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Public sector enterprises in India: Enhancing geo-strategic reach and exports

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Working Paper 388

**Public Sector Enterprises in India:
Enhancing Geo-Strategic Reach
and Exports**

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April 2020



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List of Abbreviations

ASEAN	Association of Southeast Asian Nations
BHEL	Bharat Heavy Electricals Limited
BRI	Belt and Road Initiative
CAG	Comptroller and Auditor General
CLMV	Cambodia, Laos, Myanmar and Vietnam
CONCOR	Container Corporation of India Limited
CPSE	Central Public Sector Enterprise
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CSR	Corporate Social Responsibility
DPA	Development Partnership Administration
DPE	Department of Public Enterprises
EU	European Union
EXIM	Export Import
FDI	Foreign Direct Investment
GAIL	Gas Authority of India Limited
GATT	General Agreement on Trade and Tariffs
GDP	Gross Domestic Product
GVC	Global Value Chain
IMF	International Monetary Fund
IOCL	Indian Oil Corporation Limited
IRCON	Indian Railway Construction Company Limited
ITEC	Indian Technical and Economic Co-operation
LDC	Least Developed Country
LOC	Line of Credit

MAI	Market Access Initiative
MEA	Ministry of External Affairs
MoU	Memorandum of Understanding
OECD	Organisation for Economic Co-operation and Development
ONGC	Oil and Natural Gas Corporation
PSE	Public Sector Enterprise
R&D	Research & Development
RBI	Reserve Bank of India
RCEP	Regional Comprehensive Economic Partnership
SABIC	Saudi Basic Industries Corporation
SASAC	State-owned Asset Supervision and Administration Commission
SCM	Subsidies and Countervailing Measures
SDG	Sustainable Development Goal
SDP	Small Development Project
SME	Small and Marginal Enterprise
SOE	State-owned Enterprise
TCIL	Telecommunications Consultants of India Limited
TiSA	Trade in Services Agreement
TTIP	Transatlantic Trade and Investment Partnership
UAE	United Arab Emirates
US	United States
USTR	United States Trade Representative
WTO	World Trade Organization

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Abstract

Public sector enterprises (PSEs) have been one of the key drivers of economic development in several countries, including India. While many countries have gradually moved away from the PSE model of growth, in the year 2019, around 25 percent of the Fortune Global 500 companies were PSEs. As countries use PSEs to enhance their geo-strategic reach, it has raised concerns about the potential influence of governments on these enterprises in destination markets and the emergence of an uneven playing field between PSEs and the private players. Therefore, the role of PSEs is being increasingly discussed in international forums such as the WTO and G20 and trade rules on PSEs are being negotiated in several bilateral/regional trade agreements.

India is among the top eight countries in the world with a large number of PSEs that play a key role in meeting the country's geo-strategic interests and export targets. At the same time, several PSEs are loss-making units and are plagued by operational inefficiencies. In this context, this paper examines the role of Indian PSEs in expanding the country's geo-strategic reach and exports. It analyses the experiences of PSEs in select countries and presents the discussions and debates on PSEs in different international forums. Based on in-depth meetings with stakeholders, it identifies the challenges faced by the Indian PSEs and provides policy recommendations on how to prioritise and address them.

Keywords: *PSEs, state-owned enterprises, geo-strategy, exports, India, policy, WTO, G20*

JEL classification: *E61, F13, G38, L32, P45*

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Public Sector Enterprises in India: Enhancing Geo-Strategic Reach and Exports

Arpita Mukherjee, Angana Parashar Sarma, Ankita Barah, Arush Mohan

1. Introduction

Public sector enterprises (PSEs), also known as state-owned enterprises (SOEs), have been one of the key drivers of economic development in a number of countries (Kwiatkowski and Augustynowicz, 2015). Globally, these enterprises account for around 20 percent of investment, 5 percent of employment and up to 40 percent of domestic output (International Finance Corporation, 2018). In 2019, around 25 percent of multinational enterprises were owned, controlled or linked to governments according to the Fortune Global 500 company rankings.¹ The developing countries have a higher presence of PSEs among their top companies as compared to the developed countries.²

With liberalisation in the 1980s and development of multilateral trade rules under the World Trade Organization (WTO) in the 1990s, many countries, especially developed countries, have gradually moved away from the PSE model of growth to encourage private investment and competition (Nguyen, 2016). There has been a parallel shift in governance from direct control to provision of more autonomy to companies. The breakup of the erstwhile Soviet Union, the financial crisis in a number of Southeast Asian nations and the pressure on government exchequers due to the losses incurred by PSEs, have led to the privatisation of a number of PSEs.³ In spite of a drive towards privatisation, PSEs continue to play a key role in many developing countries in (a) economic development by ensuring implementation of government schemes and policies, and (b) enhancing the geo-strategic reach of countries by acquiring strategic assets through targeted investments. Today, they are mostly present in strategic sectors such as energy, minerals, infrastructure and other utilities. They help to ensure energy security, national security (for example, defence), supply public goods and services at concessional rates to targeted groups in the country and support governments in pursuing sustainable development goals (SDGs) [World Bank, 2014; Organisation for Economic Co-operation and Development (OECD), 2018; Greene, 2014; Barnes, 2019].

PSEs play a key role in international trade and in boosting investment flows, which is also linked to enhancing a country's geo-strategic reach. For example, the top eight countries in the world with the highest share of PSEs, namely China, United Arab Emirates (UAE), Russia, Indonesia, Malaysia, Saudi Arabia, India and Brazil, collectively account for more than 20 percent of the world trade (Kowalski et.al, 2013). Among them, China has strategically pursued its global expansion plan through SOEs in its Belt and Road Initiative (BRI), which is a government sponsored programme to enhance regional connectivity between China and countries in Asia, Africa, Europe, South America and the Pacific (OECD, 2018). Over 80 Chinese SOEs are part of this initiative. Studies show that China alone has

¹ <https://fortune.com/global500/> (last accessed December 20, 2019).

² <https://www.weforum.org/agenda/2013/05/state-owned-enterprises-in-the-global-economy/> (last accessed September 23, 2019).

³ <https://hbr.org/1991/11/does-privatization-serve-the-public-interest> (last accessed December 20, 2019).

over 100,000 SOEs and a number of them are growing as leading multinational companies (Miner, 2016).

As PSEs are increasingly operating in the global market, it has raised concerns about the potential influence of government authorities in these enterprises in destination markets and the emergence of an uneven playing field between these enterprises and private players (Buge et.al, 2013). Therefore, the role of PSEs has been increasingly discussed and debated in international forums such as the WTO and G20. Trade rules on PSEs are being negotiated in several mega-regional trade agreements such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and Trade in Services Agreement (TiSA) and bilateral trade agreements such as the European Union (EU)-Mexico Trade Agreement and the United States (US)-Singapore Free Trade Agreement.

1.1 PSEs in India

In India, post-independence, PSEs have played an important role in development and have been responsible for creating a strong industrial base. After independence, the government followed a socialist model with a public-sector led industrial development – the Feldman-Mahalanobis model, which focused on developing a strong capital base through PSEs in core sectors such as railways, steel, power, oil, telecommunications, mining and transportation (Nayar, 2001; Hambrook and Hauptmann - Socrates, 1999). Studies show that Indian PSEs have contributed to the development of backward regions, environment protection, promotion of green and energy efficient technologies, capacity building, promotion of social infrastructure such as education and healthcare (Gupta and Arora, 2014). PSEs have presence in several sectors spanning both goods and services, and many of them are engaged in international trade. They have helped to meet the country's energy and food security needs and have supported the implementation of government schemes and policies.

In the early 1990s, due to a severe balance of payment crisis, India shifted towards a liberalised economy with a larger role for the private sector in compliance with the conditions that had been laid down by the International Monetary Fund (IMF) for a structural adjustment loan. A number of sectors including telecommunications, power, ports, airports and airlines, which were erstwhile public monopolies, were gradually opened up for privatisation in a phased manner. More recently, private investment has been allowed in strategic sectors like defence. With liberalisation, PSEs faced competition from domestic and foreign players (Chauhan and Giri, 2016). In this environment, some PSEs have grown while others have become loss making units. A number of PSEs have undergone disinvestment and the disinvestment process still continues till date.⁴ Among the various methods of disinvestment followed by the government for the PSEs,⁵ a large part of it comes from strategic disinvestment, where there is sale of a substantial portion of the government shareholding of

⁴ <https://www.pwc.com/sg/en/government-public-services/assets/state-owned-enterprises-201504.pdf> (last accessed October 14, 2019).

⁵ These methods include strategic disinvestment, initial public offering (IPO), further public offering (FPO), offer for sale, institutional placement program, CPSE exchange traded fund, buy back shares or sale through demerger.

a PSE (up to 50 percent or higher as determined by the competent authority) including transfer of management control (Kaushik, 2018). In November 2019, the government had identified 28 central PSEs for strategic disinvestment.⁶ In the Union Budget 2020-2021, government has proposed a disinvestment target of Rs. 2.1 lakh crore.⁷ However, with the global outbreak of coronavirus disease (COVID-19), some disinvestment proposals have been put on hold and for others the deadlines for submitting bids have been extended.⁸

In spite of these developments, PSEs continue to play an important role in India's exports and in enhancing the country's geo-strategic reach. In the Fortune Global 500 list of companies for 2019, India had 7 PSEs, which is the second largest number after China. Due to the important role played by Indian PSEs, the Honourable Prime Minister, Mr. Narendra Damodardas Modi, at the Central Public Sector Enterprise (CPSE) Conclave held on April 9, 2018, pointed out that by 2022, Indian PSEs should maximise their geo-strategic reach and minimise their import bills.⁹ He emphasised the key role of PSEs in the country's development and encouraged them to improve competitiveness, innovate and adopt technology, engage more in global trade (especially in exports and outward investments) and enhance value addition in India to make 'Make in India' successful. This is needed because unlike China, India has not been able to fully utilise its PSEs to expand its geo-strategic reach and exports. If India wants to engage in new global partnership forums such as the Indo-Pacific and G20, there is need to explore how it can use its PSEs to expand its geo-strategic reach.

2. Objective and Methodology

Given this background, the objective of this paper is to examine the role of Indian PSEs in expanding the country's geo-strategic reach. The paper examines the experiences of PSEs in select countries and then presents the discussions and debates on PSEs in different international forums. It provides an overview of PSEs in India, focusing on exports, investments and their international presence.

It identifies external and domestic challenges faced by PSEs in expanding globally and in enhancing exports. The paper makes policy recommendations on how India can strengthen its geo-strategic reach and exports through PSEs, by addressing key issues and learning from global best practices. It also presents India's negotiating strategies and options in different international forums. The paper is based on secondary information analysis and in-depth meetings with 30 PSEs, different ministries and departments, and financial institutions such as Export Import (EXIM) Bank.

⁶ <https://pib.gov.in/newsite/PrintRelease.aspx?relid=194643> (last accessed October 14, 2019).

⁷ <https://dea.gov.in/sites/default/files/Final%20Budget%20Circular%202020-2021.pdf> (last accessed October 14, 2019).

⁸ <https://economictimes.indiatimes.com/news/economy/finance/covid-19-throws-a-wrench-into-indias-disinvestment-plans/articleshow/75034686.cms> (last accessed April 16, 2020).

⁹ <https://pib.gov.in/Pressreleashshare.aspx?PRID=1528394> (last accessed October 14, 2019).

3. Experiences of PSEs in Select Countries

A number of countries have designed strategies to use their PSEs to increase their geo-strategic reach and overseas investment, thereby opening up trade routes for their private sector enterprises. While some countries such as Canada and Singapore have successfully used their PSEs to develop key sectors of the economy (such as the agriculture and modern services sectors, respectively) and in expanding their international presence, in others such as Brazil, these state enterprises have not been much successful (Haywood, 2016).

Countries have also adopted various methods to improve governance and make their PSEs globally competitive. While some PSEs are fully-owned and controlled by the government, in others, government may hold a partial stake. It is, therefore, interesting to examine the experiences of different countries. In this context, the experience of six countries, namely, China, Singapore, Brazil, Indonesia, Russia and Saudi Arabia, have been examined in detail in terms of the role played by PSEs in their economic development, their exports, the key sectors in which PSEs are present and the different models of global expansion followed to increase their geo-strategic reach. These countries are among the top ten countries in the world in terms of the number of PSEs, with China holding the highest share of around 80 percent. It is interesting to look at the experiences of PSEs in these countries as they have different models of expansion and these countries are also a part of the WTO, G20 and the Indo-Pacific forum. Indian PSEs are competing with PSEs from these countries in the global markets. Table 1 gives an overview of the PSEs in these six countries mentioned above, across select indicators.

Table 1: Overview of PSEs across Select Countries

Country	Contribution of PSEs to the Gross Domestic Product (GDP)	Total number of PSEs in the country and in Fortune Global 500 list of 2019	Share of exports of PSEs as percentage of total exports	Major sectors of operation	Share of PSEs among countries' top ten firms (2013) in percentages
China	39% in 2015	<ul style="list-style-type: none"> Total number - over 150,000 in 2017 Fortune Global 500 List (2019) -119 	10.7% in 2015	Finance, construction, oil and natural gas, telecommunications	96
Singapore	15% in 2010	<ul style="list-style-type: none"> Total number- over 100 in 2013 Fortune Global 500 List (2019) – none 	<i>Not Available On-line</i>	Telecommunications, media, public transportation, defense, port, and airport operations	23
Brazil	30% in 2016	<ul style="list-style-type: none"> Total number- 418 in 2017 Fortune Global 500 List (2019) - 3 		Oil and natural gas, finance	50
Indonesia	56.9% in 2016	<ul style="list-style-type: none"> Total number- 148 in 2016 Fortune Global 500 List (2019) - 1 		Oil and natural gas	69
Russia	30% in 2015	<ul style="list-style-type: none"> Total number-around 31,000 in 2013 Fortune Global 500 List (2019)- 3 		Oil and natural gas, finance, technology, manufacturing	81
Saudi Arabia	70% in 2016	<ul style="list-style-type: none"> Total number - around 24 in 2015 Fortune Global 500 List (2019) - 2 		Oil and natural gas	67

Source: Compiled from multiple government sources and Fortune Global 500 List (2019)

3.1 China

Chinese PSEs play a key role in the country's economic development and global expansion plans (Chiang, 2018). In 2015, PSEs controlled 38.8 percent of total assets and accounted for 17.2 percent of total profits and 18.2 percent of employment in the country.¹⁰ In the Fortune Global 500 list of companies, China has the largest number of PSEs. In 2019, China had a total of 119 companies listed, of which 84 were PSEs operating across a wide range of sectors such as finance, construction, oil, natural gas and telecommunications.

