NFCG National Foundation for Corporate Governance

CII Confederation of Indian Industry

the rise of the elephant

Enhancing Competitiveness of Central Public Sector Enterprises

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Executive Summary

This is indeed an opportune time for the 'elephant to rise' and exhibit its power.

Central Public Sector Enterprises (CPSEs) have sometimes been considered 'white elephants', with a reputation for operating inefficient firms and thereby being a drain on the national exchequer. Further, popular discourse asserts that the dynamic private sector environment in the India of today no longer requires CPSEs. Consequently, there is considerable pressure on the government to divest CPSEs.

This report establishes that CPSEs are indeed required in select sectors and under specific circumstances and lays out a CPSE Filter Framework to determine the need for government participation in a sector. The government's participation in a business is merited only if it satisfies one of four criteria:

1. The sector is of **strategic national importance**, such as security, defence, nuclear, energy and communications
2. The sector requires **market-making** since there is either insufficient depth of market or market failure, including rare instances when there threatens to be a private sector monopoly
3. CPSEs are required to undertake **government functions** necessitating the freedom, managerial capabilities and responsiveness of a corporate entity, such as skill development or job creation
4. Making **strategic investments**, primarily abroad by setting up of sovereign wealth funds

To the extent, these four objectives can be met by other modalities, the need for setting up an entity is negated. Such modalities could include policy directives or offering short-term incentives to private players or partnering or incubating entities with a clear roadmap to divestment.

The other essential step is to regularly re-evaluate the need for a particular CPSE, given the rapidly changing context. For instance, while the situation may have necessitated setting up a CPSE in a certain sector in the past, evolving market dynamics may dissipate its strategic importance and need.

It may be noted that globally, even developed economies, such as Germany, Norway, etc. operate State Owned Enterprises (SOEs).

Given that some CPSEs are required, the focus should be on building competitiveness in the surviving CPSEs – ensuring the 'rise of the elephant'.

The report first examines whether, in line with popular perception, CPSEs do indeed perform poorly vis-à-vis their private sector peers (termed the Competitiveness Assessment), using a data-based approach. The Competitiveness Assessment assesses CPSE performance across multiple dimensions, ranging from corporate governance to operational efficiency to societal contribution. The answer is a mixed bag, varying by dimension and sector.

Contrary to the common belief, SOEs can indeed be efficient and globally competitive. Singapore is a prime example of nurturing competitive SOEs. A study shows that SOEs in Singapore (termed as GLCs), on an average, exhibit higher valuations and better corporate governance than non-government-linked companies.

The success ingredients are really no secret; it is a mix of governance and independence. Some key elements include:

- Temasek, the holding companies for many GLCs, views its role as promoting high standards of corporate governance and supporting the formation of a high-calibre board.
- The government **does not influence the appointment of personnel** in Temasek portfolio companies (TPCs). Neither the government nor Temasek steer **business operations or management decisions**.
- TPC boards mostly comprise **non-executive independent directors**. Temasek insists that the Chairperson and CEO roles should be held separately to provide effective oversight and supervision of the company
- TPC are **professionally managed**; **competitive compensation** to executives ensures that the best talent is attracted to GLCs

Drawing on the learnings of international experience in operating SOEs to the Indian context, we have developed a Competitiveness Model for transforming CPSEs into efficient and globally competitive entities. The key elements of the Competitiveness Model are:

1. **Clarity in roadmap and objective**

   Given today's environment of divestment uncertainty (whether and which CPSEs will be divested), there is urgent need to first classify CPSEs into 'Core CPSEs' or 'Non-core CPSEs'. The framework for this assessment should be transparent and made known to

CPSE top management to ensure there are no surprises in government policy regarding ownership.

Further, CPSEs are often faced with multiple and often contradictory objectives. The priority of objectives for each CPSE should be clearly laid out to enable them to operate effectively.

2. Role demarcation

There must be clear definition and separation of the roles and responsibilities of the owner, the management and the Board. A well-documented ownership policy will help avoid either passive ownership or excessive interference. To further effect this, the positions of the Chairperson and Chief Executive Officer must be held by different people, independent of each other. This is in line with the Singapore model, where the management and board are independent of the government.

3. Operational independence

Operational independence comprises independence in operational decision-making and in personnel related matters such as recruitment, promotion, compensation and other terms of employment.

4. Independent and empowered board

CPSE Boards must be accorded independence, authority and autonomy. This will transform CPSEs from being ministry-driven to Board-driven. Empowered CPSE boards, comprising independent experts, will enhance the quality of decisions, overall management supervision and governance, while ensuring that nearly all strategic decisions are taken at the Board level and not passed on to the respective Ministry thereby increasing the speed of decision-making.

5. Level playing field

This report recommends that CPSEs be subject to the same governance standards as private players to help create a level-playing field. Excessive scrutiny from the Central Vigilance Commission and the Comptroller Auditor General, coupled with the threat of Central Bureau of Investigations often leads to stalled or over-cautious decision-making in CPSEs.

In addition, distinction must be made between mala-fide action and taking a business risk. The former needs to be punished, while the latter, protected.

Given the social obligations CPSEs are expected to undertake, the same parameters and benchmarks as used for private players cannot be applied to CPSEs. A different evaluation system, taking cognizance of their social objectives, needs to be developed

6. Future ready

In order to remain competitive, CPSEs must develop internal competencies in technologies such as Artificial Intelligence, Internet of Things, blockchain, and big data analytics amongst others. Appropriate adoption of these technologies is the key to future competitiveness.

In summary, as is the practise globally, some CPSEs are required. However, only in sectors which meet the filter criteria and where government participation through non-ownership routes such as policy directives are unlikely to be successful.

The decision on divestment of a CPSE should be based on its nature of business, not its profit status.

Finally, there are enough examples internationally and a few in India to demonstrate that CPSEs can be operated efficiently enough to become globally competitive. The trick is to translate thought and reams of paper recommendations into action.

1. Context

This chapter discusses the role and need for Central Public Sector Enterprises (CPSEs). It also sets out an overall vision for CPSEs and consequently, the way forward.

It may be noted that this report focuses only on Central Public Sector Enterprises; the study does not include the estimated 1,455 public sector units operated by state governments[1].

A. Role of CPSEs

Historically, CPSEs have contributed tremendously to the economic and social development of the country and should accordingly be recognised for their impact.

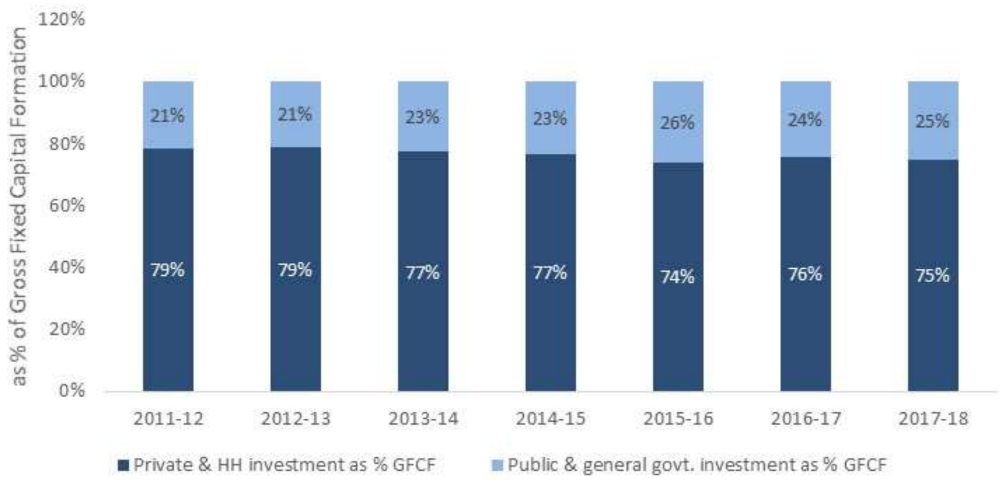
They were pivotal in building assets – both physical and intellectual. In addition to physical assets such as logistics infrastructure, CPSEs have helped the nation develop valuable intellectual property, research, etc. CPSEs were leveraged to develop sectors where the private sector was unwilling to enter due to factors such as high-investment, high-risk and low-return. For instance, much of the India's energy sector, from exploration to distribution, has been established by CPSEs. At one time, they were also a significant source of employment in the formal sector.

In recent times, CPSEs have played and continue to play a not-so-insignificant role in driving investment in infrastructure, moderating prices in some sectors, countering cyclical downturns and furthering geo-political interests.

As seen from the graph below, while private investment (private sector and household investment combined) as a proportion of gross fixed capital formation (GCFC) has declined over the recent period, public investment (often routed through CPSEs) has stayed constant. During periods of economic downturn, CPSEs present the government with the potential for such investment related interventions.

1 Comprising 1,136 functional and 319 dysfunctional state public sector units. From 'Time to rationalise State PSUs', The Hindu Business Line, 20 January 2019 (https://www.thehindubusinessline.com/opinion/time-to-rationalise-state-psus/article26043388.ece#)

Share of Public and Private Sector Investment



Note: *Private sector and household investment have been clubbed together. Public sector and general government investment have been clubbed together.*

Source: *CSO*

CPSEs such as Coal India Limited continue to be instrumental in moderating the price of coal – a key element of India's energy security given that around 72% of India's current power generation is currently met through coal[2].

The government can use CPSEs to steer policy for national interest, including initiatives to counter cyclical downturns. For instance, the government has the option to leverage the significant muscle of public sector banks to drive policy initiatives such as financial inclusion.

Countries are increasingly using business to further national interests and vice-versa. China's massive infrastructure investments (building rail, roads and ports) in Africa, focused on the oil-rich Nigeria and Angola, is a case in point. The move is seen as China's bid to gain political and diplomatic influence in the region[3].

B. Need for CPSEs

This, then, begs the existential question: in the current context, do we need CPSEs to fulfil the roles described above.

The government should not be in the business of doing business. Its role is to protect the strategic interests of the country and facilitate business. Add to this, the fact that the prevailing business environment in India is largely characterised by a dynamic market economy and vibrant private sector. Further, CPSEs are a significant drain on the national exchequer, having run up cumulative losses of Rs 1.38 lakh crore over the last 5 years (from 2013-14 to 2017-18)[4].

