State-Owned Enterprises
Catalysts for public value creation?

April 2015: SOEs are likely to remain an important instrument in any government’s toolbox for societal and public value creation given the right context.
## Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Foreword</td>
</tr>
<tr>
<td>6</td>
<td>Summary</td>
</tr>
<tr>
<td>8</td>
<td>Setting the stage – SOEs in context</td>
</tr>
<tr>
<td>14</td>
<td>Same but different</td>
</tr>
</tbody>
</table>

**Setting the stage – SOEs in context**
- Defining state owned enterprises (SOEs)  
- An increasing share of the world’s largest companies  
- SOEs have gone global

**Same but different**
- Why state ownership?  
- Changing times, new purpose?  
- Similarities with private enterprises  
- A question of objectives
State-owned enterprises: Catalysts for public value creation?

Creating value, delivering outcomes
- Value creation for whom? Citizens vs the state
- Defining public value
- A new scorecard for SOEs?

Managing stakeholder relationships
- SOE of the future
- Active ownership and management: a clear purpose and mission
- Active ownership and management: decentralised, centralised or dual ownership?
- Active ownership and management: the “4 Cs”
- Active ownership and management: the importance of leadership setting the right tone
- Transparent and accountable

Achieving balance
- Striking an appropriate internal-external balance
- Managing internally for efficiency and effectiveness
- Leveraging external influence to facilitate good growth

Agenda for action
- SOE owners
- SOE board
- SOE executive leadership
In this report, we address the following key questions which we believe are essential for a robust discussion around the nature and extent of state ownership:

- What role do SOEs play in societal and public value creation?
- What is the purpose and mission of SOEs?
- What are their desired outcomes and associated performance scorecards?
- What makes SOEs similar, yet different, to their private sector counterparts, and how do these nuances translate into how they are led, governed and controlled?
- What does the SOE of the future look like?

In our view, SOEs are likely to remain an important instrument in any government’s toolbox for societal and public value creation given the right context, collaborating with other stakeholders for this purpose in the ‘penta helix’ of private companies, not-for-profit organisations, academia, public sector and citizens. For instance, increased global competition for finance, talent, and resources may mean that countries may increasingly turn to SOEs as a tool to better position themselves for the future in the global economy.

The motivations for state ownership can wax and wane over time, but state-owned enterprises (SOEs) appear to be an enduring feature of the economic landscape and will remain an influential force globally for some years to come. As such, it is important to ensure that – whether held nationally, regionally or locally – the state’s investments actually deliver the societal outcomes desired.

1 For the purposes of this report we adopt the Organisation for Economic Co-operation and Development (OECD) definition of SOEs, i.e. enterprises where the state has significant control through full, majority, or significant minority ownership. In this definition we include SOEs which are owned by the central or federal government, as well as SOEs owned by regional and local governments.
But whatever the motivation, the future SOE will need to be much more actively owned and managed if it is to deliver real public value, and avoid competing unfairly in markets where private and third sector enterprises can deliver more efficiently and effectively the goods and services that citizens need and want.

As a result, we believe that leaders of the SOE of the future, particularly the board of directors and the executive team, will need to meet the following tests:

- **Clarity** – Clear understanding of the purpose and objectives of the SOE and their role in delivering this.
- **Capacity** – Time and resources to conduct their role well.
- **Capability** – Required and relevant expertise and experience to steer and manage the SOE.
- **Commitment to integrity** – Serving the citizen for the purpose of societal value creation.

In this report, we put forward an agenda for action for key SOE leaders – owners, governors and managers – and hope that this can form the basis of discussions on the best ways in which SOEs can add value to society, now and in future.

We look forward to continuing the debate on this important topic.
Summary

SOEs are an influential and growing force globally. For instance, the proportion of SOEs among the Fortune Global 500 has grown from 9% in 2005 to 23% in 2014, driven particularly by the growth of Chinese SOEs.

SOEs have become tools for some countries to better position themselves for the future in the global economy given increased global competition for finance, talent, and resources. It appears, however, that while existing (strongly performing) SOEs are growing larger, there is a more general downward trend in state ownership, even when considering the effects of the financial crisis.

However, a tendency of governments to only partially divest their ownership stakes also means that while there may be a drop in the share of SOEs in a national economy, this does not necessarily equate to a corresponding decrease in the government’s ability to wield influence over these enterprises.

While in many respects SOEs face similar megatrends, opportunities and threats to private sector businesses, there are also some important differences. In particular, SOEs have a different purpose, mission and objectives which relate to some aspect of public service and/or social outcomes.

In PwC’s CEO Pulse survey, private sector CEOs believe that government ownership has advantages in certain circumstances e.g. furthering social outcomes, providing physical infrastructure and creating stability in times of crisis within and across supply chains. But equally, there is a risk that state ownership can destroy value if best practices in ownership and management are not applied: of most concern to CEOs in our Pulse survey are issues of corruption, bribery and inefficiency.

Although there are many different drivers and motivations, where state ownership is the favoured option, SOEs should not be purely evaluated only on the basis of financial results (the profit and loss account), but more widely on how they contribute to societal value creation, taking an integrated and holistic view of their impact (see Figure A).

---

2 Based on number of companies, with China alone comprising 15% in 2014.

3 Based on a survey of 153 CEOs in January 2015 on protectionism and government ownership. See http://www.pwc.com/gx/en/ceo-survey/pulse/index.jhtml for more details.
As such, SOEs need a **new scorecard**, capturing Key Performance Indicators (KPIs) which clearly link to their wider purpose. This goes beyond financial results to consider total impacts such as on other societal 'capitals' like social, human, innovation, citizen and welfare, and environmental capitals. Indeed, the future SOE will need to act quite differently to deliver on this scorecard and will need to develop new capabilities (see Figure B).

To achieve the objectives of public value creation and good growth, the **SOE of the future** should therefore develop in the following ways:

- **Be actively owned and managed** by establishing a **clear purpose and mission** for the SOE, linked to desired societal objectives and outcomes. This should then be communicated through dialogue between the SOE’s owner, governors and managers.
- **In this context**, active ownership and management requires that those undertaking those roles, particularly the board of directors and the executive leadership, fulfil the tests we call the **“4 Cs”**: clarity, capacity, capability and commitment to integrity. In addition, state ownership status should be continually monitored and evaluated to ensure that value continues to be delivered.
- **Be transparent and accountable** through quality, timely and reliable reporting of SOE performance. This goes beyond financial reporting to integrated reporting, with SOEs being role models for good reporting practices. This also aids in **building trust** between the government (owner) and the citizens and other stakeholders (including other shareholders).
- **Strike an appropriate internal-external balance**: like any organisation, the SOE should develop and maintain sound **internal management** in order to maximise efficiency and effectiveness. It should leverage technological and service innovations to deliver products and services, which meet user needs within constrained budgets (doing “better for less”), as well as achieve desired outcomes economically and socially.
- At the same time, the SOE should leverage its **external influence** by co-creating value with other stakeholders in society and driving good growth, linked to its purpose, mission and strategic objectives.

In this way, SOEs can truly become **catalysts for sustainable public value creation**.
Setting the stage – SOEs in context

The motivations for state ownership can change over time, but SOEs appear to be an enduring feature of the economic landscape. There is no doubt that SOEs are an influential force globally, but how are they contributing to governmental strategy and the national, regional or local economy?

Defining State Owned Enterprises (SOEs)

SOEs are known by many names – government corporations, government business enterprises, government-linked companies, parastatals, public enterprises, public sector units or enterprises and so on.

As well as the name, the definition of SOEs also often varies across countries. Research suggests that there is a wide range of legal forms for SOEs, depending on factors such as:

- The level of government that owns the enterprise (central/federal, state/regional or local).
- The way in which the enterprise was founded.
- The position in the public administration hierarchy.
- The purpose of the SOE.
- The status of the SOE if it is in the process of being privatised.

Other variations include:

- Full, majority or minority ownership by the government.
- Listing (or not) on a stock exchange.
- Government shareholdings through vehicles such as government pension funds, asset management funds, restructuring corporations and development lenders.
- State-enabled (for example enterprises which have been granted exclusive rights by the state) as opposed to state-owned.

While the varying forms of SOEs may provide governments with flexibility, these multiple forms may also serve to complicate ownership policy, make them less transparent and insulate SOEs from the legal framework applicable to other companies, including competition laws, bankruptcy provisions or securities laws.

However, a move towards harmonisation of the legal status of SOEs with companies in the private sector is beginning to take place, which in turn could facilitate a more systematic use of corporate governance instruments. For instance, the International Public Sector Accounting Standards (IPSAS) Board is in the process of clarifying how companies which are owned by the government should be defined. This in turn will impact which financial reporting standards apply.