Since the 1970s, state-owned enterprises in China have been transforming due to market-oriented economic reforms aimed at opening up the economy to foreign trade (Guluzade, 2019). The State-owned Asset Supervision and Administration Commission of the State Council (SASAC) was formed in 2003 and is the central decision-making body that is responsible for the functioning of PSEs in China.¹¹ The SASAC has been involved in restructuring PSEs through various measures such as privatisation, asset sales, mergers and acquisitions, etc. A number of PSEs are also being restructured into modern profit-oriented corporations by SASAC (Nan, 2019).

Nevertheless, Chinese PSEs are still important, especially for procurement of overseas businesses. In recent years, especially with the launch of the BRI in 2013, Chinese PSEs have been getting more involved with overseas infrastructure projects, gradually increasing their stake in China's exports. As of May 2019, around 3,000 projects along the BRI have been implemented by around 85 Chinese PSEs in countries located in Africa, Asia, Middle East and Europe.¹² The BRI focuses on the global expansion of the Chinese PSEs, especially in countries with rich endowments of natural resources to meet its requirements. China has also been using the BRI as a means to channelise its excess industrial capacity through the PSEs.¹³ Its focus is both strategic and economic, and involves investing and acquiring foreign assets and companies, especially taking over projects in countries which cannot afford to finance it (OECD, 2018).

3.2 Singapore

Although there is no data on Singapore PSEs in terms of their global expansion, according to a number of studies, the PSEs of Singapore (also known as government-linked corporations) have a strong presence in Asia and follow a model of operation different from that of Chinese PSEs (Cheng-Han, Puchniak and Varotttil, 2015; PwC, 2015).

¹⁰ National Bureau of Statistics of China, China Statistical Yearbook 2016, <http://www.stats.gov.cn/tjsj/ndsj/2016/indexeh.htm> (last accessed September 23, 2019).

¹¹ <http://www.oecd.org/corporate/ca/Ownership-and-Governance-of-State-Owned-Enterprises-A-Compendium-of-National-Practices.pdf> (last accessed September 23, 2019).

¹² <https://in.reuters.com/article/us-usa-trade-china-soe/chinas-soe-regulator-calls-for-continued-overseas-expansion-despite-trade-war-csj-idINKCN1T1044> (last accessed February 3, 2020).

¹³ <https://medium.com/fairbank-center/the-overseas-expansion-and-evolution-of-chinese-state-owned-enterprises-3dc04134c5f2> (last accessed September 25, 2019).

After gaining independence in 1965, the Government of Singapore made huge investments to form private companies and start-ups to drive economic growth. In this context, PSEs were instrumental in Singapore's economic development as there was a shortage of private sector funds and expertise.¹⁴ In 1974, Temasek, an investment holding company, was formed to own and commercially manage investments and assets previously held by the Government of Singapore. As an active investor, Temasek engages the board and management of its portfolio companies on global or strategic trends. It promotes good governance among them to drive strategy and oversee management.¹⁵ Temasek has a diverse portfolio spanning across various sectors, with financial services (25 percent) and telecommunications, media and technology (20 percent) being the most prominent. The Temasek model allows the Ministry of Finance to focus on policymaking and separate itself from business dealings. There are no government representatives on the Board of Temasek portfolio companies.¹⁶ As such, the government of Singapore does not have any influence over the appointment of key personnel and operations of Temasek or other PSEs.

Temasek stepped up investments in companies outside Singapore in 2002. As of March 31, 2019, Temasek had a portfolio value of US\$ 231 billion.¹⁷ A major share of Temasek's assets are in Singapore (26 percent) and China (26 percent). The rest of Asia accounts for a combined share of 14 percent, with India's share at 5 percent. North America and Europe accounts for shares of 15 percent and 10 percent, respectively.¹⁸ Since 2015, Temasek has invested around US\$ 286 million in Indian start-ups such as Ola Cabs (ANI Technologies Private Limited), Zomato, Policy Bazaar and Pine Labs, among others.¹⁹ This is a unique model of global expansion, which India can learn from.

3.3 Brazil

As of 2019, out of the eight Brazilian companies in the Fortune Global 500 list, three were PSEs operating in the oil and natural gas sector, and financial sector.²⁰ In Brazil, state ownership of enterprises began in the 1940s and PSEs were established in core sectors such as mining, power generation, steel and chemicals. State ownership expanded and accelerated in the 1970s under military dictatorship, with PSEs being responsible for a significant amount of investments.²¹ As of 2019, the Government of Brazil had 418 PSEs in its portfolio.²² However, because of limited international expansion and involvement in international trade,

¹⁴ <https://www.pwc.com/sg/en/government-public-services/assets/state-owned-enterprises-201504.pdf> (last accessed October 14, 2019).

¹⁵ <https://www.temasek.com.sg/en/what-we-do/how-we-invest> (last accessed February 3, 2020).

¹⁶ <https://www.temasek.com.sg/en/faqs> (last accessed February 3, 2020).

¹⁷ <https://www.temasek.com.sg/content/dam/temasek-corporate/our-financials/investor-library/annual-review/EN-TR-PDF-2019/TO19-full.pdf> (last accessed February 3, 2020).

¹⁸ <https://www.temasek.com.sg/content/dam/temasek-corporate/our-financials/investor-library/annual-review/EN-TR-PDF-2019/TO19-full.pdf> (last accessed February 27, 2020).

¹⁹ <http://www.forbesindia.com/article/boardroom/singapore-sting-temaseks-game-plan-for-india-investments/56081/1> (last accessed February 27, 2020).

²⁰ <https://fortune.com/global500/2019/search/?hqcountry=Brazil&rank=asc> (last accessed February 27, 2020).

²¹ https://www.oecd.org/daf/ca/Workshop_SOEsDevelopmentProcess_Brazil.pdf (last accessed September 27, 2019).

²² <https://www.forbes.com/sites/kenrapoza/2018/11/03/when-it-comes-to-state-owned-companies-brazil-is-the-china-of-latin-america/#20c555d153da> (last accessed September 27, 2019).

and low operational and managerial efficiencies, the contribution of PSEs to the economy overtime has been below their potential (Vianna, 2014; Musacchio and Lazzarini, 2014). Therefore, like India, the present government is privatising some of the PSEs by selling off their subsidiaries.²³

The PSEs of Brazil have a strong global presence primarily in the energy sector through their representative offices, joint ventures and subsidiaries. For example, Petrobras, an oil and natural gas company, has presence in Africa and South America through joint ventures, Asia and Europe through representative offices and North America through their exploration and production activities.²⁴ Another PSE, Eletrobras, operates in Paraguay, Uruguay, Argentina and Venezuela through its joint ventures.²⁵

3.4 Indonesia

As of 2019, Indonesia had one PSE, Pertamina, present in the Fortune Global 500 list, which operates in the oil and natural gas sector.²⁶ The PSEs in Indonesia have been the main drivers of the country's infrastructure development. Even after the Asian financial crisis and privatisation thereafter, PSEs continue to play a crucial role in key sectors such as oil, natural gas, steel and coal (Kim, 2018). The role played by PSEs in the economic development of the country is similar to the journey of PSEs in India. In 2019, the Indonesian government announced plans to create a state-owned holding company to strengthen the role of PSEs.²⁷ This structure is similar to the Temasek model of Singapore.²⁸ Indonesian PSEs operate overseas primarily through their international subsidiaries. For example, Pertamina operates in several countries in Asia, Europe, Africa and South America through its subsidiary, Pertamina International.²⁹

3.5 Russia

PSEs in Russia are an integral part of the economy. Even after privatisation in the 1990s, the share of state-owned assets has increased over time, from 30 percent in 2005 to 35 percent in 2010 (Bella et al., 2019). In 2019, three Russian PSEs were present in the Fortune Global 500 list. These PSEs mainly operate in the oil and natural gas sector, and the financial sector.³⁰

The Russian government has strong control over the oil and natural gas sector, with substantial equity stakes in PSEs in other sectors such as technology, manufacturing and natural resources. Consequently, the development of the Russian economy depends on the

²³ <https://in.reuters.com/article/us-brazil-privatization/brazil-govt-aims-to-sell-at-least-20-billion-in-assets-this-year-idINKCN1PN1O4> (last accessed September 27, 2019).

²⁴ <http://www.petrobras.com.br/en/petrobras-worldwide/#americasul> (last accessed October 24, 2019).

²⁵ <https://eletrobras.com/en/Paginas/Eletrobras-in-the-World.aspx> (last accessed October 24, 2019).

²⁶ <https://fortune.com/global500/2019/pertamina/> (last accessed February 27, 2020).

²⁷ <https://www.thejakartapost.com/news/2019/04/15/super-holding-company-to-replace-function-of-soes-ministry.html> (last accessed November 2, 2019).

²⁸ <https://www.thejakartapost.com/news/2019/04/15/super-holding-company-to-replace-function-of-soes-ministry.html> (last accessed October 15, 2019).

²⁹ <http://www.piep.pertamina.com/working-area> (last accessed October 24, 2019).

³⁰ <https://fortune.com/global500/2019/search/?hqcountry=Russia&rank=asc> (last accessed February 27, 2020).

success of its PSEs. Due to abundant natural resources, some Russian PSEs operating in the oil and natural gas sector are able to export their products after meeting domestic demand. For example, Gazprom sells more than half of its gas to Russian consumers and exports gas to over 30 countries within and beyond the former Soviet Union. Rosneft, another oil and natural gas company, has operations in over 25 countries. The government is planning to privatise some of the PSEs to improve productivity, through a state asset privatisation plan launched in 2017.³¹

3.6 Saudi Arabia

In 2019, there were two Saudi Arabian PSEs, Saudi Aramco and Saudi Basic Industries Corporation (SABIC), in the Fortune Global 500 list, operating in the oil and natural gas and petrochemical sectors respectively.³² Saudi Aramco has a large global presence with representative offices, joint ventures and subsidiaries in Asia, Europe and North America. SABIC is one of the world's largest petrochemicals manufacturers, which operates in over 50 countries and has 64 world-class manufacturing and compounding plants across countries in the Middle East, Asia, Europe, North America and South America.

Given the abundance of oil deposits in the country, much of the country's development is attributable to PSEs in the oil and natural gas sector (Eljelly, 2011). Saudi Aramco contributes almost 43 percent to the country's GDP and 85 percent to its exports and is the world's largest oil exporter. However, there are only a few PSEs in Saudi Arabia that have been successful in the last few decades and most of them suffer from operational inefficiencies. To improve operational efficiencies, the government plans to privatise PSEs through programmes such as the Delivery Plan 2020, which aims to increase the role of the private sector in the Saudi Arabian economy.³³

Overall, the experiences of PSEs across countries show that they tend to be in infrastructure and strategic sectors. While a number of countries are going in for disinvestment due to government fund shortages and to improve performance, PSEs are still used by governments to enhance their geo-strategic reach, although the models differ from country-to-country. Within the Association of Southeast Asian Nations (ASEAN), Singapore's experience with Temasek has been an innovative and successful model and other ASEAN countries are keen to adopt it. In most countries, PSEs tend to concentrate in a few strategic sectors. Innovation and technology adaptation have been key to the success of many PSEs (Benassi and Landoni, 2017) and Indian PSEs can learn from their experiences.

PSEs across countries have been expanding abroad through various means such as signing memoranda of understanding (MoUs) with PSEs/private firms in foreign countries, mergers and acquisitions, forming consortiums with other PSEs and investing together as a group, forming local partnerships, etc. Some of these routes to expanding abroad are determined by

³¹ <https://tass.com/economy/928615> (last accessed February 27, 2020).

³² <https://fortune.com/global500/2019/search/?hqcountry=Saudi%20Arabia&rank=asc> (last accessed February 27, 2020).

³³ <https://us-sabc.org/tag/delivery-plan-2020/> (last accessed October 24, 2019).

the government while some are company determined. The routes through which Indian PSEs are expanding abroad are discussed in detail in Section 6.

Countries which support PSEs as part of their geo-strategic objectives can work together in international forums such as the WTO, G20 and Indo-Pacific on how to use PSEs to increase exports, become self-reliant and extend their geo-strategic reach. The next section discusses some developments in international forums and trade agreements on PSEs.

4. PSEs – Developments in International Forums/Agreements

The use of PSEs by countries such as China for international expansion and trade are now increasingly being discussed in several forums such as the WTO and G20, and various regional and bilateral trade agreements are focusing on ensuring a more transparent process by applying trade rules to PSEs. Some of these are discussed below.

4.1 WTO

Historically, state enterprises have been in discussion since the signing of the General Agreement on Trade and Tariffs (GATT), where multilateral trade rules were introduced (Haywood, 2016). However, PSEs have started receiving more attention in recent times due to their extensive presence internationally, engaging in cross-border trade and investments and in expanding their geo-strategic reach (OECD, 2016). Concerns have been raised in the WTO by developed countries such as the US, Australia, Germany, etc., that PSEs can be used by certain countries to distort investment flows and competition in trade, affecting the development of efficient global value chains (GVCs) and opening up of domestic markets for foreign investment (World Bank, 2020; Willemys, 2016). Majority of the PSEs globally operate in sectors which are GVC-intensive such as energy and as such their trade distorting potential in cross-border trade and investment is a cause of concern (World Bank, 2020). Specifically, these concerns have been associated with the notion that PSEs are usually granted certain competitive advantages in the form of regulatory favouritism, financial support such as state subsidisation, favourable tax regimes, easy access to credit and low cost borrowing through state-owned financial institutions (as the in case of countries like China), and being preferred in public procurement, etc., which leads to a non-level playing field for the private sector (Kowalski et.al., 2013).

