that are not always aligned with the observed profitability of the firm. For instance, an SOE could be highly profitable and still can create some risks for private sector participation if the profitability is obtained through the imposition of market barriers for potential competitors that

[33] This section is aligned with the iSOEF and particularly with Module 1 related to SOEs and the Markets (World Bank, 2019f)

[34] Competitive neutrality principles refers to: (i) the separation of commercial vs. non-commercial activities of the SOEs; (ii) the definition of a market-consistent rate of return to justify a long-term retention of assets and pay commercial dividends; (iii) regulatory neutrality such that SOEs are subject to similar legal rules and market discipline vis-à-vis their competitors, (iv) taxation neutrality such that SOEs are subject to tax liability, and do not receive advantages or preferential treatment that is not available for their competitors, (v) debt neutrality, which requires that government businesses are subject to similar borrowing costs and honor their debt arrangements under prudent investment decisions, (vi) access to state support measures are not granted to SOEs in preferential terms, (vii) transparent procurement mechanisms to allow private companies to participate in bids on equal terms vis-à-vis SOEs (World Bank, 2019l) (OECD, 2009).

allow the SOE to extend and exploit its market power (e.g., increasing prices). Similarly, a loss-making SOE can raise some flags of potential risks of competition in case the company operate in commercial sectors and could reduce artificially prices to exclude competitors on the market. However, it is not always the case. Some SOEs could be performing with relatively low rates of return precisely when providing for some goods or services of non-commercial nature.

Subsidies, tax credits, or government aid do not necessarily translate into market distortions that deter the private investment, but it is the preferential access granted to SOEs that ultimately turns into barriers for the private sector. The government can have valid rationales to grant financial support to individual sectors or firms to advance policy goals such as R&D or regional development. When it is allocated under impartial and symmetric conditions, both private and public companies can benefit from the support and advance the respective policy goal. The distortions arise when access to those resources is granted in preferential or favorable terms for a subset of companies. For instance, when government businesses are more likely than their private competitors to receive tax exemptions, access to inputs, access to infrastructure facilities, and face lower borrowing costs, it may increase the for private investors to compete in the market against the SOE. The more symmetrical the conditions for accessing state-aid programs between SOEs and the private sector, the lesser the potential distortions created in the market.

Distortions may also arise when the government acts simultaneously as market-player and regulator. Often, there is no clear separation of obligations of the SOEs as service provider vis-à-vis as regulator. This can translate into the entity designing rules that unduly favor its commercial activity vis-à-vis its private peers. For instance, in the absence of an independent regulator, an SOE could use its role as sole operator of the railway's infrastructure and extract rents for subsidizing operation in the commercial segment (e.g. offering discounted prices to rail passengers). This could allow it to gain a significant market share in the service segment and crowd-out private firms. Similarly, if an SOE has a regulatory role, it could create undue licensing requirements for private operators (e.g. import licenses) eroding the competition from private companies to obtain higher revenues. Even in cases of changes of full ownership, former SOEs could continue benefit from preferential treatment when the sector regulation is ineffective, and some distortions could remain if not complementary measures are implemented. Additionally, some risks for potential distortions can also appear when SOEs generate or allocate rents and are employed as intermediaries to channel subsidies and state support and operate simultaneously as market players. Some risks for potential distortions can also appear when SOEs generate or allocate rents and are employed as intermediaries to channel subsidies and state support. Some risks for private sector participation could also emerge from the simultaneous role of SOEs as market providers (i.e. commercial functions) and as channels to provide state support (non-commercial functions).

Independently of the ownership arrangements, the competitive neutrality principles are a helpful resource to unveil, prevent, and mitigate potential market distortions that might affect private investors in presence of SOEs. As set out in iSOEF (World Bank, 2019) and consistent with (OECD, 2009), *competitive neutrality principles* offer a structured framework to explore potential sources of market distortions related to the presence of SOEs. These principles refer to (i) the separation of commercial vs. non-commercial activities of the SOEs; (ii) the definition of a market-consistent rate of return to justify a long-term retention of assets; (iii) regulatory neutrality such that SOEs are subject to similar legal rules and market discipline vis-à-vis their competitors, (iv) taxation neutrality such that SOEs are subject to tax liability, and do not receive advantages or preferential treatment that is not available for their

competitors, (v) debt neutrality, which requires that government businesses are subject to similar borrowing costs and honor their debt arrangements under prudent investment decisions, (vi) access to state support measures are not granted to SOEs in preferential terms, and (vii) transparent procurement mechanisms to allow private companies to participate in bids on equal terms vis-à-vis SOEs. Table 3 summarizes these principles, illustrates the least distortive scenario (benchmark), as well as some examples of potential market distortions in presence of SOEs and mitigating measures. Competitive neutrality principals have been applied in numerous Competition Policy Team (CPT) documents, which can also serve for further reference.[35] [36]

[35] IFC decision investments on SOEs apply the level playing field analysis in accordance with the framework set out in the IFC Board Paper -Approach to Engaging with State-Owned Enterprises Operating Outside of Home Markets, IFC Official Paper to the Board of Directors (IFC, 2017). This CPSD SOE guidance note does not apply to inform the IFC board on the decision process to determine whether to invest in a SOE.

[36] Please refer to bibliography for specific documents where these principles have been analyzed by the CPT

Table 3. Competitive neutrality principles and SOEs

Competitive neutrality principle	Benchmark (Least distortive scenario)	Examples of distortions for private investors	Examples of mitigating measures
Separation of commercial and non-commercial activities	Legislation requires separation of commercial and non-commercial activities (e.g. obligations for providing universal services, community service, public services).	- SOE participates both in non-commercial and commercial segments and exploits this position to exclude private rivals in the latter.	- Legal separation of activities through separated legal entities.
Cost allocation	Rigorous cost allocation methods are followed to avoid cross-subsidies between commercial and non-commercial activities, and SOE performance is objectively assessed based on financial indicators.	- SOE does not disclosure financial statements or performance indicators. - SOE can cross-subsidize costs and activities to offer prices below private competitors in the commercial segment.	- Accounting practices are implemented to separate and allocate resources and costs to commercial and non-commercial activities. - Monitoring and evaluation of SOEs based on transparent and performance indicators. - Role of regulators to set tariffs that allow for cost recovery.
Achieving a commercial rate of return	SOE commercial operations are required to earn a market-consistent rate of return of their assets and investments (positive NPV) that justify the retention of assets in the business and pay commercial dividends.	- SOE is not required to have positive NPV in investments. - SOE exhibit significant losses and operate at high levels of indebtedness that require frequent capital injections from the government. - Net profits are substantially below to their private competitors. - Below-cost pricing that can exclude private competitors.	- Regulation establishes clear requirements on benchmarked rate of return on the assets held by the government. - SOE performance is measured based on private sector benchmarking exercises.
Regulatory neutrality	Government and private sector businesses should as close as possible comply with equivalent regulations and legal obligations. In case of remaining differences, the legal requirements do not affect the ability to compete of the private sector.	- SOE is exempted from antitrust law. - SOE is not required to follow the same requirements to disclose financial information. - SOE is not subject to bankruptcy law or quality requirements.	- Sectors where competition is viable are open to private investment. - SOE are also subject to antitrust law, procurement law, bankruptcy law and equivalent quality requirements. - Government entities in charge of oversight and regulation of SOEs are separated and not involved in the day-to-day management of SOEs with commercial activities.

Debt neutrality	Government business is subject to similar borrowing costs and access to credit versus private peers.	- Government is liable for the SOE debt/losses and arrears. - Government provides debt guarantees to SOEs for investment projects. - SOE enjoys preferential access to loans through state-owned banks.	- Government controls on public sector borrowing are in place and rates charged on public sector loans are similar to those faced by private investors.
Tax neutrality	Government business and private businesses are treated equally or at least equivalently under the tax law such that SOEs do not receive tax exemptions or benefits that are not available under the same conditions to private competitors.	- SOE is not fully liable for taxes or receive a special tax regime even when carrying out commercial activities. - SOE profit tax or corporate tax rate is below the rate applied to private competitors in the same market.	- Tax exemptions, subsidies and debt guarantees are granted in similar conditions to both SOEs and private investors. - Commercial activities of SOEs are subject to equivalent VAT, income tax, as private competitors. - A tax equivalent regime is designed to reflect as close as possible the obligations assumed by the private sector.
Public procurement	Procurement law and procedures are applicable independently of the ownership of the provider. Open, transparent and competitive bidding procedures are in place to level the playing field between private companies and SOEs.	- SOE receives preferential information and priority access to public procurement processes. - Additional requirements or asymmetric conditions are imposed for private investors, which are not applicable for the SOEs.	- Competitive and open procedures are in place to allow market-based competition between SOE and private operators (e.g. bids, auctions). - Equivalent conditions, legal and technological requirements are applied indistinctly of being a public or private provider.
Access to state-aid	Government subsidies and sector-specific support programs should not distort competition between public and private companies. SOEs and private companies face similar costs of capital, labor, access conditions to inputs and infrastructure.	- SOE benefits from favorable and preferential interest rates for loans. - SOE receives direct transfers and grants and subsidies in preferential terms (e.g. priority access, length of support) compared to private competitors. - SOE benefits from below-market prices for accessing to infrastructure or essential inputs.	- State support is provided to all companies within a sector following transparent and objective allocation mechanisms. - Time-bound access to state-aid under clear and transparent criteria.

Source: authors elaboration building upon (OECD, 2009), (OECD, 2012), and iSOEF (World Bank, 2019c) and multiple studies produced by the Competition Policy Team including (Miralles Murciego, Roberto Martin, Ore Monago, & Zipitria, 2018), (Pop, Martinez Licetti, Gramegna Mesa, & Dauda, 2019), (Aprahamian , et al., 2015), and (Pop & Corthay, 2018).

In addition to distortions that arise from rules directly related to the SOEs, other indirect government interventions in sectors in which SOEs are critical to identify potential market distortions. One set of competitive neutrality principles discussed help to identify, for example, whether SOEs must achieve commercial rates of return or can cross-subsidize their commercial activities. However, market distortions may also arise from indirect government interventions (rules, regulations, etc.) that are not directly related to the SOE but affect the sectors in which SOEs operate. This include, for example, import licenses, FDI barriers or domestic regulatory barriers that may limit the potential of private competitors to enter and grow in the market.

In conclusion, rules that increase the risk of market distortions in the presence of SOEs can be divided into those that (i) reinforce dominance of an SOE and (ii) those that increase the cost for private firms to compete with SOEs. The form and magnitude of the distortions associated to the presence of SOEs diverge based on the characteristics of the goods and services provided (e.g. tradable vs. non-tradable) as well as the market structure. However, private investors typically face two types of rules that increase the risk of market distortions in sectors where SOEs participate. Drawing on the WBG's Markets and Competition Policy Assessment Tool (MCPAT), these can be categorized into (i) the rules that reinforce dominance of SOEs and limit the right to enter into the market or (ii) the rules that are conducive to increase the costs to compete vis-à-vis an SOE in the marketplace. Rules that affect competitive neutrality are predominantly captured in the second category. Table 4 describes examples of these rules and resulting distortions.

The first stream of distortions refers to those that limit the ability of private investors to enter the market. FDI constraints, import restrictions (e.g. high tariffs, quotas), licenses, permits and legal requirements to enter can all shield SOEs from potential private sector entry. Moreover, private companies might be deterred from entering when SOEs intervene in the determination of key market variables (e.g. prices) that affect the viability of participation in the market. In the case of tradable goods, a common barrier is related to import restrictions (e.g. high tariffs, bans, and quotas) on both final products and key inputs.

The second stream of distortions is related to the rules that are conducive to increase the costs to compete vis-à-vis an SOE in the marketplace. Even when private counterparts overcome barriers of entry and become a market player alongside an SOE, investors can face additional hurdles to compete that can ultimately impact their feasibility and profitability. These have been comprehensively outlined in the competitive neutrality principles above. Here, we focus on those that are most common and most harmful. First, fair competition between the SOE and private operators can be undermined when the former has a preferential access to resources such as capital (e.g. reduced interest loans, capital injections, tax-credits, subsidies, accelerated depreciation), land (e.g. allocation of strategic territories or locations for operation, favorable lease contracts), labor (e.g. subsidies to cover wage-related costs), or infrastructure assets (e.g. airports, ports, undersea cables, etc.). Second, private investors can encounter that the access to those factors is in fact operated or controlled by the SOE.

Table 4. Streams of rules and government actions that could create distortions and barriers for private investors

Streams of market distortions	Barriers faced by private investors	Examples
I. Rules that reinforce SOE dominance or limit entry into the market	FDI restrictions that shield SOE from private competition.	Bans, caps.
	Import restrictions on inputs or substitute products for private providers.	Bans, quotas, high tariffs.
	Legal barriers including licenses and permits are required to enter into the market for private investors	Monopoly rights and absolute bans for entry (e.g. constitutional restrictions of private operators in utilities sectors).
		Permits for registry and requirements to private investors (e.g. minimum capital requirements) to be able to enter the marketplace, that are not applicable to SOEs.
	Entry and prices in the market are determined or substantially influenced by the SOE (incumbent)	SOE holds voting power and sits in the board/committee where legal requirements and prices (e.g. price controls) for private competitors are determined.
II. Rules are conducive to increase the costs to compete vis-à-vis an SOE	Asymmetric access to productive resources and essential inputs vis-à-vis SOEs	SOE has preferential or favored access to capital (e.g. reduced interest rate loans, subsidies, tax-credits, accelerated depreciation).
		SOE has preferential access to labor through more competitive salaries or subsidies to the wage-related costs.
		SOE has preferential access to land or infrastructure such as ports, airports, through below-market prices or subsidized fees.
	The access to specific inputs is controlled or influenced by the SOE	Private companies only get access to ports, airports, undersea cables through the SOE and assuming significant fees.
	Not market-based profitability is required for the SOE (e.g. no minimum expected rate of return for SOEs)	SOE can continue operations indefinitely despite exhibiting substantial losses over time.
		SOE is required by law to report NPV>0 of investments, but it is not enforced by the competent authorities.
	Clearance and explicit permits for operation are issued or granted by the SOE.	Documents, clearance and explicit authorizations from SOE are needed to operate in specific segments (e.g. endorsement of the SOE to enter use specific ports).
	Lack of separation between commercial and non-commercial operations.	SOE engages in operations in both commercial and non-commercial sectors (e.g. railways infrastructure operation and railway passenger transport) that can create the ability to cross-subsidize.
	Asymmetric rules and conditions faced to compete in procurement process vis-à-vis SOEs.	Absence of competitive bidding process and lack of transparency when defining the provider of a good or service related to a government program.

Source: authors' elaboration adapted from MCPAT (World Bank, 2018) and competitive neutrality check list applied in several CPT analytics.

Case studies: Market distortions and barriers faced by private investors in presence of SOEs

A current SOE operating in the dairy sector in Nepal illustrates market distortions arising from rules that limit entry and reinforce dominance. In this case, there are import barriers for powder milk, which is a critical input for obtaining processed milk, especially when raw milk is scarce. In addition, all FDIs are banned for the milk industry. The dairy SOE in Nepal is the largest company with more than 63% of the total production (including processed milk, yogurt, cheese, and butter), but operates with the second highest losses among all public enterprises. Although the private sector could bridge a substantial production gap (shortage is above 100,000 liters per day) and bring productivity enhancing methods and increase quality standards, FDI and import barriers, among other constraints, curb the potential of private investors in this sector.

The case in Lesotho highlights that such barriers can also arise from domestic regulatory requirements. Even in the absence of FDI or import restrictions, the cumbersome legal requirements established in the domestic markets, including minimum capital requirements and expensive license procedures, inhibit or deter entry of interested investors as shielding mechanisms for the SOE operation. In Lesotho, for example, licenses for mobile operators are only granted to foreign companies that are already incorporated locally to provide services. It is expected that private companies incur in substantial sunk costs to install operations even before having full certainty about the issuance of the license to finally get the right to operate in the market increasing significantly the entry costs for a foreign firm interested in competing vis-à-vis a SOE.

Case studies from The Gambia and Lesotho showcase the effects of rules that increase the cost of the private sector to compete due to SOEs operating essential infrastructure in the telecom sector. In both countries, private competitors in the telecommunication sector require explicit authorization for accessing undersea cables to be able to offer reliable and high-speed connections. However, SOEs operate as the gateways that ultimately provide these connections to private competitors and can potentially influence the access rules (e.g. connection fees).

The intersection of the role of government as a market player through the SOE and as a regulator is another mechanism that can create an uneven playing field and impact the ability of the private sector to compete. When the borderline between role of the government as market player, owner, and regulator is unclear, the private sector could confront undue advantages in the marketplace. For instance, the government can favor SOEs through waivers for specific legal requirements, ceding the power to issue licenses, granting exclusivity contracts for supplying specific sectors (e.g. procurement processes), or giving special voting power in regulatory committees. In Kenya, there is some suggestive evidence of these despite the presence of potential private providers. The Kenya Seeds Company (KSC) participates in both commercial (e.g. certification, packaging, processing seeds) and non-commercial activities (crop breeding). The government of Kenya provides subsidies to farmers supplying seeds, which are directly provided by the SOE. In addition, the KSC sits on the regulatory committee for seed merchants, which proposes the seed policy, certification standards, and formulates the certification fees that apply for private companies in the sector. In South Africa, Transnet is the SOE involved simultaneously in the ports operation and the sector regulation (Nyman & Koschorke, 2019). This

double-role has translated into a continuous conflict of interest and risk of anticompetitive conducts, which is been investigated for the competition authority given the excessive pricing and exclusionary practices against their private counterparts (World Bank, 2019i).

The consequences of these distortions do not only affect private investors; downstream industries and final consumers can also be impacted by altered market dynamics in presence of SOEs. The absence of private investments and the low entry of productive and competitive companies in sectors dominated by SOEs or underperforming SOEs can translate into higher prices, lower performance for interconnected and enabling sectors (e.g. logistics, telecommunications), lower productivity, shortages, and low-quality standards, which impact the competitiveness of several interconnected industries as well as access for consumers.[37] Some case studies are described below in the Box 3 as examples of how specific distortions connect with disordered market outcomes. Table 5 shows the interaction of the different distortion channels described. Finally, Table 6 shows the market outcomes related to the presence of distortions in each case.