For the purposes of this report we adopt the Organisation for Economic Co-operation and Development (OECD) definition of SOEs, i.e. enterprises where the state has significant control through full, majority, or significant minority ownership. In this definition we include SOEs which are owned by the central or federal government, as well as SOEs owed by regional and local governments.

---


An increasing share of the world’s largest companies

State-owned enterprises: Catalysts for public value creation?

SOEs have been rising in influence in the global economy over the past decade. For instance, the proportion of SOEs among the Fortune Global 500\(^6\) has grown from 9% in 2005 to 23% in 2014, including a greater presence in the top rankings. This increased SOE presence in the Global 500 has been driven primarily by Chinese SOEs (see Figure 1).

In fact, three Chinese SOEs (Sinopec Group, China National Petroleum and State Grid) have consistently made the top ten since 2010 and contributed 16% of total revenues from the 114 SOEs on the list in 2014. This also underscores the growing revenue share of Chinese-owned SOEs among the biggest companies in the world, as well as SOEs from across the rest of Asia (see Figure 2).

But even this marked presence of state ownership among the world’s biggest companies may be understated, given that the Fortune Global 500 only covers listed companies. In a recent report\(^7\) produced by the OECD, majority-owned SOEs which were not listed comprised 29% of the total enterprise value of all SOEs.\(^8\)

The prevalence of SOEs also differs across sectors, with petroleum refining, utilities and financial services as dominant sectors in the Fortune Global 500 SOEs (see Figure 3). While SOE involvement in these sectors is not surprising, it is interesting to observe emerging sectors in the “Others” category, which in 2014 was dominated by: metals; motor vehicles and parts; trading; telecommunications; mail, package and freight delivery; and aerospace and defence (see Figure 4).

The impact of government intervention during the recent financial crisis also resulted in SOE representation in diversified financials: for instance, Fannie Mae and Freddie Mac in the United States, classified as having more than 50% government ownership between 2010 and 2013, together contributed 5% of total SOE revenues in the Global 500 in 2011.

---

\(^6\) Defined by Fortune as companies having 50% or more government ownership


\(^8\) The OECD report only considered SOEs with ownership stakes from central government. These SOEs were classified into: majority-owned listed companies, majority-owned non-listed companies, minority-owned listed companies, and statutory and quasi corporations. Listed SOEs (both majority- and minority-owned) contributed 51% of the total enterprise value of all SOEs analysed.
Figure 3: Petroleum refining, utilities & financial services are dominant sectors among SOEs in the Fortune Global 500.

Figure 4: Emerging SOE sectors.
It is also important to point out that SOEs are not all nationally owned. While all of the above statistics relate to centrally-owned SOEs, regionally and locally-owned SOEs also form an important part of the SOE landscape. And these tend to outnumber centrally-owned SOEs, while being smaller in size. For example, in the case of Sweden, while county – and municipality-owned SOEs comprised 74% of the total number of Swedish SOEs, they represented just 34% of SOE employees and 40% of total SOE revenues in 2013. Similarly, 89% of all German SOEs are owned by municipalities, contributing 62% of all SOE income (see Figure 5).

However, it also appears that while some existing SOEs have performed well and are growing larger (driven by Chinese SOEs), there has been a more general downward trend in state ownership, with virtually all industrialised and emerging economies experiencing a decreasing share of SOEs in their economies in the decade leading up to 2008. This trend persists since then, even when considering the effects of the financial crisis and a small number of governments reasserting ownership over “strategic sectors”.

The same statistics, however, also highlight a tendency of governments to only partially divest. This reduces government holdings to a point where companies are no longer considered as SOEs according to national definitions, while still allowing governments to hold non-trivial, and often controlling, stakes. As such, while there may be a drop in the share of SOEs in a national economy, this does not necessarily equate to a corresponding decrease in the government’s ability to wield influence over these enterprises.

SOEs have gone global

Another important dimension of SOEs is the extent to which they are now a global force. Many, if not most, large SOEs are active internationally and engaged in trade, with some emerging country governments pursuing explicit policies of SOE internationalisation. Increased global competition for finance, talent, and resources are seeing some countries turning to SOEs as tools to better position themselves for the future in the global economy (see Box 1).

In one study which analysed Fortune’s 2000 largest companies in 2010-2011, the authors found that 204 (10.2%) of the 2,000 companies were majority-owned SOEs with ownership interests spread across 37 countries.

And many of the countries with the highest SOE shares are also important traders. For instance, the top eight countries with the highest SOE shares (China, United Arab Emirates, Russia, Indonesia, Malaysia, Saudi Arabia, India and Brazil) collectively accounted for more than 20% of world trade, with China alone accounting for more than 10% of the world’s merchandise exports in 2010.

This could be a result of one of the megatrends we have observed i.e. a shift in economic power (alongside other megatrends such as rapid urbanisation, demographic and social change, technological breakthroughs, and climate change and resource scarcity).

In our report World in 2050, we indicate that the aggregate purchasing power of the ‘E7’ emerging economies – Brazil, China, India, Indonesia, Mexico, Russia and Turkey – will overtake that of the G7 by 2030. China will clearly be the largest economy by 2030, while India could challenge US for second place by 2050. Indonesia, Mexico and Nigeria could also push UK and France out of top ten global economies.

In addition, there has been the growth of Sovereign Wealth Funds (SWFs) which might be considered a special kind of SOE. SWFs are increasingly used as vehicles to invest in economic sectors around the world, increasing their power in the global economy.

Chinese Premier Li Keqiang’s recently announced ‘Made in China 2025’ strategy is designed to help Chinese SOEs compete more effectively in overseas markets as well as to improve their high-end export capability.

Expected measures will cover easing of red tape, introduction of market practices, and consolidation of selected SOEs to create larger and more efficient national champions. The recent merger of China Southern Rail and China Northern Rail is an indication that consolidation within certain industries is already taking place.

One important expected reform should see SOEs granted increased decision-making authority over resource allocation, including cross-border mergers and overseas acquisitions. In addition, the authorities are expected to set up investment holding companies, introduce performance-based compensation schemes and – for SOEs deemed to be in non-sensitive sectors – allow non-state investment in government-controlled firms.

In addition, there has been the growth of Sovereign Wealth Funds (SWFs) which might be considered a special kind of SOE. SWFs are increasingly used as vehicles to invest in economic sectors around the world, increasing their power in the global economy. For example, in March 2014, 69% of the portfolio of Singapore’s SWF – Temasek Holdings – resided outside Singapore.

---

13 This is computed as equally weighted averages of SOE shares of sales, assets and market values among each country’s top ten companies.
15 http://www.pwc.com/gx/en/issues/megatrends/index.jhtml
16 http://www.pwc.com/gx/en/world-2050/index.jhtml
17 PwC, 2011, “The impact of Sovereign Wealth Funds on economic success”
SWFs also rose in prominence during the financial crisis, acting to recapitalise a number of the world’s largest banks including Morgan Stanley and Merrill Lynch. These state-owned investment funds are now major holders of government debt and have also been actively courted by European governments to aid in solving the Eurozone debt crisis.

In recent years, SWFs have grown in number and size and are now larger than the private equity and hedge funds industries combined, with over US$5 trillion under management. They are increasingly seen as active investors, with sophisticated governance structures and investment policies open to new markets and opportunities.

Each SWF is unique, with varied investment portfolios, strategies and stated objectives. But the overriding objective of most funds is to ensure that the proceeds from extracting finite resources (mainly oil and other minerals) are shared with future generations, while shorter-term objectives such as economic stability remain important as well (see Box 2).

It is clear that SOEs, including SWFs, are increasingly operating in a global market, which means that their actions not only have a domestic impact, but an international one as well.

This has given rise to concerns, however, about how both SOEs and SWFs can be perceived as instruments of foreign policy when acting abroad, increasing political unease regarding the motivations behind the actions of companies held by “rival” governments.

In addition, while emerging economies like the E7 have great long term potential, the last couple of years have seen some of them falter. Some also have a long way to go on many key institutional measures, particularly in relation to corruption, political stability, income inequality and trust.

Such countries are unlikely to graduate as fully fledged members of the advanced economy club unless they reform their political, social and economic institutions to make them more inclusive and thereby provide the right incentives to encourage innovation and entrepreneurship and to attract internationally mobile investors and talent.

---

Box 2 Norway’s Government Pension Fund Global

One of the world’s biggest SWFs, Norway’s Government Pension Fund Global (GPFG), was set up in 1990 to give the Norwegian government room for manoeuvre in fiscal policy should oil prices drop or the mainland economy contract.

GPFG’s stated mission is to safeguard and build financial wealth for future generations. It believes that active ownership protects shareholders’ rights and provides a basis for profitable commercial activity. As quoted from its website: “Responsible investment safeguards the value of investments. This will benefit the people of Norway.”