Countries such as the US and Germany have raised concerns regarding whether provisions specified in international organisations and trade agreements lead to a level playing field between PSEs and privately owned enterprises (Rashish, 2019), and whether they adequately address existing concerns about the participation of PSEs in international trade and investments (Messenger, 2017).

Studies such as Haywood (2016) pointed out that trade rules under the WTO and various trade agreements [such as the CPTPP, TiSA, and Transatlantic Trade and Investment Partnership (TTIP)] have attempted to discipline the behaviour of PSEs, through the application of principles such as non-discriminatory treatment and acting on commercial

considerations. Messenger (2017) pointed out that the WTO regulates PSEs through various provisions; however, there exist several theoretical deficiencies and many countries and their PSEs do not comply with existing norms.

For example, the WTO's Agreement on Subsidies and Countervailing Measures (SCM) states that '*a subsidy shall be deemed to exist if there is a financial contribution by a government or any public body within the territory of a member*'. However, Messenger (2017) pointed out that what constitutes a 'public body' under the WTO is not clearly defined. In 2014, the WTO Appellate Body had ruled against the US in a series of countervailing duty investigations carried out against Chinese exporters who were PSEs and were believed to be recipients of unfair government support. The Appellate Body found that the US government's rationale behind 'public bodies' could not be justified under WTO rules [International Centre for Trade and Sustainable development (ICTSD), 2014]. Such measures have raised concerns among a number of developed countries such as the US about the use of PSEs by countries like China to promote exports in an unfair way that cannot be countered within the existing WTO framework. PSEs of countries such as India and China have been targeted by developed economies such as the US and the EU and India needs to develop a strategy to address the concerns raised by some of its key trading partners, especially since it has lost the export subsidy case against the US in October, 2019.³⁴ The US has taken several retaliating measures against China in products such as steel that are PSEs' major export items of the PSEs.

4.2 Bilateral/Regional/Other Trade Agreements

Trade agreements such as the CPTPP, TTIP, TiSA (under negotiations and not signed) and many other bilateral agreements have provisions for discussions on PSEs. Focusing on regional agreements, CPTPP (signed on March 8, 2018) is one of the biggest regional trade agreements between some of the largest economic players in the world, including countries such as Vietnam, that make extensive use of PSEs. It has one of the most comprehensive provisions on disciplining PSEs and has a separate chapter on 'State-Owned Enterprises and Designated Monopolies', which has standards set for management of PSEs and rules defined for their commercial engagement.³⁵ The main aim is not to prohibit PSEs, but to set standards that do not give PSEs an unfair advantage over private firms (Haywood, 2016). In many regional agreements such as TTIP and TiSA, provisions such as prohibition on cross-subsidisation through PSEs have been proposed (Willemys, 2016).

Among bilateral agreements, the US-Singapore Free Trade Agreement (signed on May 6, 2003) has a dedicated chapter on PSEs, with requirements such as non-discriminatory treatment in the sale of goods and services and acting on commercial considerations.³⁶ In

³⁴ [https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?Query=\(@Symbol=%20wt/ds541/r*%20not%20rw*\)&Language=ENGLISH&Context=FomerScriptedSearch&languageUIChanged=true#](https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?Query=(@Symbol=%20wt/ds541/r*%20not%20rw*)&Language=ENGLISH&Context=FomerScriptedSearch&languageUIChanged=true#) (last accessed April 14, 2020).

³⁵ https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/cptpp-ptppg/sectors-secteurs/state_owned-appartenant.aspx?lang=eng (last accessed February 23, 2020).

³⁶ https://ustr.gov/sites/default/files/uploads/agreements/fta/singapore/asset_upload_file708_4036.pdf (last accessed February 23, 2020).

many other bilateral agreements such as the EU-Vietnam Free Trade Agreement (signed on June 30, 2019)³⁷ and EU-Japan Economic Partnership Agreement (signed on July 17, 2018),³⁸ core rules related to PSEs include non-discrimination and commercial considerations, including rules that put PSEs and private enterprises on an equal footing when engaged in commercial transactions (sales and purchases with a profit-making objective). It includes provisions that enable parties to request information on corporate structures and finances. Besides, they can also request information on corporate governance, including those relating to the application of regulations to PSEs and the private sector in a non-discriminatory manner.

Several issues may come up if India engages in trade negotiations, especially with the US and the EU. These include lack of a clear definition and broad scope on PSEs, limited specific disciplines on trade distortive practices by PSEs, and problems of enforcement in the existing international disciplines on PSEs (Willemys, 2016). Overall, it is important to note that it is not the existence of PSEs in international markets that is objected by many of India's key trading partners, but their distortive practices when engaging in commercial competition. More specifically, if India wants to enter into any agreement with developed economies such as the US or the EU after backing out from trade agreements such as the Regional Comprehensive Economic Partnership (RCEP), India will have to follow rules of transparency and non-discrimination. Such countries would like to have more clearly defined rules regarding enforceability and dispute settlement, specific exemptions, exclusion/inclusion of many government entities from the ambit of PSEs, etc.

5. Overview of PSEs in India

India is one of the countries with a strong PSE presence across diverse sectors of the economy including petroleum, power generation, financial services, steel, textiles, hotel and tourism, telecommunications, etc. The ownership of PSEs has a decentralised structure (owned by both the central and state governments), with a nodal agency – Department of Public Enterprises (DPE), Ministry of Heavy Industries and Public Enterprises, which acts as a co-ordinating body. The DPE is responsible for formulating policies for PSEs with respect to performance improvement, monitoring and evaluation, financial accounting, personnel management, corporate social responsibility, etc.³⁹

As of March 31, 2018, there were 339 central PSEs (excluding insurance companies) in India, out of which 257 were in operation during 2017-18.⁴⁰ At the centre, PSEs are administered under different line ministries and departments.⁴¹ For example, Coal India Limited comes under the Ministry of Coal and the Power Grid Corporation of India Limited

³⁷ https://trade.ec.europa.eu/doclib/docs/2018/september/tradoc_157368.pdf (last accessed February 23, 2020).

³⁸ https://trade.ec.europa.eu/doclib/docs/2017/july/tradoc_155693.doc.pdf (last accessed February 23, 2020).

³⁹ <https://dpe.gov.in/about-us/about-department> (last accessed November 23, 2019).

⁴⁰ For details, see <https://pib.gov.in/newsite/PrintRelease.aspx?relid=191107> (last accessed October 24, 2019).

⁴¹ These enterprises are classified under four schedules (Schedule A, B, C and D) and are categorised into Maharatna, Navratna and Miniratna, based on their comparative advantages and potential to become global players.

comes under the Ministry of Power. The vision, mission and long/short term objectives of PSEs are developed by the line ministries. Some PSEs have created several subsidiaries, in India and abroad. For example, Coal India Limited has 8 subsidiaries and Indian Oil Corporation Limited (IOCL) has 2 Indian and 7 foreign subsidiaries.

To improve the performance of the PSEs and as part of geo-strategic measures, the DPE has come up with several initiatives in recent years. For example, ‘Samanvay’ is a knowledge management platform where PSEs can share their technical knowledge, expertise, innovation, case studies and best practices with each other. Through this platform, PSEs can also upload information and access research and development (R&D) and training facilities.⁴² ‘Drishti’ is an online dashboard that provides real-time update and monitoring of activities undertaken by the PSEs and their respective line ministries, as a part of the implementation of their action plans prepared in the context of the CPSE Conclave 2018, which focused on enhancing the geo-strategic reach of Indian PSEs. Such initiatives can enable PSEs to collectively share knowledge, insights, and best practices from their respective sectors, thus helping each other to grow and compete in domestic as well as foreign markets.

Some PSEs have also come up with innovative measures. For example, Bharat Heavy Electricals Limited (BHEL) has come up with a ‘multidimensional transformational strategy’ to lead the company towards becoming a global engineering firm. BHEL has taken up the task of reviewing and revamping its existing processes, redesigning its business models, developing a committed workforce with strong leadership skills and expanding into new markets.

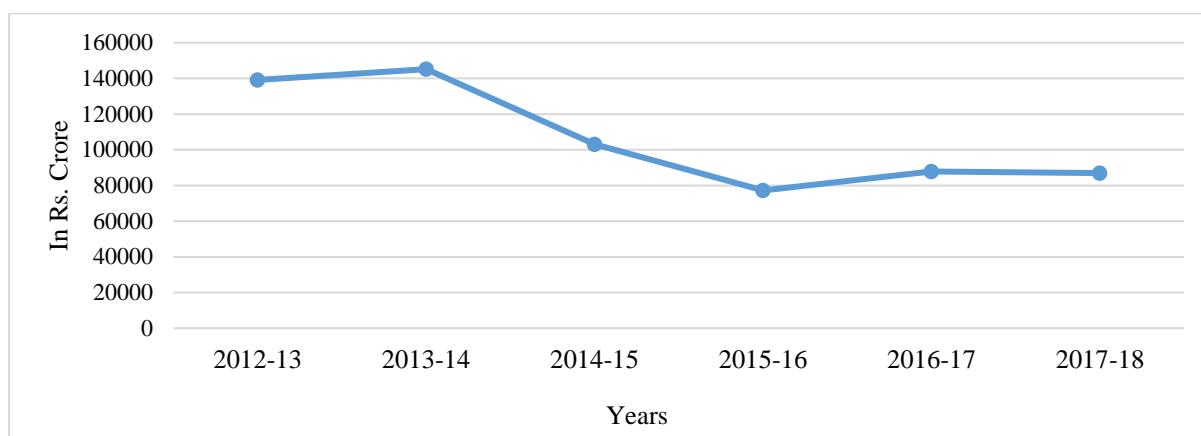
5.1 Exports and Foreign Exchange Earnings

Indian PSEs are engaged in exports of both goods and services. The top goods exported include steel products (such as rails, structural, wire rods, stainless steel sheets, etc.), copper concentrates, aluminium products, petrochemical products and lubricants, polymers, and chemical fertilisers; the top services include consultancy services related to construction, exploration (oil, petroleum, coal, and minerals), mining and railways, and information technology services. In 2017-18, the total foreign exchange earnings of PSEs through exports of goods and services amounted to Rs. 86,980 crores.⁴³ However, exports by PSEs have declined as compared to 2012-13 (see Figure 1).

⁴² <https://samanvay.cpse.in/> (last accessed November 23, 2019).

⁴³ <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1557466> (last accessed October 24, 2019).

Figure 1: Foreign Exchange Earnings of PSEs from Exports of Goods and Services

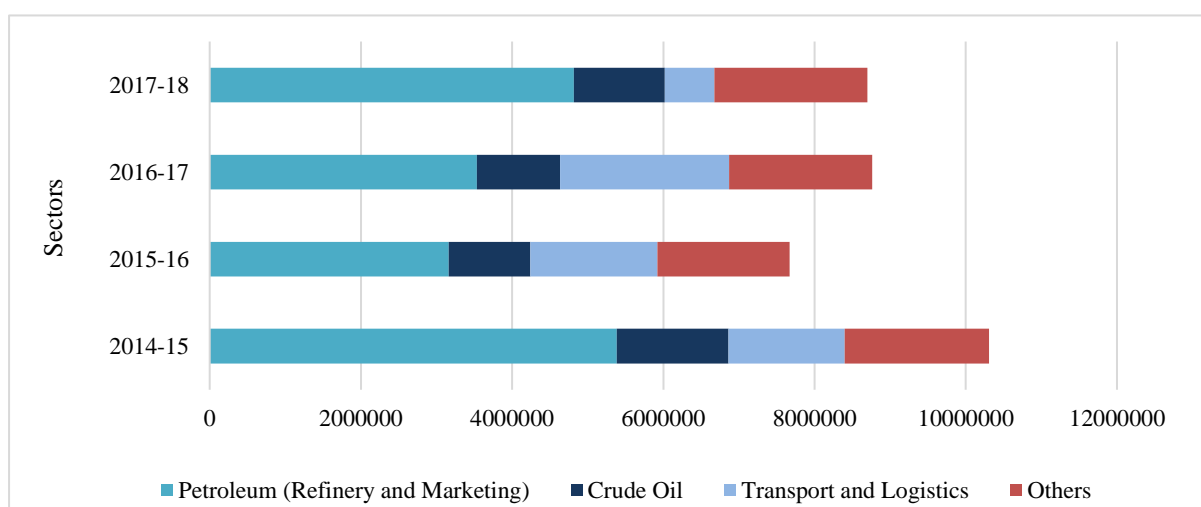


Source: Compiled from Public Enterprises Surveys from 2013-14 to 2018-19, of the Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises

The sector-wise trend in foreign exchange earnings for four years shows that the petroleum and crude oil sectors accounted for over 60 percent of total foreign exchange earnings from exports (see Figure 2 and 3). During meetings with PSEs, it became apparent that Indian companies, unlike firms from China, is yet to explore the full potential of exports of services, especially financial services, high technology-oriented and software services, and social sector services like health and education. There is potential for India to collaborate on R&D and consultancy services through partnership between PSEs and the Indian private sector, which has also remained unexplored.