Box 3. Examples of distortions and market-outcomes consequences

Dairy (Nepal)

The Dairy Development Corporation (DDC) is a full state-owned SOE that operates in the segments that can be considered as fully commercial and attractive for the private sector (e.g. milk collection, processing milk, producing dairy products as yogurt, cheese, butter, etc.). The SOE is the largest company in the sector accounting for 63% of the total production of dairy products. The SOE benefits from regulatory protection including FDI bans for all milk businesses and as member of the National Dairy Development Board (NDDB) participates in pricing policy recommendations. Still, it makes significant losses. Private investors are affected by additional government interventions, such as import bans of key inputs (e.g. milk powder) to bridge local shortages. There is a daily shortage above 100,000 liters. Final consumers are affected by high prices, processed milk shortages, and quality and sanitation concerns.

Logistics (Ethiopia)

The Ethiopian Shipping and Logistics Enterprise (ESLSE) is a fully owned SOE and is currently the only authorized operator for the provision of multimodal transportation services. The SOE has a *de facto* monopoly and benefits from regulatory protection in several segments where it competes with the private sector. For instance, private companies that require foreign exchange for import transactions through commercial Ethiopian banks can only provide sea transportation services for those loading ports where the SOE has no operations registered. Even in that case, the importer still needs a waiver from the SOE to be able to transport the freight and all sea transport services require a *bill of lading* – a customs clearance document- that is provided by the SOE. The government directives promote that maritime transportation of shipments under public procurement only employ services of logistics from the SOE. The SOE's installed capacity and quality of services is limited and some ports and more efficient routes are not covered, which impact private companies with extra shipping costs (between 30%-50%) and constant delays. The performance of the logistic sector is low compared to other landlocked countries. As of 2018, Ethiopia ranked in the position 131 among 167 economies in the logistics performance index (World Bank, 2018b)

[37] In 31 economies in Africa, state-owned telecom incumbents are either dominant or exclusive monopolistic privileges in other digital infrastructure. See https://techcentral.co.za/we-name-africas-telecoms-deliquents/46200/.

Seeds (Kenya)

The Kenya Seed Company (KSC), is a state-owned company that operates not only in the segment where it serves a valid public policy objective (crop research, which offer an economic rationale for its operation), but also accounts for large market shares in commercial segments that can be typically be served by the private sector (e.g. seed multiplication for certification, processing and packaging, importation, marketing and distribution). For instance, the SOE holds the largest share in the seed production segment in the most relevant crops (64% for maize, 50% for beans, 70% for cowpeas). Although private companies have increasingly registered into the market (more than 143 by 2018), most firms are operating as seed merchants rather than breeders or producers. Only 13 private companies produce their own seeds (breeders), meanwhile the SOE enjoys exclusive access to breeding programs through other government agencies. The seeds varieties provided by the SOE are among the most demanded by local farmers. Private seed companies face higher prices as the government holds down the prices for the SOE and implemented long and expensive license procedures to access the market (e.g. maize seeds). Moreover, the SOE sits in the regulatory committee that decides on permits and certifications required to private peers. Market outcomes (low varieties for some types of soil and climate) suggest that the SOE is not fulfilling its public policy objectives and in this critical input sector and affecting downstream productivity.

Mobile telecommunications (The Gambia)

Gambia Telecommunications Cellular Company Limited (GAMCEL) is a state-owned company that provides mobile phone services in The Gambia. It competes with other three private operators. Despite the attempts of privatizing it in 2007, the government revoked the transaction in 2008 arguing fundamental breach on the contract. As of 2019, the government owns 99% of the company. GAMCEL is the second largest operator measured by the number of total subscribers. GAMCEL is a subsidiary of another SOE, the Gambia Telecommunications Company (GAMTEL). Through the latter, the government controls the main telecommunication infrastructure assets holding the largest ownership shares (49%) of the fiber-optic cable that connects the country with the African undersea cable. GAMCEL can *de facto* access free of charge to the fiber network managed by GAMTEL, while private operators are required to obtain leasing licenses and to pay connection fees. As of 2017, the GAMCEL payable accounts to GAMTEL for connection and premium wholesale inputs amounted USD 7.8 million, which is perceived as an implicit subsidy that is not available for private competitors. Yet, GAMCEL is facing significant financial constraints and is performing below its private competitors in terms of investments, quality and efficiency. GAMCEL investment in 4G networks has been limited and is below its private competitors. In 2017, GAMCEL was ranked in the last place among all operators by the regulator agency according to the quality and efficiency indicators. Final consumers experience partial network coverage, high prices, and slow connection speeds for mobile-cellular services compared to the regional average.

Mobile telecommunications (Lesotho)

Econet Telecom Lesotho (ETL) is a majority-privately owned company. However, the Government of Lesotho (GoL) retained 30% of the ownership after the privatization efforts in early 2000s. ETL participates both in the fixed and mobile telecommunication segments. In the former, ETL has a *de facto* monopoly, since private and licensed operators do not consider attractive to offer fixed-lines vis-à-vis mobile services. In the mobile segment, there is *de facto* a duopoly between ETL and a private company VODACOM LESOTHO (VCL), whose market shares in 2016 were 23% and 76%, respectively. Although there are other two licensed private companies (ComNet and Leo), several distortions seem to prevent them from gaining a higher share in the market. First, VCL and ETL operate as the international gateways that connect the minor private operators to the undersea cables. Second, the electromagnetic spectrum is allocated between the leading companies, VCL (49%) and ETL (51%). Third, the monopoly in the fixed segment of ETL guarantees its exclusive access to the offshore international cable EASSY. Moreover, the GoL signed international loans for supporting ETL infrastructure projects, whose accumulated debt to the government exceeds USD 27 billion. Yet, ETL is not making profits and is failing to pay dividends. Weak competition and the presence of SOE related distortions is affecting final consumers with high prices, unreliable and low speed connections that are becoming key constraints for a greater digital adoption (33% of internet penetration rate compared to Botswana and Namibia above 60%).

Source: Markets and Technology unit analysis.

Table 5. Examples of barriers to private investors and market distortions in presence of SOEs

Streams of market distortions	Barriers faced by private investors	Dairy	Logistics	Seeds	Mobile telecommunications	Mobile telecommunications
		Nepal	*Ethiopia*	*Kenya*	*Gambia*	*Lesotho*
I. Rules that reinforce SOE dominance or limit entry into the market	**FDI restrictions**	*FDI bans in all milk industry*	*Bans until 2018, as of 2019 FDI cap of 49%*			
	Import restrictions	*Import bans on substitute inputs (powder milk)*				
	Licenses and permits to enter into the market			*License requirements for imported seeds and foreign competitors can take 3+ years*		*Licenses are granted to foreign companies only if they are already incorporated locally to provide services*
	Pricing mechanisms and regulation influenced by the SOE	*SOE sits in the regulatory board and participates in pricing policy recommendations*		*SOE sits in the regulatory committee and can influence relevant market variables and licensing requirements for private competitors*		

Table 5. Examples of barriers to private investors and market distortions in presence of SOEs (continued)

Streams of market distortions	Barriers faced by private investors	Dairy	Logistics	Seeds	Mobile telecommunications	Mobile telecommunications
		Nepal	*Ethiopia*	*Kenya*	*Gambia*	*Lesotho*
II. Rules that are conducive to increase the costs to compete vis-à-vis an SOE	**Asymmetric access to productive resources and essential inputs**				*Network infrastructure projects for broadband services are supported by government-arranged credits* *SOE have access free of charge to wholesale inputs that are costly for private competitors*	*SOE get access to credits for infrastructure development and government-backed loans to increase network coverage*
	Access for the private sector to specific inputs is controlled/influenced by the SOE				*Private operators require connection to the undersea cable through the SOE*	*SOE intervenes in the management of the facilities to connect private providers to high-speed undersea cables*
	No minimum expected rate of return	*SOE is operating with second highest deficit among government agencies*				

Table 5. Examples of barriers to private investors and market distortions in presence of SOEs (continued)

Market distortions type	Barriers faced by private investors	Dairy	Logistics	Seeds	Mobile telecommunications	Fixed-Mobile telecommunications
		Nepal	*Ethiopia*	*Kenya*	*Gambia*	*Lesotho*
II. Rules that are conducive to increase the costs to compete vis-à-vis an SOE	**Licenses and permits to operate**		*Private companies that require foreign exchange from Ethiopian Banks can only operate in ports where the SOE has no operation.* *The SOE provides the bill of lading – a customs clearance requirement*			
	Lack of separation between commercial and non-commercial operations			*SOE engages in crop breeding (public policy objective) and simultaneously participates in certification, processing and packaging, importation, marketing, etc.*		
	Procurement mechanisms		*Shipments under public procurement should go through the SOE*	*Government subsidies granted to farmers are provided by seeds from the SOE*		

Source: authors elaboration based on case studies developed by the Markets and Technology unit following MCPAT framework (World Bank, 2018)

Table 6. Examples of potential distortions and effects on market where there is SOE presence[38]

Market consequences	Dairy	Logistics	Seeds	Mobile Telecommunications	Fixed-Mobile telecommunications
	Nepal	Ethiopia	Kenya	Gambia	Lesotho
Installed capacity		*Some ports and more efficient routes are not covered*		*Limited infrastructure deployed in 4G technologies*	
Prices	*Milk prices among the top 10 countries with the highest prices for whole fresh milk since 2016*	*Private importers and exporters face extra-shipping costs of 30-50%*		*Among countries in the African region with the highest prices for the mobile services*	*High mobile voice prices and data prices compared to best performers in Africa RAMP index.* *Average fixed broadband prices are 30% higher than in Sub-Saharan Africa*
Timely delivery		*Constant delays in shipments*			
Quality	*Health and sanitation concerns for final consumers*	*Low performance logistic indicator (ranks Ethiopia as 131 among 167 economies)*		*Unreliable connectivity, low connection speeds*	*Unreliable connectivity, low connection speeds*
Shortages	*Daily shortage above 100,000 liters of milk.*				
Productivity			*Yields (hg/ha*[39]*) are below the reported by other Sub-Saharan countries.*		
Coverage				*Limited access to telecom in rural areas (one of the most disconnected regions in the world)*	*Low internet fixed broadband penetration rates compared to Sub-Saharan countries.*

Source: Markets and Technology Unit

[38] These case studies were conducted as part of identifying examples of distortions that arise in the presence of SOEs. The analysis was done with qualitative methods, so we cannot presume causality and the objective is rather to showcase that these distortions are present in markets where SOEs operate and there may be facilitating factors (red flags) that contribute to the risk of such distortions arising.

[39] Yield for main crops is measured as hectograms per hectare (hg/ha) from (FAO, 2019)

Potential effects of SOEs on the market

Under certain circumstances including presence of market failure and the lack of commercial viability, well managed SOEs could fill and investment gap and promote development in key markets. In the presence of natural monopolies, public goods, where there are geopolitical or national security objectives to be protected, or when the commercial viability is limited, SOEs could play a key role to fill the investment gaps, open and create new markets, and protect geopolitical sensitive assets (e.g. ports in FCV countries). The intervention of well managed SOEs following a clear rationale and under a level playing field can enable further private investment. Furthermore, SOEs could be play a role as pioneer in new markets or segments where financial gaps are prominent such that SOEs could open new markets and mitigate risks for private investors that could enter in the market afterwards. For example, in infrastructure projects that are capital intensive and SOEs might be the only viable option given potential uncertainty and lack of competitive returns to attract private investors.[40]

However, when operating in sectors where there is commercial viability and benefiting from an unlevel playing field, SOEs in the markets could potentially undermine the performance of a specific market/sector, impact downstream industries, and global markets. As illustrated in Table 6, the presence of market distortions arising from SOE activity can result in higher prices, shortages of inputs and final products, reduced productivity, limited infrastructure investment, and low coverage of essential services, which ultimately can shape both the upstream and downstream markets. Particularly, the distortions in enabling sectors such as power generation, transportation (e.g. maritime freight), water, digital infrastructure, and (air)ports can refrain the development of other potential sectors and export locomotives (e.g. agribusiness, manufacturing, tourism and digital services). For example, the dominance of the telecommunication SOEs in Indonesia (Telkom and Telkomsel) has translated into lack of nationwide broadband backbone connectivity, underdeveloped last-mile fiber-optic and broadband networks, which represents an obstacle for the development of the digital economy (World Bank, 2019). Likewise, in Bangladesh, many power plants cannot generate electricity as specified in term of power and thermal efficiency and daily shortages are common. In Rwanda, the costs, reliability of service and connectivity (only 35% have access to electricity) are also potentially correlated to the presence of SOEs (World Bank, 2020). Furthermore, the distortions created by SOEs and underperformance could have spillover effects on global markets, when these companies act as exporters (i.e. arms' length) or through subsidiaries located in foreign markets.

The presence of market distortions associated with SOEs could hamper the competitiveness of a whole country. SOEs-related distortions in a specific segment can spread across related and unrelated value chains and represent significant productivity and competitiveness losses for the whole economy.[41] For example, in Ethiopia exporters and importers experience on average extra shipping costs between 30% and 50% as potential result of the intervention of the SOE in multimodal transportation services. As a result, Ethiopian companies face higher costs for importing inputs and delivering into foreign markets lessening their competitiveness in both domestic and foreign markets. Similarly, in South Africa, the operation of an SOE simultaneously as port operator and regulator has created a significant conflict of interest and risk of anticompetitive practices (e.g. excessive pricing and exclusionary practices in port

[40] The commercial viability and ultimate interest of the private sector to enter in certain sectors will vary on the market size, expected profitability, geography, political risk perception in addition to the socio-economic context. These elements should be considered as part of the analysis of the CPSD TTLs to assess the viability of promoting private sector participation in certain sectors.

[41] For instance, significant GDP gains can be obtained increasing the SOE efficiency in developing economies: An increase of SOE efficiencies by 5% could represent GDP gains that vary from 1% of the GDP in Pakistan, 1.4% in Bolivia, 2% in Mali and Turkey, up to 5% in Egypt. (World Bank, 2019c)

businesses), which has translated into port fees that are 88 percent higher than the global average (World Bank, 2019i), (Nyman & Koschorke, 2019).

Similarly, inefficiencies of SOEs can stifle private investment and economic development. In Tajikistan, the SOE (Tajik telecom) enjoys an unregulated monopoly for internet traffic and the international calls gateway World Bank (2019e). The development of the internet market in the country is limited and there are unexploited opportunities for development since potential optic connections to China, which could reduce the costs of traffic and improve quality and speed of services, were blocked (World Bank, 2019c). In The Gambia, the distortions related to the SOE unfold into higher costs for accessing mobile data, exceeding 10 percent of the GNI per capita and the international standards for affordability, lowering digital adoption and slowing down the development of communication platforms (Alliance for Affordable Internet, 2016; Freedom House, 2016).

Market distortions created domestically can also extend and impact consumers and companies abroad and even lead to international trade disputes. The asymmetric support of the government to owned companies, for example in the form of subsidies or loans, can reduce costs artificially and create an undue comparative advantage for SOEs vis-à-vis private peers. These effects are not limited to domestic markets. There are two potential channels for extending uneven state-aid related distortions to cross-border markets: the trade channel when the SOE exports to third markets (arm's length) and the subsidiary channel when the SOE install operations in a third market (analogous to a branch for a private enterprise). Regarding the first channel, some evidence suggest that manufacturing locomotives such as motor vehicles, in which SOE participation is around 20%, account for 12% of the world trade, as well as service sectors with the highest SOE participation (e.g. civil engineering and technical testing and analysis) account for approximately 21% of the world service trade (Kowalski, 2013). Likewise, about 90% of the SOEs analyzed across 38 OECD and non-OECD economies declared to have at least one subsidiary in other markets highlighting the relevance of this operational extension on SOEs, although private companies are more prone to this type of operations (Kowalski, 2013).

The distortive potential of SOEs in third markets is highly discussed and included in the negotiations of international trade agreements in order to guarantee that foreign SOEs do not have any undue advantages in the local context that can be disseminated to third markets. For example, the Transpacific Partnership (TPP) contains provisions to ensure competitive neutrality such that SOEs cannot use their monopolistic position or receive non-commercial assistance to cause adverse effects to another TPP party (Martinez, De Aguiar Falco, & Millares, 2016).[42] Moreover, the World Trade Organization (WTO) imposes obligations on member governments such as subsidy disciplines applying to SOEs and, non-discrimination clauses to limit the use of SOEs as vehicles to influence international trade (Kowalski, 2013).

[42] Examples of non-commercial assistance include direct transfers of funds or potential direct transfers of funds or liabilities, and goods/services other than infrastructure on terms more favorable than those commercially available to the enterprise. (Martinez, De Aguiar Falco, & Millares, 2016)

3. Policy routes for SOE reform to improve private sector participation

Diverse instruments of reform and mitigating mechanisms can prevent and curtail potential distortions and unintended market consequences related to SOEs. As diverse as the set of sectors with SOE presentation, the degrees of contestability in the markets and the potential distortions, as diverse are the policy alternatives to address them. Evidence suggests that there is no *one size fits all* solution to lessen the barriers for private sector participation in the presence of SOEs. Solutions vary depending on the degree of effective management, independence, profit orientation, and asset ownership (Asian Development Bank, 2008). For mitigating market distortions, fostering contestability, and attracting private sector participation in presence of SOEs, there are various alternatives to introduce market discipline in SOEs, ranging from corporate governance reforms (e.g., introduction of good corporate principles), regulatory reforms (e.g. competitive neutrality), management arrangements (e.g. concession and management contracts), joint-ventures and PPPs, and partial or full divestiture.[43] All these instruments can shape the incentives on SOEs to improve performance, attract further private investment and promote a market-based dynamic. The following subsections describe different alternatives for SOE reform, especially those focused on attracting private investment and engaging the private sector. Different vehicles of reform are discussed below referring to evidence from across the globe to determine what type of interventions and policy alternatives can be explored to mitigate the distortive potential of SOEs in the markets. Evidence suggests that ownership *per se* might not solve all the potential sources of distortions for private investors unless the market incentives change as well.