2 'Coal here to stay despite India's ambitious goals for renewable energy', The Economic Times, 12 May 2019

3 'Why Is China Building Africa?', Forbes, 21 September 2019 (https://www.forbes.com/sites/panosmourdoukoutas/2019/09/21/why-is-china-building-africa/#242133af502c)

4 Public Enterprises Survey 2017-18, Annual Report on the performance of Central Public Sector Enterprises, Government of India

Despite this, CPSEs are indeed required in select circumstances. The CPSE Filter Framework lays out these circumstances, in the form of 'rules'.

CPSE Filter Framework

Government participation in a business is merited only if it satisfies at least one of four criteria:

1. The sector is of strategic national importance

   Examples of such sectors include security, defence, nuclear, energy and communications. Taking cognizance of the overarching and dominant, although often ignored, power of technology in the current era, this is another area (extending across sectors) which could be considered.

   The intent is not to suggest that government participation is required in all segments of these sectors; only in the select few which are truly of strategic criticality.

2. The sector requires market-making

   Sectors where there is either insufficient depth of market or market failure, including rare instances when there threatens to be a private sector monopoly, could benefit from government participation. In general, CPSEs operating in industries with vibrant and efficient private players should be divested or closed down since the role of the CPSE in such sectors has become redundant.

   Logistics and transportation is an example of such a sector; for instance, providing air services to uneconomical routes or building a rail and road network across the country. Public sector banks have been key in servicing remote areas where branches yield low-return.

3. Undertaking functions of the government, requiring autonomy

   CPSEs are required to undertake functions taken on by the government which require the freedom, managerial capabilities and responsiveness of a corporate entity. Examples include training & skill development agencies and employment exchanges.

4. Making strategic investments

   Sometimes, making strategic investments, primarily abroad, are in national interest. This can be done through setting up sovereign wealth funds. Acquiring part stake in cutting-edge technology firms (often, start-ups), through sovereign wealth funds, helps countries access the latest in fields such as artificial intelligence, edge computing, connected vehicles, wearable technology, cyber-security, etc.

All CPSEs should be subject to the CPSE Filter Framework, to identify:

- Core CPSEs — those meeting the four criteria filter of strategic national importance, market-making, government functions and wealth funds; and
- Non-core CPSEs — all other CPSEs

While the CPSE Filter Framework lays out the four circumstances in which government participation in business may be required, this is not to suggest that private sector participation be disallowed in the identified sectors.

Modes of Participation

The key word is government participation, not necessarily government-ownership. To the extent, the earlier-mentioned four objectives can be met by other modalities, the need for setting up an entity is negated. Such modalities could include policy directives or offering short-term incentives to private players or partnering or incubating entities with a clear roadmap to divestment.

For instance, short-term incentives could be offered to private transportation companies (airlines, etc.) for connecting remote, or economically unviable routes.

Periodic Re-evaluation

Given the rapidly changing environment, from a business, technology and global policy perspective, regular re-evaluation of the need for a particular CPSE is essential. While, in the past, circumstances may have necessitated setting up a CPSE in a certain sector, evolving market dynamics may dissipate its strategic importance and need.

It may also be possible that strategic needs or market conditions, in the future, may require the setting up of a new CPSE. For instance, areas of 'natural monopoly' such as Metros or suburban trains, may necessitate the setting up of a CPSE or a joint sector company. However, setting up a new CPSE in the future may be considered only if it adheres to the filter criteria set out earlier.

Given today's rapidly changing environment, the need for all existing CPSEs must be reassessed every 5 years.

C. Vision for CPSEs

In light of the above discussion, we believe it is time to set a new vision for CPSEs which takes cognizance of its now limited raison d'être, given the changed context. Further, although CPSEs are focused on non-financial objectives, they must operate efficiently, ensuring optimised use of resources (financial and human).

The overall vision for the 21st century CPSEs in India could be set as:

"Creating value for the country, from a societal or strategic national interest perspective, while adhering to high standards of governance and efficiency."

D. Way Forward

Clearly, the way forward differs for Core and Non-Core CPSEs.

1. Non-Core CPSEs

Non-core CPSEs should be divested or closed down. Such a move would provide the government with immediate liquidity and reduce future losses (in cases of loss-making CPSEs) or investment. The divestment or closing down decision should be based solely on the CPSE's nature of business and not its profit status. That said, all attempts must be made to ensure that the surviving CPSEs, particularly loss-making entities, are made competitive. The intent is to reduce the burden on the exchequer. Further, as mentioned later in the report, appropriate evaluation parameters, which take cognizance of the social obligations of the CPSEs, must be used to gauge performance.

Of course, the disinvestment approach and timing could vary from entity to entity to ensure that the government receives the optimal valuation and, thus, disinvestment proceeds. They could be divested individually or merged together and then divested, depending on the specific companies / buyer interest.

2. Core CPSEs

CPSEs that meet the CPSE Filter Framework, the Core CPSEs, should be nurtured to ensure they meet their objectives and accrue maximum benefit to the country. Accordingly, it is important to first accurately evaluate their performance and then provide CPSEs with the appropriate resources to build a competitive organisation.

Evaluation Parameters

Developing appropriate parameters for evaluating a CPSE is important to ascertain a realistic value and contribution of the entity.

CPSEs typically fulfil a social need or a gap in the market. To this end, their vision varies from the private sector. As a consequence of the nature of their business and social obligations, the criteria for success and benchmarks for acceptable financial performance is likely to differ from the private sector players. Therefore, using only financial performance parameters will not provide a comprehensive view. Different comprehensive evaluation parameters are required.

One option is to price the social obligations. For example, if a CPSE is required to supply pharmaceuticals at below market rates, to economically weaker sections of society or to maintain affordable prices for the average citizen, this subsidy could be valued and considered in the performance evaluation of the entity.

Majority Ownership and Raising Funds

For the sectors identified as requiring government participation, is it essential for the government to hold majority stake?

The intent of a majority stake is control. In a diversified shareholding structure, being the single largest shareholder is often sufficient to drive the direction of the organisation.

Thus, even in cases where a CPSE operates in a strategic sector or is involved in market making, the Government may consider divesting up to 49% in some of these CPSEs.

Creating competitive CPSEs requires funds.

Ideally, the funds should come from non-government sources. Divesting upto 49% in some Core CPSEs would help raise funds. However, this must be 'genuine divestment' and not one CPSE acquiring stake in another, which, in essence, is simply transfer of government funds between two government-owned entities.

Permitting CPSEs to issue shares with differential voting rights (DVRs) is another option. This enables investment to flow through while retaining control.

Competitiveness

The focus should be on making Core CPSEs efficient and competitive. Contrary to the common belief, SOEs can indeed be efficient and globally competitive (discussed in the chapter on 'Global Experience').

The need to meet social objectives is in no way an excuse for not being operationally efficient. Further, to the extent possible, within the boundaries of its social obligations, CPSEs should take heed of market dynamics, and pricing should take cognizance of the cost of producing and delivering. This will help minimize losses.

The 'Recommendations' chapter discusses this is detail.

2. Overview of CPSEs

This chapter assesses the overall performance of CPSEs over the last ten years.

During this period, the number of CPSEs increased from 213 in 2008-09 to 255 in 2017-18. The infrastructure sector accounted for the largest number of CPSEs, followed by power and oil & gas.

Break-up of CPSES by sector (2017-18)

Sector	Number of CPSEs	% total CPSEs
Infrastructure (road, rail, port, air)	40	16%
Power	24	9%
Oil & gas	20	8%
Atomic energy, space, defence	18	7%
Steel	13	5%
Mining (excluding oil & gas)	14	5%
Chemicals & fertilizers	13	5%
Pharmaceuticals	12	5%
Others	101	40%
Total	**255**	**100%**

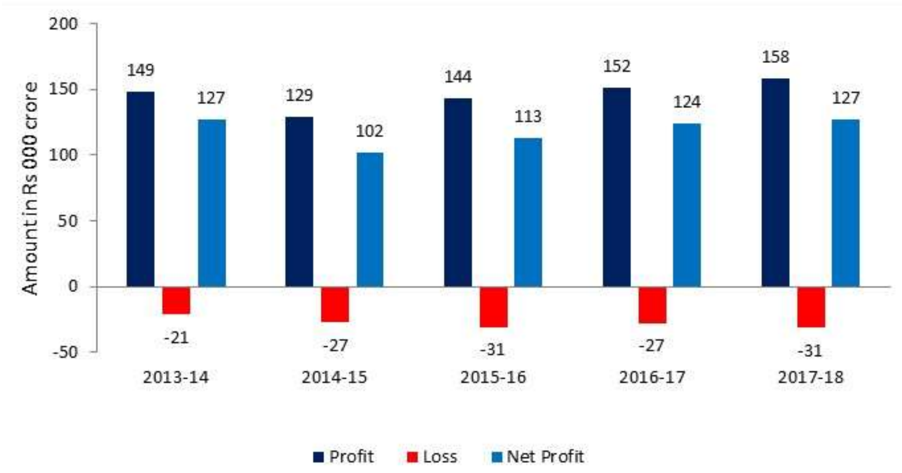
Note: *segregation by sector done on the basis of nodal ministry*

Source: *Public Enterprises Survey, 2017-18, Ministry of Heavy Industries and Public Enterprises*

The sections below evaluate the impact of CPSEs on the exchequer and their contribution to society (employment, creation of assets and CSR).

A. Impact On Exchequer

Net Profit Delivered by CPSEs (2013-14 TO 2017-18)



Source: *Public Enterprises Survey, 2017-18, Ministry of Heavy Industries and Public Enterprises*

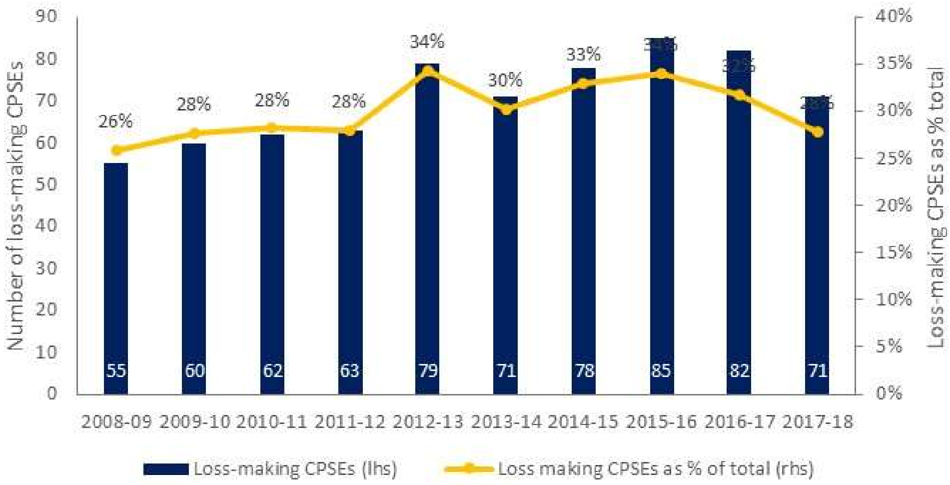
Despite popular belief, CPSEs have, on a consolidated basis, contributed positively to the exchequer, as is evident from the graph below. Over the past five years, CPSEs have generated around Rs 593,000 crore.