Figure 2: Sector-Wise Foreign Exchange Earnings from Exports of Indian PSEs (2014-15 to 2017-18)

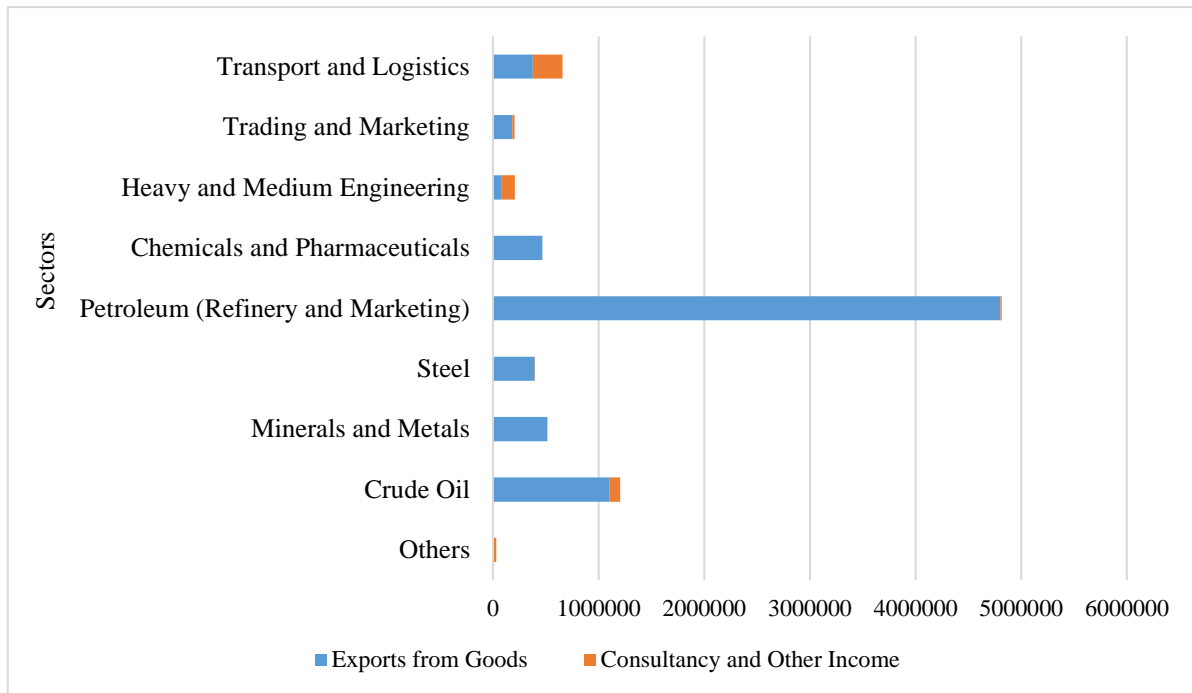
In Rs. lakhs



Source: Compiled from Public Enterprises Surveys from 2015-16 to 2018-19, of the Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises

Figure 3: Composition of Goods and Services in Foreign Exchange Earnings of the PSEs across Sectors (2017-18)

In Rs. lakh



Source: Extracted from Public Enterprises Survey (2018-19) of the Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, available at <https://dpe.gov.in/sites/default/files/E1Statement20.xlsx> (last accessed November 2, 2019)

This is despite the fact that a majority of Indian PSEs have been exporting both goods and services for over ten years. For example, Coal India Limited, BHEL, Gas Authority of India Limited (GAIL), Indian Railway Construction Company (IRCON) Limited and Oil and Natural Gas Corporation (ONGC) Videsh have been exporting or have an established presence in foreign markets or have successfully completed international projects for over ten years. Some PSEs, such as Hindustan Insecticides Limited (HIL), have been selling their products in the global market for over five years. Container Corporation of India (CONCOR) Limited has started exploring global opportunities in the past one year. PSEs have established global presence through joint ventures and subsidiaries, by acquiring assets, through mergers and acquisitions and by taking up projects through competitive bidding, either on their own or through consortium partnerships. In the financial sector, public sector banks, such as State Bank of India, Indian Overseas Bank, Punjab National Bank and Bank of India, provide banking and financial services through their overseas branches, subsidiaries, joint ventures, representative offices and exchange companies.

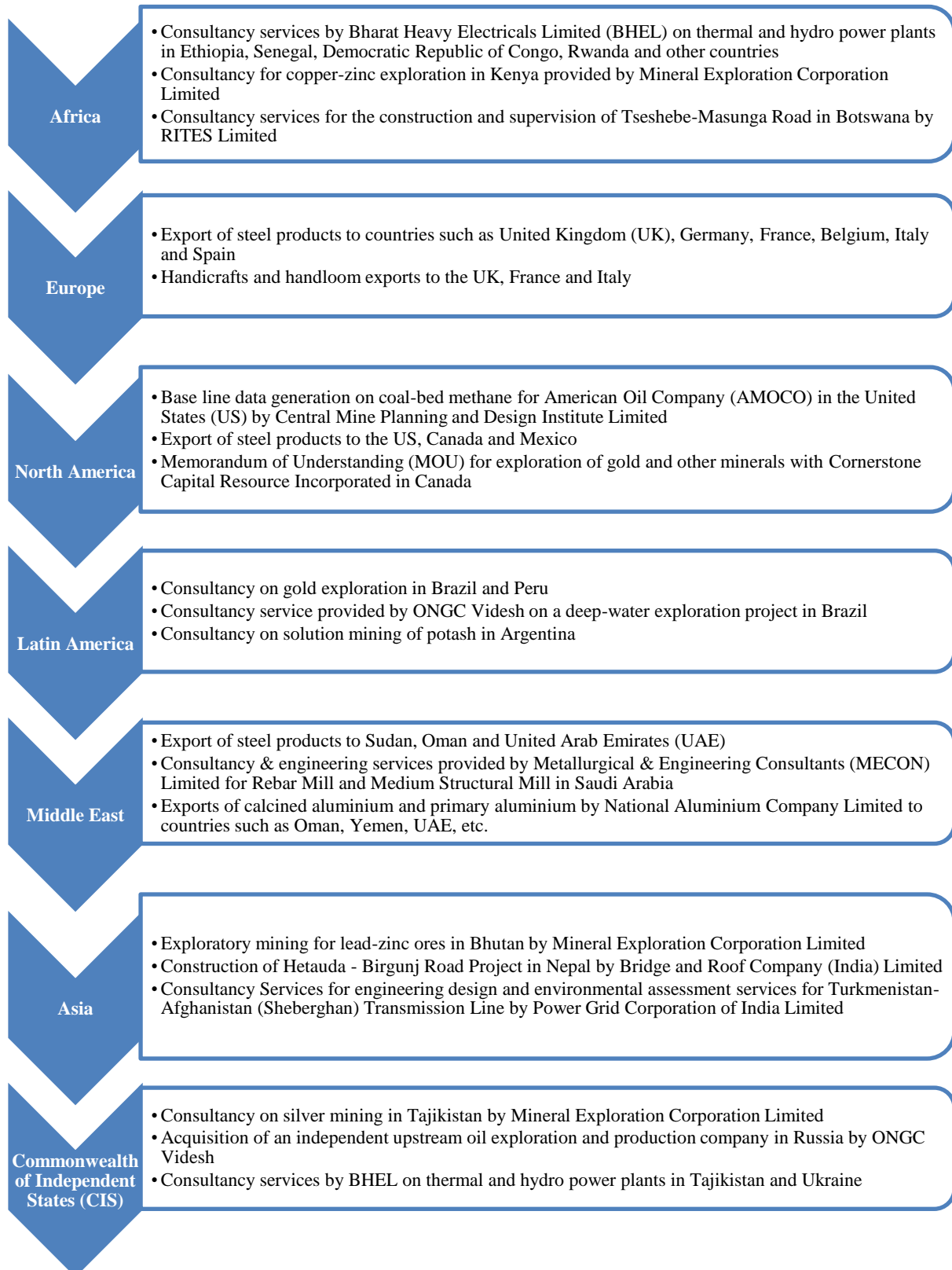
Overall, Indian PSEs have a presence in over 80 countries through different modes ranging from representative offices to wholly-owned subsidiaries. Within regions, they concentrated on specific countries depending on their sector/sectors of operation. Some examples of international projects undertaken by Indian PSEs in different regions are given in Figure 4.

A majority of the PSEs who have established their presence abroad are present in more than one region. The survey found that while countries in the Middle East were core markets for Indian PSEs in the beginning due to their large reserves of natural resources, these markets are slowly getting saturated. Indian PSEs are now using the Middle East as a hub to expand to new regions such as Africa. At present, majority of them are located in South Asia.

When the RCEP negotiations were going on, Indian PSEs were focusing on expanding to the CLMV (Cambodia, Laos, Myanmar and Vietnam) region. However, after India backed out from RCEP in November 2019, there are no clear guidelines for PSEs on how to proceed further.

The PSEs pointed out that they may also be required to withdraw from a number of markets, which are rich in natural resources due to issues such as sanctions, war, etc. They have to align their global expansion strategies with that of the strategy of the Indian government. The survey found that none of them track trade agreements and India's international engagements and partnerships closely, except for what is available in the newspapers, media and through participation in conferences and seminars. The lack of specific strategy makes it difficult for PSEs to operate in certain key markets, especially in those where they have already made long-term investments.

Figure 4: Select International Projects, Exports and/or Investments of Indian PSEs in Different Regions

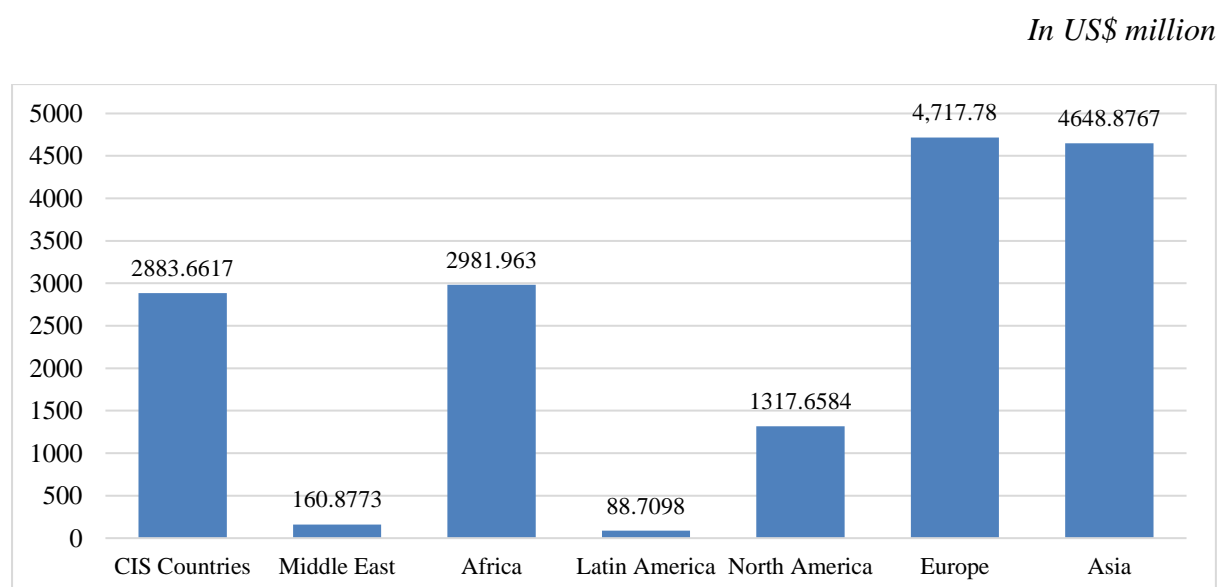


Source: *Compiled from Primary Survey and Websites of the PSEs*

5.2 Foreign Investment

According to the data provided by Reserve Bank of India (RBI), India's total overseas investment in equity, loan and guarantees issued stood at US\$ 276 billion during the period October 2009 to October 2019.⁴⁴ Of this, the share of PSEs was around 18 percent, and they were mainly present in mining and manufacturing, which covered 90 percent of the total investments. Over 50 percent of the PSEs invested through wholly-owned subsidiaries. Figure 5 shows the overseas investments by PSEs.

Figure 5: Region-Wise Overseas Investment by Indian PSEs (Oct, 2009 to Oct, 2019)



Source: Compiled from Reserve Bank of India (RBI)'s Data on Overseas Investment, available at https://m.rbi.org.in/Scripts/Data_Overseas_Investment.aspx (last accessed November 20, 2019)

During 2010-18, out of a total of US\$84.38 billion worth of greenfield investments by Indian companies abroad (see Table 2), the share of PSEs was only 13.49 percent.⁴⁵ This investment was concentrated in a few sectors, namely the coal, oil, and gas sectors. While all Indian PSEs pointed out that they need more support from the government to explore global markets, the survey found that they hardly use the competitive tendering route and depend mostly on government support. The survey also found that while private enterprises tend to venture abroad for better technologies and to increase their customer base, PSEs contended that they explore global markets to meet the home country's needs. Specifically, they expand to foreign countries to help meet India's energy, food, mineral and commodity security needs.

⁴⁴ https://m.rbi.org.in/Scripts/Data_Overseas_Investment.aspx (last accessed November 20, 2019).

⁴⁵ Extracted from fDi markets database, which is a private database on cross-border greenfield investments maintained by Financial Times.

Table 2: Region-Wise Greenfield Investments by Indian PSEs (2010-2018)

Regions	Total Greenfield Investments by Indian Companies (In US\$ billion)	Share of Indian PSEs (In percentage)
ASEAN	16.37	10.38
Africa	27.60	16.12
Middle East	25.79	3.10
CIS	2.39	53.97
South Asia	12.23	24.93
Total	84.38	13.49

Source: Compiled from fDi Markets database, available at https://www.googleadservices.com/pagead/aclk?sa=L&ai=DChcSEwjd_qrc64LoAhXKE_SsKHdpkD9YYABAAGgJzZg&ohost=www.google.com&cid=CAESOOD2hxf6myvWT1aTzgqxEmamMmTNVffhKvS1ptHFpCNq3yses-JRNaD4TQRAm5Ea7VP61_WWUPP8MeEDTyIO_hLE&sig=AOD64_2eqlYmlc5aCTa1jEVOszUP2dTrSQ&q=&ved=2ahUKewjCi6Lc64LoAhWWfn0KHV0iCP4Q0Qx6BAgUEAE&adurl= (last accessed March 4, 2020)

5.3 Routes through which PSEs are/or can Export and Increase their Geo-Strategic Reach

The process of exporting for a PSE differs from that of a private sector enterprise. This could be for various reasons such as fulfilling certain geo-political strategic objectives of the government and this can determine their export markets. They can be engaged in exports through external aid, inter-governmental agreements and MoUs. Secondary information and the primary survey indicate that PSEs can venture into global markets and enhance their geo-strategic reach mainly through three different routes (a) Ministry of External Affairs (b) subsidiaries, joint ventures, mergers and acquisitions (c) competitive bidding. Among these, competitive bidding is the least explored.