A broader concept of privatization: breaking the paradigm and opening a role for the private sector beyond ownership

The private sector does not only benefit from SOE reform, but it is a strategic ally to help mitigate the distortive potential of SOEs. When thinking about policy reforms to solve market distortions associated with the presence of SOEs, a common concept arises among policymakers - *Privatization*. Traditionally, privatization has been associated with change of ownership through divestiture, which shifts the partial or full ownership of the SOE from the government's hands to private investors. However, fostering private sector development through SOE reforms require a broader approach beyond ownership and therefore understand privatization as a broader concept that aim to engage private sector participation through different mechanisms even when there is no ownership transformation. CPSD team should focus on how to restructure the market incentives and market dynamics, even if that does not necessarily imply a change of ownership. Just as state ownership does not solve market failures *per se*, neither does private ownership. However, changing the incentives for the operation of the market players independently of the ownership structures can be a powerful mechanism to address market distortions. This change in the incentives of operation for SOEs can occur jointly through the adoption of good corporate governance practices to promote day-to-day operational autonomy and through regulatory and sectoral reforms to foster market-based decisions and more contestable markets.

[43]Fiscal and public financial management measures are also part of the routes of reform for SOE aimed to limit the possible negative impact on fiscal stability and macroeconomic performance. Although public investment management reforms (PIM) are a significant route of SOE reform with importance consequences on macroeconomic performance, this document focuses on the reforms that can have a direct impact at the microeconomic level, restructure the market-based incentives and level the playing field for private investors. A full guidance on how to assess fiscal implications of SOE reforms is developed in the Module 2 of the iSOEF (World Bank, 2019m).

The specific venue of participation of the private sector might also vary depending on the degree of contestability of the markets (e.g. natural monopolies vis-à-vis commercial sectors) and regulatory framework. Depending on the market characteristics and legal conditions, the room for incorporation of the private sector vary across sectors. In some cases, private sector competition will not be viable due to constitutional constraints or due to the features of the market (e.g. in segments that feature a natural monopoly). Yet, private participation can be feasible through other mechanisms such as private-public partnerships or management contracts when the governments could maintain partial operational and ownership control.[44] The role of the private sector and investment can take place through at least three different vehicles (i) ownership change (e.g. full/partial sale), (ii) management and partnership arrangements (e.g. management contracts, concession, PPP), and (iii) greenfield reforms that allow private competitors to enter and expose SOE to competition pressure particularly in contestable and fully commercial sectors. An overall summary of the market scenarios and other pre-conditions is provided in Table 7.

[44] The political and socio-economic context will influence significantly in the willingness and viability of the implementation of intermediate solutions such that the government could relinquish part of the control to private operators.

Table 7. Policy alternatives for SOE reform (summary)

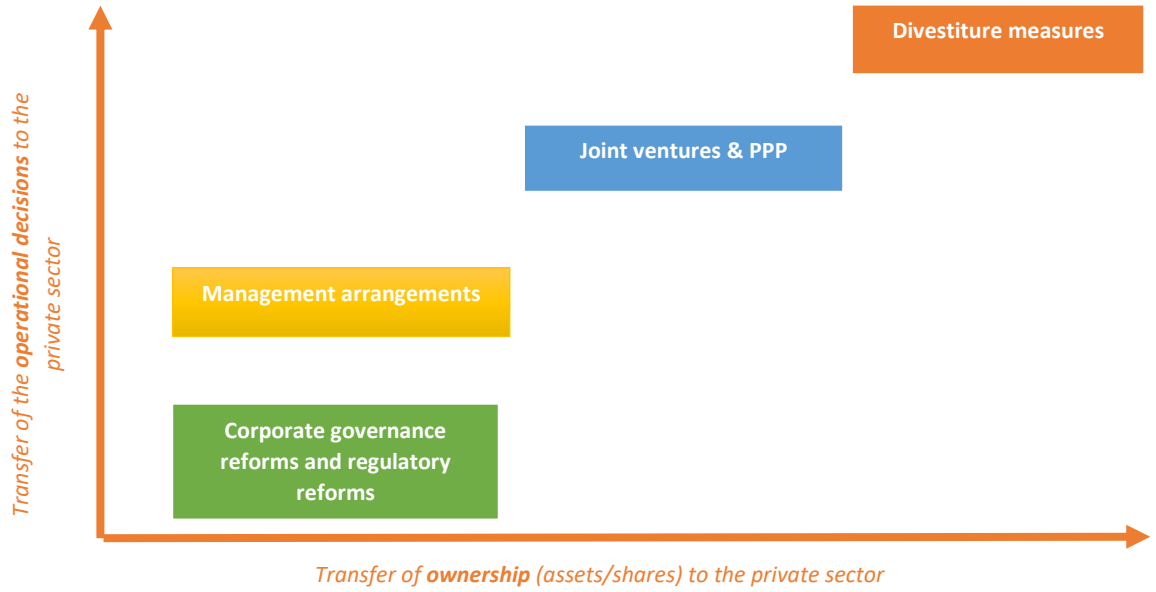
Role of the private sector	Instrument of reform	Vehicles for higher private sector participation	Suitable for…			Ownership transformation	Probability to change structure of incentives in marketplace	Complementary measures suggested
			Natural monopoly	Contestable sectors	Fully Commercial sectors			
As competitor of the SOE	Regulatory and institutional reforms towards market-discipline	Implementation of competitive neutrality principles		X	X	Low	High	Improve enforcement capability (e.g. competition authority, oversight entities) to follow-up market-based incentives are in place.
		Greenfield reforms		X	X	Low	High	
		Corporate Governance Reforms	X	X	X	Low	High	
As manager of the SOE	Management arrangement	Service contracts	X			Low	Low	Regulatory framework that mitigate rent-seeking behaviors or private managers (e.g. price controls), regulatory changes to reduce influence of SOE over key market variables (e.g. SOE determination of prices), and close performance monitoring. Implementation of good corporate governance practices.
		Management contracts	X	X		Low	Medium	
As partner or temporary owner and manager of the SOE	Joint-ventures & Public-Private Partnerships	Joint ventures	X			Medium	Medium	Bidding procedures to ensure transparent and competitive selection of private partners. Regulatory framework of PPPs should be aligned with competitive neutrality principles. Implementation of good corporate governance practices.
		Concessions, build- and similar	X	X		Medium	Medium	
As long-term owner and manager of the SOE	Divestiture	Auctions	X	X	X	High	Medium	Unbundling commercial and non-commercial activities to foster private sector participation in different segments. Reforms in the regulatory framework to avoid abuse of dominant position of private monopolies. Competitive neutrality principles implemented to avoid undue comparative advantages of resulting privately-owned company. Implementation of good corporate governance practices.
		Direct sale	X	X	X	High	Medium	
		Stock offering	X	X	X	High	Medium	
		Liquidation	X	X	X	High	Medium	
		Management/employees buy-outs	X	X	X	High	Low	
		Free or low-cost distribution of shares	X	X	X	High	Low	
		Capitalization	X	X	X	High	Medium	

Source: Markets and Technology unit

Ownership is associated with efficiency and performance of a sector, but it does not solve all potential sources of distortions and it is not an exclusive channel to improve efficiency and market dynamics. Evidence suggests that compared to private ownership, government ownership relates to an inferior performance (Wang & Shailer, 2018; Bajo, Zuber, & Primorac, 2018; IMF, 2019) and is more prone to experience financial distress than their private peers (Melecky & Sharma, 2019). However, changing the ownership structure alone is not a sufficient condition to eliminate market distortions, and therefore require further changes on the market incentives and interactions. For instance, despite the wave of SOE divestiture in China, the government continued favoring the former state-owned companies by low interest loans and subsidies compared to private peers (Harrison, Meyer, Wang, Zhao, & Zhao, 2019). In other cases, such as Senegal (water) and some countries in the LAC region (railways), despite no ownership changes (i.e. government retained the property of the assets and infrastructure), the private sector performed a significant role simulating a market dynamic by acting as manager and investment partner to improve the functioning of the SOEs through concession contracts.

When focusing on how to restructure the market incentives beyond the ownership structure, different policy alternatives emerge for addressing SOE market distortions and boost private sector participation. Promote private sector participation refers to a broad spectrum of activities that lessen the government´s involvement in the provision of goods and services (Irving, 1995)**.** As shown in Figure 4, there are multiple arrangements to engage private sector participation in the presence of SOEs depending on the degree of ownership and influence on operational decisions of a firm. Often, attracting private sector investment is often understood as a synonym of divestiture, which implies the transfer of both assets and operations from the government hands to a private firm through auctions, direct sales of assets/shares, public offering in stock markets, liquidation, among others. Nonetheless, there are other potential alternatives, even without transferring operational decisions or asset ownership that can spur significant efficiency gains and foster private sector development. Ranging from lesser private ownership participation towards larger ownership (from left to right in Figure 4) and depending on the degree of private-sector engagement in the managerial and operational decisions (from bottom to top in Figure 4), alternatives for further private sector participation include regulatory and institutional reforms, management arrangements, public-private partnerships and joint-ventures, and divestiture measures.

Figure 4. Strategies for promoting higher private sector participation - spectrum of private sector engagement in SOE reform[45]



Note: *In divestiture measurements, private participation can be partial/full.
Source: authors elaboration

The role of private investors and instruments to mitigate market distortions in the presence of SOEs can vary depending on the overall private sector participation strategy. As illustrated in Table 8, regulatory and corporate governance reforms constitute a first approach to attract higher private investment without intervening in the ownership or managerial structure of an SOE. In this case, the private sector can play a fundamental role as a competitor of the SOE and contribute to restore market incentives. Regulatory and institutional reforms including the implementation of good corporate governance practices are powerful tools to redefine the incentives faced by the state-owned enterprises, promote competition and contestability of the markets, and improve performance when properly enforced. Regulatory changes introducing competitive neutrality principles that level the playing field and greenfield reforms that allow private operators to enter in contestable or commercial sectors (e.g. agribusiness, air transportation, manufacturing of beverages) reserved formerly to the public sector are examples of these set of instruments to promote the role of the private investors as competitors. Similarly, good corporate governance practices can contribute to bring a market-oriented perspective to improve efficiency, performance, profitability and transform SOEs into more commercially oriented and well performed firms.

The private sector can also perform a critical role in bringing a market and profitability perspective when managing the operations of SOEs. A second approach to promote efficiency-based decisions is to engage private companies through management contracts. In this scenario, the government retains the ownership of the assets and policy control over public facilities, whereas the private sector leads and manages the operational decisions of the SOE. Management contracts are particularly relevant where there is no political consensus or interest in transferring assets to private owners, but the government is

[45] Aligned with the recommendations of the (World Bank, 2020), this framework proposes a cascade approach to offer clients the options for SOE reform that can mobilize both private financing and capacity through ownership reform.

willing to shift the responsibility and part of the management costs to a third party (Prokopenko, 1995). The independence of day-to-day managerial decisions from government intervention through private management and accompanied by corporate governance reforms can provide expertise for specialized functions and commercial development, reduce costs, optimize efficiency, streamline operational decision making, and bring an increased emphasis on revenue enhancement, commercial and economic development (Ernico, Boudreau, Reimer, & Van Beek, 2012). Although the implementation of managerial arrangements might not require a sophisticated framework, a well-developed capacity for contract design and regulatory framework that limit the rent-seeking behavior on private operators as well as promote close performance monitoring is key in order to yield the expected results.

Private investors can also perform a key role as partners in infrastructure development and the provision of goods and services in joint efforts with the government while delivering goods and services in an efficient and cost-effective manner. Fostering private-public partnerships and contractual consortiums or concessions constitute another alternative for involving the private sector while reducing the government control in day-to-day interactions, promote market-based dynamics and reshape the incentives for SOE operations in the market, especially when complemented with corporate governance reforms. These partnerships allow private counterparts to contribute with financial, technical and managerial resources and share risks and rewards with the government, without relinquishing fully the control of the entity (UNDP, 2000). This strategy is particularly suitable in situations where governments face financial constraints to raise debt and devote resources to respond to the investment needs and improve service. The private sector plays a key role in bridging the gap between the investment requirements and ensuring that infrastructure and services can be delivered by more-efficient and reliable services (Saussier, 2013) (Carbonara, Costantino, & Pellegrino, 2014). Concessions and consortiums (e.g. Build-Operate-Transfer and similar) are examples of public-private partnerships, which can create channels for transferring know-how, management and marketing techniques and increase capacity within the SOE to operate more efficiently and under market incentives. To foster private sector development, PPP should be considered as potential solutions in sectors prone to natural monopoly structures, where competition in the market is not feasible and the selection of private partners should be selected to ensure competition for the market (World Bank, 2019e). However, PPPs should also be assessed in detail to minimize the creation of perverse incentives to governments when there are important fiscal implications of this type of measures.

Finally, the private sector can exert a role as ultimate and long-term owner and manager of the entity in question, when both assets and operations are transferred to private operators through divestiture measures. Divestiture involves the transfer of both assets and operations of an SOE to private investors. The allocation of assets and decision-making power to private investors can take different forms depending on the trade-off between the profit orientation and, 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 (e.g. vouchers to employees) but impacts substantially the government revenues and might not change substantially 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 (e.g. workers and civil opposition). 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. Complementary regulatory measures are also required to ensure market contestability in contestable and fully commercial sectors and mitigate further obstacles that could prevent entry or competition from other private counterparts.

Similarly, price and quality regulations might be required to mitigate potential abuse of dominance when transferring a public monopoly to private owners.

Table 8. Role of the private sector and potential venues of privatization

Role of the private sector	Alternative of reform	Description	Vehicles for higher private sector participation
As competitor of the SOE	**Regulatory and corporate governance reforms to bring market-discipline**	Exposing State-enterprises to market discipline and competition from the private sector[46]	**Implementation of competitive neutrality principles (e.g. Hard budget constraints, market-based decisions for accessing to loans, credits, inputs, etc.)**
			Greenfield reforms
			Corporate Governance reforms
As manager of the SOE	**Management arrangement**	Retain government ownership and policy control over public services, facilities and assets, while obtaining the benefits of the private sector management and operation for a specific period.	**Service contracts**
			Management contracts
			Concession and lease contracts
As partner or temporary owner and manager of the SOE	**Public-Private Partnerships**	Private and public sector provide jointly financial, technical and managerial capacities for the provision of goods and services, and the government does not relinquish all control of the entity.	**Joint ventures**
			Concessions and similar)[47]
As long-term owner and manager of the SOE	**Divestiture**	Assets and operations are transferred to private investors with the incentive to improve performance.	**Auctions**
			Direct sale
			Stock offering
			Liquidation
			Management/employees buy-outs
			Capitalization
			Free or low-cost distribution of shares

Source: authors elaboration based on (Prokopenko, 1995)

[46] Due to the market characteristics of natural monopolies, this type of solutions is suitable for contestable or fully commercial sectors.

[47] Build-Operate-Transfer (BOT) and Build-Own-Operate (BOO) contracts are often used to refer to greenfield concessions and therefore as a subtype of management arrangements. However, under the framework proposed, the classification keeps these types of arrangements as part of the PPP measures as they could imply a transfer of assets to private operators specially those built under the concession.

Fostering private investment: Different vehicles for private sector participation, challenges and country examples

Corporate governance reforms and regulatory reforms

Private sector participation in commercial and contestable sectors can be enhanced - even without transferring ownership of the assets or decision-making power – by reforming the corporate governance of the SOEs and introducing regulatory changes. Reforming the regulatory and institutional framework is a powerful mechanism to introduce market-based incentives and good corporate governance practices as venues to remove barriers to private participants in the respective sector. This option is often employed when there is an interest in improving SOE performance, in the absence of political consensus to pursue a transformation in the ownership structure or intervene in the managerial structure. Part of the inefficiencies and market distortions in presence of SOEs arise from the lack of competition and the lack of economic pressures from the market to operate within hard budget constraints (Prokopenko, 1995). Regulatory reforms can promote private sector development and contestable markets introducing competitive neutrality principles that expose SOEs to market discipline by allowing the entry of private competitors and strengthening incentives to improve performance. Similarly, corporate governance reforms can be essential to increase accountability and transparency. Due to the market characteristics, these types of reforms are mostly suitable for commercial and contestable sectors and where the regulatory framework is pre-identified as a binding constraint for private investors (e.g. FDI restrictions, exclusionary rights granted to SOEs in commercial segments).

Shaping regulatory reforms around competitive neutrality principles can be a powerful tool to level the playing field and boost private investment. Following competitive neutrality principles, regulatory reforms can start by promoting, where possible, the separation of commercial and non-commercial activities. This seeks to ensure that the SOE operates in sectors where there is a clear economic rationale or where SOEs are compensated for clearly defined non-commercial activities, while facilitating the entry of private investors to perform the commercial activities. Reforms should also create hard budget constraints to steer SOEs towards market-based decisions and respond to similar incentives as their private counterparts. For this purpose, reforms should establish a minimum market-consistent rate of return for SOEs and grant access to productive resources (e.g. land, infrastructure, labor, capital, subsidies, tax benefits) on similar economic basis as private peers in contestable or commercial sectors (i.e. comparable prices and accessibility terms). In addition, reforms should restrict the use of preferential subsidies or tax treatment towards SOEs (direct or indirect) and promote that the government-backed company and private investors compete on equal terms. Finally, strengthening transparency and enforcement capability of these reforms is key to foster credibility of these measures by the private counterparts and offer them the right incentives to pursue market operations. The economic transformation program followed by Poland in 1991 is an example of how private sector investment improved as result of the imposition of hard budget constraints on SOEs that enhanced the credibility for private investors through the elimination of subsidies, curbed access to credits, and a tightened control of state-owned commercial banks, even when divestiture and governance measures lag (Pinto , Belka, & Krajewski, 1993). Similarly, in Morocco, the corporatization and corporate governance reforms of a state-owned company in the phosphates industry (Office Cherifien des Phosphates) in 2008 improved transparency, financial performance and commercial-based decisions, leading the sector towards highly competitive standards and exporting role (World Bank, 2019d).