That said, the number of loss-making CPSEs have, in fact, increased from 55 in 2008-09 to a high of 85 CPSEs in 2015-16, declining to 71 in 2017-18. On an average, the number of loss-making CPSEs, over the last five years (2013-14 to 2017-18) were 77, an increase from 64 CPSEs from the previous five-year period (2008-09 to 2012-13).

In relation to all CPSEs (loss and profit making), 26% of the CPSEs were loss-making during 2008-09; this figure rose to 34% in 2015-16 and, subsequently, dropped to 28% in 2017-18.

This is depicted in the graph below.

Number and proportion of loss-making CPSEs (2008-09 TO 2017-18)



Source: *Public Enterprises Survey, 2017-18, Ministry of Heavy Industries and Public Enterprises*

The loss per loss-making CPSE, too, increased over the ten-year period (2008-09 to 2017-18) from Rs 266 crore to Rs 440 crore per loss-making CPSE. This trend is reflected in the increase of the average yearly loss over the last five years (2013-14 to 2017-18) as compared to the previous five-year period (2008-09 to 2012-13): Rs 27,541 crore per annum vs. Rs 21,677 crore per annum.

The cumulative losses of CPSEs over the last 10 years (2008-09 to 2017-18) were around Rs 247,000 crore, of which 56% were incurred during the last five years (2012-13 to 2017-18). Three CPSEs – Bharat Sanchar Nigam Limited, Air India Limited and Hindustan Photo Films Manufacturing Company Limited – were responsible for nearly 53% of the cumulative losses during the last five years, as shown in the table below.

Top Loss-Making CPSES (CUMULATIVE 2012-13 TO 2017-18)

Sector	Cumulative loss (2012-13 to 2017-18) in Rs crore	% total cumulative loss
Bharat Sanchar Nigam Limited	32,899	23.8%
Air India Limited	27,596	20.0%
Hindustan Photo Films Manufacturing Company Limited	12,347	8.9%
Rashtriya Ispat Nigam Limited	3,807	2.8%
Mahanagar Telephone Nigam Limited	2,930	2.1%
Others	58,663	42.4%
Total	**1,38,241**	**100%**

Source: *Public Enterprises Survey, 2017-18, Ministry of Heavy Industries and Public Enterprises, CII Research analysis*

The causes for the increase, or indeed, losses, in the first place, are varied. In certain sectors, aggressive competition from the private sector has accentuated internal inefficiencies in some CPSEs. Internal inefficiencies typically result from a lack of or out-dated resources (technology and/or skills). Limited managerial independence (in practise) coupled with bureaucratic and political interference have also stymied the competitiveness of CPSEs. Moreover, as mentioned earlier, CPSEs exist to fulfil a societal need, such as servicing economically unviable customers, which leads to weak finances.

B. Contribution to Society

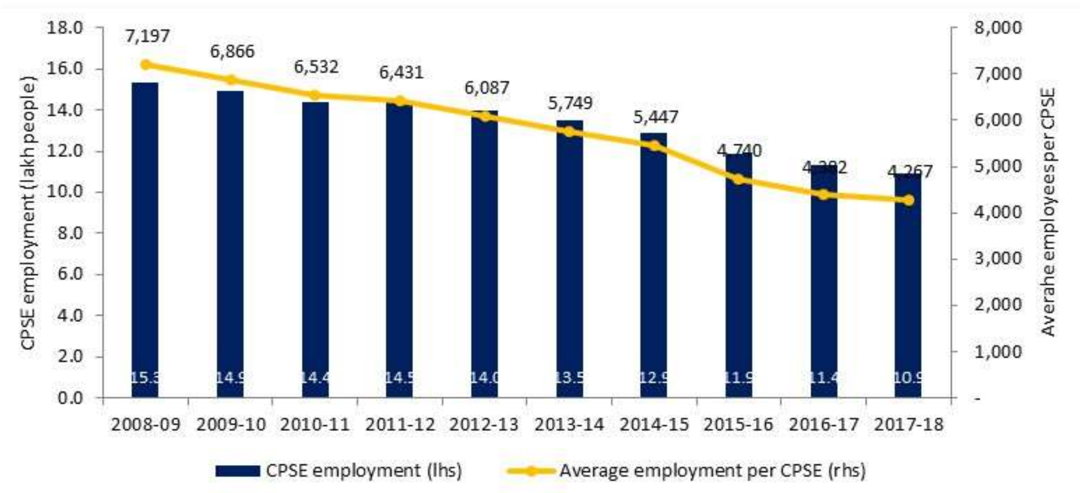
1. Employment

CPSEs were looked upon as generators of remunerative employment in the formal sector: job security and health-care with the added benefits of prestige and opportunity to serve the nation. During their early years, given India's fledging private sector, CPSEs were also a significant source of formal employment.

Over the last four decades, this has changed. Private sector has burgeoned and, consequently, the number of jobs available. Compensation and other benefits offered by the private sector often hugely exceed those offered by CPSEs. In short, CPSEs are no longer viewed as the primary source of remunerative formal employment providing high-quality work conditions.

Employment in CPSEs, over the last 10 years (2008-09 to 2017-18), shows a declining trend. During this period, the employment per CPSE, too declined from 7,197 people in 2008-09 to 4,267 in 2017-18, as depicted in the graph below.

CPSE Employment (2008-09 TO 2017-18)



Source: *Public Enterprises Survey, 2017-18, Ministry of Heavy Industries and Public Enterprises*

The above trend is also reflected in the decrease in total CPSE employment over the last five years (2013-14 to 2017-18) as compared to the previous five-year period (2008-09 to 2012-13): from 14.6 lakh jobs per annum to 12.1 lakh jobs per annum.

Given estimates of 2.8 crore organised sector jobs in India[5], CPSE employment (not to be confused with overall government jobs) at 10.9 lakh in 2017-18, is an insignificant proportion of the total organised sector pie.

It may be noted that the decline in jobs per CPSE is a combination of divergent factors and needs to be examined on an entity level to ascertain whether it is a positive or negative trend. It could be reflective of the shrinking nature of an organisation and/or an evolution in technology and business model which now requires a smaller workforce.

2. Creation of assets

CPSEs are rightly credited with having built much of India's asset base in the initial decades following independence, particularly in sectors viewed as high-risk and/or low-return by private players. Given the limited availability of financial capital, during that period, the private sector also stayed away from many high investment sectors. CPSEs, on the other hand, nurtured both human capital and physical assets.

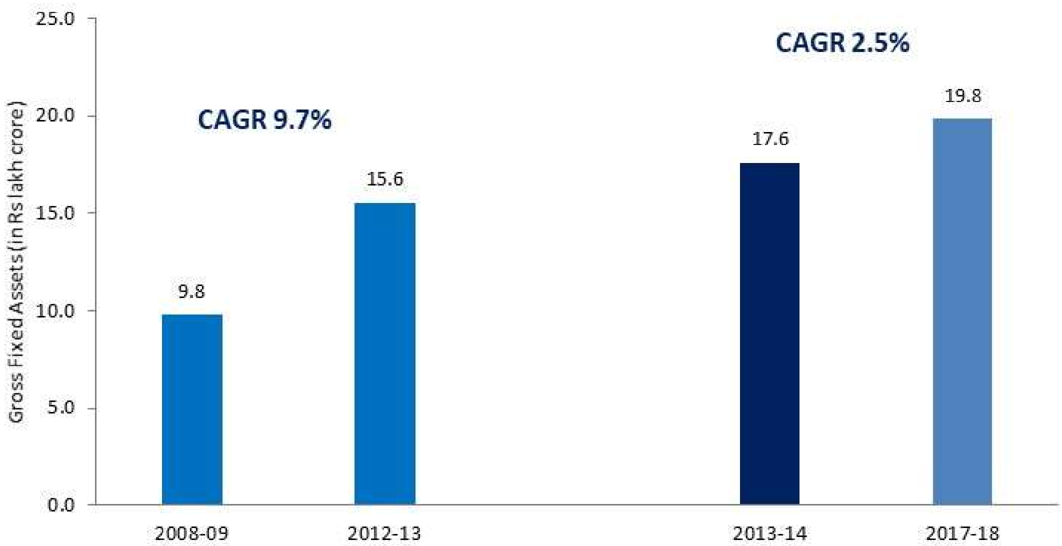
5 Ministry of Labour & Employment, Government of India

As a testimony to the quality of human resources developed by CPSEs, many private sector organisations, even today, recruit former / retired CPSEs employees either directly or as part-time advisors, in sectors relating to infrastructure, power, mining and oil & gas, amongst others.

In terms of physical assets, while the total gross fixed assets of CPSEs have grown over the past ten years, their pace of growth has declined, as shown in the graph below.

The average gross fixed assets per CPSE also reflect a similar trend; growth slowed from 8.1% (CAGR) during the period 2008-09 to 2012-13 to 0.8% from 2013-14 to 2017-18.

Growth in Gross Fixed Assets



Source: *Public Enterprises Survey, 2017-18, Ministry of Heavy Industries and Public Enterprises, CII Research analysis*

As in the case of employment, the slow down in growth needs to be examined at an entity level. It could be indicative of the dominance (relative to CPSEs) of the private sector and thus reduced pace of fixed asset addition (expansion activities) of CPSEs. Such sectors could include chemicals, pharmaceuticals, engineering / capital goods, etc. On the other hand, certain sectors have witnessed a drastic change in business models and asset acquisition norms (e.g, leasing instead of outright purchase).