GPFG also illustrates how SWFs can promote corporate social responsibility on a global stage, particularly given its reach (it has ownership stakes in 1.3% of the world’s listed companies). For example, Norway’s Ministry of Finance, which has formal responsibility for the fund’s management, may exclude companies from GPFG’s investment portfolio if there is an unacceptable risk that the company contributes to, or is responsible for:

- serious or systematic human rights violations;
- serious violations of the rights of individuals in situations of war or conflict;
- severe environmental damage;
- production of weapons that through their normal use may violate fundamental humanitarian principles;
- production of tobacco; and
- other particularly serious violations of fundamental ethical norms.

As of January 2015, GPFG had an exclusion list comprising of 60 companies.

This brings us to the question of the purpose of SOEs, to which we now turn.

Questions to think about

- What trends are driving state ownership in your national, regional or local economy or industry?
- How are these changing the purpose, mission and objectives of SOE policy?
- How well are SOEs using their influence in your local economy or industry to create public value and deliver societal outcomes?

---

21 http://www.nbim.no/en/
22 http://www.nbim.no/en/responsibility/
Same but different

There are some common motivations behind state ownership, such as developing strategic sectors and boosting the national economy, as well as fiscal, political and social considerations. But how different are SOEs from private sector enterprises?

**Why state ownership?**
The OECD and World Bank have set out a range of commonly stated reasons 25 26 27 for state ownership where SOEs might:

- Provide public goods (e.g. national defence and public parks) and merit goods (e.g. public health and education), both of which benefit all individuals within a society and where collective payment through tax may be preferred to users paying individually.
- Improve labour relations, particularly in ‘strategic’ sectors.
- Limit private and foreign control in the domestic economy.
- Generate public funds. For instance, the state could invest in certain sectors and control entry in order to impose monopoly prices and then use the resulting SOE revenues as income.
- Increase access to public services. The state could enforce SOEs to sell certain good and services at reduced prices to targeted groups as a means of making certain services more affordable for the public good through cross-subsidisation.
- Encourage economic development and industrialisation through:
  - Sustaining sectors of special interest for the economy, and in particular to preserve employment.
  - Launching new and emerging industries by channelling capital into SOEs which are, or can become, large enough to achieve economies of scale in sectors where the start-up costs are otherwise significant. This might be seen as an alternative to regulation, especially where there are natural monopolies and oligopolies (e.g. electricity, gas and railways).
  - Controlling the decline of sunset industries, with the state receiving ownership stakes as part of enterprise restructuring.

Often governments have created and invested in SOEs because markets were imperfect or unable to accomplish critical societal needs such as effectively mobilising capital or building enabling infrastructure for economic development e.g. a nationwide electricity grid or water system (see Box 3).

---

26 The World Bank, 2006, "Held by the Visible Hand – the Challenge of SOE Corporate Governance for Emerging Markets”
Singaporean SOEs (known in Singapore as “government-linked corporations” or GLCs) served to jumpstart industrialisation, spearhead development and lead to economic growth (primarily job creation) in various sectors of the Singaporean economy. GLCs had a clear purpose: to compensate for a lack of private sector funds and expertise in the years following Singapore’s independence in 1965.

Pioneering GLCs were present in shipping (Neptune Orient Lines), ship building and repair (Keppel, Sembawang, Jurong Shipyards) and development finance (DBS). The GLCs also played a role in building strategic alliances with foreign companies in order to kick-start local economic development, especially given a dearth of local entrepreneurs at the time.

In fact, many early GLCs were joint ventures with foreign investors. For instance, the Singapore Refining Company, a joint venture with Caltex and BP, catalysed growth in the oil refining industry, while Petrochemical Corporation of Singapore, a joint venture with Shell and a Japanese consortium, launched Singapore’s entry into the petrochemicals industry.

Depending on the motivation, which often impacts the desired level of government control, we have observed that there is a continuum of models of control which span the public-private interface. These provide differing degrees of state ownership and influence and also a range of models which governments might choose on the path to private ownership where there is no longer value seen in maintaining state involvement (see Figure 6).

**Box 3 Singapore, Inc**

Singaporean SOEs (known in Singapore as “government-linked corporations” or GLCs) served to jumpstart industrialisation, spearhead development and lead to economic growth (primarily job creation) in various sectors of the Singaporean economy. GLCs had a clear purpose: to compensate for a lack of private sector funds and expertise in the years following Singapore’s independence in 1965.

Pioneering GLCs were present in shipping (Neptune Orient Lines), ship building and repair (Keppel, Sembawang, Jurong Shipyards) and development finance (DBS). The GLCs also played a role in building strategic alliances with foreign companies in order to kick-start local economic development, especially given a dearth of local entrepreneurs at the time.

In fact, many early GLCs were joint ventures with foreign investors. For instance, the Singapore Refining Company, a joint venture with Caltex and BP, catalysed growth in the oil refining industry, while Petrochemical Corporation of Singapore, a joint venture with Shell and a Japanese consortium, launched Singapore’s entry into the petrochemicals industry.

Depending on the motivation, which often impacts the desired level of government control, we have observed that there is a continuum of models of control which span the public-private interface. These provide differing degrees of state ownership and influence and also a range of models which governments might choose on the path to private ownership where there is no longer value seen in maintaining state involvement (see Figure 6).

**Figure 6: Continuum of public-private models of control**

<table>
<thead>
<tr>
<th>Public sector control</th>
<th>Hybrids</th>
<th>Private sector control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Agency</td>
<td></td>
<td>Privatisation</td>
</tr>
<tr>
<td>Trading Fund</td>
<td></td>
<td>PPP</td>
</tr>
<tr>
<td>GovCo</td>
<td></td>
<td>Joint Venture</td>
</tr>
<tr>
<td>Business Process Outsourcing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-departmental public body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Corporation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Changing times, new purpose?
But once the SOEs have fulfilled their initial purpose, and the domestic market has matured, the question becomes: what is their new purpose? Indeed, it used to be the common wisdom that the destiny of SOEs which had fulfilled their public service remit might be candidates for privatisation, as seen in the wave of privatisations in developed economies towards the end of the 20th century.

Recent developments to maximise the returns on assets, particularly for countries needing to reduce fiscal deficits and public debts, has had a similar intent. For instance, in Australia there has been a trend towards ‘capital recycling’ which has further resulted in a wave of SOE asset sales (such as in public transport, energy poles and wires, power companies and ports) to free up funds for reinvestment into much needed infrastructure such as major road projects.

But this is not always the case. For instance, at the time of India’s independence in 1947, SOEs were perceived to be the best way to accelerate the growth of core sectors of the economy given a weak industrial base, inadequate infrastructure, lack of skilled human capital and an underdeveloped private sector. However, when the Indian market re-opened to foreign investors in 1991, the country underwent only partial privatisation of its SOEs instead of complete divestment of state holdings (see Box 4).

Box 4 The changing face of state ownership in India

Before the Indian market liberalised in 1991, SOEs laid a strong foundation for the economic development in the country through large-scale investments in infrastructure, services and resources. The liberalisation of the economy in 1991, however, revealed the lack of market competitiveness and efficiency among SOEs compared to private sector businesses.

As a result, reform measures were combined with ‘disinvestment’ to improve SOE viability, involving the partial sale of government equity in public sector enterprises while retaining majority control with the government. This era of partial privatisation also enabled the government to use SOEs to raise resources for the annual budget cycles.

More recently, the government, in its 2015-16 budget, set a target of raising INR 41,000 Crores (approximately US$6.7 billion) by divesting SOEs to meet the country’s fiscal deficit target. This represents an increase from the previous year’s target of INR 24,500 Crore (approximately US$4 billion). The government has also approved the turnaround of five underperforming but viable SOEs.

31 http://indiainbusiness.nic.in/newdesign/index.php?param=newsdetail/11329/1
State ownership has also been used as a crisis response tool in instances where events threaten the survival of companies deemed “too big” or “too strategic” to fail. The most recent large scale example was the bailing out of banks by many governments during the financial crisis.

In a volatile global economic environment, government ownership may also serve as one of the policy levers governments can use, not only to maintain jobs, but also to sustain a network of firms that serve as suppliers to troubled companies which are under current stress but are still seen to have a strategic value in the long term (see Box 5).

These cases illustrate how the motivation to retain state ownership can shift over time, sometimes driven by crisis and events which can also influence how and when enterprises move into, and out of, state control (see Box 6).

**Box 5 General Motors**

The peak of the financial crisis saw the US government intervening in troubled automakers. For instance, General Motors (GM) received government bailouts totalling US$49.5 billion, which were subsequently converted into a 61% equity stake in the company. The bailouts were supported to help GM avoid liquidation and restructure itself, while also preventing a total automobile industry shutdown which would have led to a loss of 2.63 million jobs from the US economy in 2009, as estimated by the Center for Automotive Research.

The government’s consequent plan to exit, which began in 2012 through a sell-down of GM shares, served to boost investor confidence, and on the day of the US Treasury Department’s sale of final GM shares in December 2013, the company’s shares closed at a record high of $40.90, up from a low of $18.80 in July 2012.