Greenfield reforms are also part of regulatory alternatives to allow private sector investors to enter markets that are otherwise reserved for the public sector. Greenfield reforms refer to those initiatives that remove explicit legal restrictions faced by private investors and allowing them to enter and compete vis-à-vis with SOEs. Greenfield reforms often involve delicensing major industries, reducing the number of areas reserved for public sectors, and promoting FDI (Kaur, 2004). Although it might require profound regulatory changes implying even reforms in the constitution (e.g. in Bolivia, the Constitution reserves the main utilities sectors to the government provision), these reforms can create competition and steer SOEs in an efficiency-enhancing path (Kaur, 2004). Complementary measures such as the establishment of a strong competition authority, an independent regulator and oversight authorities might be needed to enforce the law and prevent anticompetitive practices. Evidence of these reforms is found in both enabling sectors and commercial sectors. During the mid-1990s, Colombia established a new set of rules for the energy sector. These measures included a new regulatory framework that allowed unbundling former vertically integrated public companies in the electricity sector, foster the entry of private investors, and reformed the incentives to calculate the distribution rates (Chong & Lopez-de-Silanes, 2005). As a result, most Colombian energy SOEs were restructured into power companies in different segments (i.e. generation and distribution) which started to compete among each other and vis-à-vis private operators. In Indonesia, similar reforms occurred in the air passenger industry. In early 2000s, the sector followed a deregulation program to eliminate entry restrictions (e.g. licenses) and eradicate regulatory floor prices in the air-transportation sector. As a result, this country rapidly evidenced the expansion of the sector with increased number of operators, passengers and substantial drop in prices despite the presence of an SOE in the sector (World Bank, 2019). [48]

Corporate governance reforms can also help to create incentives for attracting private investors and force the SOEs to improve performance and mitigate market distortions, when the government intends to retain ownership (World Bank, 2020)**.** The implementation of good corporate governance practices can contribute and complement the regulatory reforms to promote fair competition and mitigate market distortions redefining the rules of operation for SOEs and increasing transparency and accountability. Adopting good corporate governance practices can encourage SOEs to be more effective, compete and increase investors' confidence (Reed, 2002). Corporate governance reforms aim to enhance transparency, accountability of SOEs including the separation of ownership and management and improving corporate disclosure (World Bank, 2020). These reforms contribute to ensure day-to-day autonomy of the SOE, clarifying the SOE objectives, improving the legal framework for SOE governance, separating SOE operations from direct government participation, promoting financial sustaintability, and aligning the incentives with a market-oriented and commercial approach signaling to private investors the orientation of the SOE.

The implementation of good corporate governance practices can pave the path to deeper SOE reforms and deployed as a first engagement that could contribute to mitigate the corruption and influence of the government to successfully implement SOE reforms. Through corporate governance reforms, SOEs could benefit from introducing performance indicators, promoting the separation of the policy and oversight functions from the commercial functions of the SOE (e.g. independent regulator), encouraging the autonomy of the management (e.g. board balanced structure), professionalizing SOE boards and management, and increasing transparency and accountability (e.g. financial reporting obligations, audits and procurement procedures) (World Bank, 2019l). Evidence from the support of WB projects in Serbia jointly with IFC advisory services supported corporate governance reform that brought discipline and

[48] Airlines increased from 7 to 27 between 2000 and 2003, number of passengers tripled between 2001-2005 and airfares dropped substantially (World Bank, 2019).

improved fiscal management that contributed in the preparation of SOEs to further engagement of the private sector (World Bank, 2020). Similarly, recent evidence from Korea (Heo, 2018), Lithuania (Jurkonis & Petrusauskaite, 2014) and Kenya (Miring'u & Muoria, 2011) suggests that size, composition, and independence of the board, quality of the control of performance, corporatization and transparent disclosure practices have a positive impact on SOE performance. Similarly, in Indonesia, SOEs improved their performance as a result of the reorganization and corporate governance reforms, which echoed in profit growth rates over 19 percent between 2004-2009 and increased transparency through reorganization and corporate governance measures (World Bank, 2019). Table 9 summarizes the vehicles of privatization when opting for the route of regulatory reforms indicating main challenges and advantages of each alternative. [49]

[49] Detailed guidance for implementing corporate governance reforms including specific toolkit of reform are thoroughly described in the **Corporate Governance Toolkit** (World Bank, 2019).

Table 9. Examples of regulatory and institutional reforms (pros, challenges and country-examples)

REGULATORY AND INSTITUTIONAL REFORMS TOWARDS MARKET-DISCIPLINE					
Vehicles for private sector participation	**Description**	**Pros**	**Challenges**	**Complemented by**	**Country examples**
Implementation of competitive neutrality principles[50]	Increase the pressure on the SOE to improve performance without having preferential access to subsidies, privileges or forms of capital that allow SOE to compete without improving efficiency. It includes the limited access to subsidies, no procurement set-asides, no favorable exchange rates, and loan and capital decisions based on commercial principles with no government guarantees.	Creates incentives for the SOEs to recover costs and improve efficiency.	- Are difficult to measure and monitor as subsidies (direct/indirect) cannot be uncovered without detailed information of the individual firms. - Requires a sound financial sector to prevent SOE from replace government transfers with soft credits through politically connected companies.	-Improving supervision and regulation to reduce direct credit programs. - Reduction of the interest rate controls to allow the financial sector to allocate capital on market and commercial basis. -Separation of commercial and non-commercial activities of SOE.	**Poland (1991)**: curbed access to credits to SOEs and tightened control on state-owned banks. **India (2000s):** created a new private port rather than bring private participation within the existing SOE, which improved as result of competition. **Burkina Faso (2009):** DPO supported regulatory framework to promote a transparent and competitive tariff setting mechanism for power SOEs. **Vietnam:** DPO promoted power sector reform to adopt market-based pricing mechanisms for electricity.
Greenfield reforms	Allowing private sector to operate in areas reserved for the public sector and remove legal barriers for its operation.	Introduce competition and market-based dynamics from private investors	It might require legislation changes even at constitutional level to allow private companies to enter.	-Stronger competition authority and independent regulators to monitor market dynamics and enforce law in case of anticompetitive practices. -Separation of commercial and non-commercial activities and unbundling commercial segments.	**Indonesia (2001):** deregulation of the air-transportation sector to open to competition and eased entry restrictions (e.g. licenses) and removed floor prices. **Colombia (1995):** New regulatory framework, unbundling electricity segments (generation, distribution), creation of an independent regulator (CREG), new regulatory framework to promote market entry and competition among generators (bid pricing

[50] These instruments as proposed before are part of the instruments of reform understanding privatization as a broader concept that refer to reforms that encourage private sector participation beyond ownership measures. These reforms (e.g. competitive neutrality) can address simultaneously other valid policy objectives (efficiency of spending, delivery of public services etc.) that go beyond the participation of private sector.

					mechanism). **Chile (1980s):** Regulatory bodies created, new regulation introduced and company restructuring process - the 2nd largest power companies were separated into 6 distribution companies and 6 generating companies.
Corporate governance reforms	Set of mechanisms to address agency problems to ensure investors receive a return on investment and lead to better decision making and efficiency gains. These mechanisms include ownership structure, board independence, professionalizing SOE boards, performance monitoring, transparency and disclosure of information (e.g. audits, financial reports), among others.	It can compensate in a considerable extent for the underdeveloped legal and institutional system in transition economies.	Complexity of operating models of SOEs can make the implementation of corporate governance principles difficult.	Changes in legal status of SOE through incorporation of company law principles to strengthen the governance of SOEs.	**Korea, Kenya, Lithuania:** Corporate governance principles such as the independence, size and composition of the board, control of performance and disclosure practices improved SOE operations. **Indonesia (mid-2000s):** Implementation of governance principles improved SOE performance such that profits grew at 19% annual rate between 2004-2009. **Israel (mid-2000s):** Ministries and deputies cannot serve as SOE directors and specific rules are in place to prevent possible conflict of interest. **Sri Lanka:** IFC and WB project for training certification program oriented to SOE board directors to strengthen corporate governance and leadership skills.

Source: authors elaboration based on (Prokopenko, 1995), (Kikeri & Fatima Kolo, 2005), (Chong & Lopez-de-Silanes, 2005), (Jurkonis & Petrusauskaite, 2014), (IFC, 2018), (Miring'u & Muoria, 2011), (Heo, 2018), (Wong & Berg, 2018), iSOEF (World Bank, 2019), (World Bank, 2019l), (World Bank, 2020)

Management arrangements

Where SOE ownership remains unchanged, operational decisions and rules of incentives can improve with private management. Delegating operational decisions to private investors for a specific timeframe can spur efficiency gains as the SOE gets access to sector-specific expertise, innovative management, and sound operational practices. Under management arrangements, the government transfers the responsibly for the delivery of goods or services to a private counterpart while granting the freedom to choose the means for meeting the targets. Management agreements can take different forms depending on the duration, the legal status of the assets built, financing by the private operator, and degree of private contractor responsibility (Guislain & Kerf, 1995). SOE reforms through private management require a sound regulatory framework that limit the rent-seeking behavior of private operators in contestable sectors or private monopolists.

Service contracts are a first management option where the relationship with the private sector is based on the provision of a specific good or service for the short-term without full responsibility for the provision of the good or service. Under service contracts, the private sector can be engaged for a specific period to supply specific inputs and perform specific tasks or services, while the responsibility for the final provision of the good and service remains with the government. To promote competition, such contracts must be allocated based on transparent bidding to attract the best private provider and following objective quality indicators. In the United States, municipalities contracted nearly 25 percent of their services with private operators mainly related to street light maintenance, solid waste collection, road repair; in Chile and Guatemala governments contracted private operators for providing specific subsegments of the services such as water purification, distribution and metering; in Peru, private companies provided computer, billing and collection services for SOEs (Prokopenko, 1995). Although this type of contract can improve efficiency in service delivery and foster private sector participation in a subsegment of the activities conducted by the SOE, it might not change the market incentives, performance and decision-making process within a SOE. Therefore, these instruments could limit the role of the private sector as provider of a limited range of outsourcing activities without removing substantially the barriers for private investors.

Management contracts constitute a second option that can be pursued to delegate the responsibility of operations and maintenance to private investors, with the autonomy to make operational decisions and foster efficiency-enhancing reforms. Such contracts engage a private company to perform activities in a specified period (from 2 up to 50 years), and are often employed when the condition of the assets is uncertain and the private sector might not be willing to accept an extensive risk (World Bank, 2019m). Unlike service contracts, in management contracts the private sector assumes the responsibility for operating and maintaining a facility and providing goods and services. Thus, the private sector can get the managerial autonomy to adopt further steps to improve the operation of the SOE (Prokopenko, 1995). This mechanism is typically used when SOEs do not exhibit short-term prospect of capital gains and the private sector faces high uncertainty and risks to assume the full operation of a SOE. Through management contracts, private investors can enter under controlled risks and initiate actions for attracting further private investment, but it also requires considerable time and capability for designing contracts (including bidding processes) as well as close performance monitoring. For example, Venezuela with the support of the World Bank deployed in 1997 a management contract to give a private operator the responsibility for managing the entire water company (Monagas) with direct authority over commercial practices and full control over resources (e.g. human resources) and execution power (e.g.

investment decisions).[51] As a result, the company benefited from operational reforms implementing reliable accounting and control systems and a new organizational structure, reformulated expensive and ineffective third part contracts, and evidenced substantial improvement of the operations and service quality perceived by final consumers (e.g. connections two folded, and hours of water supply increased from 12 to 22) (Mariño, Stein, & Wulff, 1998).

[51] The payment of the private operator was financed by a fixed monthly payment supported by a World Bank loan and the variable payment through the cashflow contingent to surpassing the performance indicators. Similarly, penalties were imposed when annual targets were unmet.

Table 10. Management contracts (pros, challenges and country-examples)

Management Contracts					
Vehicles for private sector participation	**Description**	**Pros**	**Challenges**	**Complemented by**	**Country Examples**
Service contracts	A private firm is contracted by the government agency to provide a specific service for a specific period.	- The contracts can be awarded based on competitive bids to attract the best provider. - Contractors can be penalized in case of low-quality provision. - Promotes competition in the area of the contract. - Relatively simple contractual form for allowing private sector to participate. - Potential for efficiency gains in the area covered by the contract	- It requires close control of tariffs, and quality monitoring. - Lack of competition could remain in the upstream markets led by the SOE.	- Close monitoring on performance indicators to ensure quality and provision under the contract terms.	**United States:** municipalities contracting streetlight maintenance, solid waste collection, hospital management, etc. **Chile, Guatemala: (1990s):** contracted private companies for purify, distribute, meter and charge for water. **Peru (1990s):** contracted-put private sector organizations to conduct specific activities such as meter-reading, computer services, billing and collection of water supply services.

Management contracts	The contractor assumes the responsibility for operating and maintaining a facility or program with the freedom to make daily management decisions. The government transfers operational risks and looks for increase in service efficiency.	- Used to restructure SOEs that will not be privatized immediately and for which there is no prospect of capital gains. - Shifts the responsibility and part of the costs of restructuring SOEs from the government to entrepreneurial managers. - Provides opportunity to staff to gain management expertise and creates incentives for employees to perform better. -Potential for introducing standards and performance incentives to achieve the standards.	- Considerable time and effort are required in the bidding process. - It can involve organizational disruption. - Poorly designed contracts can imply cancelation or financial distress of the projects or limited provision of goods and services. - It is costly for the government to switch to a new provider after the contract is awarded even in case of disputes. - Technological changes could require change on targets and performance indicators. - Governments can underestimate the extent of their information disadvantage relative to managers and therefore fail to design indicators that motivate substantial changes or performance improvement.	- Threat of competition closely connected to performance indicators of the concessioners. -Performance monitoring to enforce the targets established in the contract. - Regulation and price controls may be required to mitigate potential abuse of dominance and rent-seeking behaviors at expense of the coverage and quality of te service provided.	**Venezuela (1997)**: With the support of the World Bank, the water company established a management contract that showed improved results in terms of performance. **Poland (1990s)** employed management contracts to privatize SOEs, such that the managers (Polish or foreign) could obtain the right to restructure and develop the SOE by submitting a business plan and making down payment of a percentage of the estimated value of the enterprise after restructuring.

Source: authors elaboration based on (Prokopenko, 1995), (Kikeri & Fatima Kolo, 2005), (Chong & Lopez-de-Silanes, 2005), (Sharp, 2005), (Jurkonis & Petrusauskaite, 2014), (Sharp, 2005), (IFC, 2018), (Miring'u & Muoria, 2011), (Heo, 2018), (Wong & Berg, 2018), (Agence Francaise de Developpement, 2018), (IFC, 2018), iSOEF (World Bank, 2019), (World Bank, 2019l) (Asian Development Bank, 2000)

Public-Private Partnerships: Concessions and joint-ventures

Public-private partnerships are another mechanism to catalyze SOE reforms and foster private investment for long-term and large-scale projects where pure private solutions and financing are not possible. Although there is no single definition and legal forms could vary across countries, a PPP could be understood as a long-term contract between a private party and a government entity for the provision of public asset or service, in which the private counterpart bears significant risk and management and responsibility and remuneration is linked to performance (World Bank, 2017). Through private-public alliances, the private sector can take an active role in financing infrastructure and developing projects while sharing the risks and financial commitments with SOEs. Collaboration between SOEs and private companies can compensate for gaps of knowledge and capacity to provide goods or services of each part of the agreement (Walker & Johannes, 2003). PPPs constitute a mid-point solution to expose SOEs to increasing levels of private participation where the SOE can leverage private sector expertise, financial, technical and managerial capacity for large-scale projects and share significant risks with private investors whose final remuneration is highly connected to performance (World Bank , 2020). Unlike under managerial agreements discussed above, under PPP the government could transfer, often partially or temporally, assets or stakes to the private sector.

Most PPP projects are contractual agreements of 20 to 30 years in order to provide the private sector with the incentives to invest and obtain a reasonable rate of return for involvement in asset building, service delivery, maintenance and operation. Through PPPs, private investors assume the responsibility for building or maintaining assets but also enjoy the technical independence to achieve these requirements. Depending on the degree of responsibility and assets included, PPP contracts can be defined as greenfield projects (new assets) or brownfield projects (existing assets). The role of private investors might vary depending on the type of asset or service involved as well as the activities performed. Main activities include (i) designing (engineering work) of initial concept and technical requirements, (ii) building or reparation of the infrastructure assets, (iii) financing (partial or total) of the capital expenditures, (iv) maintenance of the assets over the life of the contract, (v) operation of the underlying assets or associated services (World Bank, 2017). Thus, the role of the private investors under PPP may vary significantly depending on the type of assets involved, ownership structure of the assets built, and the combination of activities assumed by the private investors. For example, under operation and maintenance contracts (O&M), the private sector operates and maintains existing assets receiving the payment from the government without ownership changes of the assets. Under build-operate-transfer (BOT) and concession contracts the private company is responsible for building new assets and their operation for the time of the contract, which are transferred to the government after the termination of the contract. In Private Finance Initiatives (PFI), private companies are responsible for designing, building, maintaining new assets without providing direct services to final users (World Bank, 2017).

To foster contestability in the markets and achieve substantial efficiency gains through PPP, it is key that the design of PPP follows market dynamics, and open and competitive procurement procedures and focus on sectors with natural monopoly characteristics. PPPs can be a powerful mechanism to attract private investment and, expose SOEs to market-based dynamics while promoting the development of enabling sectors that are key for further private sector development (e.g. port infrastructure, digital backbone infrastructure, etc.). 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 (World Bank, 2019e). For example,

complementary regulation to promote competition and transparency in the procurement procedures serves to mitigate the risk of allocating a PPP contract to politically connected firms. Enabling sectors prone to natural monopoly are sectors potentially where PPPs could contribute substantially (e.g. telecom fixed-line network, energy transmission, air/port operations, railroad infrastructure), while preventing SOEs intervention through PPPs into export locomotives, especially in commercial and contestable segments (e.g. agri-business and manufacturing).