3. Corporate social responsibility

CPSEs have been and continue to be generally recognised for their social development initiatives. Such initiatives pre-date even the mandatory Corporate Social Responsibility (CSR) contribution.

Data shows a decline in the total CSR contribution by CPSEs, over the past three years. This trend is reflected in the decline in the CSR contribution as a proportion of profit. It may be noted that the decline notwithstanding, CPSEs have, on a consolidated basis, contributed more than the mandated 2.0% of profits.

Corporate Social Responsibility Contribution (2015-16 TO 2017-18)

Parameter	2015-16	2016-17	2017-18
CSR contribution (Rs crore)	4,028	3,337	3,442
CSR contribution per CPSE (Rs crore per CPSE)	16.11	12.88	13.50
CSR as % of CPSE profit	2.78%	2.18%	2.16%

Note: *Only profit of profit-making CPSEs taken for computing 'CSR as % of CPSE profit'*

Source: *Public Enterprises Survey, 2017-18, Ministry of Heavy Industries and Public Enterprises, CII Research analysis*

3. Competitiveness Assessment

In this report, we have developed a Competitiveness Assessment to assess the performance of CPSEs vis-à-vis the private sector across various dimensions:

a. Corporate governance

b. Value generation

c. Stock market perception

d. Dominance in the market

e. Operational efficiency

f. Future orientation

f. Contribution to society

The intent is to determine whether, as per popular perception, CPSEs do indeed perform poorly vs. their private sector peers. Further, is there a largely consistent trend, across sectors, of poor or superior performance of CPSEs?

The analysis has been done on a sectoral basis, to negate the impact of differing characteristics of each business. It may be noted that the sector descriptions are deliberately broad since there may not be any directly comparable private sector companies. Seven sectors have been considered for this study: financial services; construction; mining (excluding oil & gas); power; steel; telecom; and transport & logistics.

This study has deliberately omitted the oil & gas sector. Although, in its broad definition, the sector comprises many large and critical CPSEs (such as BPCL, GAIL, IOCL, ONGC, OIL, etc.), the entities are highly varied in their operations and, therefore, not comparable. Further, there are very few to no private sector listed players, who cover the spectrum of activities undertaken by the oil & gas CPSEs.

This is a limited exercise, in that the analysis is restricted to select CPSEs and a few listed private sector players. The list of companies considered for the analysis is mentioned in the Annexure.

A. Corporate Governance

High standards of corporate governance are a cornerstone of any well-regarded entity. One of the imperatives for ensuring good corporate governance is an independent and robust board of directors. An effective board comprises of a majority of independent non-executive directors.

The Competitiveness Assessment uses the proportion of independent directors on the board as a measure of corporate governance.

On the whole, CPSEs have a lower proportion of independent directors (44%) vis-à-vis the private sector (51%). This trend is reflected across all sectors in the sample excluding steel, where the proportion of independent directors in CPSEs exceeds that of private sector companies.

The results, by sector, are presented below.

Proportion of independent directors: CPSE VS. Private Sector

Sector	CPSEs	Private sector
Financial services	41%	50%
Construction	42%	51%
Mining (excluding oil & gas)	42%	54%
Power	46%	50%
Steel	50%	44%
Telecom	50%	51%
Transport & logistics	40%	61%
Consolidated	**44%**	**51%**

Source: *Ace Equity database, BoB data from 'Bank of Baroda - Corporate Governance Report 31.03.2019, Annexure 1', SBI data from SBI Annual Report 2018-19, Tata Teleservices Ltd. data from company website, CII Research analysis*

Another indicator of corporate governance is the separation of the positions of the Chairperson of the board and the CEO. This is a parameter in which all CPSEs fail.

B. Value Generation

This dimension seeks to evaluate the value generated by the entity. The Tobin's Q ratio[6], which compares the market value of company relative to the replacement cost of its assets (at book value), has been used as the evaluation parameter.

6 Tobin Q ratio is calculated as: (market cap + book value of debt) / book value of total assets

Thus, a Tobin's Q ratio of 1 implies that the market value of the company equals its replacement cost – the equilibrium state.

A Tobin's Q ratio of less than 1 implies that the replacement cost is higher than the company's market value. This could be indicative of the market undervaluing the stock or that the firm's assets are too expensive to support the business (and thus, an inefficient, firm).

Conversely, a ratio greater than 1 could indicate either that the stock is overvalued, or the firm is generating value in excess of its cost of assets (and thus, an efficient, firm).

The Tobin's Q ratio for the sample set, by sector, are presented below.

Tobin's Q Ratio: CPSE VS. Private Sector

Sector	CPSEs	Private sector
Financial services	0.50	0.97
Construction	1.01	1.16
Mining (excluding oil & gas)	3.08	0.77
Power	0.87	0.89
Steel	0.59	0.73
Telecom	1.40	1.56
Transport & logistics	1.54	1.59

Source: *Ace Equity database, CII Research analysis*

Tobin's Q ratio for CPSEs is lower than their private sector peers for all sectors, with the exception of mining.

The significant difference between CPSEs and the private sector mining players, as also the significantly high Tobin's Q for mining CPSEs is driven by Coal India Limited. Excluding Coal India Limited, CPSEs and private sector players register a similar Tobin's Q of 0.79 and 0.77 respectively. The high Tobin's Q of Coal India is probably a function of its currently near monopolistic dominance in coal and relatively low book value of assets. The similar and below equilibrium Tobin's Q for CPSEs (excluding Coal India Limited) and private sector suggests an industry-wide issue.

CPSEs in the financial sector and steel exhibit a ratio significantly below the equilibrium point of '1', possibly indicating inefficient firms (assets are too expensive to support the business). Interestingly, private sector firms in the steel sector too exhibit a Tobin's Q below '1', pointing to a sector-wide issue of over investment in non-productive assets, unlike in the case of financial services where the Tobin's Q for private sector firms is nearly '1'.

In the power sector, both CPSEs and private players, registered a Tobin's Q below '1', indicating an industry-wide issue.

C. Stock Market Perception

This dimension assesses whether the stock market does, in fact, value CPSEs higher than private sector, given the perception of 'special dispensation' to CPSEs. Alternatively, are CPSEs valued significantly lower than their private sector peers.

The PE ratio (price-to-earnings ratio) has been used to understand the stock market perception.

Price Earnings Ratio

The price-to-earnings ratio (PER) compares the share price of a firm to its earnings per share. It indicates the amount an investor is required to invest in a firm to receive one Rupee of earnings.

A high PER (i.e., the company's stock price is high vis-à-vis its earnings) could imply either that the firm is over-valued or that investors expect high earnings in the future. On the other hand, a low PER could be indicative of under-valuation. The PER varies by industry and therefore must be compared only with the industry peer set. Typically, mature sectors registering moderate growth have a lower PER than high-growth nascent sectors.

As evident from the table below, CPSEs recorded a higher PER vis-à-vis their private sector peers in the power, steel and transport & logistics sectors.

In other sectors, investors' expectation for the future earnings from private players appears substantially higher than from CPSEs. The mining sector recorded the highest differential between CPSEs and private players, driven by Hindalco Industries Limited which recorded a PER of 52.76. The private sector mining PER reduces to a more moderate 12.21, if Hindalco Industries Limited is excluded.

Price-to-earnings ratio: CPSE VS. Private Sector

Sector	CPSEs	Private sector
Financial services	24.48	38.97
Construction	13.53	15.32
Mining (excluding oil & gas)	8.31	32.49
Power	9.78	7.96
Steel	8.09	5.40
Telecom	N.A.	N.A.
Transport & logistics	**38.04**	**18.73**

Note: *PER as of 30 September 2019, based on NSE data. Telecom PER is N.A. since the companies registered losses*

Source: *Ace Equity database, CII Research analysis*

D. Dominance in The Market

This dimension evaluates the market impact of CPSEs in their respective sectors. This is done in two-fold ways: determining the overall change in revenue dominance in the sector; and the growth in net sales relative to its peers.

Revenue Dominance in the Sector

The change in revenue share of the CPSEs in the sample over the past ten years is indicative of their change in market dominance.

As is evident from the table below, the share of the CPSEs in the sample has declined significantly over the ten-year period, from 2008-09 to 2018-19, across all sectors excluding power, construction and financial services.

The decline in share is possibly the combined effect of change in government policies, lower competitiveness of CPSEs (relative to their private sector peers) and the onset of vibrant private sector competition. Examples of such sectors include steel and telecom.

Some of the sectors such as mining were hitherto closed to, or unattractive to, private players; their entry, naturally, has impacted the share of the CPSEs. The high market dominance in FY 2009 was driven by Coal India Limited.

The financial services sector is an interesting case. Despite vibrant private sector competition, CPSEs have managed to stay strong; in fact, they have increased their market dominance marginally. The power sector remains public sector dominated. Construction also witnessed an increase in public sector share over the years; however, CPSE presence remains under 10%.

This is depicted in the table below.

Revenue share of CPSE: 2008-09 and 2018-19

Sector	2008-09	2018-19
Financial services	24.7%	26.7%
Construction	6.2%	9.8%
Mining (excluding oil & gas)	96.2%	48.9%
Power	55.0%	62.2%
Steel	30.2%	19.5%
Telecom	7.1%	2.3%
Transport & logistics	37.4%	28.5%

Note: *Net Sales is taken as proxy for revenue. Industry size has been computed assuming all companies for which data is available in Ace Equity comprise the 'industry'*

Source: *Ace Equity database, CII Research analysis*

Growth in Net Sales

The five-year CAGR (FY 2015 to FY 2019) in net sales of CPSEs, relative to their industry peer set, is also indicative of market dominance. In order to negate any short-term fluctuations, the change over a longer term (a five-year period) has been taken.

CPSEs recorded a higher growth in net sales relative to their private sector peers in the construction and power sectors. While part of this growth may be attributed to the competitiveness of the firms, these are also sectors which have received special dispensations from the government. Special dispensations could be in the form of obtaining business on nomination basis (construction sector, for instance), quicker payment of dues, etc.

The net sales growth for the sample set, by sector, is presented below.