**Box 6 Air New Zealand**

Air New Zealand, after having gone private in 1989, was later renationalised in 2001. One reason given for the renationalisation was to rescue the airline after it merged with the loss-making Ansett Australia airline. However, Peter Harbison from the Centre for Asia Pacific Aviation also believed that the New Zealand government feared that there would otherwise not be enough airlines committed to fly to New Zealand to support their burgeoning tourism industry.

The government’s move seems to have paid off – not only has the number of international arrivals to New Zealand yearly grown by 51% between 2000 and 2013 with a national tourism industry worth $24 billion in 2013. Air New Zealand’s own profits have been growing, with the airline posting a 40% increase in its half-year profit as of Feb 2014 to NZ$140 million. It was ranked as the top airline in the world in 2014.
Similarities with private enterprises

Even though the motivations of SOEs may be different, they still share a number of similarities with their private sector counterparts – they have shareholders to which they are accountable (even if the shareholder is government), they are continually on the hunt for talent and they operate in a local, national and/or global marketplace for their services.

This can be seen from the responses of state backed CEOs in PwC’s 18th Annual Global CEO Survey. State backed CEOs have many similar concerns about their businesses as their private sector counterparts: over regulation, availability of key skills, government responses to fiscal deficit and debt burden and geopolitical uncertainty were among the top five concerns for both state backed and non-state backed CEOs (see Figure 7).

An internationally competitive and efficient tax system and a skilled and adaptable workforce were also the top two outcomes on the wish list for government by both state backed and non-state backed CEOs.

However, there is one significant difference that we have observed over time. When considering responses by business leaders in PwC’s Annual Global CEO Survey over the last five years, state backed CEOs are generally less confident about long term (three year) prospects for revenue growth (see Figure 8).

Indeed, the gap in expectations for long-term growth between state backed CEOs and their private sector counterparts has been widening since the depths of recession. A similar proportion of state backed CEOs (approximately 85%) were confident of both short – and long-term growth in 2014, while non-state backed CEOs seem to have much higher levels of

Figure 7 Threats to business

Q: How concerned are you about the following potential economic, policy, social and business threats to your organisation’s growth prospects?

<table>
<thead>
<tr>
<th>Threat</th>
<th>State backed</th>
<th>Non-state backed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-regulation</td>
<td>80%</td>
<td>78%</td>
</tr>
<tr>
<td>Availability of key skills</td>
<td>74%</td>
<td>73%</td>
</tr>
<tr>
<td>Cyber threats including lack of data security</td>
<td>68%</td>
<td>68%</td>
</tr>
<tr>
<td>Government response to fiscal deficit and debt burden</td>
<td>66%</td>
<td>66%</td>
</tr>
<tr>
<td>Geopolitical uncertainty</td>
<td>66%</td>
<td>73%</td>
</tr>
<tr>
<td>Social instability</td>
<td>65%</td>
<td>60%</td>
</tr>
<tr>
<td>Speed of technological change</td>
<td>64%</td>
<td>60%</td>
</tr>
<tr>
<td>High or volatile energy costs</td>
<td>61%</td>
<td>60%</td>
</tr>
<tr>
<td>Shift in consumer spending and behaviours</td>
<td>61%</td>
<td>59%</td>
</tr>
<tr>
<td>Increasing tax burden</td>
<td>59%</td>
<td>59%</td>
</tr>
<tr>
<td>Inadequate basic infrastructure</td>
<td>57%</td>
<td>57%</td>
</tr>
<tr>
<td>Lack of trust in business</td>
<td>54%</td>
<td>54%</td>
</tr>
<tr>
<td>New market entrants</td>
<td>52%</td>
<td>53%</td>
</tr>
<tr>
<td>Protectionist tendencies of national governments</td>
<td>51%</td>
<td>53%</td>
</tr>
<tr>
<td>Bribery and corruption</td>
<td>50%</td>
<td>52%</td>
</tr>
<tr>
<td>High unemployment / underemployment</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Access to affordable capital</td>
<td>46%</td>
<td>49%</td>
</tr>
<tr>
<td>Supply chain disruption</td>
<td>46%</td>
<td>49%</td>
</tr>
<tr>
<td>Pandemics</td>
<td>31%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Common top 5 threats

Source: PwC 18th Annual Global CEO Survey
confidence, with 93% being somewhat or very confident about their prospects for revenue growth over the next three years.

The difference in expectations for long term growth may hint at the tension that state backed CEOs face in aiming to be commercially viable and competitive while also trying to fulfil non-commercial objectives, the latter often demanding trade-offs in terms of financial performance between the short and longer term. Political cycles, limited leadership mandates and tenure among top SOE executives as well as budgetary constraints may also contribute to this phenomenon.

**A question of objectives**

At its heart, however, the differences between state and private sector CEOs appear to be driven by the very different motivations and objectives of SOEs. Consider the objectives of the public and private sector – while the private sector uses services (business activities) as a means of achieving financial profit as a goal, the public sector uses finances (taxes, fees, etc) as a means of achieving services and outcomes for citizens (see Figure 9).

---

**Figure 8 Less confident SOE CEOs**

Percentage of CEOs who were somewhat/very confident about their company’s prospects for revenue growth

![Graph showing CEO confidence over the next 12 months and 3 years](image)

**Figure 9 Balancing SOE objectives**

<table>
<thead>
<tr>
<th>Public sector</th>
<th>Private sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal</strong></td>
<td><strong>Goal</strong></td>
</tr>
<tr>
<td>Services</td>
<td>Money</td>
</tr>
<tr>
<td>Profit in services/benefits</td>
<td>Profit in financial terms</td>
</tr>
<tr>
<td><strong>Means</strong></td>
<td><strong>Means</strong></td>
</tr>
<tr>
<td>Money</td>
<td>Services</td>
</tr>
<tr>
<td>Taxes, Fees, etc</td>
<td>Business activities</td>
</tr>
</tbody>
</table>
In other words, government objectives of SOEs are, generally speaking, to create wealth in the economy and wellbeing and jobs for its citizens. In contrast, shareholders of private businesses have a primary focus on seeing financial wealth created by the company, leading to financial dividends (although many are now seeing the wider contribution needed from business in society, as shown by the growth of corporate social responsibility programmes).

SOEs are also sometimes seen as needing to be “more public than public companies” since the wider public is the ultimate owner, which means that there are greater demands on transparency and accountability. In fact, there is an increasing recognition by governments of the need for improved disclosure and enhanced transparency and accountability among SOEs, though how this shows up in practice differs across countries.

But do SOEs have access to resources and degrees of protection that creates an uneven playing field compared to the private sector and unfairly hinders competition? It is argued, for example, that SOEs can access preferential and cheaper funding as government is a guarantee of protection from bankruptcy.

Indeed, PwC’s CEO Pulse poll revealed some interesting perceptions: compared to 2010, a larger proportion of CEOs today believe that government ownership distorts competition in an industry and leads to political interference in the marketplace (see Figure 10).

Given the continued importance and influence of SOEs, and whatever the arguments over the merits of government control, we should perhaps pay more attention to their governance and performance where their foreseeable future lies in state hands, especially since their reach is increasingly extending beyond national borders.

Questions to think about

- Which objectives are currently guiding the ownership and management of SOEs in your economy or industry?
- Is there clarity on the continuing (and changing) purpose of state ownership?
- How can the wider objectives of SOEs best be balanced in order to create public value?

---

41 OECD, 2011, “State-owned Enterprise Governance Reform – An Inventory of Recent Change”
42 Based on a survey of 153 CEOs in January 2015 on protectionism and government ownership. See http://www.pwc.com/gx/en/ceo-survey/pulse/index.jhtml for more details.
21 State-owned enterprises: Catalysts for public value creation?
Creating value, delivering outcomes

While in many respects SOEs face similar opportunities and threats as private sector businesses, there are also important differences which have a major influence on their role in creating value for society as a whole.

Value creation for whom? Citizens versus the state

SOEs have to walk a fine line when balancing economic, social and other objectives. As such, and perhaps even more so than their private sector counterparts, they need to find a way to remain financially sustainable (and where appropriate commercially competitive), while creating value for citizens and society.

Accordingly, SOEs should not be purely evaluated on financial results (profit and loss statement of the enterprise), but on how they contribute to societal value creation, taking an integrated and holistic view (see Box 7).

Box 7 Phnom Penh Water Supply Authority in Cambodia

The Phnom Penh Water Supply Authority, established in 1895, has a key social as well as economic objective: the goal of providing clean water to every person in Cambodia. To accomplish this, it adopts a cross-subsidising water tariff with three blocks – domestic, institutional, and industry / commercial – allowing it to sell its water at a higher rate to industries and distribute water at an affordable rate (below production cost) to domestic households.