Examples of PPP led by the IFC offer evidence of the impactful results of these type of arrangements with the private investors to foster further private sector development. IFC has supported the implementation of PPP contracts to expand and maintain transportation networks, rehabilitate and build air and port facilities, streamline operations and logistics and mobilize foreign private investment (IFC, 2018). Examples of successful interventions are evidenced in Saudi Arabia, Madagascar and Benin. In Saudi Arabia, a PPP contract for USD 1.4 billion was developed with the support of the IFC to expand the infrastructure of Madinah airport and build a new passenger terminal that will increase airport capacity from 4 to 18 million passengers by 2037. Similarly, IFC supported the implementation of a PPP contract in Madagascar for 20-years to finance, rehabilitate and develop the port of Toamasina in 2005. As a result, the handling capacity and contained movement increased reducing the handling and dispatch time to few hours benefiting both private exporters and importers. Finally, in 2009, a build and operate contract was designed under the IFC advisory to overcome high shipping costs and low efficiency in the Cotonou port in Benin.

Concessions are another example of potential PPP alternative where the government retains ownership of assets and transfer under specific terms certain responsibilities and risks to provide a good or service including the operation and maintenance, to the private sector. The latter returns the assets to the government afterwards. Under concession contracts, the private sector assumes the operational responsibility and part of the commercial risks for the service provision while given some freedom to choose the means for meeting those targets (Guislain & Kerf, 1995). Different type of concession contracts can be implemented depending on the responsibility for new investments, the legal ownership, and the duration of the contract. For instance, some contracts will involve the design, construction or financing the new infrastructure, allowing the subsequent transfer of assets built during the concession (Guislain & Kerf, 1995).[52] Although concession contracts do not require sophisticated regulatory frameworks and can be adapted to a country-specific context, they depend substantially on the capacity of contract design to include clear objectives, performance indicators, monitoring and dispute settlement mechanisms. Concession contracts often require complementary regulation on prices and quality indicators to monitor the performance of the private contractor and to mitigate the potential abuse of market power specially when the concession is granted on a natural monopoly (e.g. utilities).

Concession contracts are often employed for infrastructure sectors or economic activities that can be considered as natural monopolies. Senegal and Latin American countries are examples of the implementation of these contracts. In the mid-1990s, after several attempts to improve the water company (Sénégalaise Des Eaux) through performance monitoring and corporate governance improvements, the government of Senegal decided to implement a concession contract (*affermage*) and

[52] Following the framework proposed, such that management contracts refer to those situations where the ownership of the assets remains on the government hands, other arrangements such as build-operate-transfer (BOT) that imply the transfer of assets to private owners are considered as part of the public-private partnerships.

open a competitive bidding process for awarding the management of the water company.[53] As a result, the water production increased by 40%, water losses declined significantly, water access connections grew by more than 25%, and the sector that was highly dependent on government funding became financially autonomous in 2003 (Agence Francaise de Developpement, 2018). Concession contracts were also deployed in railways concessions across the LAC region, albeit with mixed results. Lessons from the implementation of concession contracts railways in LAC suggest that concessions were important instruments to revive the railway sector, especially when commercial activities (e.g. passenger transport) and infrastructure management were unbundled. However, evidence also suggests that concession arrangements might not solve all investment requirements specially when major rehabilitation of infrastructure is required. In those cases, public-private partnerships can be more effective (Sharp, 2005).

IFC has contributed through advisory and investment projects in the implementation of concession contracts and promoting investment to build, rehabilitate and expand air and port facilities essential and energy distribution networks that are key to improve competitiveness and foster foreign direct investment. In Niger, a landlocked country highly dependent on congested seaports of neighbor countries, the IFC supported the structure of a 20-year contract to build a new dry port and invest in existing facilities connecting Niger to the ports in Togo, Ghana and Cote d'Ivoire. Similarly, with the support of the advisory services of the IFC, a 25-year concession was structured in Jordan to rehabilitate the airport and upgrade operations to promote Jordan as economic hub and tourist destination (IFC, 2018). Similarly, the IFC invested in 2019 in the electric sector mobilizing investment to support the improvement of the distribution network in Uganda. The investment aimed to improve the power supply and distribution equipment and develop the electricity distribution network to increase access, connections, quality and reliability of electricity supply in Uganda, which will benefit the sector but also provide spillover effects on other industries (IFC, IFC and Partners Invest in Power Utility Umeme to Support Electrification in Uganda, 2019). As summary of the measures discussed in this subsection, Table 11 illustrates the main advantages, challenges and complementary measures evidenced from country examples of the implementation of management contracts around the globe.

Joint ventures are also useful mechanisms for pooling private and public resources, implementing temporary ownership arrangements and sharing risks and costs in the development of infrastructure or the provision of goods and services. Joint ventures offer the possibility of risk and resource sharing, especially in capital-intensive projects between public and private investors. A joint venture arrangement can take the form of a different legal entity in which public and private parties participate on equity basis and, operate as a partnership arrangement with profit sharing between partners created for a specific purpose without a separate legal entity, or as a contractual consortium where each part is remunerated for the specific services provided to the consortium (IFC, 2018). In the case of existing assets or companies, a joint venture may imply the divestiture or transfer of assets towards the private sector, whereas in the case of a new projects, a new company can be established with a shared ownership between the SOE and the private sector. The final ownership structure will vary depending on the level of direct control that the government wants to maintain or the country-specific regulation. However, joint ventures without explicit transfer of capital are also possible in non-equity arrangements where an

[53] An affermage contract differs slightly from a similar concession contracts since in affermage contract the operator does not have any decision-making role in setting tariffs. In leasing contracts, the lessor effectively buys the rights to the income stream from the utility's operations assuming most of the commercial risk of the operations. In the affermage, the operator takes relative less commercial risk, but there is still an element of risk due to the fact that the operator's profits are related to volume of water sold (Brocklehurst & Janssens, 2004)

SOE can benefit from the technical services or technical expertise from the private counterpart to modernize operations or expand their core activities to other markets.[54]

Joint ventures can provide an alternative for private investors to operate in sectors reserved for public ownership or in cases where the law grants the exclusive control of resources that are essential for the operation of the business are managed by SOEs. Joint ventures can provide a venue to overcome regulatory barriers and foster private participation in situations where public equity stakes are mandated by the constitution or high-level laws, or when the use of land, essential resources or infrastructure is restricted to public agencies. Improvements to the corporate governance practices are also often part of the pre-requisites for successfully implement joint-ventures such that SOEs incorporate best practices in day-to-day operations that promote autonomy, transparency and accountability, which are key for private sector engagements. In Vietnam, for example, the acquisitions of state-owned firms has been permitted since 1997 with caps for foreign participation, but acquisitions of SOEs have rarely been feasible, so the private sector has opted by engaging in joint ventures or non-equity collaboration (Business Strategy Review, 2004). China and Vietnam illustrate some experiences of the implementation of joint ventures. In 2000, the Chinese telecom SOE (China Telecom) established a joint venture with AT&T for a period of 20 years, which was recently proposed for a further extension to foster the development network services, create new services in internet of things, roaming, and cloud-based big data (AT&T, 2017). In Vietnam, until 2004, 44% of foreign investment transactions occurred in the form of joint ventures as a mechanism to enter to the market in alliances with SOEs as acquisitions were inhibited by legal constraints (Business Strategy Review, 2004). Examples of joint ventures include partnerships between the Vietnam beer producing company with a foreign company (Calsberg Breweries) where the private partner contributed with modern technology and know-how, whereas the SOE provided the local brand and distribution network.

Selecting partners based on transparent and competitive processes and clear governance frameworks are essential for the successful implementation of joint ventures between SOEs and private counterparts. The success of a partnership in the form of a joint venture to foster private sector participation and ensure market efficiency gains is highly related to the mechanisms employed to determine the appropriate and most competent partner. The selection of the private partners should be conducted following open and transparent competitive selection processes to avoid the use of joint ventures as mechanisms to favor politically connected firms (World Bank, 2019e). Similarly, it is critical to develop governance mechanisms and clear frameworks to prevent SOE presence in segments of operation where pure private participation is feasible (i.e. contestable and commercial sectors). Joint ventures should also follow competition law to mitigate the use of state support measures that result in an unlevel playing field for private investors (World Bank, 2019e).

Nevertheless, PPPs can bring fiscal implications and require an assessment of the medium-term challenges. A challenge when working with PPPs is that is not always determined how much it will cost and what are the direct fiscal commitments required in the medium and long term, which will vary depending on the demand, exchange rates, and other contingencies (World Bank, 2020). A selection of a PPP as a potential reform to SOEs require an intertemporal assessment of the fiscal budget constrains and the introduction of some budget rules (e.g. Colombia law on PPP liabilities). Among the fiscal considerations when designing and evaluating a potential PPP, CPSD teams should assess the explicit

[54] IFC developed a check list and pre-requisites for developing a joint venture. See https://ppp.worldbank.org/public-private-partnership/ppp-overview/practical-tools/checklists-and-risk-matrices/joint-venture

liabilities in terms of foreign and sovereign debt, the implicit liabilities (e.g. future or recurrent costs of public investments).[55]

[55] A guidance fiscal assessment tool for PPPs can be consulted in https://pppknowledgelab.org/guide/sections/34-assessing-fiscal-implications-of-a-ppp-project

Table 11. Examples of public-private partnerships (pros, challenges and country-examples)

PUBLIC-PRIVATE PARTNERSHIPS					
Vehicles for private sector participation	**Description**	**Pros**	**Challenges**	**Complemented by**	**Country examples**
Concessions	A private company leases a facility or receive the concession to operate public assets and provide the good or services. The private company assumes the operation, maintenance, and replacement of non-fixed capital assets, and the responsibility for the provision of the good or service.	-It does not require a sophisticated regulatory framework. - The remaining ownership of the assets on the state can favor their implementation when laws exclude private ownership of specific assets. - It is a helpful solution when the sale of the company or assets would not reflect the real value or price of the company, which could expose the government to accusations of a giveaway. - Contracts can be tailored and defined as specifically as required to adjust to the local context. - Assets remain in control of the government while released from the management and financial responsibilities. - Incentives for the contractor to minimize costs, improve service	- Blueprints and model contracts cannot always be applied from one sector to another. - Contract design capacity is key to cover potential contingencies and instances for dispute settlement in case of potential conflicts. - The terms of the contract need to be monitored and enforced. - Contract will need to be adapted to reflect changing conditions which could require further renegotiation. - The renegotiation can depend substantially on the bargaining power of the private sector. - Contract periods often are long to allow the contractor to earn an appropriate return on investment.	- Regulation to determine key market variables (e.g. price caps and inflation increments) and obligations such as quality requirements and prices. - Performance targets and monitoring to assess the progress and accomplishment of contract goals. - Embed clauses of progress to guarantee both value for money and the economic and financial balance of the concession. - In some countries, further regulatory changes are required to allow concessions to private companies.	**Senegal (1995):** Contracted the management and development of water service assets through a concession for 30-years, implemented with price cap regulation and followed closely tariff and target indicators. **LAC region (1990s):** Around 40 railways across the LAC region used concession contracts including services of urban passengers and freight transportation. - **Jordan (2007):** IFC advisory work helped to structure and award the 25-year agreement to rehabilitate the airport and upgrade operations to promote Jordan as economic hub and tourist destination. - **Niger (2014):** IFC advisory work supported the design of the 20-year concession to build a new dry port in Dosso and connect Niger to ports in Togo, Ghana and Cote d'Ivoire.

		delivery and maximize revenue collection. - It can increase efficiency in the asset's management.			
Joint Ventures	Public and private organizations work together and take an active role in financing infrastructure or in projects development. The contracting authority may require having an equity stake in the project company or operator.	- It creates a channel to obtain "know-how" related to foreign technology/capital, financing, learning management and marketing techniques, increase capacity and promote joint research. -Although there is a potential transfer of assets (temporally), it will favor the public perception that the company or project is not fully privatized.	- When connected to tax-credit, special tax privileges, it requires close supervision to manage the incentives correctly and avoid rent-seeking practices. - It can be used to favor specific private companies or reinforce political connections between private players and SOEs.	-Clarification of the subsidiary role of the state, and corporate governance principles to ensure transparent and competitive procedures for establishing the public-private joint ventures. - Development of the institutional capacity to assess and monitor the PPPs. - PPP law and sector-specific laws should be aligned to avoid creating confusion or conflict of interests among investors.	**Shanghai (2000, 2017 renewed):** Joint venture between AT&T and China Telecom for developing telecommunication facilities and create new services for multinational companies (e.g. new services of Internet of Things). **Vietnam (1993):** Brewery SOE in joint venture with foreign company (Calsberg) to improve technology and producing techniques.

BUILD-OPERATE-TRANSFER (BOT) and similarly	A consortium (contractor) receives the rights from the government to build infrastructure and then operates the project in a period between 15-30 years to recover the costs and make a reasonable return on the investment. At the end the project facilities can be transferred to the government or purchased by the operating company.	-When regulation does not allow outright sale of assets of SOEs or contracting services, alliances between private and public counterparts can provide a good venue to finance and develop large scale projects.	- Mainly focused on sectors with slow technological changes due to the long-term of the agreements. - Development, bidding and ongoing costs in PPP could be greater than in traditional procurement processes. - Incentives and performance requirements need to be clearly set out in the contract to keep engagement and accountability of the private counterpart. - Long-term nature of the projects and technical complexity limits the capability to foresee all possible contingencies and some events can create issues between the parties.	-Regulatory framework for PPP should be aligned with competition principles and open and competitive process should be followed to determine the private counterpart. - Open and transparent competitive selections to enact partnerships. - Competitive neutrality principles to validate the terms of the partnership (e.g. investment with private companies in vertically integrated chains can favor coordination or discrimination in favor of private operators with SOE participation).	**Indonesia (1990s):** Build a BOT agreement on Postal and Telecommunication services to install 100,000 telephone lines in metropolitan Jakarta. **- Madagascar (2005):** IFC advisory work to create a 20-year PPP for the management, financing, rehabilitation and rehabilitation of the port of Toamasina to increase handling capacity and reduce dispatch times. - **Benin (2009):** IFC advisory work to support to build the Port of Cotonou through a PPP to build and operate the container terminal to improve shipping capacity, reduce costs and time on port, and increase country competitiveness.

Source: authors elaboration based on (Prokopenko, 1995), (Asian Development Bank, 2000), (Chong & Lopez-de-Silanes, 2005), (Sharp, 2005), (Business Strategy Review, 2004) (Jurkonis & Petrusauskaite, 2014), (World Bank, 2017), (IFC, 2018), iSOEF (World Bank, 2019), (World Bank, 2019e), (World Bank, 2019l)

Divestiture measures

Divestiture involves both the partial or full transfer of assets and managerial decisions to private parties – shifting the role of the government from market player to regulator. Divestiture is the alternative that reduces government intervention the most, and transfers SOE property rights and decision-making powers to profit-oriented owners through different schemes including auctions, direct sales, offering of shares on the stock market, liquidation and sale of assets, and employee buy-outs. The approach to privatization will depend on the intrinsic characteristics of the SOE (e.g. operational status, revenue generation, the value of the assets), the level of capital market development, and the political and development objectives of the government in ceding SOEs to private hands (e.g. cede ownership to workers to protect employment or mitigate political costs). Table 12 illustrates the main methods of divestiture, indicating the benefits, challenges, relevant complementary measures, and some examples.

Divestiture methods cover a wide range of instruments including auctions, direct sales, share offering, vouchers, and management buyouts to transfer the government ownership and control to private investors. Auctions are one option in which the government sells either full or partial ownership to private investors through a competitive process. Under this option, the government invites private investors to bid for state property or assets. This instrument favors the allocation of the ownership rights toward private investors through transparent and open procedures, avoids the valuation problems as the auction determines the price that private investors are willing to pay, and ensures that property is sold to a counterpart that has the financial resources to develop and use the assets effectively (Prokopenko, 1995). Recently, Nigeria implemented this mechanism to complete a privatization strategy on the energy sector to unblock a major bottleneck for social and economic development (Reuters, 2013). Before proceeding with the auctions, the Nigerian government separated the former energy SOE into six generation companies and eleven distribution firms for fostering competition for the market (through the auction) and in the market after the privatization efforts.

Direct sale is another mechanism, where the government transfers state property rights to private owners without a public offer process. In contrast to auctions and public tendering offers, direct sale reduces competition and is less transparent. This option may be relevant where financial and stock markets are underdeveloped, but it carries potential risks. Offers presented directly by investors to the government without following competitive criteria could increase the risks of collusion, corruption, and the allocation of final assets to politically connected firms. In fact, SOE reforms that opt for this venue of reform need to be complemented by proper regulatory frameworks that restructure the incentives and it is not limited to ownership changes. Otherwise, divestitures might not be sufficient to mitigate market distortions. For instance, even becoming fully privately-owned, if the resulting company is a politically connected firm, it might still receive some preferential access to loans or subsidies from the government distorting the playing field compared to other private peers. Direct sales were implemented in Argentina in the early 1980s and in Tanzania in the late 90s. In the first case, the Argentinian government sold the electricity distribution and supply company of Buenos Aires to a consortium of private and foreign investors. Tanzania employed massive direct asset sale strategies to foster private sector participation in commercial sectors including tobacco industry (Tanzania Tobacco), tourism (Moshi Hotels, New Savoy hotels), agribusiness (Muheza company), manufacturing (textile mills, breweries, cement factories) (Waigama, 2008).

Stock market offerings are another option when financial markets are fully developed. Sale of government shares on the stock exchange can be deployed as an alternative for increasing private sector participation and diversifying the possibility of private actors to participate. However, it requires several prerequisites for a successful implementation such as well-developed and regulated capital markets, and market-based valuation of the company. This option provides some advantages with respect to other divestiture measures such as auctions and direct sales as it is more transparent. However, the results of an IPO to change market incentives on the SOE and private competitors depend substantially on the magnitude of the shares offered to the public and the management structure of the company. For example, an SOE could retain control through majority of shares or golden shares. Complementary measures such as regulatory changes on management board of SOEs, and corporate governance

reforms to foster transparency and accountability of SOEs are determinant to yield successful results. Examples of stock offerings are found in contestable sectors such as airline services in Kenya where the airline SOE -Kenya airways- implemented a public offering in the mid-1990s, allowing foreign investors to obtain 14 percent of the participation and reducing the government stake to 23 percent (Ranja, 2004). Similarly, stock offerings were implemented in enabling sectors such as gas and energy in 2004 in India, that reduced state participation from 89 to 54 percent in the largest energy conglomerate in India over the last years (NTPC, 2020).