Growth In Net Sales (FY 2015 to FY 2019): CPSE VS. Private Sector

Sector	CPSEs	Private sector
Financial services	8%	20%
Construction	17%	12%
Mining (excluding oil & gas)	4%	6%
Power	9%	-18%
Steel	10%	15%
Telecom	-13%	-11%
Transport & logistics	**2%**	**8%**

Source: *Ace Equity database, CII Research analysis*

E. Operational Efficiency

The popular notion is that the public sector is significantly less efficient than the private sector. This section seeks to evaluate that hypothesis. Internal competitiveness or operational efficiency has been measured using two parameters: PAT margin and return on capital employed. These parameters vary by industry and, therefore, must be compared only with the industry peer set.

Pat Margin

The PAT margin7 indicates the efficiency of the operations and the overall health of the company. In order to negate any short-term fluctuations, an average over a three-year period has been taken.

In terms of profitability, CPSEs performed better than the private sector in four of the seven sectors covered in the study: construction, mining, power and transport & logistics. Interestingly, CPSEs managed to buck the negative growth exhibited by their private sector peers in the construction and transport & logistics sectors.

7 PAT margin = profit after tax / net sales

The PAT margin for the sample set, by sector, is presented below.

PAT Margin (Average FY 2017 to FY 2019): CPSE VS. Private Sector

Sector	CPSEs	Private sector
Financial services	10%	18%
Construction	13%	-28%
Mining (excluding oil & gas)	19%	12%
Power	26%	1%
Steel	-1%	3%
Telecom	-133%	-68%
Transport & logistics	10%	-1%

Note: *Simple average of the three-year period computed*

Source: *Ace Equity database, CII Research analysis*

Return on Capital Employed

Return on capital employed (ROCE) is also a measure of profitability. However, unlike PAT margin, ROCE takes cognizance of the amount of capital used to generate the profits, and thus the efficiency of capital utilisation. ROCE is particularly relevant for capital-intensive sectors.

A higher ROCE indicates more economical use of capital whereas a low ROCE implies poor utilisation of capital. Consistency in ROCE is important; therefore, in order to negate any short-term fluctuations, an average over a three-year period has been taken.

As evident from the table below, CPSEs register considerably higher ROCE in mining, construction, and power sectors. CPSEs in the steel, financial services and transport & logistics sectors appear to be straddled with legacy assets, resulting in lower ROCE relative to their private sector peers. CPSEs in the telecom also echo this trend, although private telecom players also registered negative ROCE.

ROCE (Average FY 2017 to 2019): CPSE VS. Private Sector

Sector	CPSEs	Private sector
Financial services	6%	13%
Construction	21%	11%
Mining (excluding oil & gas)	36%	8%
Power	9%	6%
Steel	2%	11%
Telecom	-14%	-8%
Transport & logistics	9%	23%

Note: *Simple average of the three-year period computed*

Source: *Ace Equity database, CII Research analysis*

F. Future Orientation

Competitiveness is not merely about winning today, but also laying the foundation for winning in tomorrow's marketplace. The future corporation will need to be global in outlook, catering to different geographies. For instance, India has already witnessed the entry of a plethora of international firms, across sectors – including in industries considered critical to national interest such as oil & gas and defence. In addition, the successful corporation of the future will be innovation driven.

To this end, we evaluate two potential levers for building future competitiveness: export propensity and expenditure on research & development (R&D).

Export Propensity

Exports as a proportion of net sales could be used as an indicator of a company's future thinking strategy. Comparing this to the company's peer set would negate any effects of differing industry characteristics.

However, limited consistent and reliable export sales data is available. While some companies report foreign exchange earnings and export sales in their annual reports, this may not be representative of the entire earnings from foreign markets. Further, most companies (CPSEs and private players) tend to establish separate legal entities to cater to foreign markets.

Although CPSEs were initially set up with the objective of developing competencies to serve the domestic market, the current geopolitical and technological context has widened the ambit of national interest. This necessitates CPSEs to establish a global footprint in strategic markets with varied objectives such as:

- Furthering India's goodwill (e.g., constructing infrastructure, offering basic services such as telecommunications)
- Securing raw material (e.g., critical minerals not available or not adequately available in India; oil & gas assets)
- Influence in the global financial system
- Acquiring new-age technology, including participating in its initial development to drive India beneficial standards

While some CPSEs have ventured abroad, especially in the oil & gas space, significantly more focus and strategic direction is required.

In the banking sector, Indian banks reported 144 overseas branches, as of 30 September 2019, of which public sector banks accounted for 125 branches8. Bank of Baroda has the highest number of foreign branches (38) followed by the State Bank of India (37).

In the construction sector, Engineers India Ltd. (EIL) and NBCC have undertaken some projects abroad. EIL has set up an engineering office in Abu Dhabi catering to the UAE and Middle

8 Source: RBI. Indian banks include public sector banks plus private Indian banks (Axis bank, ICICI bank, HDFC bank and IDBI bank)

East region9. NBCC has established NBCC Gulf LLC to undertake construction activities in Oman and its neighbouring countries, in addition to setting up NBCC International Limited aimed at extending its overseas operations10. NBCC has completed projects in Mauritius, Maldives, Turkey, Niger, Malawi and Zambia, amongst others.

Coal India Limited is exploring acquisition of minority stakes in operational coking coal mines in Russia, Canada and Australia11. NTPC Limited is looking to develop nearly 1000 MW of solar power projects in Africa12. The company has already entered into a 50% joint venture with the Bangladesh Power Development Board (BPDB) to set up two coal-based units of 660 MW each, catering to the local Bangladesh market. NTPC is also exploring thermal and hydropower consultancy opportunities in Morocco, Oman and a few African countries.

Steel Authority of India (SAIL) has an International Trade Division charged with exports of mild steel products and pig iron13. Japan, China, Korea, Thailand, Indonesia, Australia, UK, Germany, Sudan, Oman, UAE, Bangladesh and Sri Lanka are some of SAIL's export markets.

As evident from the examples above, CPSEs do have a presence abroad, although a fledging one, which needs to be ramped up in line with India's strategic goals. CPSEs could leverage their India experience particularly in other emerging economies.

Based on available data, export sales as a proportion of net sales for the sample set, by sector, is presented below. In order to negate any short-term fluctuations, an average over a three-year period has been taken.

Exports as Proportion of Net Sales (Average FY 2017 TO 2019): CPSE VS. Private Sector

Sector	CPSEs	Private sector
Financial services	-	-
Construction	10%	6%
Mining (excluding oil & gas)	18%	45%
Power	-	-
Steel	4%	8%
Telecom	-	4%
Transport & logistics	41%	3%

Note: *Simple average of the three-year period computed*

Source: *Ace Equity database, CII Research analysis*

9 EIL website

10 NBCC website

11 'Coal India targets stakes in overseas coke mines', 24 June 2019, The Economic Times

12 'NTPC eyes 1,000-MW solar power projects, consultancy in Africa', 6 February 2019, The Hindu Business Line

13 SAIL website

R&D Expenditure

R&D expenditure is an indication of the company's investment in innovation and future technologies – the key drivers of competitiveness going forward. R&D expenditure as a proportion of turnover, as compared to its industry peer set has been used as the parameter. In order to negate any short-term fluctuations, an average over a three-year period has been taken.

As evident from the table below, CPSEs spend more on R&D as a proportion of turnover, vis-à-vis their private sector counterparts. While this is a positive sign, the proportion is small, crossing the 1% mark only in the mining sector. Given that CPSEs are present in sectors of national strategic interest, the R&D expenditure should be higher.

R&D Expenditure as Proportion of Turnover (Average FY 2017 to 2019): CPSE VS. Private Sector

Sector	CPSEs	Private sector
Financial services	-	-
Construction	1.01%	0.27%
Mining (excluding oil & gas)	3.47%	0.03%
Power	0.64%	0.59%
Steel	0.58%	0.21%
Telecom		
Transport & logistics		

Note: *Simple average of the three-year period computed. Companies in the financial services, telecom and transport & logistics sectors did not report R&D expenditure in their Annual Reports. 'Turnover' refers to gross sales.*

Source: *Ace Equity database, CII Research analysis*

G. Contribution to Society

The popular notion is that the public sector is more conscientious in its Corporate Social Responsibility (CSR) spend vis-à-vis the private sector. In order to negate any short-term fluctuations, an average over a three-year period has been taken.

As seen from the table below, CPSEs do not fare better than the private sector when it comes to spending on CSR, barring the mining and construction sectors. A negative value implies that actual spending has been less than the mandatory spend.

The higher than required spending in the CPSE mining sector is driven by Coal India Limited (541%), whereas the private mining sector is driven by Vedanta Limited (328%). In the private steel sector, Tata Steel Limited (161%) drives the high spend on CSR.

The transport & logistics sector is the biggest laggard in CSR spending.

Actual VS. Mandatory Spend (Average FY 2017 TO 2019): CPSE VS. Private Sector

Sector	CPSEs	Private sector
Financial services	-37%	-22%
Construction	6%	-20%
Mining (excluding oil & gas)	195%	174%
Power	1%	4%
Steel	N.A.	89%
Telecom	N.A.	-40%
Transport & logistics	-43%	-45%

Note: *formula used is [(actual spent - mandated to spend)/mandated to spend] Total over a three-year period taken. Steel and Telecom CPSE is 'N.A.' since the firms in the sample set are loss-making and thus do not have to bear CSR expenses.*

Source: *Ace Equity database, CII Research analysis*

Conclusion

Do CPSEs indeed perform poorly in relation to their private sector peers? The answer is a mixed bag, varying by dimension and sector.

Corporate Governance

CPSEs fare lower than the private sector in terms of proportion of independent directors, in all sectors covered in the study, with the exception of steel. In general, though, CPSEs are not substantially lower. However, on the other key determinant of corporate governance – separation of the positions of the Chairperson and CEO – CPSEs fail as a consequence of government policy and not an individual entity-level decision.

Value Generated And Perceived

CPSEs registered a lower than '1' Tobin's Q ratio in three out of the seven sectors indicating either undervaluation or, more likely, over-investment in assets (inefficient firms): financial services, steel and power. It may be noted, though, that the private players in the power and steel also registered a similar Tobin's Q indicating an industry-wide (not confined to CPSEs) issue.

The higher than '1' Tobin's Q ratio, pointing to overvaluation or efficiency (firms generating value in excess of their cost of assets) in transport & logistics and telecom is in line with the performance of private players.

Stock market perception is somewhat different. CPSEs in the steel, power and transport & logistics trade at a premium to private players, possibly indicating higher earnings expectation from these CPSEs.