Since 1993, it has connected more than thirty thousand poor households to the water system for free, enabling these households to save money, improve sanitary conditions (with associated public health benefits) and allow children to focus on their education. As a fully government-owned company, it depends on the help of government ministries to support its goal of providing clean water to all.

It was also the first company to be listed on the Cambodian Stock Exchange. The listing was not driven by the need to raise extra capital; rather, it was encouraged by the government in order to set a precedent and promote the establishment of the stock exchange to the rest of Cambodian industry.
In fact, a pure profit and loss focus in the short term may risk the achievement of wider goals and even contribute to social value deterioration. A recent report\(^43\) by UNU-IHDP and UNEP highlights this well. It evaluated the “inclusive wealth” of countries, which is the sum of three kinds of assets: manufactured capital (e.g. roads, machinery, buildings); human capital (people’s health and skills); and natural capital (e.g. forests and fossil fuels). The report revealed that even though global GDP rose by 50% between 1992 and 2010, inclusive wealth increased by only 6%\(^44\).

Equally, it needs to be recognised that state ownership can destroy value as well if best practices in ownership and management are not applied: in this respect, of most concern to CEOs in our CEO Pulse poll are issues of corruption, bribery and inefficiency.

Looking at this the other way, P&L losses may in fact reflect investments which lead to value creation e.g. in infrastructure leading to the attraction and growth of private sector businesses (see Box 8). Indeed, our CEO Pulse poll revealed that most CEOs believe government ownership can have some advantages e.g. furthering social outcomes, providing physical infrastructure, and creating stability in times of crisis.

---

**Box 8 Transnet in South Africa**

The history of Transnet dates back to the late 1850s, when railway transport was proposed for the harbours in the Cape and Natal. Transnet SOC Ltd was established as a limited company on 1 April 1990 and it owns, manages and operates a national freight transport system consisting of port, rail and pipeline infrastructure.

Transnet, which is wholly owned by the South African government, has been a key contributor in meeting South Africa’s challenges of an emerging democracy with its related socio-economic demands by investing heavily in infrastructure and integrating and coordinating programmes within the country.

For example, in the financial year 2013/2014, it invested R31.8 billion in infrastructure development. This is linked to its mandate to assist in lowering the cost of doing business in South Africa, enabling economic growth and ensuring security of supply through providing appropriate port, rail and pipeline infrastructure in a cost effective and efficient manner.

\(^43\) [http://inclusivewealthindex.org/](http://inclusivewealthindex.org/)

\(^44\) The Economist used an interesting example to highlight the discrepancy between financial wealth (GDP) and inclusive wealth. While Qatar’s GDP increased by 85%, its inclusive wealth actually fell by more than 50% in the same period, thanks to the depletion of its natural resources. See: [http://espresso.economist.com/1121aab9e6e128e7a7d78186c65b3c2b](http://espresso.economist.com/1121aab9e6e128e7a7d78186c65b3c2b)
A value creation/profitability matrix (see Figure 11) provides a framework when considering whether government should have, and retain, an ownership stake in an enterprise.

Figure 12 goes on to set out some guiding principles for the decision making process. If the decision is made to exit the SOE, government owners should consider the timing for privatisation, in particular:

**Figure 11 SOE positioning – value creation and profitability**

- **Societal value**
  - **Value creating**
  - **Value deterioration**

- **Business/commercial profitability**
  - **Profitable**
  - **Loss making**

- **Strategic investment**
- **Role model**
- **Review options including exit/closure**
- **Re-engineer to reduce/avoid non-value adding activity**

**Figure 12 Diagnostic framework for decision making process when considering state ownership**

1. **Define public value**
   - Based on consultations with citizens & other stakeholders

2. **Is SOE creating public value?**
   - **Y**
   - **N**

3. **Is SOE profitable?**
   - **Y**
   - **N**

4. **Can SOE profitability be achieved through efficiency improvements/use of technology and innovative solutions?**
   - **Y**
   - **N**

5. **Can the non-value adding activity be reduced or avoided?**
   - **N**
   - **Y**

6. **Ensure trade-offs with commercial objectives (including rationale) are clearly accounted for and reported**

7. **Ensure profits are used in alignment with value creating objectives**

8. **Review options including exit/closure**

9. **Re-engineer to reduce/avoid non-value adding activity**

10. **Review and improve internal management**

• Should it take place before the enterprise is restructured? This could mean a lower sales price for the owner as the new private sector owner/s would need to bear the costs of restructuring.

• Should it be restructured first before privatisation? This may allow for a higher sales price, but may introduce unwanted delays and the risk of restructuring in a way that the future private sector owner deems undesirable, thus complicating the privatisation process further.

Another timing issue is the degree of regulatory readiness of the sector, especially when the SOE being privatised held a degree of monopoly in the sector. This requires regulatory capacity and capability to be put in place before the sale is completed.

**Defining public value**

The starting point is to define public value and quantify impacts. For instance, SOEs may have a strategic role in driving growth that is socially, financially and environmentally sustainable – good growth (see Box 9).

---

**Box 9 TIMM as a tool for tracking the delivery of outcomes**

Good growth is in everyone’s interest. But what does good growth look like? Why is it important? How can one identify it and what will create it? There is a mounting need for ‘good’ growth (that’s real, inclusive, responsible and lasting) if business and government are to meet the increasing demands of a growing population on a finite planet. But ‘growth’ is elusive, let alone ‘good’ growth.

To help identify what good growth looks like, PwC, together with its clients, has developed the “Total Impact Measurement and Management” (TIMM) framework, which aims to provide the total perspective on business impact. It enables the calculation of a value (and a cost) for the social, environmental, fiscal and economic activities of a company, which allows organisations to see at a glance the impact they’re making and the trade-offs between their strategies. In effect, the organisation can see the optimal decision for all its stakeholders.

---

**Total**

A holistic view of social, environmental, fiscal and economic dimensions – the big picture

**Impact**

Looks beyond inputs and outputs to outcomes and impacts – understand your footprint

**Measurement**

Quantify and monetise the impacts – value in a language business understands

**Management**

Evaluate options and optimise trade-offs – make better decisions

---

45 [http://www.pwc.com/totalimpact](http://www.pwc.com/totalimpact)
As major players in their domestic economies, while increasingly competing in global markets, SOEs can also play a major role in driving improvements in quality e.g. by requiring an increase in the standards of goods and services being provided by the small – and medium-sized enterprises (SMEs) which may comprise their supply chains. This can not only encourage SMEs to be more economically competitive, but can also provide other social benefits such as safer, more reliable products for citizens, environmental compliance, and skills development or enhancement.

So by looking beyond profit and loss considerations at their broader impact on society with respect to wealth creation, growth, job creation and wellbeing, SOEs can potentially create value and deliver outcomes that benefit societal goals such as healthy living (see Box 10).

Box 10 Swedish SOEs’ social objectives

The Swedish Government’s overall objective for the management of its SOEs is to ensure long-term value growth and to ensure that specifically adopted public policy assignments are performed well. For instance, the state-owned alcohol retail chain (Systembolaget) illustrates how state ownership can be an approach to higher social responsibility and to ensure that revenues can be used for the benefit of society as a whole.

Systembolaget, Sweden’s alcohol retail monopoly under the Ministry of Health and Social Affairs, is committed to helping to reduce the impact of alcohol abuse while providing good service to its customers and conducting its operations in a financially efficient way.

In order to live up to its social responsibility, targets have been set for the age-checks conducted in its stores. Systembolaget is also obligated to make advertisements focused on the side effects of drinking and the encouragement of drinking moderately and it is not allowed to advertise its products to increase sales. At the same time, in order for Systembolaget to be a modern, efficient retail company, it is now offering home delivery and has also developed an app to help people prevent high blood alcohol concentration.
Defining public and societal value should in turn involve citizens and other stakeholders, providing guidance and input on the role of the public sector and government ownership (see Box 11). This dialogue should clarify how trade-offs should be made when there are competing sources of value, and should also consider not just the present needs of society, but also the longer-term public good, including the needs of generations to come.

This means a focus on sustainable outcomes by considering the following questions: are we creating or consuming a legacy? Are the decisions being made today contributing to the wellbeing of future generations, or are they satisfying immediate needs at the expense of the future? The future needs to be treated as an asset with government and SOEs prioritising efforts such that today’s citizens are being taken care of, while retaining a view to long term sustainability.

This sustainable approach to public value creation necessitates the involvement and contribution of all in the ‘penta helix’ of stakeholders in society – private sector, public sector, not-for-profit organisations, academia and citizens. SOEs can play a part in catalysing the co-creating collaborations needed between these various stakeholders (see Figure 13).