Liquidation of assets of SOEs are an alternative when the company value as operating unit is below the liquidation value of the assets. In this case, the state sells physical assets belonging to SOEs when the company itself cannot be sold entirely or when the value of independent assets exceeds the company value even beyond restructuring (Prokopenko, 1995). This option can be deployed when SOEs are inviable under market-based conditions and private sector will face substantial uncertainty about the contingent liabilities when acquiring the company. Liquidation can promote allocative efficiency when allowing the transfer of productive resources towards private and productive investors. To achieve these potential efficiency gains, it is key that the allocation of these assets follow clear criteria to allow private interested counterparts to participate and avoid strategic assets end up in politically connected firms or flow to dominant players. Examples of liquidation are evidenced in Burundi, Gabon, and Guinea in late 1980s (World Bank, 1989), and in Chile and Poland where SOEs followed liquidation strategies in different sectors including construction, communication, transport and manufacturing (Prokopenko, 1995).

Management and employees buy-outs can provide an additional route of divestiture, but with some limitations in terms of the changes of incentives for SOE to improve. Management-employee's buyouts (MEBOs) refer to divestiture solutions in which SOEs become employee-owned firms through sale of shares or direct transfer to workers and managers. Although this option is easy to implement in the short-term and could contribute to overcome political opposition, barriers for private investors and market incentives might not change substantially. For example, the formerly SOE could maintain an overstaffed structure, increases prices in the market to guarantee high returns and dividends without focusing on cost restructuring or market-based behavior. Complementary reforms to expose this companies to market discipline and competition despite ownership changes is determinant to mitigate *insider* biases, yield efficiency gains, and remove barriers for private investors. Implementation of this divestiture option are evidenced in Guinea and Mozambique in food distribution outlets, in Nicaragua in gold mines, and in Chile in the power sector (Berg & Berg, 1997).

Similarly, free or low-cost distribution shares to citizens or special groups can expand the shareholder base of an SOE and reduce the influential power of the government but might deliver limited results in terms of efficiency gains. Divestiture measures can also occur in the form of distribution of shares to citizens or targeted groups through lower-price shares, no cost vouchers and coupons. Resulting ownership under these strategies can be diffuse and difficult to monitor or submit to market discipline. This divestiture strategy was implemented in over 15,000 companies in Russia, where the government distributed vouchers to citizens born before September 1992 (about 150 million people), which could use those vouchers with cash to purchase shares in selected SOEs (Berg & Berg, 1997). Similarly, vouchers were provided in Mongolia in early 1990s for citizens to acquire shares in large SOEs (Prokopenko, 1995).

Finally, the government can dilute its participation through capitalization of SOEs. Government can maintain the current stake of the company but by allowing private companies to invest, relative state stake declines. Investment from private companies will flow to SOEs increasing its net worth (Ewing & Goldmark, 1994). 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. Risks about transparency and accountability may remain in absence of complementary good corporate governance reforms. Bolivia implemented a massive capitalization scheme to transfer ownership over six of the biggest SOEs in natural monopoly sectors (rail, power, telecom networks) and contestable sectors (e.g. air, mining smelters). Foreign and domestic investors injected capital in the state-companies that was devoted to investment and working capital purposes (Berg & Berg, 1997).

Table 12. Examples of divestiture measures (pros, challenges and country examples)

DIVESTITURE MEASURES					
Vehicles for private sector participation	**Description**	**Pros**	**Challenges**	**Complemented by**	**Country examples**
AUCTIONS	Government sells total or partial shares in the SOE to private investors through a competitive process.	- Open and transparent method. - Avoid problems of valuation as the auction determines the prices that buyers are willing to pay. - Market prices guide the government revenues rather than political privilege to allocate the state assets. - Transfer the property rights to profit-oriented owners with the incentive to improve performance. - Bidding and competitive tenders can contribute to maximize the government's proceeds (fiscal revenue) of the transfer of the assets.	- It can create private monopolies under weak regulatory frameworks and regulators.	- Regulatory changes at high-level laws to enable the process and allowing private sector participation. - Regulatory changes to remove obstacles that prevent entry, competition to avoid replacing a public monopoly with a private monopoly. - Unbundling economic segments of operation of highly vertically integrated SOEs to allow competition in different segments.	**Nigeria (2013)**: 6 electricity generation companies, and 11 distribution firms were transferred to private owners in 2013 to reduce electricity shortages and high costs for businesses and consumers. The government raised about USD 2.5 billion as result of the transaction.
DIRECT SALE	Transfer of state property rights to private owners without a public offer process.	- Operates even where the stock exchange is underdeveloped.	- Transparency and fairness in the process of allocation to private hands or politically connected firms. -Time-demanding alternative when it is required the preparation of state assets to be sold individually.	- Regulatory changes to remove obstacles that prevent entry, competition to avoid replace a public monopoly with a private monopoly.	**Argentina (1980s):** (Thermal electric capacity sold to foreign and domestic investors. **Tanzania (1995-1999):** agribusiness factories, hotels, tobacco processing plants, leather companies, tea factories assets followed direct sale mechanisms to promote private sector participation in commercial sectors. **Brazil (2019):** plans to sale assets and subsidiaries of the state-controlled oil company (Petroleo Brasileiro SA), Banco do Brazil SA, and Caixa Economic Federal to raise up to USD 214 million.

STOCK OFFERING (e.g. Initial Public Offering - IPO, secondary offering)	Public sale of shares through Stock Exchange markets	- Market-based determination of the value of the company. - Increase accountability and transparency.	- Requires a well-developed capital market. - Transparency and clarity of the procedure might raise important transaction costs (e.g. preparation for sale, valuations, managing offers), which usually makes this mechanism applicable for mainly larger SOEs. - Sometimes requires specific legislation processes for allowing divestment via public offering, block sale, bonds. - It might require former restructuring of the firm to attract private investment.	- Regulatory framework reforms to allow private (domestic and foreign) investors to participate and remove caps of foreign equity. -Corporate governance reforms and regulatory changes to balance the shareholder power to influence the operational decisions of the firms. - Competitive neutrality principles to mitigate the potential use of government-linkages to favor the SOE vis-à-vis other private competitors.	**Kenya** (mid-1990s Stage 2): After partnership KLM, Kenya airways increased its book value and attracted investors for public offering of 235.4 million shares on the Nairobi Stock Exchange. **India (2004):** National thermal power corporation followed an IPO to become a listed company in 2004, while the government retained 89.5% of the equity share. Subsequent public offering in 2010, reduced the government participation to 54.14%.
LIQUIDATION	State sells physical assets belonging to SOEs, when the company cannot be sold entirely or when the assets have value, but the company does not.	- Operates when the assessment shows the company value as operating unit is below the liquidation value. - An alternative for cases where operation of SOEs are inviable under market-based conditions. - Suitable for companies where private sector will face uncertainty about contingent liabilities.	- Social and political costs of liquidating employees of SOEs. -Transparency in the process is determinant to allow private counterparts to participate in the liquidation and avoid assets to end up in politically connected firms. -It might require the SOE to be legally dissolved before the assets can pass to private owners.	- Regulatory framework reforms to allow private investors to participate in the allocation of the assets. - Regulatory changes to allow private owners of the liquidated assets to start operations.	**- Chile (1990s)**: SOEs were liquidated when operating value was below its liquidation value. **- Poland (1990s)**: 540 SOEs liquidated 1990s, in construction, communications, transport, manufacturing.
MANAGEMENT/ EMPLOYEES BUY-OUTS	Shares of the company are sold or given (transferred) from the state to workers and managers.	- Facilitates the transition as a way of giving the employees a stake in the company, minimizes the social costs of layoffs. - Facilitates overcoming opposition.	- Might not change structurally the performance or market incentives. - Can imply efficiency costs since workers and management goals might not be completely aligned with	-Regulatory reforms to expose resulting privately-owned companies to competitive neutrality principles and market-based dynamics.	**- Guinea and Mozambique (1990s)**: Regional state food distribution outlets were transferred to employees. **- Nicaragua (1990s):** assets of gold mine were sold to workers in the mining industry. - **Chile (1990s):** worker bought most of the

		- Relatively rapid to implement	efficiency objectives (e.g. excessive wage increases, maintain larger than optimal levels of employment) - Reduce the government proceeds and may impose obstacles for attracting foreign investors.		shares of a chemical producer SOE, and one of the units resulting from the separation of the state-owned power company ENDESA.
CAPITALIZATION	Injection of private capital to the enterprise leading to a decline of the share of equity owned by government.	- Popular participation might mitigate political backlash. - It can promote short-term investments in sectors with high capital-needs. - Bidding processes can be implemented to encourage competition across investors.	- Capitalization law might be required to provide a legal basis for private ownership. -When government retain significant shares or decisive power on the company, SOE might not follow efficiency-enhancing reforms or market-based dynamics.	-Regulatory changes seeking to promote competition and efficiency (tariff regulation, entry, service quality, sections, etc.) - Establishment of oversight agencies responsible for coordination and evaluation.	**Bolivia (1990s):** six of the largest SOEs allowed private investors to inject capital in rail, air, power, phone and petroleum distribution monopolies.
FREE OR LOW-COST DISTRIBUTION OF SHARES	Allow citizens or special groups to obtain shares at little or no cost through free vouchers, lotteries, coupon sales, to obtain shares in the company.	- Helps to overcoming social and political opposition.	- Proceeds for the government are limited, which can exacerbate fiscal risks. -It might not change the market-incentives of SOEs to follow efficiency-enhancing reforms.	- Unbundle commercial activities into separate segments.	- **Mongolia (1990s)** issued vouchers to all citizens born before the enactment of the privatization law to acquire ownership in small companies or shares in large SOEs. - **Russia (1994)**, 15,000 companies were privatized using vouchers, that accounted for 60% of the industrial assets.

Source: authors elaboration based on (Ewing & Goldmark, 1994) , (Prokopenko, 1995), (Berg & Berg, 1997), (Business Strategy Review, 2004) (Jurkonis & Petrusauskaite, 2014), (World Bank, 2017), (IFC, 2018), iSOEF (World Bank, 2019), (World Bank, 2019e), (World Bank, 2019l) , (Reuters, 2019)

SOE instruments of reform and sector characteristics

As discussed above, instruments for SOE reform as well as their potential to mitigate market distortions might vary across sectors. Based on the evidence analyzed above, ownership matters to mitigate market distortions, but is not sufficient to dissolve market distortions. SOE comprehensive reform requires restructuring the incentives that delimit the market interactions to effectively remove barriers for private investment. The analysis across policy alternatives and their potential to reshape market incentives also highlighted that some reform instruments could be more suitable for some type of sectors. For instance, greenfield reforms are suitable for contestable and commercial sectors, whereas service, management contracts and PPPs seem particularly relevant for sectors with natural monopoly characteristics (See Table 7).

Evidence suggest that ownership transformation per se does not necessarily yield the efficiency gains and remove barriers for private sector development. Although instruments for privatization are diverse, a common set of pre-conditions needs to be in place for implementing SOE reforms and foster private sector development. These include a sound legal and regulatory framework, unbiased institutional arrangements, oversight and monitoring, and enforcement mechanisms. Recent findings suggest that the largest improvements in the performance of SOEs and impact on the contestability of the markets can derive from a robust regulatory and institutional framework, the well-functioning of the capital markets, and the capacity to protect consumers and workers' rights (Estrin & Pelletier, 2018). Countries with weak competition regulation, particularly in sectors where private companies received the concession of natural monopolies, had lower results (Estrin & Pelletier, 2018).

Ownership reforms might be a necessary but not a sufficient condition to reshape the market incentives and foster private investment. Restructuring incentives across private investors and SOEs is essential to ensure successful reforms that foster contestable and efficient markets. Evidence suggests that regulatory weaknesses are often related to less successful cases of privatization as those evidenced in the privatization of water provision in low-income countries (Kirkpatrick, Parker, & Zhang, 2006). On the contrary, most successful cases of reform are related to situations where there is independent regulatory agencies and robust regulatory frameworks that not only promote competition and create right incentives for the agents in the market, but also can mitigate the corruption risks on the privatization process (Estrin & Pelletier, 2018). Evidence from Latin America and Africa region suggests that larger efficiency gains and improved SOE performance are evidenced when privatization programs are coupled with effective and independent regulation and increased competition (Wallsten, 2001).

Key lessons from experience: how to pursue SOE reforms?

In view of the above, a sound legal and institutional framework is needed to ensure transparency and maximize the benefits of privatization, backed by strong political commitment. Good practice calls for a clearly defined privatization law and the establishment of an independent, highly specialized, standalone privatization agency whose sole mandate is to privatize SOEs to improve efficiency and enhance competition. Endowed with the right powers, authority, skills, and expertise, such an entity is critical to lead and manage the process in a speedy and transparent manner. A key lesson from Eastern Europe and the former Soviet Union, and from other countries, is that relying on insiders to run the process led to asset stripping, delayed financial and operational restructuring, lack of transparency, and insufficient attention to social safety nets for workers and consumers. Avoiding these problems and putting in place a sound, independent, and well-resourced agency is essential to ensure timely and smooth execution and the transparency, credibility, and success of the program.

Responsibilities for privatization lie at the political level, which defines objectives, sets priorities, takes major decisions, and oversees the program, and at the technical level. The political level typically consists of the head of state, an inter-ministerial commission, a cabinet committee, or the cabinet itself. It defines the program, sets objectives, identifies SOEs for privatization, takes major decisions, and oversees implementation. Countries have used different mechanisms to exercise political oversight and oversee the process. For example, inter-ministerial commissions were established in Brazil, Lithuania, Malaysia, Peru, the Philippines, Serbia, and Turkey; in Argentina, the Presidency oversaw and monitored privatizations, along with a Bicameral Commission with a mandate to coordinate privatization policies with legislative and executive powers; in France and Poland, a single minister oversaw privatization; and in Chile, oversight functions were carried out by the board of CORFO, the state holding company. The relationships between the political and technical levels vary and depend on the clarity of the privatization mandate. The clearer the mandate given to the implementing agency, and the greater the consensus on privatization, the more political authorities will be able and willing to delegate their powers. In countries where the SOE sector has shrunk, the privatization function is often located in a state ownership entity that exercises the state's ownership rights.

The institutional level focuses on implementation of the program. Countries with large SOE sectors, such as Serbia, Turkey, and the Philippines among many others, established a stand-alone privatization agency to carry out the process and ensure transparency and speed. The clearer the mandate given to the implementing agency, and the greater the consensus on privatization, the more political authorities will be able and willing to delegate their powers. Such entities help to provide political clout and independence, consolidate decision-making and expertise, control and implement the program in a timely manner, and ensure transparency and credibility. Various types of entities can be created. Some transition countries with large SOE sectors and major privatization programs established a specialized privatization ministry, as for instance in the 1990s in the former Czechoslovakia, Hungary, Poland and Russia, among others. While such ministries privatized large numbers of SOEs, vested interests and resistance to privatization within the ministry contributed to delays and to lack of transparency in implementation. For these reasons, most other countries established a dedicated and independent privatization agency with a clear mandate and autonomy, the necessary clout and authority, minimal bureaucracy, and quality staff. While varying in structure and form, the core functions of such agencies are to: execute decisions; implement transactions; carry out any needed restructuring; determine financing needs; manage the activities of the entity; and conduct oversight. Specialized issues, such as financial and organizational restructuring, may require delegation to institutions with the necessary qualifications and skills, such as banks and financial institutions, and international and local

consultancies, based on clear implementation principles, standards of accountability, and regular oversight.

Many countries have started with small and medium-sized SOEs in commercial sectors that are easier to privatize. In such SOEs, there is little if any debate about privatization or its spillover effects. Small and medium-sized SOEs can and have been privatized quickly. Countries such as Chile, Jamaica, Mexico, the Philippines, Poland, and the United Kingdom began by privatizing firms in sectors such as retail, food, construction, and hotels. Such sales require little prior restructuring and institutional capacity, entail minimal political risk, and do not face thorny issues of foreign ownership. Speed is essential to put the assets to more productive use and to reduce the government burden. Unviable enterprises that attract no investor interest are usually phased out or liquidated. Experience with such transactions also helps prepare for the sale of larger more complex SOEs.

On the other hand, large SOEs in infrastructure and other strategic sectors are more complex and are likely to require significant prior organizational and financial restructuring and careful management of the social implications. Concerns typically focus on the valuation and pricing of assets, lack of transparency, and negative labor impacts. Experience shows that these concerns can be addressed through proper valuation techniques carried out by professional and independent valuators; the adoption and enforcement of competitive bidding processes; and the setting up of institutional decision-making arrangements that are professional and transparent. In countries such as Argentina, Mexico, New Zealand and the United Kingdom, privatization of large enterprises was accompanied by significant downsizing of the labor force, with severance packages and retraining programs provided to mitigate the social and political costs. Countries, such as Russia, that let excessive labor stay in place experienced prolonged negative effects while countries such as Hungary and the Czech Republic that shed excess labor relatively quickly with the needed support had relatively higher unemployment initially, but were able to recover real wages faster, while unemployment decreased subsequently with higher growth from faster and more profound reforms.

A key lesson from global experience is that the transparency and integrity of the privatization process should not be compromised for speed. Evidence across a wide range of countries shows that privatization yields benefits in terms of economic productivity and consumer welfare where there are no economy-wide distortions that hinder competition, the policy environment is market-friendly, a sound legal and regulatory system is in place, and the process itself is managed in a transparent and open manner through competitive bidding and other means to avoid concentration of assets in the hands of a small elite.