5.3.1 Ministry of External Affairs (MEA)

One of the modes through which PSEs venture into foreign markets is through the government providing development assistance/foreign aid, which is a key instrument in India's foreign policy. The Ministry of External Affairs (MEA) created the Development Partnership Administration (DPA) in 2012 to channelise aid. The development partnership is based on the needs identified by partner countries and the Ministry adheres to such needs, keeping in mind India's geo-political, strategic and economic interests. The programme has focused on South Asian and African countries, although development co-operation is now being extended to South East Asian, East and Central Asian, the Caribbean, Latin American and Pacific Island countries.

The main instruments of India's development assistance include extending line of credit (LOC), grant assistance, small development projects (SDP), disaster relief and humanitarian aid, as well as capacity-building programmes under the Indian Technical and Economic Co-operation (ITEC) programme. These are given in Box 1.

Box 1: Instruments of India's Development Assistance under MEA

- ***Line of Credit (LOC)***

In India, the EXIM Bank is the nodal agency that provides LOCs as a finance mechanism to extend support for exports of projects, equipment, goods and services from India. Both PSEs and private enterprises are eligible to obtain funds through this medium. The fund has certain requirements; for example, the LOC recipient countries are expected to source 75 percent of the value of goods and services required for the implementation of the projects from India.⁴⁶ From 2008-19 to 2018-19, 194 LOCs aggregating US\$23.29 billion have been extended to 63 countries across various sectors. Among these, 137 LOCs have been allocated to countries in Africa aggregating US\$ 8.53 billion, 32 LOCs to Asia amounting to US\$ 13.91 billion and the remaining 25 LOCs to countries in Latin America, Oceania and CIS aggregating to US\$ 0.84 billion.⁴⁷ The projects under LOCs are spread over a wide range of sectors, but the presence of the public sector in such projects is limited. For example, the LOC contracts approved by the EXIM Bank as of October 15, 2019 show that out of a total of 768 contracts, only 30 percent has been secured by the PSEs. While PSEs argue that the process suffers from drawbacks such as delays in clearances, the fact that it offers a level playing field to PSEs and private sector units shows that a number of issues internal to PSEs may have to be addressed for them to become competitive.

- ***Grant Assistance***

Projects associated with grant assistance are mostly handed over to PSEs for completion, as these projects are focused on promoting good will and long-term economic development in recipient countries.⁴⁸ For example, Telecommunications Consultants India (TCIL) was nominated by the MEA to manage a grant worth Rs. 900 crore to oversee building of infrastructure to support tele-education and tele-medicine in West Africa for five years. Major recipient countries are Afghanistan, Bangladesh, Bhutan, Nepal, Maldives, Myanmar, Sri Lanka, Mauritius and Niger. Recently, in July 2019, India extended US\$15 million grant assistance to Niger to support the organisation of the African Union Summit in Niamey, Niger.⁴⁹

- ***Humanitarian Aid***

India extends humanitarian aid to countries affected by disasters, which includes providing essential items such as medicines, medical supplies, food items, etc. Major recipient countries of such humanitarian aid include LDCs such as Mozambique, Nicaragua, Myanmar, Nepal, Afghanistan, Zambia, Yemen, Syria, Lesotho, Namibia, etc. Aid has also been extended in the form of building houses in countries such as Nepal and Sri Lanka, development co-operation in the form of tractors to Cuba and books to Tanzania. India has also provided cash assistance to countries such as Croatia and Burundi. Such aid initiatives are mostly extended through PSEs.

⁴⁶ <https://www.eximbankindia.in/assets/pdf/loc/2017/Handbook%20on%20Lines%20of%20Credit.pdf> (last accessed March 4, 2020).

⁴⁷ <https://www.eximbankindia.in/lines-of-credit#> (last accessed March 4, 2020).

⁴⁸ Grant assistance initiatives are undertaken in compliance with the General Financial Rules (GFR) of Government of India and Central Vigilance Commission (CVC) guidelines issued from time to time.

⁴⁹ <https://timesofindia.indiatimes.com/india/india-gives-15-million-to-niger-for-african-union-summit-in-july/articleshow/69850009.cms> (last accessed March 4, 2020).

- ***The Indian Technical and Economic Co-operation (ITEC)***

The Indian Technical and Economic Co-operation (ITEC) programme provides assistance to countries in Africa, Eastern Europe, Asia and Latin America. It has four components: training, projects and project-related activities, deputations of Indian experts and study tours. In 2017-18, 10,918 civilian training slots were offered to around 161 partner countries for various short-term and medium-term courses across a variety of disciplines such as agriculture, food and fertilisers, banking, finance, accounts, rural development and poverty alleviation, etc. The programme also funds feasibility studies in areas such as water management or machine tool manufacturing, which are generally carried out by PSEs such as WAPCOS (Water and Power Consultancy Services) and Hindustan Machine Tools.

- ***Small Development Projects (SDPs)***

Under the SDP programmes, India supports small grassroots projects in partner countries. For example, the Government of India has committed US\$200 million for SDPs in Afghanistan since 2006. Under this commitment, 536 projects had been approved for implementation as of 2019, of which 327 projects have been completed. These projects mostly involve infrastructure development such as building schools, irrigation canals, farm roads, block connectivity roads, basic health units, urban infrastructure, etc.

Source: Compiled from Ministry of External Affairs, available at <https://www.mea.gov.in/lok-sabha.htm?dtl/30977/QUESTION+NO53+DEVELOPMENT+ASSISTANCE> (last accessed March 8, 2020)

5.3.2 Subsidiaries, Joint Ventures, Mergers and Acquisitions

Indian PSEs also invest abroad through wholly-owned subsidiaries, joint ventures or through mergers and acquisitions. For example, IOCL has joint ventures with companies such as Petron as (Malaysia) and Lubrizol Incorporated (US), and has seven foreign subsidiaries located in Sri Lanka, US, Singapore, Mauritius and the Middle East. ONGC Videsh has acquired an 11 percent stake in the Russian oil company JSC Vankorneft from Rosneft Oil Company for US\$930 million.⁵⁰

5.3.3 Competitive Bidding for International Tenders

The survey participants pointed out that PSEs usually place bids for tenders either on their own or by enlisting project management consultants or by entering into strategic consortiums wherein all partners collectively place a common bid with the help of in-house/external consultants. PSEs may enter into consortium partnerships with other Indian PSEs, PSEs from other countries or foreign private sector enterprises. For example, an Indian consortium of Indian oil PSEs, comprising Oil India Limited (OIL), IOCL and Bharat Petro Resources Limited, had collectively bid to acquire a 23.9 percent stake in Russia's Vankor cluster

⁵⁰ <https://www.businesstoday.in/sectors/psu/indian-psus-eye-more-oil-gas-projects-in-russia-strengthen-ties/story/282367.html>; <https://economictimes.indiatimes.com/industry/energy/oil-gas/ovl-partners-buying-49-stake-in-vankor-cluster-oilfields/articleshow/70932067.cms?from=mdr> (last accessed October 20, 2019).

oilfields. After the government's insistence of PSEs to increase their geo-strategic reach, a number of PSEs have been trying to diversify their international markets through the competitive bidding process, but few have been successful. They are yet to explore the opportunity of collaborating with the Indian private sector and innovative start-ups. They tend to look at the private sector as a key competitor rather than as collaborators in competitive bidding.

5.4 Perception of Indian PSEs

During the survey, all PSEs pointed out that, unlike countries such as Canada or China, the Indian government does not have an overarching policy to promote exports/investments by PSEs, by clearly laying out focus markets/products, desired market entry strategies or expectations from them. A number of PSEs complained that they have been losing their competitiveness to the private sector but, at the same time, they agree that they do not have a strategy for partnership with innovative firms in the private sector to explore global markets. Some PSEs have export and investment targets for the future. Those that have set targets and are working on it are primarily those that have been investing abroad or exporting for around five to ten years or more. While all PSEs interviewed were aware of the five key areas that the Prime Minister wanted them to focus on by 2022, including enhancing their geo-strategic reach, only 50 percent had set any targets to meet the requirements and only 20 percent strictly monitored the target on a monthly or quarterly basis. Even among those that are exporting, only a select few companies had a dedicated international desk and a dedicated team that could write proposals, follow up on international tenders and bidding processes, examine contracts, or do feasibility studies.

PSEs point out that there are three kinds of issues they face – those internal to the organisation, government-control related issues and issues related to lack of market knowledge and strategy to address barriers in key markets. While PSEs tend to overlook the possibilities of internal re-organisation, some have employed globally renowned firms to do their restructuring. While such restructuring may help to improve efficiencies, on-time project delivery and manpower management, and reduce losses, the interviews highlighted that this will not help improve their geo-strategic reach.

Unlike the US and EU companies, who work closely with organisations such as the United States Trade Representative (USTR) and the European Commission respectively, to identify and list barriers by country and by sector and to make them available in the public domain, there are no such initiatives in India. While all PSEs were of the opinion that it can be done easily through a corporate social responsibility (CSR) type of funding, none of them has taken such initiatives and/or has worked with institutes specialising in international trade to design a trade barrier report that can be used by the Indian government in its trade discussions.

The survey also found that there are wide variations across nodal ministries for PSEs in terms of their approach to enhancing exports and geo-strategic reach, their process of monitoring

PSEs in terms of achieving the objectives laid down by the Prime Minister, and their system of monitoring it.

6. Challenges faced by the Indian PSEs

The survey participants were asked to identify issues, which adversely affect their ability to export and enhance their geo-strategic reach. Most companies referred to more than one issue. On an average, companies face three broad challenges, which are:

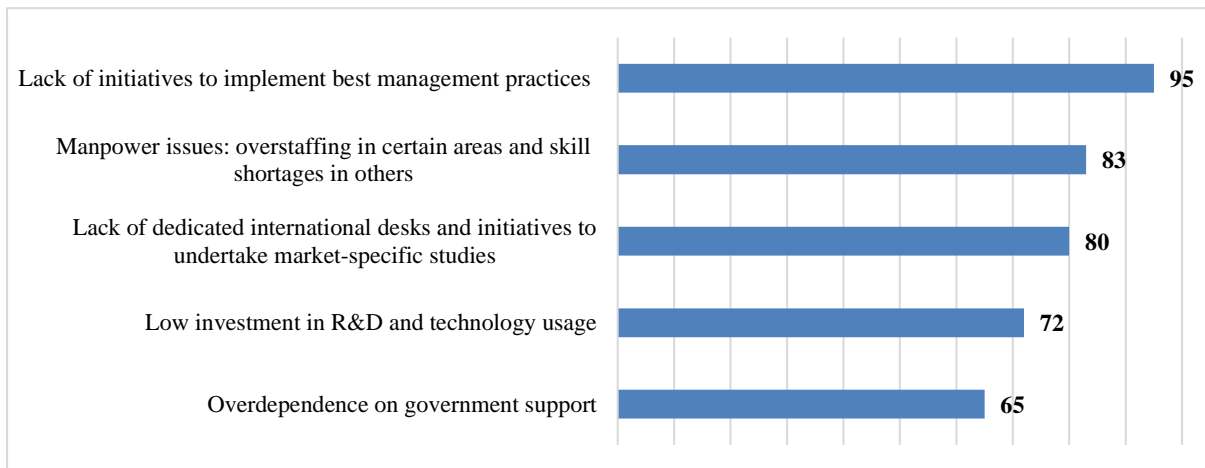
- Internal issues/company-specific issues
- Domestic market related issues
- External market related issues

The companies were able to classify the issues into detailed sub-categories under the above categories. Forty percent of the barriers were related to internal practices and business management of the PSEs, 30 percent were due to lack of autonomy and excessive government control; the remaining 30 percent of the barriers are those that they face in foreign markets. Some PSEs such as BHEL are now undergoing restructuring and for that, they have engaged with internationally reputed organisations. Such initiatives show that PSEs are aware of their internal issues and are trying to work towards resolving them. The top issues, which more than 60 percent of the respondents have referred to, relates to their own organisation. The next highest ranking was given to excessive government dependence, and policy and/or lack of support from the government, within a list of issues that they face in the domestic market. Some top issues are presented in Figures 6 (a) and 6 (b) and discussed in Section 6.1 and 6.2 respectively. Unlike the private sector, which usually refer to high logistics costs and ease of doing business as key issues, PSEs perceive government control to be the most crucial issue as they are dependent on the government and are unable to take their own business decisions. They pointed out that they are at a disadvantage *vis-à-vis* the Indian private sector. They also feel that they are at a disadvantage *vis-à-vis* public sector from other countries like China, which offers significant financial support to its SOEs. China also has a clear strategy for international exports and enhancing its geo-strategic reach through projects like the BRI.

When a PSE enters a foreign market, it can face a wide range of issues, many of which are also faced by public sectors from other countries and the Indian private sector. These are given in sub-section 6.3.