In 2013, citizens of Hamburg, Germany’s second biggest city, were asked to vote in a referendum on whether the city of Hamburg should re-municipalize its distribution grids for electricity, gas and district heating. Prior to the referendum, the networks were owned by joint ventures between the city and the energy companies Vattenfall (electricity and district heating) and E.ON (gas), of which Hamburg held a 25.1% share. The referendum resulted in 50.9% of the population voting to re-municipalize the local utilities.

This reflects a general trend towards public ownership among German municipalities, with many concession rights for the operation of local distribution grids in German cities having turned back to public ownership in recent years. One of the main arguments often put forward for this development is that public ownership of local utilities is considered by many citizens as being the best way to realize the country’s shift to renewable energies. Moreover, its proponents argue that public ownership helps to keep the profits as well as the socio-economic value in the region.
A new scorecard for SOEs?
If SOEs have a wider purpose and set of desired outcomes, this should then be reflected in how their performance is managed. As such, there should be a new scorecard for SOEs, capturing KPIs which go beyond financial results to consider impact on other societal capitals like social, human, innovation, citizen and welfare, and environmental capitals.

In turn, the balancing of objectives should be made explicit and linked clearly to the purpose of the SOE (see Figure 14). For long term sustainability, there needs to be a balance financially over time, with investments by SOEs looking for long term gains for the economy and society over short term rewards for an individual owner.

**Figure 14 Future scorecard of SOEs**
To accomplish this, however, requires the following guiding principles:

- **SOEs should not be run as a private company given the different business logic:** their primary task is not just to generate financial return on investment to the government in the short term – it must add more than this. The task is to deliver strategic value through the right investments creating a long term sustainable and competitive advantage for a nation or a region.
- **SOEs need to be actively owned, directed and evaluated in a more holistic way to include a wider range of impacts including human, social, environmental, intellectual, infrastructural as well as financial dimensions.**
- **Cost-revenues are not enough.** Cost-benefit, outcome and societal impact need to be vital parts of the future scorecard of SOEs.
- **SOEs need new principles for corporate governance – for owner, board, CEO and auditor – regarding their tasks, roles and internal collaboration.**
- **SOEs must be a bigger strategic player linked to the ambition of creating new jobs, growth and innovation in existing and emerging industries.**
- **SOEs can be an instrument for exponential value creation, if the right ideas, people and processes are put in place together with a solid and mature energising leadership at all levels.**

### Questions to think about

#### SOE owners
- Is there a clear vision and purpose for state ownership?
- What is the expected dividend of an SOE? Is it purely financial/revenue gain to shareholders, or are there wider impacts?
- For whom are SOEs creating value? Who are the most influential and important stakeholders?
- How is public value defined?
- Who should SOEs be ultimately accountable to? How does this affect their purpose, management and operations?
- How should SOEs be evaluated? What would a “value creating SOE” look like? Is the rationale for state ownership continually reviewed for positive impact?
- For SOEs which no longer need to be under state ownership, are they being considered for privatisation in a way that extracts the most value for society?

#### SOE directors
- How are we monitoring the delivery of society’s ‘dividend’?
- What total impact does our organisation have beyond profit and loss considerations?
- How is SOE performance being monitored and evaluated in a way that reflects its contribution to societal outcomes?

#### SOE executive management
- Is the SOE being managed for profitability or value creation? How does that affect internal organisation and resource deployment?
- Are we making best use of our resources to deliver value for all of our stakeholders?
- Do our performance management systems monitor and evaluate our delivery of value, outcomes and impacts through our KPIs?

---

Managing stakeholder relationships

Given broader objectives than pure financial gain, and often with a changing purpose over time as economies mature, SOEs in future need to look and act very differently to deliver value for society. But what does the SOE of the future look like? And how are the stakeholders that define public value to be managed?

SOE of the future
To achieve the objective of public value creation, SOEs need to be actively owned and managed by establishing a clear purpose and mission for the SOE linked to desired objectives and outcomes. In addition, as very public organisations, SOEs need to be transparent and accountable through quality, timely and reliable reporting of SOE performance and activities, and in turn building trust with citizens and other stakeholders.

Achieving this means that SOE owners and managers will need to strike an appropriate internal-external balance. On the one hand, the SOE needs to develop and maintain sound internal management in order to maximise efficiency and effectiveness. This includes leveraging technological and service innovations to deliver products and services within tighter budgets (doing “better for less”), as well as achieving desired outcomes economically. This can enable SOEs to operate in both a commercially viable and financially sustainable way, while fulfilling their non-commercial objectives.
At the same time, the SOE needs to leverage its **external influence** by co-creating value with other stakeholders in society and be a catalyst or driver for good, inclusive growth linked to its purpose, mission and strategic objectives. For instance, SOEs can take an active role in developing local, regional and national innovation systems by providing test beds and rapid prototyping opportunities for promising entrepreneurs and start-ups.

SOEs should also be continually scanning the environment (intelligence scanning) to allow them to proactively identify and address opportunities and challenges which arise from external trends and events.

Figure 15 captures these features.

**Active ownership and management: a clear purpose and mission**

An actively owned SOE’s strategy and desired outcomes should be **connected to the vision and strategy of the government at the relevant level** (national, regional or local). This should in turn provide a **clear purpose and mission** for the SOE.

Once formulated, the SOE’s purpose and mission should then be **cascaded through dialogue between the SOE owners (government) and its managers (CEO and executive management) and governors (board of directors)** to provide clear direction and accountability, with external auditors performing a scrutiny role.
In turn, the **steering process should be well managed**, with roles and responsibilities for governing and managing the SOE clearly defined and understood by those involved in the steering process. The **board of directors is responsible for ensuring that the SOE meets its defined objectives and fulfils its stated purpose by holding the CEO and executive management accountable for the SOE’s performance**. For this to work in practice, the board should have a clear mandate and be given the appropriate level of authority to hold management accountable for good results.

The role of the **external auditor** is important as well. Appointed by the owners / shareholders, the external auditor has a public responsibility to act as a “check and balance” by ensuring that the SOE provides an accurate picture of the enterprise’s strategy and operations when reporting externally. It is essential that the auditors maintain the highest levels of independence, objectivity and ethics when performing their role. The auditors should also consider expanding from financial to holistic (or integrated) reporting, recognising that a broader set of integrated information is needed to satisfy an increasing number of stakeholders – all with potentially different perspectives of value.48

The OECD has set out a series of recommendations for corporate governance within SOEs, which includes the state as active owner (see Box 12). These guidelines provide a robust template for SOE governance.

### Box 12 OECD guidelines for SOE corporate governance 49

The OECD’s guidelines for corporate governance of SOEs are summarized as follows:

- **Ensuring an effective legal and regulatory framework for SOEs**: The legal and regulatory framework for SOEs should ensure a level-playing field in markets where SOEs and private sector companies compete in order to avoid market distortions. The framework should build on, and be fully compatible with, the OECD Principles of Corporate Governance.50

- **The state acting as an owner**: The state should act as an informed and active owner and establish a clear and consistent ownership policy, ensuring that the governance of SOEs is carried out in a transparent and accountable manner, with the necessary degree of professionalism and effectiveness.

- **Equitable treatment of shareholders**: The state, and its SOEs, should recognise the rights of all shareholders and, in accordance with the OECD Principles of Corporate Governance, ensure their equitable treatment and equal access to corporate information.

- **Relations with stakeholders**: The state ownership policy should fully recognise the SOEs’ responsibilities towards stakeholders and request that they report on their relationships with stakeholders.

- **Transparency and disclosure**: SOEs should observe high standards of transparency, in accordance with the OECD Principles of Corporate Governance.

- **The responsibilities of the boards of SOEs**: The boards of SOEs should have the necessary authority, competences and objectivity to carry out their functions of strategic guidance and monitoring of management. They should act with integrity and be held accountable for their actions.

---


Note: In 2014, the OECD began undertaking a review of the guidelines to take into account developments since their adoption and the experiences of the growing number of countries that have taken steps to implement them.

Active ownership and management: centralised, decentralised or dual ownership

Bringing clarity to the purpose and mission of SOEs may also be aided by the presence of a public body which holds a coordinated and / or portfolio view of SOEs across a relevant jurisdiction. An example of such a body is the Shareholder Executive in the UK. This is a part of the Department for Business, Innovation and Skills which controls the UK’s largest national state holdings.

It must be noted, however, that this approach holds its own challenges as well. According to the OECD and World Bank, SOE ownership can generally be categorised into three forms – centralised, decentralised, or dual:

- **Centralised ownership** indicates that there is one government body, such as a ministry or holding company, which is responsible for the government’s stake in all SOEs.
- **In decentralised ownership**, different SOEs are overseen by different ministries.
- **In dual ownership**, one single ministry, often the Ministry of Finance or another specialised body, performs certain ownership functions for all companies, while other functions are performed by different ministries for different SOEs.

In addition to such specialised ownership entities and ministries, the government may hold its ownership shares in SOEs through organisations which are at arm’s length to the state such as pension funds, privatisation funds or asset management entities like Russia’s Federal Agency for State Property Management (see Box 13).