In parallel with privatization, it is important to strengthen competition policy and tackle cartels and abuse of dominance. Countries such as Brazil, Chile, Colombia, Mexico, Peru, and South Africa have set up effective anti-cartel programs over the last decades. Competitive neutrality principles are essential to ensure that any remaining commercial SOEs 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 to safeguard and enforce these principles. Effective policies that tackle cartels and abuse of dominance are critical to ensure that consumers gain from reforms. In commercial sectors, laws that establish state monopolies or restrict private participation will need to be revised. In key industrial or agribusiness inputs, one or several SOEs often control the production and distribution and are often protected by exclusivity rights. Exclusivity rights may need to be amended or revoked. For example, to allow for private sector entry in 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.

Successful privatization programs have been accompanied by pro-competition product market

regulation reform and by the development of sound regulatory frameworks. International experience from countries that have carried out privatization and structural reforms shows that fostering competition by opening sectors to domestic and foreign private investment and trade is a necessary complement to SOE restructuring and privatization in achieving dynamic growth and efficient market outcomes. This is mirrored by firm-specific experience as well. For example, exposing monopoly SOEs in commercial (or potentially commercially viable sectors) to private competition on a level playing field can reveal poor performance and at the same time 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 expected results. In the case of infrastructure SOEs, successful privatization requires a regulatory framework that separates out potentially competitive activities, establishes the tariff regime, clarifies service goals, develops cost minimization targets, and 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 privatization.

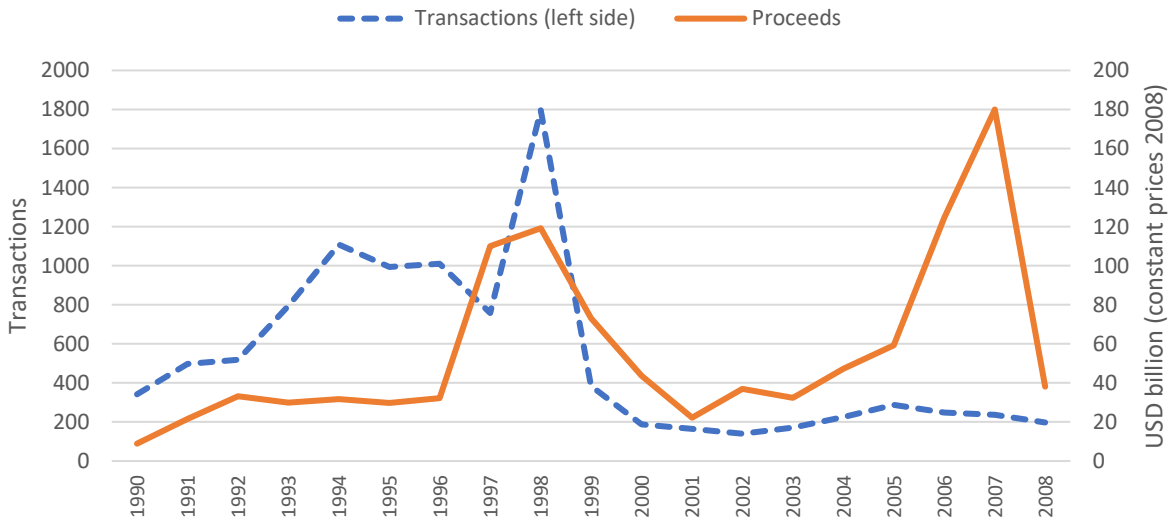
Infrastructure sectors—which involve complex issues of price, access, and quality of services—call for more of a case-by-case approach considering prevailing market structures and regulatory capacities. The challenges are greater in network sectors such as water, telecom, and power. Care needs to be taken that privatization or private participation in such sectors is accompanied by broader sector-wide reforms that introduce competition, address tariff reform, develop the necessary regulatory frameworks and capabilities, ensure proper contract design and enforcement, and foster transparency. When such measures are put in place, the outcomes are better, and public support for privatization can be built.

Finally, a principal lesson of experience is the need for transparency and political commitment. Transparency is achieved by having clear and simple selection criteria for evaluating bids, clearly defined competitive bidding procedures, disclosure of purchase price and buyer, well-defined institutional responsibilities, and adequate monitoring and supervision of the program. Lack of transparency can lead to a political backlash and is often associated with poorly structured sales. It can also lead to a perception of unfair dealing and to a popular resistance that can not only threaten privatization but also reform in general. At the same time, excessive devotion to transparency need not become an excuse for inaction. For smaller commercial firms in competitive markets, light management and review of transactions is needed. But for larger and more visible transactions, and the less competitive the market, the greater is the importance of transparency. Oversight bodies play a key role in ensuring transparency. Special commissions outside the regular privatization machinery and the use of technical advisers, foreign and domestic, can help ensure transparency and speed in the process. Most of all, strong political commitment and leadership are needed to carry out privatization.

SOE reform and privatization vehicles: some trends

Massive privatization efforts occurred between 1990-2008 with more than ten thousand privatization transactions recorded, according to the World Bank privatization database (World Bank, 2008). [56] During the 1990s, a total of 7,859 worldwide transactions were registered amounting USD 480 billion in privatization proceeds.[57] Although a smaller extent in terms of number of transactions, massive privatization efforts continued between 2000-2008, with a total of 1,858 transactions and accumulated proceeds of USD 1,657 billion, which tripled the revenues reported in the former decade. The annual trend of transactions and proceedings, shown in Figure 5, revealed that the peak of transactions recorded occurred in 1998, whereas privatization proceeds peaked in 2007. Both transactions and proceeds deaccelerated substantially at the start of the financial crisis. [58]

Figure 5. Privatization transactions and proceeds, 1990-2008



Source: authors calculations using Privatization database WB (2008)

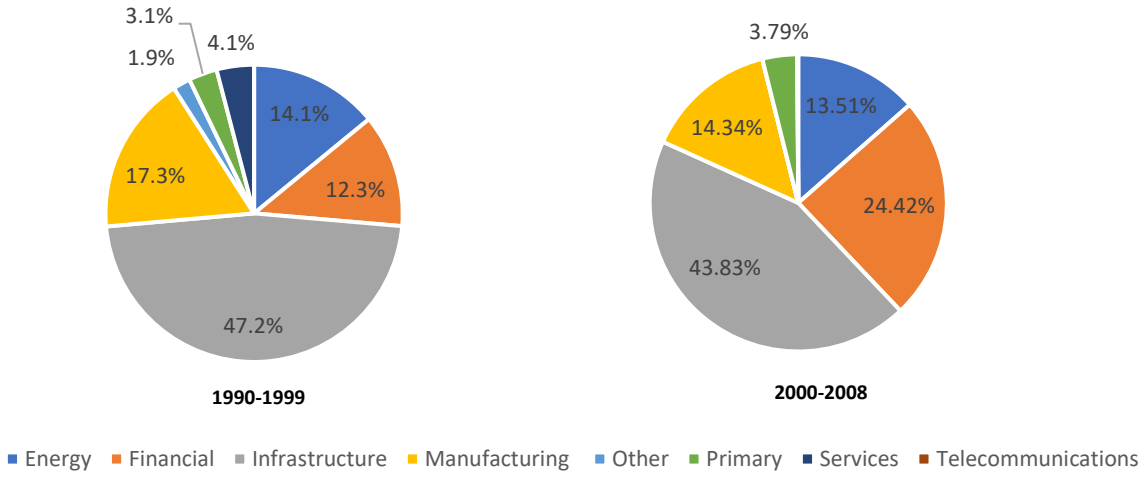
Privatization efforts varied across sectors over the last decades focused mainly on enabling sectors such as infrastructure and financial sectors. Based on transactions and proceeds retrieved from the privatization database (World Bank, 2008), estimates suggest that during the 1990s most efforts were pursued in the infrastructure sector (43.9%), followed by manufacturing and services (17.8%) and energy (15.13%). In the 2000s, as shown in Figure 6, privatization efforts persisted in the infrastructure sector (43.8%) and manufacturing (14.34%), yet a significant shift is evidenced towards financial sectors (24.42%).

[56] This database collected all major (at least USD 1 million) privatization of public companies from 1988-2008 carried out by developing countries. This database includes only transactions which generate proceeds or monetary receipts to the government, resulting from partial and full divestiture, concessions, management contracts and leasing arrangements. The amount of the transaction is the sale price on the announcement basis rather than the actual flows of receipts and does not include all other transactions that did not include payments to the governments. (World Bank, 2008). Therefore, the figures correspond to a potential lower bound, since regulatory reforms and management arrangements might not be covered in this dataset. This data collection effort has been by Sunita Kikeri, Lead Financial Sector Specialist, EFNFS.

[57] For comparison purposes, revenues from privatization transactions are expressed in constant prices of 2008.

[58] Due to the lack of availability of systematic databases with worldwide coverage, the analysis conducted covers mainly the period 1990-2008.

Figure 6. Privatization transactions by sector[59]

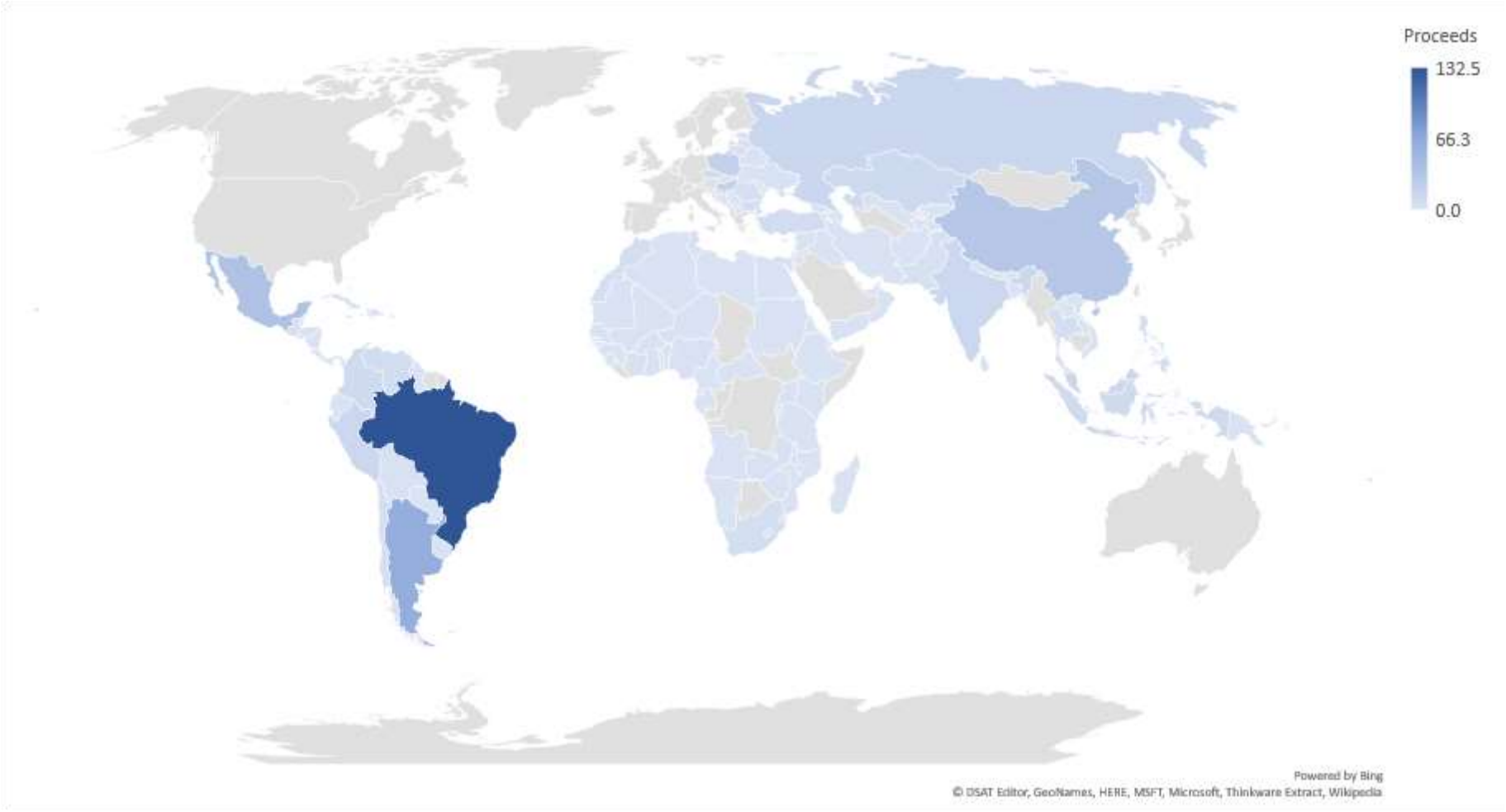


Source: authors calculations using Privatization database (World Bank, 2008)

Latin American countries led the privatization efforts during the early 1990s, whereas China ranked in first place measured by total proceeds during 2000-2008. In the late 1990s, Brazil (27.1%), Argentina (12.5%) and Mexico (7.7%) were the top three leading countries, surpassing USD 231 billion in total proceeds. Peru, Colombia and Venezuela also ranked among the top 20-countries with the largest proceeds (See Map 2), followed by China (6.6%), Poland (4.3%), and Hungary (4%). Between 2000-2008, China ranked first in privatization proceeds with total revenues that exceeded USD 216 billion, accounting for 37% of the total worldwide revenues of privatization initiatives according to estimates based on the privatization dataset (World Bank, 2008). Russia (11.5%) and Turkey (6.83%) follow in second and third place over the same period (See Map 3).

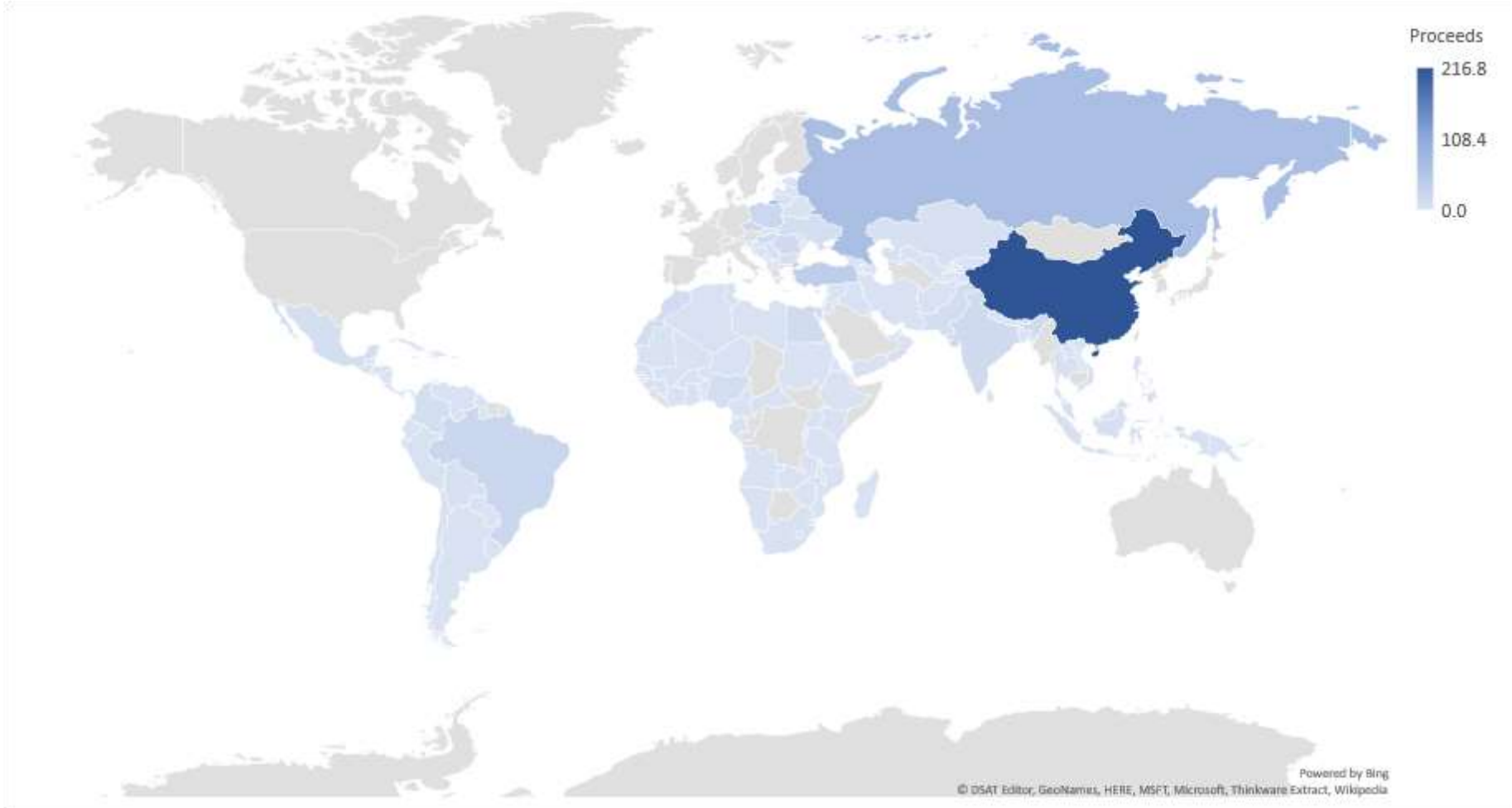
[59] Estimates obtained by MT staff using the value of the transaction proceeds in USD constant prices of 2008.

Map 2. Proceedings of privatizations 1990-1999



Note: USD dollars at constant prices of 2008
Source: authors elaboration using privatization database (World Bank, 2008)

Map 3. Proceedings of privatizations 2000-2008



Note: USD dollars at constant prices of 2008

Source: authors elaboration using privatization database (World Bank, 2008)

As sectoral and regional privatization programs have shifted over time, so have the methods of transformation of SOEs. Measured by both the number of transactions and proceeds (USD), the path for increasing private sector activity was mainly paved by divestiture solutions through auctions and direct sale of SOE assets in the 1990s (See Table 13). In the early 2000s, the largest proceeds derived from direct asset sales (35.9%). Estimates suggest that over the years 1990-1999, changes in almost four of every ten SOEs occurred through divestiture, direct sale of shares/assets, auctions, and to a lesser extent through stock markets and management/employee-buyouts. As shown in Table 13, between 2000-2008, such divestiture mechanisms were still predominant and accounted for 74.5% of total proceeds and 53.3% of total transactions, with a notable increase in stock market operations.