Figure 6 (a): Top 5 Company-Specific Issues

(Percentage of respondents)

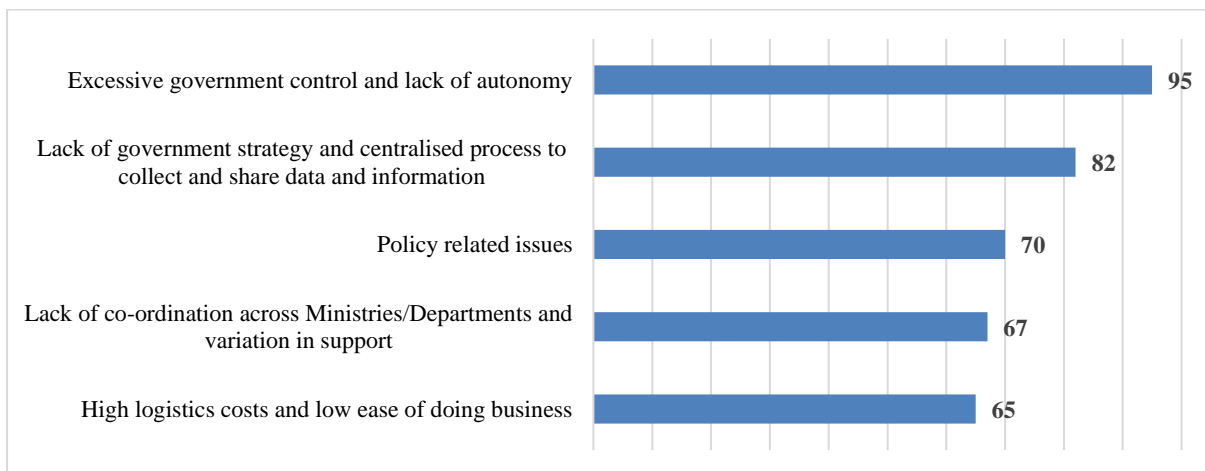


Source: Compiled by authors

Note: Multiple choice questions

Figure 6 (b): Top 5 Domestic Market Related Issues

(Percentage of respondents)



Source: Compiled by authors

Note: Multiple choice questions

6.1 Company-Specific Issues

6.1.1 Lack of Initiatives to Implement Best Management Practices

Unlike in the private sector, the survey found that there is a lack of initiatives to implement best management practices by PSEs, which leads to low productivity, inefficiency, project delays and losses. Accountability is low and there are gaps in monitoring employees and projects. This makes PSEs less competitive, especially in comparison to private enterprises.

There is also a lack of willingness to compete, which is evident from the survey findings – majority of PSEs stated that they preferred projects based on nomination rather than competitive bidding and only a few of them were engaged in competitive bidding. In many cases, they said that they do not have in-house expertise to draw a good tender document and, therefore, fail to win competitive tenders. As per the data provided by the EXIM Bank (as of October 15, 2019), out of a total of 768 contracts under LOC, only 30 percent have been secured by the PSEs (see Table 3).

Table 3: Contracts Approved under EXIM Bank’s Line of Credit

Industry Sector	Contracts approved as on 15.10.2019 [A]		Share of contracts secured by Public Sector Enterprises		
	No.	Value	No.	Value	% of A
		(US\$ million)		(US\$ million)	
Power	133	2,574.82	32	902.60	35.05
Railways	110	2,131.54	55	1,621.43	76.07
Agriculture & Food Processing	132	1,404.05	5	3.66	0.81
Water and Irrigation	54	817.68	17	121.23	14.83
Construction	41	495.80	3	1.64	0.33
Auto & Auto Components	88	457.56	3	6.05	1.32
Roads & Transport	44	407.66	2	5.25	1.29
Engineering/Industrial Goods	84	378.73	5	3.80	1.00
Petrochemicals	7	216.56	1	1.45	0.67
Technology and communication	23	147.89	11	69.80	47.20
Renewable energy	10	95.28	1	27.60	28.96
Shipping and Shipbuilding	4	172.20	3	72.50	42.10
Aviation	7	32.31	4	29.85	92.41
Defence	1	7.75	1	7.75	100.00
Others	30	221.13	1	1.35	0.61
Total	768	9,560.96	144	2,875.96	30.08

Source: Information Provided by EXIM Bank

In PSEs, incentives are not often performance-linked, which acts as a disincentive to perform. In some cases, there is no well-defined process of providing performance-based incentives, which incentivises employees who are talented, committed and performance-oriented. This also discourages competition.

6.1.2 Overdependence on Government Support

One of the main hurdles faced by PSEs is the lack of funds, which is mostly because of their huge losses and overdependence on government funds. Lack of funds and initiatives to become profitable and efficient also affects their ability to explore new markets and do feasibility studies to carve out new business opportunities.

6.1.3 Lack of Dedicated International Desks and Initiatives to Encourage Market-Specific Studies

In today's dynamic business environment when PSEs should have real-time access to data and knowledge about potential markets, the survey highlighted that most of the PSEs lacked initiatives to engage in in-depth market research to identify key markets, their barriers and opportunities. A number of PSEs do not have a dedicated international desk or in-house core teams to write proposals and do feasibility studies. PSEs in general, lacked holistic short-term and long-term market entry strategies for expansion to foreign markets. While in some cases, senior persons are responsible for certain markets (for example, Africa), they think that it is the responsibility of the corporate communication person to do market studies. Thus, there is lack of clarity as to who should do such a study within the company, what type of budgets should be allocated for such activities and how such activities should be conducted.

6.1.4 Manpower Issues – Overstaffing in Certain Areas and Skill Shortages in Others

In a majority of the PSEs, manpower is in excess of actual requirement, which leads to high manpower cost, duplication of work and lower labour productivity. Further, PSEs face resistance in downsizing as employment creation is one of their key objectives. This is also one of the many reasons why certain PSEs have been unable to adopt new technologies, resulting in high unit costs and lower yields. Further, PSEs also face shortages of specific skills, especially those related to high-end technology. Survey participants mentioned that it has been increasingly difficult for PSEs to find the right talent for the organisation. In addition, PSEs have been experiencing severe challenges in attracting, motivating and retaining their high-performing staff, especially at a time when a number of them are going through the disinvestment process. Employees in specialist roles and functions have been particularly vulnerable and some companies face high attritions in key skills.

6.1.5 Low Investment in R&D and Technology Usage

Investment in R&D and patent filings among the PSEs have been quite low. Overall, there is no uniform process of regular data collection – export/import data or engagement of PSEs in foreign markets, and the level of data collection and varies widely across PSEs. In more than 50 percent of the PSEs, the use of technology for collecting and storage of company data is limited, and there is lack of information sharing not only among the PSEs but within the different departments of a single PSE. They mostly tend to collaborate with industry bodies on field visits and conferences, rather than on data collection and market research.

6.2 Key Domestic Market Related Barriers: Government Control Related Issues

While most of the barriers faced by PSEs are internal to the organisation, there are many other challenges such as lack of autonomy in decision making or lengthy and multi-layered approval processes that get created due to stringent government controls and policies.

6.2.1 Lack of Co-ordination across Ministries/Departments and Variation in Support

The survey found that there was lack of co-ordination among the various ministries and departments that monitor PSEs in different sectors. This leads to the absence of a collective effort on the part of all ministries to jointly push PSEs in their efforts to expand to foreign markets. There is heterogeneity in support received from Indian embassies abroad; while some embassies are good and many are more proactive now than before, in some countries such as Burundi, Chad, Cameroon, etc., there are no Indian embassies or dedicated persons to provide information on biddings or tenders. In many African countries, there are honorary consuls but no high commissions or embassies. This makes it difficult to get information related to the market and have a continuous engagement with government. The survey participants have highlighted that there are no dedicated websites to provide information about opportunities in such countries or a source from which the PSEs can get information. Further, in markets like Africa, projects are often given directly after meetings with the highest authorities of the state. Without government support, PSEs find it difficult to access the highest authorities in some of these export markets. They felt that the Indian government is less proactive than the governments of other countries like China.

6.2.2 Excessive Government Control and Lack of Autonomy

PSEs are accountable to different government ministries/departments and agencies, among which the Comptroller and Auditor General of India (CAG) is responsible for the entire gamut of financial attestation functions including appointment of auditors and issuing directions, preparation of financial statements by the management, audit thereof by the statutory auditors and supplementary audit. The survey participants pointed out that the audit processes are often time-consuming and is done in several stages. While trying to ensure transparency and accountability, this process often lead to decreased autonomy for PSEs. Moreover, PSEs are often unwilling to take risks and defer decision making for fear of being questioned at later stages.

Unlike the private sector, PSEs have to take approval from nodal and/or line ministries to travel abroad to do feasibility studies or select partners to bid for international projects. There are other issues such as delays in the appointment of key personnel (for example, managing directors), which affects the functioning of PSEs and leads to a backlog of operations. For instance, in the case of ONGC Videsh, the position of the Managing Director has been lying vacant since February, 2019.⁵¹ A number of PSEs have been functioning without regular heads for a span of time ranging from three months to a year. Further, survey participants pointed out that it has been a challenge for the PSEs to appoint the requisite number of independent directors, as the process involves several layers of scrutiny and is quite lengthy and tedious.

⁵¹ In January, 2020, the Centre has constituted a search-cum-selection committee tasked with the appointment of the managing director.

6.2.3 High Logistics Costs and Low Ease of Doing Business

Some PSEs also mentioned the high cost of logistics (which is around 14 percent of the GDP) in the domestic market as one of the major barriers. Huge costs are involved during transportation, warehousing and storage, and in using other value-added services. For example, in sectors such as coal and steel, where Indian PSEs are prominent, logistics cost account for around 12-16 percent of total costs. These leads to low ease of doing business and decreased competitiveness.

6.2.4 Policy Related Issues

All survey participants argued that the Indian government's policies and strategies often fail to accommodate the complexity of the international political environment and match it with India's domestic manufacturing and resource capabilities. Unlike the private sector, a PSE has to meet the government's international policy and geo-strategic requirements. Exports depend on India's relationship with the importing country, which is not a commercial issue but a strategic one. Hence, the PSEs pointed out that one should not expect them to perform commercially and meet commercial targets. They argue that they do not have a level playing field *vis-à-vis* the private sector in terms of autonomy in decision making and expectations of the government.

During the survey, a number of PSEs felt that decisions regarding disinvestment resulted in an uncertain future while others thought that a reduction in government control may give them more autonomy.

6.2.5 Lack of Government Strategy and Centralised Process to Collect and Share Data and Information

While there is a push to enhance the geo-strategic reach of PSEs, there is no top-down approach towards enhancing collaboration among them. For example, a number of PSEs from India often individually target the same market rather than forming a consortium or leveraging each other's strength as is done by Chinese companies. In such cases, a lot of effort and money is wasted in competing among themselves rather than collaborating and bidding for projects as a consortium. Moreover, according to some, the Department of Commerce, Ministry of Commerce and Industry, has limited information on market access barriers that can be made available to the industry online. Even data related to exports and imports of PSEs is not available online as of March 15, 2020. There is no published data by the government on PSEs' brownfield and greenfield investments in key markets. All PSEs interviewed pointed out that in the absence of data, it is difficult to have a systematic procedure for sharing information and a well-defined strategy to explore markets, which act as serious hurdles in exporting and enhancing their geo-strategic reach.

There also seems to be a lack of initiative on the part of the government to fund studies through Market Access Initiatives (MAI) and other schemes. Some participants also

questioned the quality of the studies while others pointed out that the reports are not available in the public domain.

6.3 External Market Related Issues

Most of the challenges faced by the Indian PSEs in accessing foreign markets are the same as faced by private enterprises or by companies of other countries. These barriers include:

- Market access barriers, such as foreign investment restrictions in certain sectors
- Discriminatory barriers, such as preference for local firms
- Cumbersome regulatory processes and procedures,
- Other barriers, such as security risks, incidence of high corruption and bribe, strong competition from companies of other countries, distance, culture and connectivity related issues.

While the survey participants were able to list the barriers, they were not able to link the barriers to specific countries as many of them lacked country specific knowledge.

6.3.1 *Rising Geo-Political Tensions*

Political instability and the rise in geo-political tensions can lead to decreased economic activity and greater uncertainty for trade and businesses, for both PSEs and private enterprises. However, PSEs are more affected by inter-government relationships than the private sector. For example, a private sector can invest in the BRI initiative of China, but a PSE may not be allowed to. Specifically, geo-political tensions can be a major barrier for PSEs as they have to align their export and investment markets with the geo-strategic requirements of the government. Sometimes, they have to invest in risky countries prone to war and other political tensions and sometimes, they may have to withdraw from a country because of political reasons, in spite of the economic opportunities that the country offers. Since a majority of the PSEs are operating in natural resources and in infrastructure projects, the projects have long gestation periods, during which political situations or a country's relationship with India may change. A survey participant pointed out that Brunei has abundant oil resources, which are of interest to Indian PSEs. However, due to political instability and the Government of India's concerns related to the bilateral relationship, PSEs may not be able to explore the market.

6.3.2 *Land Acquisition Barriers*

The process to acquire land for carrying out businesses is another barrier that companies face while trying to expand in foreign markets, especially since many of them are engaged in infrastructure and mining projects. For example, in Kenya, foreign investors face issues related to complex procedures for land transactions, restrictions on ownership of land, weak enforcement procedures, etc. (Mwangi, 2017). While Cambodia allows foreign investors to use land through concessions and leases, there is a moratorium on economic land

concessions, which earlier allowed long-term leases on state-owned land (USTR, 2019). There are cases where the regulation does not clearly specify or distinguish the ownership between private foreign companies or foreign PSEs. Land acquisition restrictions and delays often discourage Indian PSEs from venturing into these markets even if they have huge investment potential.