Market Dominance

In terms of market dominance, the revenue share of CPSEs, in some sectors, has declined significantly over the past ten years. The decline in share is possibly the combined effect of change in government policies, lower competitiveness of CPSEs (relative to their private sector peers) and the onset of vibrant private sector competition. On the other hand, CPSEs have increased their market dominance in the power, financial services and construction sectors.

CPSEs outpaced private players in net sales growth in the construction and power sectors.

Operational Efficiency

The results are contrary to the popular notion that CPSEs, uniformly, across all sectors, are hugely less efficient than their private sector peers. PAT margin and return on capital employed (ROCE) were used to gauge operational efficiency. CPSEs exhibited higher PAT margins in the construction, mining, power and transport & logistics sectors, as compared to private players. They also exhibited better ROCE in the construction, mining and power sectors. Poor ROCE of CPSEs in the steel and financial services sectors is in line with the low Tobin's Q for these sectors.

Future Orientation

The future corporation will need to be global in outlook and an innovator. While some CPSEs have ventured abroad, from an exports and/or investment perspective, significantly more focus and strategic direction is required. Likewise, while CPSEs do score higher than their private sector peers in R&D expenditure, the figure remains low. More investment in R&D is required.

Contribution to Society

Contrary to popular notion, CPSEs do not score significantly better than the private sector, across all sectors, when it comes to CSR spending.

4. Global Experience

This chapter presents the global landscape for State Owned Enterprises (SOEs). It then focuses on the governance and structure of SOEs in China and Singapore.

Given that China significantly outnumbers all other countries in the number of SOEs (many of which are dominant global players in their respective sectors), this chapter briefly traces the Chinese experience with SOEs. It then studies the Singapore model to understand the success ingredients for creating efficient SOEs, with the intent of adapting some of these levers to the Indian context.

A. Global Landscape

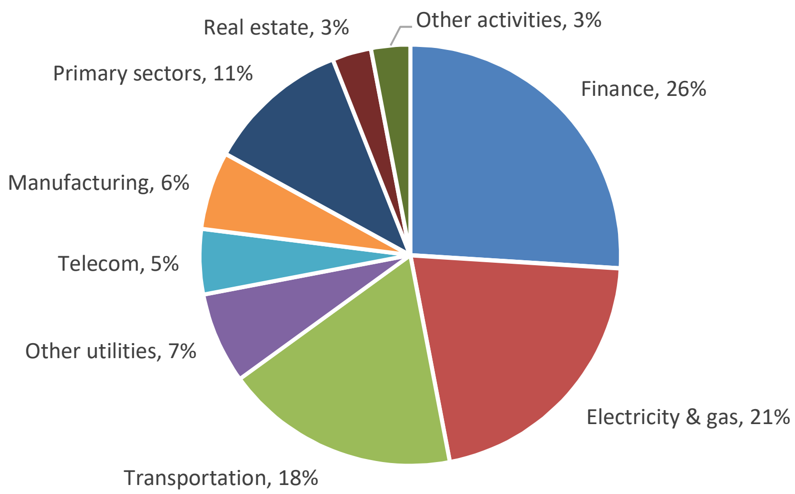
State Owned Enterprises (SOEs) are a global phenomenon, present in both, highly developed economies (Canada, Denmark, Norway, Spain, etc.) and emerging economies. However, they are most prevalent in emerging market and post-transition economies[14].

China has the largest number of SOEs, estimated to be around 51,000, followed by Hungary (370 SOEs) and India (270 SOEs), as depicted in the graph below. Governments, in the sample set (excluding China), cumulatively own around 2,467 SOEs, which are valued at over USD 2.4 trillion and employ over 9.2 million people. Chinese SOEs, alone, are valued at USD 29.2 trillion and employ around 20.2 million people.

SOEs, on an average, account for 2-3% of national employment in OECD countries. Norway ranks the highest, with SOEs accounting for 9.6% of non-agriculture employment in the country, as seen from the graph below. This element of the study did not cover India; however, as mentioned earlier in the report, CPSEs in India accounted for around 3.9% of

14 This section is largely drawn from 'Size and Sectoral Distribution of State-owned Enterprises', OECD September 2017. The study covers 40 countries, mainly in the OECD area, plus Argentina, Brazil, China, India and (partially) Saudi Arabia

SOEs By Sector (Based On Equity Value)



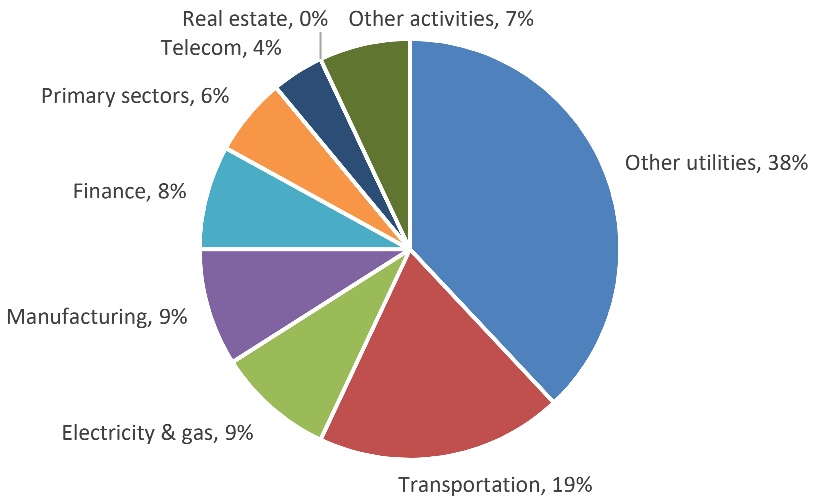
Source: *Size and Sectoral Distribution of State-owned Enterprises, OECD September 2017*

the organised sector jobs in 2017-18[15].

SOEs (by equity value) are concentrated in the utilities, finance and transportation sector, as shown in the graph below. Financial services emerge as the single largest sector. The top three sectors – finance, transportation and utilities – account for 72% of the total SOE value. This data excludes China.

In employment terms, though, financial services make a much smaller contribution. Utilities and transportation account for 66% of the SOE employment.

SOEs By Sector (Based On Employment)



Source: *Size and Sectoral Distribution of State-owned Enterprises, OECD September 2017*

15 CPSE employment 10.9 lakh in 2017-18; organised sector jobs in India estimated at 2.8 crore

B. Global Experience: China

Governance Structure

Sate owned enterprises (SOEs) in China are categorised into four groups, with each group governed by a different apex body[16].

Governing entity	SOE description	SOE examples
Central SASAC*	Central industrial SOEs	Aluminium Corporation of China Ltd., China Minmetals Corporation, China Nonferrous Metal Mining Co. Ltd.
Local SASAC*	Local industrial SOEs	Bailian group, Jinjiang International Holdings Co. Ltd.
Central Huijin Investment Company Limited	Select financial institutions	China Publishing Group Corp. China Arts and Entertainment Group Ltd., China Railways
Ministry of Finance	Select financial institutions, central administrative institutions	Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China

**SASAC: State-owned Assets Supervision and Administration Commission of the State Council*

The State-owned Assets Supervision and Administration Commission of the State Council (SASAC) is a special commission, set up in 2003, directly under the State Council to act as a funder and regulator of non-financial SOEs on behalf of the state. SASAC controls around 40% of the SOEs. The Central Huijin Investment Co. Ltd. (Huijin), established in 2003, is an investment company owned by the Chinese government. It is a wholly owned subsidiary of China Investment Corporation, the country's sovereign wealth fund.

Evolution

The SOE governance system and guiding principles have evolved over the last four decades.

1970 – 1990s

The early part of this era was characterised by factories directly controlled by the government, to the extent of stipulating production quotas. Gradually, the government started devolving power to SOEs.

- 1978 – 1984: increased operational autonomy was accorded to SOEs
- 1984 – 1989: the contract responsibility system was introduced
- 1989 – 1992: separation of the owner and manager roles commenced

16 This section is sourced from: 'The China Dashboard, State-Owned Enterprise', Winter 2019, Asia Society Policy Institute; 'China's SOE Reforms: What the Latest Round of Reforms Mean for the Market', May 2019, Dezan Shira & Associates; 'China's 40 Years of Reform and Development 1978–2018', Australian National University

1993 – 1997

The corporatisation process of SOEs was initiated. This included setting up of a board of directors, etc.

1998 – 2002

In an attempt to reform the vast number of SOEs, a policy of 'grasping the large, letting go of the small' was adopted. The underlying principle being that larger firms performed better than smaller firms and were more important to the economy.

Consequently, during 1995 to 2003, the number of SOEs reduced drastically, from 118,000 to about 34,000.

2003 – 2013

This period witnessed a slew of changes. SASAC and Huijin were set up in 2003.

In 2006, SOEs were categorised into three groups based on the relative importance of their sectors. The intent was a varying degree of state control depending on the criticality of the sector.

Industry category	Industry examples	Control principle
Key industries	Defense, electricity, oil and gas, telecom, coal, shipping, aviation, and rail	Vital to national security and economy, so maintain absolute control • 100% state ownership or absolute control • Increase state owned assets in these industries
Pillar industries	Auto, chemicals, construction, electronics, equipment manufacturing, nonferrous metals, prospecting, steel, and technology	Strategic links to economic development, so maintain strong control • Absolute or relative • controlling stake • Increase influence of state even if ownership share is reduced
Normal industries	Agriculture, pharmaceutical, real estate, tourism, investment, professional services, general trade, and general manufacturing	Maintain necessary influence • Ensure influence by controlling stakes in key companies; reduce ownership in non-key companies

In 2013, President Xi Jinping proposed the next wave of reforms to transform SOEs into full-fledged modern corporations. The proposals, later captured in the 'Guiding Opinions of the Central Committee and State Council on Deepening the Reform of SOEs' policy document in 2015, included mixed ownership, hiring professional managers and empowering the board of directors to make decisions.

Current state

Drawing from earlier proposals, the current SOE reform framework, called '1+N framework', is hinged on mixed ownership, mergers & acquisition and SOE classification.

- **Mixed ownership**

  The mixed ownership plan of the SASAC, introduced in August 2018, aims to inject mixed ownership in 404 central and local SOEs by 2020. The selected SOEs are largely in either competitive industries or industries suffering with excess capacity, such as machinery, construction, chemical, nonferrous metals, etc.