Table 13. Instruments of privatization 1990-1999 and 2000-2008 measured by number of transactions and proceedings.

Alternatives	Instruments	N. of transactions 1990-1999	N. of transactions 2000-2008	Change Percentage points	Proceeds (USD) 1990-1999	Proceeds (USD) 2000-2008	Change Percentage points
Divestiture	**Direct or Asset sale**	13.40%	35.90%	22.50%	8.05%	45.76%	37.70%
	Auctions	16.00%	11.40%	-4.60%	18.03%	3.19%	-14.80%
	Stock market	5.60%	6.00%	0.30%	12.49%	25.59%	13.10%
	Management/Employees buy-out	3.30%	0.00%	-3.30%	0.22%	0.01%	-0.20%
	Liquidation	0.50%	0.00%	-0.50%	0.01%	0.00%	0.00%
Divestiture measures		**38.80%**	**53.30%**	**14.50%**	**38.80%**	**74.55%**	**35.75%**
PPPs	**Joint Venture**	0.60%	1.20%	0.60%	0.53%	0.41%	-0.12%
	Concessions and similar	1.11%	17.40%	16.23%	2.38%	12.35%	9.9%
PPPs		1.71%	18.60%	16.89%	2.91%	12.76%	9.78%
Management contracts	**Leases**	0.90%	1.20%	0.30%	0.05%	0.52%	0.50%
	Management Contracts	0.10%	0.00%	-0.10%	0.01%	0.00%	0.00%
Management Contracts		**1.00%**	**1.20%**	**9.20%**	**2.44%**	**8.55%**	**6.11%**
Other instruments*		58.50%	26.90%	-31.60%	58.19%	12.19%	-46.00%
Other		**58.50%**	**26.90%**	**-31.60%**	**58.19%**	**12.19%**	**-46.00%**

Note: * Other mechanisms refer to cases where there was a combination of at least two of the instruments.

Source: authors calculations using Privatization database WB (2008)

Between 2000-2009, the use of management arrangements and PPPs grew. Concessions, joint ventures and similarly emerged as intermediate solutions to keep the ownership of the assets while transferring the operational and maintenance responsibilities. The private sector transactions captured in the World Bank privatization database reveal that the use of these mechanisms increased from 1.7% to 18.6% of the total number of transactions and from 2.9% to 12.7% of total proceeds in the 1990s and 2000s.

Formulas to engage the private sector also varied across sectors. Based on the sector, the vehicle for engaging the private sector differs. Estimates suggest that auctions, direct sales, concession contracts and leasing contracts occurred mainly in infrastructure, while liquidation and management/employees buy outs (e.g. vouchers) were applied mainly in manufacturing. Joint ventures were mostly used for reforming SOEs in the financial sector, while management contracts were used in the service sector (See Table 14).

Table 14. Privatization vehicles by instrument and economic sector

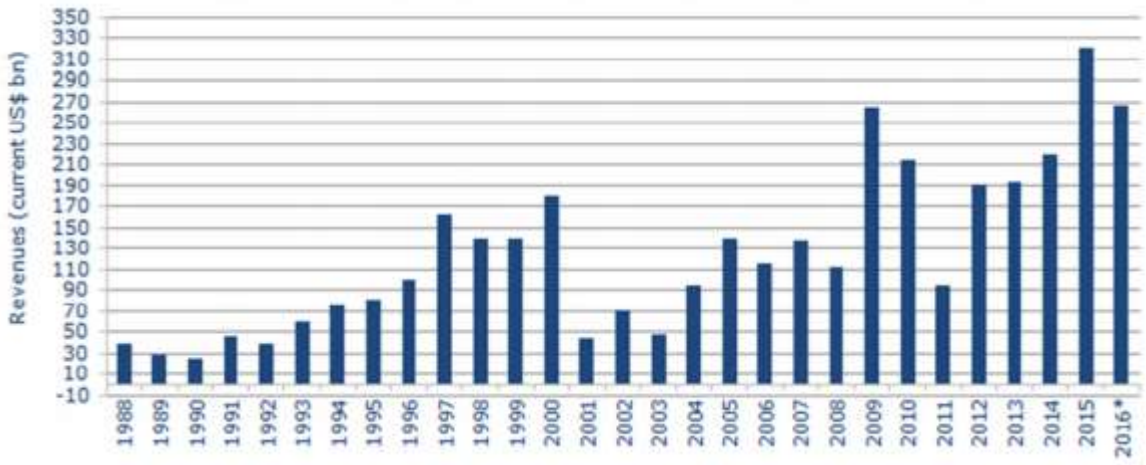
		Economic sector						
Alternative	**Vehicle of reform**	**Primary**	**Manufacturing**	**Services**	**Energy**	**Financial**	**Infrastructure**	**Other**
Divestiture	Auction	8.30%	7.60%	1.30%	4.20%	5.30%	72.20%	1.10%
	Direct or Asset sale	1.40%	12.30%	0.50%	13.00%	19.90%	52.60%	0.03%
	Liquidation	0.00%	99.50%	0.50%	0.00%	0.00%	0.00%	0.00%
	Stock market	3.90%	15.30%	0.30%	19.80%	46.00%	14.40%	0.20%
	Management/Emp. buy-out	0.50%	42.10%	39.90%	5.10%	0.00%	5.70%	6.70%
PPPs	Joint Venture	0.20%	13.80%	0.10%	21.20%	63.70%	0.90%	0.10%
	Concession Contracts	7.10%	2.70%	1.70%	0.70%	7.90%	79.80%	0.00%
Management arrangements	Lease	0.20%	3.10%	0.20%	0.50%	0.00%	95.90%	0.00%
	Management Contracts	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
Other	Others	2.30%	16.50%	4.50%	21.10%	14.30%	38.40%	2.80%

Note: The percentage corresponds to the indicative use of each reform vehicle, measured by the economic proceedings, reported over the period 1990-2008 by sector.

Source: authors elaboration based on privatization database (World Bank, 2008)

Global privatization trends in recent years are captured by the Privatization Barometer, which publishes annual reports with privatization updates. The reports show that a new worldwide wave of privatization surged after the immediate post-crisis period, reaching in 2015 the highest total privatization revenues on record reported since 1988 with a global total value of USD 319.9 billion. As shown in Figure 7, global value of privatizations in 2016 reported the second highest on record with USD 266.4 billion, which is indicative of a new wave of worldwide (Privatization Barometer, 2016). During 2015 and 2016, China was ranked as the leading privatizing country, raising USD 148 billion in 2016, and accounting for over half of the worldwide proceeds. Sales operations in China between 2015 and 2016 surpassed the total raised by all European privatizations over the years 2012-2014 (Privatization Barometer, 2016). The followers are the United Kingdom (USD 34.78 billion), Italy (USD 12.38 billion), Japan (USD 11.95 billion), India (USD 11.36 billion) and the United States (USD 11.0 billion).

Figure 7. Worldwide revenues from privatizations 1988-2016



Source: (Privatization Barometer, 2016)

The largest privatization operations over registered in 2015 corresponded to asset sales and share participations through capital markets (Privatization Barometer, 2016)**.** The largest individual deals in 2015 refer to asset sale of British government of Norther Rock to a US private equity group, whereas the second largest was an IPO from Japanese government for the Japan Post Group. However, China was the leading privatizing country through more than 298 sales registered that raised USD 176 billion in 2015.

4. SOEs in the context of COVID

COVID crisis is increasing the role of the state through direct (SOEs) and indirect assistance (Corporate sector). Worldwide governments are supporting the corporate sector to overcome the financial and economic difficulties amid COVID. This includes the provision of direct loans, grants, payroll support, as well as increased state participation that can have consequences in the long-term and affect private sector participation when not properly implemented.

As of December 2020, the WBG SOE-policy tracker identified at least 172 measures across 75 countries targeted to SOEs in response to COVID. At least 172 measures across all continents have been identified to provide support to SOEs. 44% of the measures related to SOEs identified are associated to high-income countries and 31% to lower- and middle-income countries. Europe and Central Asia region (37%) followed by East Asia and Pacific (32%) are the two most active regions in providing support to SOEs amid the pandemic.

The most common instrument of support is through capital injections (30%), followed by increased state participation (purchase of shares) 13%, and direct loans (12%). In addition to direct provision of funds, some SOEs have been called to shift some of their core commercial activities to provide essential goods such as cleaning products (e.g., hand sanitize, alcohol) and medical equipment (e.g., production of ventilators).

Figure 8. Number of measures by income-level

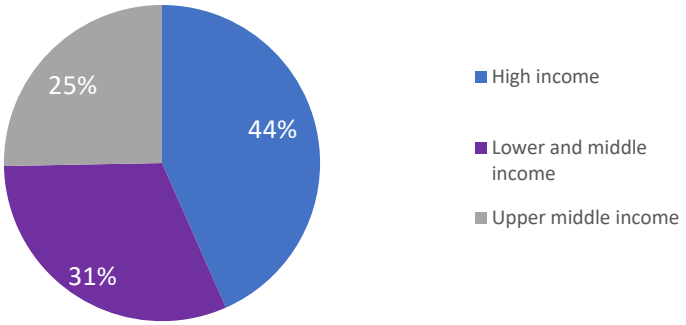


Figure 9. Number of measures by type of instrument

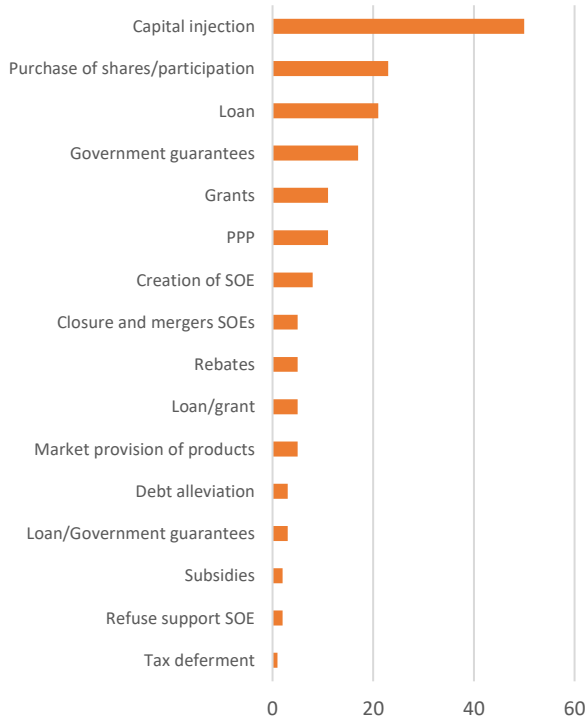
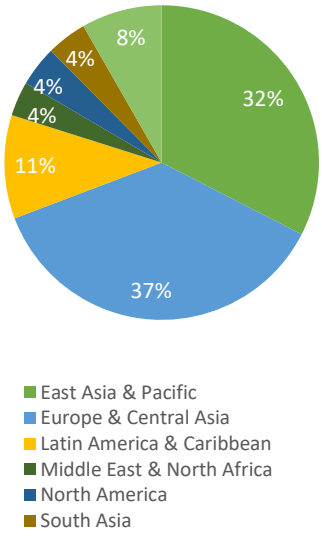


Figure 10. Number of measures by region

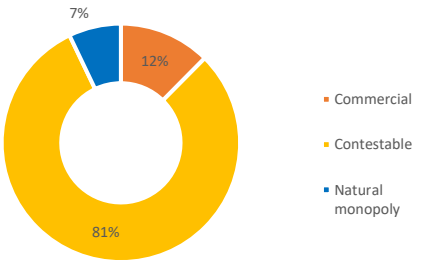


Source: authors' elaboration based on WBG SOE-policy tracker

Most SOE-related measures amid the pandemic are identified among commercial and contestable sectors often carried out by the private sector, which should be carefully monitored to ensure competitive neutrality principles in the provision of the support. 12% of the measures related to SOEs in response to the COVID shock correspond to fully commercial sectors, where there are low barriers to entry and under normal circumstances can be provided profitably by the private sector such as manufacturing sectors (e.g., medical and protective equipment, automotive, etc.) and hospitality services (e.g., hotels, restaurants). Approximately 80% of the total measures identified are targeted to contestable

sectors that correspond to markets with some degree of contestability, in which there is presence of large fixed costs and technological barriers to entry, but these could be served efficiently by more than one firm depending on market conditions such as demand structure and market size. In this case, most measures refer to the aviation and banking sectors (Figure 12). Less than 10% of the SOEs evidence worldwide in response to COVID are targeted to natural monopolies sectors, in which the costs for the provision of a good or service are minimized by concentrating the production in a single firm. In the latter, most measures respond to utilities (e.g., electricity, water).

Figure 11. Number of measures related to SOEs amid the pandemic



Source: authors' elaboration based on the WBG SOE-policy tracker

Figure 12. Number of (global) measures aimed to SOEs by sector in response to COVID-19, (March-December 2020)

Source: authors' elaboration based on the WBG SOE-policy tracker

COVID pose significant challenges on regards to the SOE agenda as it might expand the role of the state in commercial and contestable sectors with risks of crowding-out the private if the assistance is not provided under objective criteria, transparency and accountability. Competition principles should be incorporated as part of the set of criteria for providing government support to SOEs in order to protect

market-based incentives for the private sector activity and to ensure transparency and accountability. Despite the unprecedented circumstances, the governments should conduct a cost-benefit analysis approach to determine whether firm-specific assistance is needed as opposed to sector-specific assistance especially when granted to SOEs that compete vis-à-vis private operators. As of June 2020, SOEs in the aviation sector were receiving 6.8 dollars of every 10 dollars of assistance granted by worldwide governments, whereas private operators were receiving about 3 dollars (Licetti, Sanchez-Navarro, & Perrottet, 2020). Governments should minimize the provision of assistance on a preferential basis to SOEs to avoid unlevel the playing field. For that purpose, governments should confirm that there is a clear economic rationale to support SOEs and avoid to provide assistance to SOEs on exclusivity basis, especially when there are other private companies in the sector and grant the support under similar and objective conditions (e.g., period of loans, interest rates). Transparency and accountability of the assistance is also essential to minimize the risk of unlevel the playing field in favor of certain market players based on ownership or to avoid the resources been allocated to politically connected firms.

When opting for direct increased participation in the form of equity, the governments should define a clear exit strategy and should refrain from intervening in managerial decisions and prevent disruption of business decisions. The purchase of shares and increased state participation as a support measure in commercial and contestable sectors should be considered as a last resort. If deemed necessary, the governments should define ex ante an exit strategy and should refrain from intervening in managerial decisions and prevent disruption of sound business decisions. For instance, governments can obtain non-voting shares and limit their role as “observer” on the managerial boards, to maintain as much as possible the market-based incentives on the firms.

5. Final Remarks

State-owned enterprises (SOEs) are important economic actors in domestic and global markets, and especially in transition economies where they accounted for 20-30% of the GDP in 2011. Worldwide, SOEs account for 20% of total investment, 5% of the employment, and 12% of the manufacturing global trade. In 2014, one of every four companies in the Fortune Global 500 was an SOE.

SOEs can play a critical role in the market creation or taking a pioneer role to reach segments or markets that are not provided by the private sector. Depending on the local context, the presence of SOEs can be argued to different social and economic reasons. Often, governments have different rationales for state ownership such as: i) creating a state-owned monopoly where market regulation is deemed inefficient; ii) providing public goods and services; and iii) supporting public/social policy objectives or national interests. The economic rationales for the operation of SOEs usually relate to solving market failures, while political reasons involve the pursuit of development objectives or protection of national interests. SOEs can also be justified when there is no commercial viability for private sector participation, such that private companies might not be able to cover the costs of service provision with user-fees since the demand is not enough for a minimum efficient scale, or where pure private sector options might be limited. In those cases, SOEs could 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. Additionally, in the presence of public goods or where there are geopolitical or national security objectives to be protected, the private investment and private competition might not be neither viable nor desirable (e.g. defense, ports in FCV countries).

However, when operating vis-à-vis the private sector, it is essential to have competitive neutrality principles in place to level the playing field to avoid risks of distorting markets and crowding-out the private sector. SOEs are present and amid COVID are also expanding in commercial sectors where they compete with private operators. Governments should avoid policies that tilt the playing field in favor of specific market players vis-à-vis their peers and create undue competitive advantages include credits, subsidies, or land allocation granted to SOEs under favorable conditions. Governments should also promote the separation of the role as regulator and as market player to avoid create market distortions that affect the incentives of the private investors to participate in the market. The competitive neutrality principles need to be assessed and included even when there are no changes in ownership. Similarly, good practices of corporate governance should be considered as essential mechanisms to promote accountability and transparency in SOEs and mitigate risks of crowding-out the private sector.

This document shows that alternatives for SOE reform include a full spectrum of options depending on the level of transfer of the operational decisions and ownership (assets/shares) to the private sector. There is no *one size fits all* type of solution when addressing issues related to the role of SOEs in the markets. This document shows that the role of the private sector to enhance performance and market dynamics in presence of SOEs go beyond divestiture measures, and that the private sector can play an important role as a competitor of the SOE, as manager, and as temporary or permanent owner of the SOE. Depending on the level of transformation that is feasible given the local socio-economic context, this document offers a full set of potential solutions to improve participation of the private sector. This includes a menu of options ranging from corporate governance reforms (e.g., independence of board, professionalization of management, disclosure of financial information), regulatory reforms (e.g., promote competitive neutrality principles), management arrangements (e.g. concessions) and partial or

full ownership transformation (e.g., divestiture). Independently of the ownership arrangements, the focus of SOE reforms should be on defining the correct market incentives for SOEs, which can take different forms (e.g. corporate governance reforms, regulatory reforms, concessions, and ownership changes). Even when opting for full ownership transformation, the reform should be complemented by additional measures to ensure market-based incentives and a level playing field is preserved.

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