6.3.3 High Tariffs and Non-Tariff Barriers

A number of countries impose high tariffs on products such as textiles, steel, non-metallic minerals, chemicals, and other exports [United Nations Conference on Trade and Development (UNCTAD), 2018] in which Indian PSEs have a comparative advantage. These are mostly in South Asian countries where the average tariff was 13.6 percent in 2016, which was more than double the world average of 6.3 percent.⁵²

Survey participants have also referred to a number of non-tariff barriers in the form of quantitative restrictions, delays in custom clearances and cumbersome procedures of physical inspection, manual clearance and shortcomings in implementation of trade facilitation, among others. Quantitative restrictions on imports are more prevalent in some Asian countries (such as Philippines or Bangladesh) and African countries (such as Egypt, Kenya or Uganda). Non-tariff measures are mostly in the form of delayed customs clearing processes and issues related to correct evaluation of imports. In countries such as Cote d'Ivoire in Africa, products such as petroleum are subject to prior authorisation from the government.⁵³ In the ASEAN countries, machinery equipment and textiles are among the most regulated sectors where several types of non-tariff barriers are imposed.⁵⁴

6.3.4 Issues with Work Permits and Visas

Barriers related to work permits and cumbersome visa procedures (single versus multiple entries) and documentation requirements have adversely affected the mobility of high-skilled people. Sometimes, work permits are given for lower than the duration of the project (for example, in Myanmar, work visas are mainly for a period of 70 days)⁵⁵ and the renewal process is cumbersome (for example, in Madagascar). The time taken to process work permits and visa is also lengthy in many countries such as Indonesia and Tanzania. Some countries have restrictions or a quota on the number of foreign nationals who can be given visas or restrictions on the employment of foreign nationals in certain sectors. For example, in South Africa, there are restrictions on employing foreign workers in the category of 'network and support professionals' (Koser, 2014). Such visa and work permit related

⁵² <https://www.worldbank.org/en/news/press-release/2018/09/24/south-asia-remove-trade-barriers-mutual-economic-gains-report> (last accessed November 2, 2019).

⁵³ <https://www.export.gov/article?id=Cote-d-Ivoire-Prohibited-Restricted-Imports> (last accessed November 2, 2019).

⁵⁴ https://unctad.org/en/PublicationsLibrary/ERIA-UNCTAD_Non-Tariff_Measures_in_ASEAN_en.pdf (last accessed November 2, 2019).

⁵⁵ <https://www.aseanbriefing.com/news/2017/03/24/the-guide-to-employment-permits-foreign-workers-myanmar.html> (last accessed November 2, 2019).

barriers can discourage PSEs, especially in the consultancy services sectors, from expanding in these countries.

6.3.5 Foreign Direct Investment (FDI) Restrictions

In many countries, there are FDI restrictions that act as a major barrier in establishing foreign presence for a company. For example, in Myanmar, the government in 2017 had identified nine key sectors where investment is prohibited, 12 sectors where only domestic investment is allowed and 22 sectors where foreign investment can be made only through joint ventures (USTR, 2019). In a large number of countries, foreign investment is not allowed in crucial sectors such as defence. In Ethiopia, there is a ban on investments in banking and financial services.

6.3.6 Regulatory Gaps, Uncertainty and Cumbersome Procedures

PSEs generally operate in developing countries or LDCs where there are gaps in regulations or regulations are prone to be changed suddenly without prior discussion with stakeholders or tend to be interpreted differently by different government agencies. There may also be multi-layered clearance processes at the national and sub-national levels.

In countries such as Cambodia, the process of registering a business is quite lengthy and the country faces issues related to enforcing contracts and resolving insolvency.⁵⁶ In Bangladesh, foreign investors face issues related to administrative formalities and bureaucratic inefficiencies.⁵⁷ In many African countries such as Algeria and Angola, the clearance procedures for planned investments, tax exemptions, and registration requirements are often quite lengthy and cumbersome.

The survey participants mentioned the existence of over-lapping and multiple regulations, which leave them open to differing interpretations and create non-transparency. In some countries, documents, including bid documents, have to be submitted in person and there is no provision for online submission. There are frequent changes in government officials leading to project clearance delays. Infrastructure services such as banking and telecommunications are highly regulated in a number of countries, which makes it difficult for foreign companies to penetrate such markets. Further, in most African and South East Asian economies, tax rates are very high.⁵⁸

6.3.7 Infrastructure and Logistics Gaps

Infrastructure challenges continue to be among the major barriers faced by foreign investors (Luo and Xu, 2018) in developing country markets. Most African countries suffer from a lack

⁵⁶ <http://www.intracen.org/country/Cambodia/Business-and-Regulatory-Environment/> (last accessed October 31, 2019).

⁵⁷ https://www.academia.edu/9822859/Investment_Policy_in_Bangladesh_An_Agenda_for_Action (last accessed October 31, 2019).

⁵⁸ <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-tax-corporate-tax-rates.pdf> (last accessed October 31, 2019).

of efficient transport infrastructure, poor storage facilities, poor power supply, and connectivity issues. In many LDCs of Asia, especially in countries such as Bangladesh, Myanmar and Nepal, there is poor infrastructure at the borders, poor connectivity in the interiors and inefficient storage facilities (Luo and Xu, 2018). In a number of markets in Africa in which PSEs operate, there is no direct flight connectivity with India, airfares are high and the travel time is quite long. As of 2019, India had direct flight connectivity with only seven African countries out of a total of 54 countries. In a number of LDCs, the logistics costs are also very high. As per the Logistics Performance Index rankings of the World Bank of 2018,⁵⁹ a majority of African countries and Asian LDCs rank low in terms of the availability of logistics infrastructure, increasing trade and transaction costs for traders as well as investors. The survey participants mentioned that congestions at ports cause delays while lack of storage and proper transport facilities can lead to product damages. Due to connectivity issues, employees of PSEs are not willing to go and work in these countries.

6.3.8 Discriminatory Treatment

In many countries, there seems to be discriminatory treatment where preference is given to domestic companies. For instance, in the mining, oil and gas sectors, Nigerian investors are given preference over foreign bidders on the basis of meeting local content requirements.⁶⁰ In a number of other African countries, SOEs are given preference over foreign PSEs in sectors such as telecommunications, power, banking, insurance and transport (USTR, 2019). In Angola, foreign investments in sectors such as petroleum and financial services are subject to forming joint ventures with local companies.⁶¹ The survey highlighted that in the tendering processes, a number of African countries prefer companies from the OECD countries over companies from India and China.

6.3.9 Stiff Competition from other PSEs

Indian companies in markets such as Africa face stiff competition from PSEs of countries such as China as these companies get a lot of funds and support from their respective governments. The Indonesian government has taken several initiatives, including regular dialogues with African countries, to enhance its collaboration with Africa in infrastructure development projects. While PSEs feel that government often fails to provide support, they also do not provide regular inputs about the common and specific barriers that they face in foreign markets by countries and by sectors to the concerned ministries, due to which the Indian government fails to put forward a consolidated strategy to enhance the geo-strategic reach of PSEs.

⁵⁹ <https://lpi.worldbank.org/international/global/2018?sort=asc&order=Infrastructure#datatable> (last accessed October 31, 2019).

⁶⁰ <https://www.ncdmb.gov.ng/images/GUIDELINES/NCACT.pdf> (last accessed October 31, 2019).

⁶¹ [https://uk.practicallaw.thomsonreuters.com/w-011-6596?transitionType=Default&contextData=\(sc.Default\)&firstPage=true&bhcp=1](https://uk.practicallaw.thomsonreuters.com/w-011-6596?transitionType=Default&contextData=(sc.Default)&firstPage=true&bhcp=1) (last accessed November 2, 2019).

6.3.10 Other Barriers

In countries such as Egypt, there is a mandatory requirement to use local language, where documents such as bank guarantees have to be issued in Arabic for acceptance. Some PSEs referred to barriers related to cultural differences. More recently, the COVID-19 related health hazard has adversely affected business expansion.

6.4 Concerns related to PSEs in International Forums/Trade Agreements

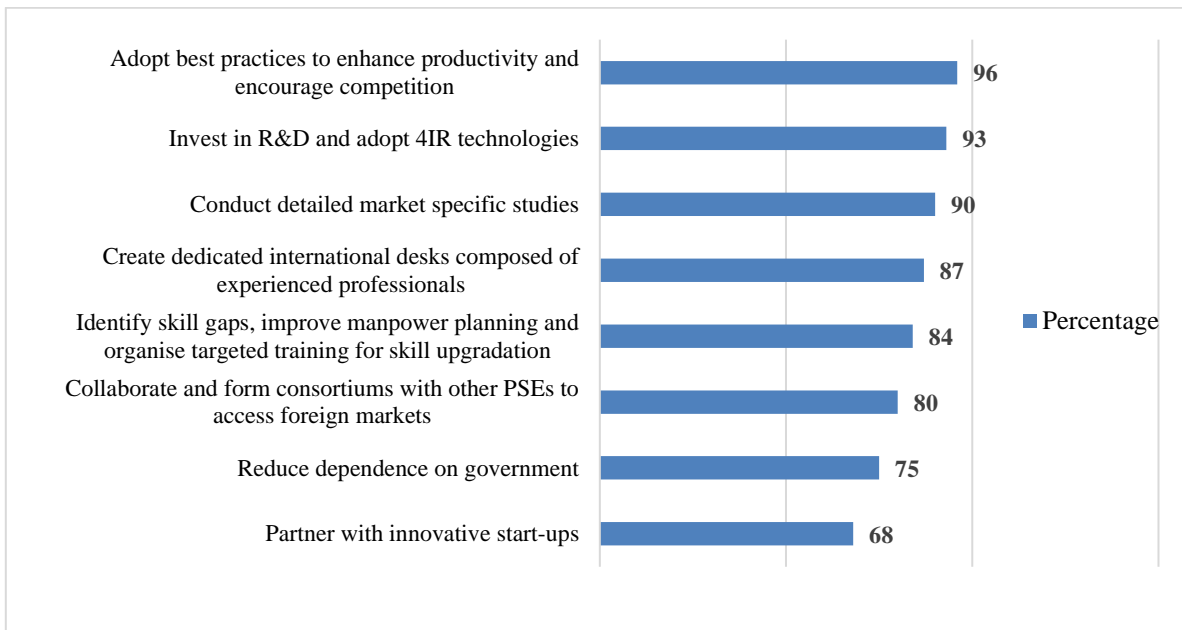
PSEs are being increasingly questioned in the international forums such as WTO and G20, and also as part of several bilateral/regional agreements due to certain advantages being granted to the PSEs to enhance their geo-strategic reach. For instance, several countervailing duties have been imposed on China on grounds of the government subsidising its PSEs to enhance exports and increase geo-strategic presence. This results in an uneven level playing field for the private enterprises while engaging in commercial transactions. India has also been questioned in forums such as the WTO with regard to the provision of various kinds of export subsidies which are prohibited and leads to trade distortions. In addition, there are other issues such as lack of clearly defined rules on transparency and non-discrimination.

Overall, the survey found that while most of the barriers faced by Indian companies (both PSEs and private enterprises) in foreign markets are common, PSEs might face additional barriers related to the government's foreign policy, security and political concerns, bilateral trade/investment relations with the concerned countries and other national interest issues such as energy security. In some cases, due to their lack of market knowledge or their unwillingness to carry out research, PSEs may be at a disadvantage *vis-à-vis* the Indian private sector. They may lag behind in technology and efficient business and process management. These adversely affect their ability to compete.

7. Recommendations and Way Forward

The discussion above highlight the need for significant restructuring of PSEs to make them more efficient and business friendly. PSEs were able to identify and prioritise what they need to do and what reforms and other measures should be taken by the government. These have been ranked in order of priority and the top-ranking priorities, which more than 60 percent of the survey participants agreed on, have been listed (see Figure 7 (a) and 7 (b)). The reforms and recommendations are discussed in detail in Section 7.1 and 7.2.

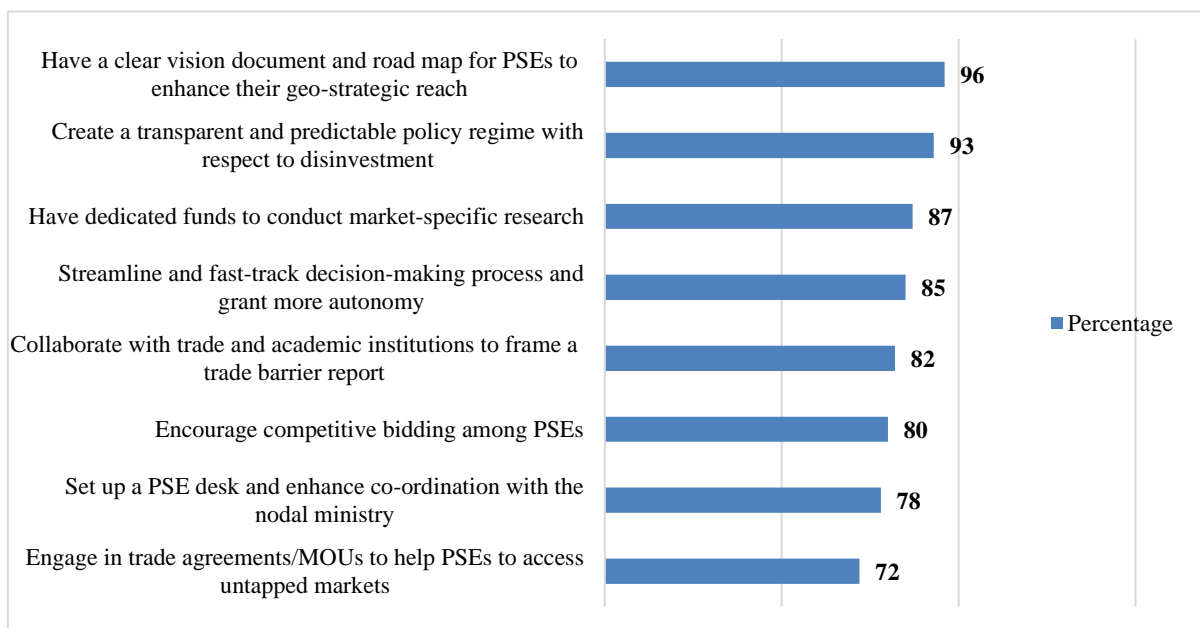
Figure 7 (a): Recommendations for PSEs



Source: Compiled by authors

Note: Multiple choice questions

Figure 7 (b): Recommendations for the Government



Source: Compiled by authors

Note: Multiple choice questions

7.1 What should PSEs Do?

7.1.1 Adoption of Best Practices to Enhance Productivity and Encourage Competition

PSEs should identify issues that reduce the efficiency of operational processes. Process delays and gaps in monitoring of employees and projects must be reviewed regularly and restructured to improve productivity. There should be a robust technology-based project monitoring system in each PSE – they may invest in robust online project management software through which they can monitor projects and track them. This can help to reduce the time and costs involved in physical monitoring and highlight gaps on a real-time basis. In addition, project management skills should be developed among employees and targets should be set for project deliveries. In this context, PSEs can learn from the best practices implemented by some Indian PSEs and from PSEs in other countries such as Singapore.