- **Mergers & acquisition**

  The intent is to merge unlisted assets into listed companies to improve their asset-liability structure and reduce leverage by acquiring external high-quality assets. During 2018, SOEs in highly leveraged industries such as property, public utilities, chemical and machinery were subject to M&A activity.

- **SOE classification**

  In 2017, a tripartite grouping scheme was adopted for SOEs: industrial enterprises groups, investment groups, and operating groups. In effect, SASAC and the government no longer directly manage each SOE, but instead manage the groups. These groups, in turn, manage individual SOEs.

Despite the spate of reforms, including introducing private and international investors, the government still retains strong control, with private and international investors having limited influence.

All SOEs are required to institutionalize the role of Communist Party Committees into their articles of association and give the Party oversight for all strategic decisions. The Party is instrumental in appointing, promoting or removing the SOE leadership, including board chairperson, party secretaries, general managers, etc. With senior SOE executives also being government officials, their incentivises are more aligned to pursuing state goals rather than maximizing shareholder value.

Size and Performance of The SOE Sector

Despite a decline in the SOE's share in total industrial assets from around 60% in 2012, it still remains a significant 28% as of June 201817.

SOEs have performed poorly vis-à-vis the private sector. They accounted for only 18% of total industrial profit (although they held 28% of the assets) and delivered a return on assets of 3.9% as compared to 9.9% by private firms. The total debt of SOEs stood at USD 15 trillion at the end of 2017, which is equivalent to nearly 120% of national GDP. SOE debt levels touched almost 140% of GDP during 2016.

17 'Missing Link: Corporate Governance in China's State Sector', Daniel H. Rosen, Wendy Leutert & Shan Guo, Asia Society Special Report with Rhodium Group

C. Global Experience: Singapore

It is interesting to study the Singapore model since it challenges the popular notion that a highly competitive economy cannot be built on the basis of public sector enterprises. Termed as Government Linked Companies, or GLCs18, Singapore has shown that public sector ownership, under an appropriate eco-system and incentive structure, could, in fact, be more efficient at allocating capital than the private sector.

An IMF study[19] demonstrated that GLCs traded at a 20% premium relative to their private sector peers. Another study found that GLCs, on an average, exhibited higher valuations relative to non-GLC, after controlling for firm specific factors. GLCs delivered higher returns on both, assets and equity. They had lower expense to sales ratio than non-GLCs, underlining their high internal efficiency, and were thus more profitable.

In addition to financial parameters, a study has demonstrated that GLCs have, in fact, better corporate governance standards than non-GLC companies. Further, GLCs in Singapore are not victims of rent-seeking or political privilege.

Governance of GLCs

GLCs were set up with an objective similar to that of Indian CPSEs: to establish new industries which the private sector would not or could not (due to limited resources, risk appetite, etc.) enter.

The government of Singapore established Temasek Holdings Pte Limited (Temasek) on 25 June 1974 to hold and manage GLCs, on a commercial basis. It may be noted that Temasek does not manage all GLCs. Temasek's sole shareholder is the Minister for Finance.

Some of the key features of this structure, which have resulted in the high-performance of GLCs, are as under:

- The government does not influence appointment of top management and other company personnel. However, the concurrence of the President of Singapore is required for the appointment of the CEO. The government also does not interfere in the management of GLCs.
- Temasek views its role as promoting high-standards of corporate governance and supporting the formation of a high-calibre, appropriately experienced and diverse boards for the Temasek portfolio companies (TPCs).
- Temasek does not steer business operations or managerial decisions, leaving this to the TPC board and management.
- TPC boards mostly comprise non-executive independent directors.
- The boards of the TPCs are policy focused rather than being operational focused. Their

18 This section is drawn from 'State-Owned Enterprises in Singapore: Historical Insights Into a Potential Model for Reform', Tan Cheng-Han, Dan W. Puchniak, Umakanth Varottil, National University of Singapore

19 'Singapore, Inc. Versus the Private Sector: Are Government-Linked Companies Different?', Carlos D. Ramirez and Ling Hui Tan, International Monetary Fund

task is to guide and complement the management leadership team.

- Temasek insists that the TPC boards be independent of the management so as to provide effective oversight and supervision of the company. Further, the Chairperson and CEO roles should be held separately.
- TPCs are professionally managed. Competitive compensation to executives ensures that the best talent is attracted to TPCs.

The governance structure of GLCs in Singapore is complemented with the overall eco-system in the country: robust public enforcement mechanism and strong corporate governance enforcement, coupled with a zero-tolerance policy for corruption. Consequently, most Singaporean companies (irrespective of whether private or GLCs) are considered to adhere to high standards of corporate governance.

Size and Performance of Temasek

Temasek has transformed from being merely the holder of select GLCs to acquiring largely strategic equity stakes in companies across the world. With 11 offices globally, Temasek's portfolio was valued at S$ 313 billion as on 31 March 2019[20]. It has delivered 15% total shareholder return since its inception in 1974.

Temasek's global portfolio revolves around six structural trends, grouped as 'social progress' and 'technology enablers'. Social progress comprises longer lifespans, rising affluence and sustainable living, while more connected world, sharing economies, and smarter systems comprise technology enablers.

Its portfolio spans numerous sectors: financial services; telecommunications, media & technology; consumer & real estate; transportation & industrials; life sciences & agribusiness; and energy & resources.

Around 26% of Temasek's portfolio is based in Singapore. Another 26% is in China, while North America and Europe constitute 15% and 10% respectively of the portfolio. India accounts for 5% of Temasek's portfolio.

Sovereign Wealth Fund

The Government of Singapore Investment Corporation (GIC), is wholly owned entity by the Singapore Minister for Finance, manages the government's reserves, including surpluses accumulated over the years.

20 This section is largely sourced from the Temasek website

5. Recommendations

The current business environment is characterised by continuous change, as a result of rapid technology advances and global inter-connectedness. Competitive pressures are intense. The popular belief is that CPSEs will inevitably fail in such an environment and that is the price a country must pay to become more competitive. However, as evident from the earlier chapter on 'Global Experience', SOEs can indeed be efficient and globally competitive, with Singapore being a case in point.

This chapter discusses the interventions required to make Indian CPSEs globally competitive. It suggests a Competitiveness Model for enabling CPSEs to compete successfully with private players (Indian and foreign) and foreign SOEs.

Competitiveness Model for CPSEs

1. Clarity in roadmap and objective

As mentioned earlier, much discussion continues to ensue about the future of CPSEs, creating a sense of uncertainty in the organization and its customers. Given today's environment of divestment uncertainty (whether and which CPSEs will be divested), there is urgent need to first classify CPSEs into 'Core CPSEs' or 'Non-core CPSEs'. The framework for this assessment should be transparent and made known to CPSE top management to ensure there are no surprises in government policy regarding ownership. Such a move will provide the respective CPSE management clarity about their future ownership (i.e. whether they will be divested or not), thereby giving confidence to the management and the board to embark on long-term plans.

Further, CPSEs are often faced with multiple and often contradictory objectives such as generating employment, especially for weaker sections of society while maximising profit; providing financially unviable services yet delivering high returns; etc. The priority of objectives for each CPSE should be clearly laid out to enable them to operate effectively.

2. Role demarcation

Clear definition and separation of the roles and responsibilities of the owner, the management and the Board is the foundation.

The role of the owner, the government, is to set an overall vision and incubate the firm. All operational decisions must be left to an experienced and independent professional management team. An independent and empowered Board, comprising experts, should be mandated to provide overall management supervision and corporate governance, as also enhance the quality of decisions of the CPSE.

In other words, there must be a well-documented ownership policy, to avoid either passive ownership or excessive interference. To further effect this, the positions of the Chairperson and Chief Executive Officer must be held by different people, independent of each other.

This is in line with the Singapore model, where the management and board are independent of the government. Government representation on the board, if any, is through the professionally run holding company, Temasek.

3. Operational independence

A consequence of Role Demarcation is according operational independence to the management. The two aspects of operational independence which are most likely to enhance the competitiveness of CPSEs are independence in operational decision-making and personnel related.

A. Operational decision-making

Rapid decision-making is critical for succeeding in today's dynamic, fast-evolving environment. Excessive interference of the concerned administrative ministry in taking decisions on operational matters greatly slows the pace. Further, the quality of the decision could also suffer since the decision-maker often lacks on-ground and in-depth operational experience.

This report recommends that operational flexibility and control be accorded to CPSEs to enable them to function efficiently. While Maharatna and Navratna companies have been permitted some degree of operational freedom (unlike other CPSEs), they could be granted additional independence in decision-making. Similarly, other CPSEs should also be accorded operational freedom.

B. Personnel Related

Selection, compensation / incentives and terms of employment are important drivers of creating competitive CPSEs.

CPSEs are generally unable to attract, recruit and retain the best talent, particularly amongst the younger generations, due to factors such as compensation, slow upward movement and a perception of the organization being 'bureaucratic'.

Further, CPSEs, unlike the private sector, are mandated to provide employment to marginalised sections of society and thus do not have the flexibility to recruit entirely on pure-merit basis. There is also often pressure to make employees permanent. This, coupled with inflexibility to right-size organization, has resulted in a number of CPSEs being over-staffed.

a. Selection of personnel

The management should be given operational freedom in selection of personnel, as in the case of private players. There should be no government interference in the recruitment criteria, process or final decision. Aside from the appointment of the CEO (and immediately below-Board positions), the Board, too, must permit the organisation to recruit as appropriate. At most, the management team may seek the Board's advice on CXO level positions.

Amongst the key social obligations of the CPSEs is providing employment to marginalised sections of society. In order to continue serving this need while ensuring a best-in-class workforce, we suggest:

- Merit-based preference for marginalised sections

  In cases where two candidates are of equal merit, preference will be given to the one from the marginalised section of society. This would extend to all positions, even beyond the formally required percentage. Job promotion, however, should be strictly on merit basis.

- Creating a skill base

  CPSEs could partner with organizations such as the National Skills Development Corporation to develop a specialised programme, aimed at the marginalised sections of society, for creating a skill base appropriate to CPSE requirements.