While having a coordinating body to standardise certain guidelines and procedures for SOEs is widely accepted, the view towards centralising control of SOEs tends to be less clear cut. Proponents of centralisation say that it promotes better corporate governance of SOEs by creating a single, highly competent body responsible for the state’s commercial assets.

Not only does this allow the development of specialised capabilities within a single entity to monitor and evaluate SOE performance more easily, the same entity would have clearer accountability for the performance of SOEs, as opposed to being spread over several different ministries. Furthermore, a single entity can mitigate situations where conflicting incentives arise from different parts of government competing for influence in the SOE.

Conversely, there are concerns that centralised ownership will lead to the wasting of resources and act as a magnet for corruption, particularly in nations with larger and more complex state sectors. It also raises questions about whether SOEs can meet diverse objectives when controlled by a single body. However, centralisation advocates emphasise that policy can still be set by the relevant parts of the government and that a centralised approach does not preclude good relations with individual line ministries.

There does, however, seem to be a global trend toward greater centralised ownership, with many countries establishing a single ownership entity or coordinating body. This tendency may reflect a shrinking portfolio of SOEs in many countries, and a greater tendency to list SOEs on stock exchanges: both these factors tend to make a coordinated (and centralised) ownership function more feasible and useful.

---

**Box 13 Rosimuschestvo, Russia’s Federal Agency for State Property Management**

Rosimuschestvo, Russia’s Federal Agency for State Property management, works with approximately 1.6 million assets under its management. This represents over 830,000 registered buildings and 260,000 land lots across Russia, approximately 500,000 movables, and shares and interests in over 2,200 different entities.

Rosimuschestvo has two major objectives – the first is to determine the scope of the state’s participation in the economy and the enterprises which should remain under state ownership up to 2018; the second objective is to ensure that those companies and organisations which do remain state property are managed effectively. A related but subordinate task is thus disposing state assets which are no longer needed in the best way possible, i.e. privatisation.

Rosimuschestvo aims to provide openness, information access, and the opportunity to make decisions, by publishing a list of all assets slated for privatisation on its website. Through the website, interested parties can ask Rosimuschestvo when and how specific assets are to be sold, as well as monitor the sales process once it begins. Rosimuschestvo believes that this is an important step towards openness and accessibility of information on the part of government for citizens and entrepreneurs.

---


OECD, 2011, “State-Owned Enterprise Governance Reform – An Inventory of Recent Change”

Active ownership and management: the “4 Cs”

We recognise that there exist a variety of ways in which the state discharges its active owner role on the board of an SOE. This ranges from full political participation on the board (to ensure that the SOE meets its political objectives) to a board comprising entirely of professionals (to make sure that the SOE runs smoothly and on commercially viable terms), with most SOE boards having a mix of both.

Regardless of type of board composition, in our view achieving success in active ownership and management requires that those undertaking these roles (regardless of background or political links) fulfil the following four tests, which we dub the “4 Cs”:

- **Capacity** – Having the time and resources to conduct their roles well and handle the additional responsibility as in the case of directors.
- **Capability** – Having the required and relevant expertise and experience to steer, manage and govern the SOE in order to add value to the enterprise, while maintaining the required degree of independence.
- **Clarity** – Possessing a clear understanding of the purpose and objectives of the SOE, which should be consistent between the owners and managers.
- **Commitment to integrity** – Serving the citizen for the purpose of societal value creation.

These four tests should in turn guide how SOE management and directors are chosen, evaluated and rewarded. For instance, the nomination and performance evaluation criteria for board members should be clear, structured and transparent, and linked to the skills, professionalism, competence and “fit” required for ensuring that the SOE meets its objectives and delivers public value.

Active ownership and management: the importance of leadership setting the right tone

Adopting these active ownership and management principles may require a significant change in established mindsets and learned behaviour. It is therefore important that the leadership sets the tone, while remaining agile in taking on different roles where needed – making decisions, serving other stakeholders or acting as a standard bearer and a setter of boundaries e.g. of acceptable behaviours (Figure 16). Agility in this context also means moving across levels and boundaries within (and outside) the organisation in a timely way.

Another important challenge for leadership is the managing of relationships, especially when there are conflicting views (expressed or otherwise). It is the leader’s task to energise the organisation and its employees, through a positive culture, and create an open dialogue and healthy relationships.

![Figure 16 Personal leadership built on integration and situation](http://pwc.blogs.com/psm_globally/2014/09/does-leadership-matter-in-the-public-sector.html)
A good leader therefore not only 'infects' the organisation with energy, but creates meaning with context, and moves people to action and jointly achieving the shared vision, mission and goals (see Figure 17). Strong leadership sets out to create a legacy for the long term, ensuring that future generations of employees, and leaders, can draw on a reservoir of knowledge and assets and build on a sound foundation of organizational integrity, accountability and commitment.

SOEs, if owned and managed well, also have the potential to be role models and standard setters for other companies (see Box 14).

Saudi Aramco, an oil company wholly owned by the Saudi Arabian government, has played a major and pioneering role in advocating and advancing the Saudi women’s employment agenda. At a time where girls’ access to education had just started in Saudi Arabia and female participation in the workforce was negligible, Aramco recognized the untapped potential of the female Saudi population by hiring its first Saudi female employee in 1964.

To support the development of its female recruits, Aramco then established a training centre to up-skill Saudi females in mathematics, sciences, clerical work and the English language. Aramco also provides international scholarship in the fields in which key positions needed to be filled by Aramco. Currently, it employs females across a variety of key functions including IT, finance, engineering and administration, as well as other key strategic positions to enable them to progress to C-suite level responsibilities.

Fifty years later from that first female hire, Aramco continues to invest in the nation’s female workforce, which now comprises 16% of the total Saudi workforce.
Managing stakeholder relationships

**Transparent and accountable**
The commitment to transparency sends the signal that the government is serious about working for, and with, its stakeholders to achieve desired societal outcomes, and will be held accountable for the part it plays in the process.

Given the mix of commercial and non-commercial objectives that SOEs often have, the World Bank suggests that increased transparency of SOE performance against its objectives can be achieved by providing both ex-ante (before the fact) and ex-post (after the fact) reporting.

Ex-ante reporting can include descriptions of the various commercial and non-commercial objectives held by the SOEs and details of the financial assistance provided by the state, as well as an estimate on the cost of fulfilling non-commercial objectives. This enables stakeholders (especially the SOE’s active owners and management) to better weigh the trade-offs between fulfilling different objectives.

Ex-post reporting is more typically related to recent performance. The World Bank recommends that all but the smallest SOEs should produce accurate financial reports which are available to the public, while all SOEs’ financial reporting should comply with international standards. Performance indicators related to SOE objectives could also be reported, linked to the proposed SOE scorecard as visualised in Figure 14 in the previous section. However, the OECD rightly cautions that SOEs and their owners should consider the trade-off between public accountability and commercial confidentiality – a balance they need to strike even more delicately than their private sector counterparts given their public nature.

In the same way, the manner in which the state, as the owner, interacts with the SOE should be made clear and transparent to all stakeholders and its relationship be clearly defined. This is especially important when the government is not the sole shareholder of the SOE.

If current or potential shareholders view the state as an unpredictable owner that does not operate to create shareholder value, this perception may have a negative impact on the SOE’s share value and its future capacity to raise funds on the market. This also ties back to the need for the SOE to have a clear purpose and mission that is communicated to all stakeholders, which would allow current and potential shareholders to evaluate if they agree on shared objectives.

In addition, a focus on transparency reinforced by accountability serves not only to better engage all actors in society, but is a natural form of ongoing monitoring and evaluation of performance and outcomes (see Box 15).

---

**Box 15 CFE in Mexico**

As part of the Mexican government’s efforts to promote transparency and the best practices in open data, CFE (Comisión Federal de Electricidad), a power company owned by the Mexican government, posts information regarding all of its tender processes on its website for public access. CFE hopes that by providing public access to such information, it can, together with Transparency International (Chapter Mexico), foster an open and transparent process of public tendering, in the belief that it will attract better services at better prices.

In addition, Mexico is currently undergoing energy reforms which would open the energy sector to public and private participation, nationally and internationally, such that companies can come and invest directly, or establish joint ventures with CFE, or with PEMEX (a state-owned petroleum company), to participate directly in the oil, natural gas and electricity sectors which have been closed in Mexico for several decades.

In the light of these reforms, CFE believes that enabling the public to follow the various tender processes allows them to understand the benefits that the nation’s current energy reform towards increased private sector participation in the energy sector will bring.

---


However, transparency is not just concerned about the mere release of information, but rather the quality, timeliness and reliability of the information being made public. Truthful transparency is required for true accountability and sound decision-making. This can be facilitated by accurate and timely reporting, either at entity level (individual SOEs) or for the country’s SOEs as a whole (aggregate annual reporting on all SOEs).