PSEs should explore innovative performance-based incentives and performance-linked financial compensation packages. A number of PSEs such as IOCL and NTPC have been successfully implementing performance-linked incentives for their employees. Other PSEs may look into such best practices. Such initiatives may result in better employee performance and attract highly skilled workers.

7.1.2 Identification of Skill Gaps, Manpower Planning and Targeted Training for Skill Upgradation

The PSEs should have a regular and comprehensive review of the skill gaps and requirements. This is especially important in the context of the advanced technology sector, where PSEs face skill shortages with advancement in fourth industrial revolution (4IR). There has to be targeted manpower planning and employees should be hired based on the company's requirement at a particular time. Further, among existing employees, there should be detailed identification of the training needs and accordingly, workshops and targeted training programmes have to be conducted by professionals. Where certain manual jobs can be replaced through technology adoption, PSEs may consider downsizing their employee base. Thus, areas of overstaffing should be identified. It will also lead to a balance between the commercial viability and job creation responsibilities of the PSEs. Vacancies in key positions should be filled on a priority basis and manpower related delays in decision making need to be avoided.

7.1.3 Invest in R&D and Adoption of 4IR Technologies

To increase the global competitiveness of Indian PSEs and to increase their geo-strategic reach, more investments are needed in the adoption of advanced technology across processes. The adoption of modern technology, processes and innovative business models are needed to strengthen the country's manufacturing base and to increase exports. PSEs should invest in acquiring patents by setting certain targets. For this, all PSEs must increase their spending on R&D. Most of the funding that comes under CSR can be utilised for this purpose. PSEs may

also engage in collaborative R&D with technical and academic institutes in India and abroad, which can fast-track the process of research and innovation. Initiatives such as setting up innovation cells to work on market-oriented research by PSEs, as directed by the DPE, are steps in the right direction.

7.1.4 Partnering with Innovative Start-ups

Partnerships and collaboration with high technology companies and innovative start-ups can be a win-win situation for PSEs and Indian companies in foreign markets. A number of countries such as Singapore use such models to enhance the growth and geo-strategic reach of their PSEs. Indian PSEs should start working with Indian start-ups to explore markets like Africa where they can then offer more holistic services and innovative solutions. Today, in the era of 4IR, many PSEs lag behind in terms of using technologies such as machine learning, artificial intelligence, robotics, etc., which start-ups have leveraged. Such partnerships can help PSEs to catch up. For example, in the case of education, PSEs like Education Consultants India Limited and TCIL can partner with Indian start-ups to offer innovative services.

7.1.5 Collaborate and Form Consortiums with other PSEs to Access Foreign Markets

The PSEs, especially those who have a presence in complementary sectors, should leverage each other's strengths through collaboration and by forming consortiums/partnerships. For example, they can form consortiums and bid together in joint venture projects, leveraging each other's competencies, experiences and strengths. Consortium formation is one of the main ways through which Chinese PSEs invest in countries such as in Africa. Consortium formation both increases the chances of getting the projects as well as ensures that PSEs do not compete against each other to get projects abroad.

7.1.6 Reduce Dependence on Government

PSEs should reduce their dependence on the government by focusing more on improving their competitiveness. More PSEs should be engaged in competitive bidding in foreign projects and at the same time, they should be willing to compete along with the private sector enterprises in acquiring more projects through the LOC route. Further, the PSEs should engage in various knowledge partnerships with innovative firms and other PSEs, invest in market specific studies and form dedicated team of professionals. Resources should be better utilised and people who are able to bring in more projects should be incentivised through performance-linked benefits.

7.1.7 Create Dedicated International Desks Composed of Experienced Professionals

Since PSEs play a major role in enhancing India's geo-strategic reach, it is imperative for them to have dedicated international desks. These dedicated desks can provide in-depth knowledge of foreign markets, which can greatly aid PSEs during competitive international bidding. The international desk can keep key project personnel informed about various legislative, business and political developments around the world that have an effect on the

operations of PSEs. These international desks can also be used to collaborate with other Indian PSEs and share knowledge, thus increasing their efficiency. For example, the primary survey revealed that IOCL helped GAIL with a project in Myanmar due to their expertise and previous engagements in Myanmar.

The international desk should be manned by experienced professionals, who can collect and collate information from various sources on market entry requirements, regulations, taxes and business environment. These professionals can help plan strategies that are tailored to the jurisdictions in which the companies operate/plan to operate.

7.1.8 Conduct Detailed Market-Specific Studies

PSEs are required to conduct detailed market-specific studies to identify opportunities and barriers by region, country and sector. At least four to five market-oriented research studies should be taken up by PSEs yearly, under their CSR funding, to help formulate market entry strategies. There is for studies on how other countries support their PSEs.

7.2 What the Government Should Do?

7.2.1 Streamline and Fast-Track Decision Making Process and Grant More Autonomy

Stringent government-control over the day-to-day business of PSEs has to be relaxed to minimise delays in processes. PSEs should be given more autonomy for better governance and faster decision-making, especially in taking critical project decisions where delays lead to losing out on opportunities. Delays in project approvals have to be minimised by setting certain targets/timelines and by reducing the number of stages for approval. Further, to streamline the approval processes and reduce time and cost, all documentation should be done online. For this, the government can look into and learn from international best practices.

Vacancies in key managerial positions and high-level executive positions should be filled on a priority basis. The survey found that there should be better succession planning, which is an important technique employed by most private sector companies to avoid delays in appointments of key personnel. It results in smooth transition and helps avoid unnecessary delays in the operations of a company.

The government should be a facilitator and help in increasing autonomy. Eighty percent of the high growth PSEs that have a strong presence in the international market were of the opinion that their performance and exports would improve if they underwent 100 percent disinvestment and had autonomy in decision-making as in the case of the private sector. Around 60 percent of PSEs felt that disinvestment with majority government control would not improve their performance or exports as government would continue to be the major shareholder, which they think is a roadblock to their growth. In the case of some PSEs, for strategic reasons, the government would like to have certain level of control. However, that should not adversely affect business operations. In day-to-day business, the companies should be given more autonomy.

7.2.2 Have a Clear Vision Document and Roadmap for PSEs to Enhance their Geo-Strategic Reach

The government should have a roadmap for 5 and 10 years on what is expected from PSEs by clearly laying down the export, investment and growth targets. The government has to work with PSEs and their industry organisations to identify key markets of geo-strategic importance. The roadmap should include (a) identifying new markets and exploring opportunities in existing markets through go-to-market studies (b) identifying ways in which PSEs can club their strengths to explore new markets (c) identifying how industry bodies can work with government to build the “Indian PSE brand” in export markets and (d) identifying ways in which Indian PSEs can partner with companies from other countries to explore new markets. A high-level strategy committee can be formed that can work with the government to create the roadmap to increase exports and extend the geo-strategic reach of the PSEs.

7.2.3 Have Dedicated Funds to Conduct Market-Specific Research

Dedicated funds should be allotted for conducting market-specific research to enhance the geo-strategic reach of PSEs. Detailed market studies should be conducted by designated government departments/ministries to identify the opportunities and barriers in foreign markets that PSEs face and/or may face, and the information should be shared with PSEs to enable them to improve their performance. Survey-based studies have to be conducted to help the government develop evidence-based and data-driven policies for the growth of PSEs in general and to enhance their exports in particular. Such studies may be conducted under the MAI schemes and/or similar schemes of the Department of Commerce, Ministry of Commerce and Industry.

7.2.4 Collaborate with Trade and Academic Institutes to Frame a Trade Barrier Report

The Department of Commerce can collaborate with trade and academic institutes to frame a consolidated trade barrier report, similar to the annual trade barrier report released by the USTR. For this, PSEs should be actively engaged in providing regular inputs about various countries and the sector-wise market access and trade barriers they face. This report will help PSEs and other Indian companies gain knowledge of opportunities and barriers in foreign markets and in different sectors and accordingly decide where to export or invest. They can then work with the government to address the barriers.

7.2.5 Engage in Trade Agreements/MoUs to Help PSEs to Access Untapped Markets

The Indian government can engage in regional/bilateral engagements and MoUs with potential markets in sectors where Indian PSEs have a comparative advantage. Strong bilateral relationships have always helped in easy market access and setting up of businesses in foreign markets. For example, various bilateral arrangements and MoUs between India and Bangladesh have helped many Indian companies, especially Indian PSEs in the energy sector, establish a significant market presence in Bangladesh.

7.2.6 Formation of PSE Desk and Enhanced Coordination with the Nodal Ministry

As PSEs come under different ministries, it would be beneficial if there is a separate PSE desk in each ministry, which can work in line with the roadmap set up for PSEs to enhance their geo-strategic reach. The survey indicated that while some ministries were quite proactive in helping PSEs and in co-ordinating with the MEA and other relevant government ministries/departments to get faster approvals and permissions or for project acquisition in foreign markets, there were delays and disinterest shown by other ministries. In this context, the formation of a PSE desk in each ministry would help PSEs engage separately with a different department for approvals, information and help with issues. The PSE desks should actively co-ordinate with the nodal ministry for PSEs – the Ministry of Heavy Industries and Public Enterprises.

The survey found that nodal ministries which have created a dedicated international desk for their PSEs have a fast-track approval process and are able to share knowledge regarding international bids and developments more efficiently. Therefore, all nodal ministries for PSEs should identify a nodal person and/or create an international desk for fast-track clearances, co-ordination with Indian embassies and for sharing information such as call for bids in foreign countries.

7.2.7 Encourage Competitive Bidding among the PSEs

The government should encourage Indian PSEs to go for competitive bidding for acquiring foreign projects rather than rely on nomination-based projects. The PSE desks should actively help PSEs move forward in this direction and enhance their geo-strategic reach. Competitive bidding can make PSEs invest in best practices to improve productivity as they are required to compete with several international players.

7.2.8 Create a Transparent and Predictable Policy Regime with Respect to Disinvestment

Disinvestment of the government's stake in PSEs creates an uncertain environment. There has to be a transparent and predictable policy with respect to disinvestment to ensure greater trust between PSEs and the government. At present, such trust appears to be very low when compared with global counterparts.

7.3 Addressing Concerns related to PSEs in Multilateral Forums such as G20/WTO and other Trade Agreements

To address the issues of PSEs in international forums and trade agreements, India needs to develop a comprehensive strategy, focused on establishing transparency. As India has already been questioned in forums such as the WTO, it is important for India to discuss and deliberate so as to be prepared with a response to deal with such issues. In this context, the survey participants have highlighted that there is an urgent need to conduct in-depth research to understand the issues that have been raised and formulate appropriate policies. Further, to address such concerns, India should look at the global best practices and how the governments of other countries are engaged in restructuring of the PSEs to enhance their geo-

strategic reach. The government's focus should be on building a consensus among the like-minded countries to work together in jointly addressing these issues. India should also share their own good practices on reforming the PSEs with these countries in the international forums.

To conclude, Indian PSEs still play a key role in enhancing a country's geo-strategic reach. However, they do suffer from certain inefficiencies, performance issues and non-transparency, some of which are also being discussed in various international forums such as G20 and WTO. Overall, the survey found that most of these challenges are related to company-specific issues and, therefore, there is a need for restructuring and transformation within these organisations. Some of them have already started the process.

At the policy level, it is extremely important for India to streamline its processes and examine how other countries support their PSEs in global market expansion and in integrating into the global value chain. India can learn from innovative models such as 'Temasek' of Singapore to enhance the geo-strategic reach of Indian PSEs. The survey found that PSEs should be given more autonomy and made accountable. Global case studies show that the number of PSEs in India should be pruned down. They should focus on certain critical areas such as oil and gas and on certain objectives like energy security or mineral security. They are not needed in areas like consultancy services or software services where India has multinational players in the private sector, who can deliver the services more efficiently. Further, instead of treating the private sector as their competitor, a more collaborative model may be adopted by Indian PSEs, where they collaborate among themselves as well as with the private sector. In this context, India can learn from China's experience where a PSE entering a new market opens the door for private sector firms, including start-ups. Partnerships with start-ups and innovative firms are few in India and this is an area where PSEs should focus on for their internal transformation and technology upgradation.

Since PSEs invest in strategic and long-term projects, long-term political strategy and planning is needed for their success. They also should have a robust disaster management strategy and should be able to handle issues, such as the global outbreak of COVID-19. The expectations from the PSEs have to be defined and they should be given clear mandates and targets. Strategies have to be defined on how PSEs can help enhance India's geo-strategic reach and build the country's brand and image globally. These are areas that need further research and deliberation. Indian PSEs may also explore possibilities of collaboration with PSEs from other countries to leverage their mutual strengths. At present, their market knowledge or willingness to acquire that knowledge is low. All PSEs acknowledge the need to have a dedicated international desk focusing on key markets and to conduct market specific studies where they can engage academic/research institutes with expertise in trade and investment. They also realise that specific funds must be allocated for such purposes. In the survey, they emphasised the need for data-driven, evidence-based policymaking. Trade and investment data for PSEs should be regularly published by the government by sectors and key markets. This will make PSEs more aware of market opportunities and trends.

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