- Additional pre-recruitment training

  In order to create a level-playing field between job candidates from marginalised sections of society and those who are not from disadvantaged backgrounds, CPSEs could partner with appropriate organizations for pre-interview training.

b. Compensation and incentives for personnel

Compensation is an important joining criterion for a potential candidate. While, in the past, the total compensation differential (including housing and other benefits) between the public sector and the private sector was marginal, the gap has steadily widened over the years. The CPSE management must be accorded freedom to decide compensation levels and performance incentives for the organisation, in line with the private sector and performance of the entity. Likewise, the compensation and performance incentives of the CEO and CXOs should be at the sole discretion of the CPSE board, without any government interference. In addition, employees should be given the flexibility to structure their total CTC as per their needs.

As mentioned earlier, one of the reasons for the successes of Singapore's SOEs is the market-linked pay structure, and thus, high quality of personnel.

c. Terms of employment

In order to spur high performance amongst employees, promotions should be purely merit-linked and not tenure-linked. This will also help attract and retain high-quality ambitious talent.

The management must be given flexibility in hiring and letting go of personnel. They must have the ability and freedom to let go of poor performing personnel, as permissible to private players.

Additional human resources are often required to take cognizance of seasonal changes in demand or the cyclical nature of business. In order to remain competitive and contain costs, the additional human resources must necessarily be temporary, on an as-required basis.

The report, therefore, recommends that the Government does not burden the CPSEs by insisting that they make such human resources permanent. However, given their social obligations, CPSEs could ensure that such labour is compensated fairly and appropriately (as per market norms). Further, it could direct the contractual employees to skill training organizations, so that they gain additional or enhanced skills, which could open up employment opportunities in the future.

4. Independent and Empowered Board

CPSEs, currently, are typically ministry-driven instead of board-driven. This issue is further exacerbated by a weak (non-empowered) board and government officials being appointed as board members.

Another outcome of Role Demarcation is the transformation of CPSEs from being ministry-driven to Board-driven. CPSE Boards must be accorded independence, authority and autonomy.

Empowered CPSE boards, comprising independent experts, will enhance the quality of decisions, overall management supervision and governance, while ensuring that nearly all strategic decisions are taken at the Board level and not passed on to the respective Ministry thereby increasing the speed of decision-making.

The Board must be sufficiently empowered to take nearly all strategic decisions such as formation or dissolution of partnerships / joint ventures, mergers / acquisitions, appointment of CEO, creation of below-board level positions, etc. The Board must also be permitted to appoint new directors to replace retiring Board directors, as is the case with private organizations.

In keeping with the tenets of separation of the owner - manager roles and granting autonomy to CPSEs, the Board must necessarily comprise independent experts, who do not represent any constituency. This typically implies that government officials should be excluded from consideration as Board members.

Attracting independent experts to join CPSE Boards is critical to ensure best-in-class input to the management team and high standards of governance. To this end, the report recommends that the Government focus on three aspects:

- **Compensation**

  The current level of compensation to Board directors may be a constraint. The Government may want to consider reducing the differential, if not equalising, the compensation typically given to Board directors in the private sector.

- **Independence**

  Compensation notwithstanding, a number of experts may be willing to join CPSE Boards for the sheer potential to make a positive impact and the challenge. Independence and autonomy of decision-making, though, would be important factors for such experts.

- **Board powers**

  Another element that would determine whether independent experts would be willing to join CPSE Boards is the extent of authority. A Board, where the directors are accorded independence in decision-making, but restricted to highly limited range of activities is unlikely to be attractive. Board directors in CPSEs should be given similar powers as those in private sector companies.

CPSE Holding Company

Another concept that has been mooted is that of the government setting up a CPSE holding company, akin to Temasek.

The intent of setting up a holding company for CPSEs (HoldCo) is to mitigate excessive interference of the concerned ministry. This is in line with the global trend of governments relinquishing their ownership rights and control by administrative ministries. The HoldCo would then take critical decisions relating to formation or dissolution of partnerships / joint ventures, mergers / acquisitions, appointment of CEO, appointment of Board of Directors, etc., thereby minimizing the need for the CPSE to interact directly with the Ministry.

This report's recommendation, though, is that operational independence be accorded to the professional management team of each individual CPSE. Further, a sufficiently empowered and autonomous Board (for each CPSE), comprising independent experts, be given the authority to take nearly all strategic decisions such as formation or dissolution of partnerships / joint ventures, mergers / acquisitions, appointment of CEO, creation of below-board level positions, etc.

Under such circumstances, a HoldCo will have limited utility and may not be required.

An important aspect of the proposed holding company for CPSEs (HoldCo) is to mitigate excessive interference of the concerned ministry. According operational independence to the management team and creating an empowered independent Board for each CPSE will make the HoldCo redundant.

5. Level Playing Field

While private players often complain of lack of level playing field, on account of some CPSEs being awarded business on nomination basis, CPSEs, too, suffer from certain disadvantages: over-scrutiny and inaccurate performance evaluation.

a. Over-scrutiny

All organizations – CPSEs or private players – must operate under the highest standards of governance.

However, excessive scrutiny from the Central Vigilance Commission and the Comptroller Auditor General, coupled with the threat of Central Bureau of Investigations often leads to stalled or over-cautious decision-making in CPSEs. Consequently, the CPSE management operates under an aura of 'fear' when taking decisions, reducing the organisation's business risk taking appetite. The private sector, while subject to statutory audits, is not faced with these levels of scrutiny, and thus can afford to take higher business risks.

This report recommends that CPSEs be subject to the same governance standards as private players to help create a level-playing field. Naturally, the governance standards, themselves, as applicable to all companies, may undergo change from time to time.

In addition, distinction must be made between mala-fide action and taking a business risk. The former needs to be punished, while the latter, protected. Further, fraudulent and mischievous complaints (complaints with mala-fide intent) against CPSE management personnel should be penalised to send a strong message against such complaints.

b. Performance evaluation

As discussed earlier, given the social obligations CPSEs are expected to undertake, the same parameters and benchmarks as used for private players cannot be applied to CPSEs. A different evaluation system, taking cognizance of their social objectives, needs to be developed.

c. Other

It may be noted that the elements discussed earlier, such as independence and flexibility in decision-making, personnel and board could also be considered as lack of level-playing field between the private sector and CPSEs.

6. Future Ready

Any competitive organisation must be prepared for the future. Today's world of rapid technology advancement has led to business models evolving speedily, across sectors. The rapid pace of change has resulted in erstwhile dominant firms losing their top positions to new-age companies within a matter of years.

This makes it imperative for CPSEs – whether in the manufacturing or services' sector - to stay abreast of and leverage technology to remain competitive. Disruptive technologies include Industry 4.0 (3D printing, Artificial Intelligence, IoT, etc.), blockchain, immersive experiences (AR, VR) and big data analytics amongst others. CPSEs must enhance knowledge, build skills and drive adoption of these technologies. Sharing case studies of actual usage, particularly by CPSEs, would be a powerful way to encourage adoption.

Annexure

The list of companies considered for the Competitiveness Assessment are set out below.

CPSEs	PRIVATE SECTOR
FINANCIAL SERVICES	
Bank of Baroda	Bajaj Finance Ltd.
Housing & Urban Development Corporation Ltd.	HDFC Bank Ltd.
Power Finance Corporation Ltd.	ICICI Bank Ltd.
State Bank of India	Kotak Mahindra Bank Ltd.
	Shriram Transport Finance Company Ltd.
CONSTRUCTION	
Engineers India Ltd.	Dilip Buildcon Ltd.
Ircon International Ltd.	DLF Ltd.
NBCC (India) Ltd.	GMR Infrastructure Ltd.
Rail Vikas Nigam Ltd.	JMC Projects (India) Ltd.
Rites Ltd.	Larsen & Toubro Ltd.
MINING (EXCLUDING OIL & GAS)	
Coal India Ltd.	Hindalco Industries Ltd.
National Aluminium Company Ltd.	Vedanta Ltd.
NMDC Ltd.	
POWER	
NHPC Ltd.	Adani Power Ltd.
NTPC Ltd.	Reliance Infrastructure Ltd.
Power Grid Corporation of India Ltd.	Tata Power Company Ltd.
	Torrent Power Ltd.

CPSEs	PRIVATE SECTOR
STEEL	
Steel Authority of India Ltd.	Jindal Stainless Ltd.
	Jindal Steel & Power Ltd.
	JSW Steel Ltd.
	Mukand Ltd.
	Tata Steel Ltd.
TELECOM	
Mahanagar Telephone Nigam Ltd.	Bharti Airtel Ltd.
	Reliance Communications Ltd.
	Tata Communications Ltd.
	Tata Teleservices (Maharashtra) Ltd.
	Vodafone Idea Ltd.
TRANSPORT AND LOGISTICS	
Container Corporation of India Ltd.	Essar Shipping Ltd.
Shipping Corporation of India Ltd.	Interglobe Aviation Ltd.
	Mahindra Logistics Ltd.
	Mercator Ltd.
	Spicejet Ltd.
	The Great Eastern Shipping Company Ltd.

Note: *All companies considered on a standalone basis, except Coal India Limited. Net Sales, PAT, ROCE, Export sales, R&D expenditure and CSR expenditure taken on consolidated basis*

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National Foundation for Corporate Governance (NFCG) was set up in the year 2003 by the Ministry of Corporate Affairs (MCA), in partnership with Confederation of Indian Industry (CII), Institute of Company Secretaries of India (ICSI) and Institute of Chartered Accountants of India (ICAI) to promote good Corporate Governance practices both at the level of individual corporates and Industry as a whole. In the year 2010, Institute of Cost Accountants of India (ICAI) and National Stock Exchange (NSE) and in 2013 Indian Institute of Corporate Affairs (IICA) were included in NFCG as Trustees.

Vision

Be the Key Facilitator and Reference Point for highest standards of Corporate Governance in India.

Mission

- To foster a culture of good governance, voluntary compliance and facilitate effective participation of different stakeholders;
- To catalyse capacity building in new emerging areas of Corporate Governance.
- To further research, scholarship, and education in corporate governance in India;
- To create a framework of best practices, structure, processes and ethics

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India is now set to become a US$ 5 trillion economy in the next five years and Indian industry will remain the principal growth engine for achieving this target. With the theme for 2019-20 as 'Competitiveness of India Inc - India@75: Forging Ahead', CII will focus on five priority areas which would enable the country to stay on a solid growth track. These are - employment generation, rural-urban connect, energy security, environmental sustainability and governance.

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