Indeed, there is an important connection between transparency, accountability and trust. According to a joint survey of 10,000 Europeans by PwC and ICAEW, there was a clear correlation between the low levels of trust that Europeans have in their governments’ financial management and their low levels of confidence in their governments’ ability to finance core public services, such as healthcare and education. The countries with the highest levels of distrust are also the ones where there is a greater demand for information and transparency on the state of public finances and on how public resources are spent.

Furthermore, in Edelman’s 2015 Trust Barometer report, while government was the lone institution to gain trust in 2015 (compared with business, media and NGOs), it was still the least trusted institution globally, with the public in 19 of 27 countries distrusting government to do what’s right.

Given these continued high levels of distrust, governments have a strong reason to rebuild trust and legitimacy. One way this can be achieved is through properly owning and managing their SOEs, especially where there is a large proportion of SOEs in the national economy.

Lack of trust infiltrates every part of society. It is not just a question of the public losing trust in the financial system. It is more fundamental. It affects how individuals trust each other. I often think about words I heard some time ago: ‘... trust that is lost because of deeds will not be restored with words, only with action’. Therefore I think we won’t gain our trust back by talking. We will have to rebuild trust by earning it with our actions.

Dagur B. Eggertsson
Mayor of Reykjavík in Iceland

Questions to think about

SOE owners
• Is the purpose and mission communicated to all stakeholders in a timely, accurate and transparent manner, linked to objectives and key performance indicators?
• Are the compensation structures for the board and executive management clearly defined and aligned to the desired objectives, outcomes and impacts of the SOE?
• What is the level of trust of citizens (and other stakeholders) in your SOEs?

SOE directors
• Is the SOE strategy clearly connected to its purpose, mission and objectives?
• What is the performance scorecard for your SOE? Are there clear principles guiding trade-offs between different performance outcomes to ensure that the right decisions are being made?
• Do you have the capability, capacity, clarity and commitment to integrity needed to properly fulfil your role?

SOE executive management
• Is the SOE governed in line with the principles of transparency and accountability?
• Is the SOE reporting on its objectives and performance on a timely, accurate and reliable basis? And publicly as well as to government?
• Do you have the capability, capacity, clarity and commitment to integrity needed to properly fulfil your role?

Achieving balance

The SOE of the future needs not only to be owned and managed actively and transparently, but must also strike the right balance between an internal focus on costs and resource management and an external focus on driving growth for the national, regional and/or local economy that it serves. How can this balance be best achieved?

Striking an appropriate internal-external balance

An argument often used against SOEs is that they destroy value rather than create value. They can be perceived (rightly or wrongly) as being “black holes” which consume tax payer money without delivering appropriate levels of returns or desired societal outcomes due to less competitive pressures to operate efficiently and effectively as compared to their private sector counterparts.

However, if SOEs have a defined and clear purpose and mission, and are actively owned and managed to create value and deliver outcomes, then they can and indeed should be innovative and agile. This, in turn, enables SOEs to remain commercially relevant, which is positive for company shareholders, while also creating jobs and driving growth in existing and emerging industries, which is positive for the economy and society. This is an example of striking an appropriate balance between managing internally (maximising enterprise efficiency and effectiveness) and leveraging external influence (facilitating good growth in society).

Managing internally for efficiency and effectiveness

SOEs need to develop and maintain sound internal management in order to maximise efficiency and effectiveness while managing risks. This includes leveraging technological and service innovations to deliver the products and services the public needs and wants, as well as achieving desired outcomes economically. This can enable SOEs to operate in a commercially viable and financially sustainable way, while fulfilling their non-commercial objectives. Especially today, it is about reconfiguring existing models or developing new ones to do better with less and increase productivity.

In particular, with affordable government the new reality, digital technology has the potential to be a key enabler, offering the scope to deliver higher productivity and better outcomes while also reducing costs. The appreciation of the integral role that technology plays across business sectors is evident in PwC’s latest Annual Global CEO Survey58: 64% of state backed CEOs surveyed are concerned about the speed of technological change (compared to 57% of non-state backed CEOs). At the same time, state backed CEOs in our survey see digital technology as creating most value in terms of operational efficiencies, data analytics and the customer experience (see Figure 18).

Digitalisation, harnessed and understood properly, has the power to help SOEs create and capture value in new ways (see Box 16).
A study on the Indian SOE landscape by Zinnov, a market expansion and globalization advisory firm, stated that Indian SOEs are expected to witness a turnover of more than USD 1 trillion by 2020. A large part of this growth will be attributed to investments in modern forms of information technology including cloud, Big Data and mobility. The report notes that with their growing size and dominance, SOEs in India are looking at information technology to meet global competition and be more environmentally responsible, coupled with the ability to be more transparent and accountable, reduce the cost of production and enhance productivity and customer reach.

Examples of SOEs which have leveraged information technology are SBI, which performed one of the largest core banking solution implementations globally, and Indian Railways, which, in its budget for 2015-2016, re-affirmed its commitment to achieve 100% paperless ticketing.

While digital offers great opportunities, it is important to put in place the relevant safeguard both for privacy but also to protect against the risks including threats from cyber-attack. Indeed, cyber threats are listed in the top three of threats identified by state backed CEOs (68%).

---

**Box 16 Technology’s impact on Indian SOEs**

A study on the Indian SOE landscape by Zinnov, a market expansion and globalization advisory firm, stated that Indian SOEs are expected to witness a turnover of more than USD 1 trillion by 2020. A large part of this growth will be attributed to investments in modern forms of information technology including cloud, Big Data and mobility.

The report notes that with their growing size and dominance, SOEs in India are looking at information technology to meet global competition and be more environmentally responsible, coupled with the ability to be more transparent and accountable, reduce the cost of production and enhance productivity and customer reach.

Examples of SOEs which have leveraged information technology are SBI, which performed one of the largest core banking solution implementations globally, and Indian Railways, which, in its budget for 2015-2016, re-affirmed its commitment to achieve 100% paperless ticketing.

---

Leveraging external influence to facilitate good growth

The SOE is in a unique position to leverage its external influence by co-creating value with other stakeholders in society and being a catalyst or driver for external good growth, linked to its purpose, mission and strategic objectives.

SOEs can also take an active role in developing local, regional and national innovation systems by, for example, providing test beds and rapid prototyping opportunities for promising entrepreneurs and start-ups. This could mean providing an ‘incubating’ environment and infrastructure for ideas to grow and flourish.

Ideas with potential can subsequently be accelerated for execution and implementation via a rapid prototyping and large-scale demonstrator approach, which tests new concepts and ideas as a transformational project before scaling up for adoption at a wider level. Large-scale demonstrators provide a way of de-risking innovation by providing a staged process in which a range of solutions are initially developed, tested and then selected for further rounds of support. Demonstrators move from small-scale prototypes to a small number of larger-scale near-market projects combining the three vital elements of infrastructure, market framework, and people and skills. The R&D factor is also present, playing a supporting role. This in turn creates intelligent ecosystems and increased interoperability.

Furthermore, SOEs can play a key role in developing the infrastructure and conditions for the private sector to flourish, for example, as Transnet in South Africa illustrates (Box 8), as well as in supporting national strategies for economic diversification and development of new and emerging industries (see Figure 19).

Indeed, more than half of CEOs in our CEO Pulse poll agreed that SOEs can enable the physical infrastructure for the modern economy, though CEOs were less inclined to agree when it came to digital infrastructure.

---

**Figure 19 Innovation value proposition**

**Territory Innovation Approach**

- Developing the conditions for business success
  - Bringing money into ideas...
    - Business framework
    - Transformational projects
    - Cluster success factors
    - Public pride

**Government**

**Jobs & Revenues**

**New Innovation Systems including SOEs – new products & services**

**Company Innovation Approach**

- **Growth & Profits**
  - R&D
  - Business development
  - Leadership through innovation

- **Business**

- **Bringing ideas into money...**
When it comes to talent, SOEs may also be able to contribute in terms of developing a pipeline for talent, as in the case of Saudi Aramco’s commitment to engaging women in the workforce (see Box 14).

Conversely, SOEs may serve to act as a magnet for top talent at the expense of the private sector. Given that both state backed and non-state backed CEOs have ranked the availability of key skills as one of their top business concerns over the past five years in PwC’s Annual Global CEO Surveys, the competition for talent is likely to continue unabated. As such, SOEs need to consider how best to attract, develop, motivate and retain talent while exploring ways of collaborating with other stakeholders (e.g. via staff exchanges between SOEs and the industry) to jointly develop talent as opposed to competing for the same talent pool.

The talent management strategy must also recognise the increasing need for the modern workforce to comprise of people from different backgrounds who are able to think and work in diverse ways. Our latest CEO survey revealed that 77% of CEOs (both state backed and non-state backed) now have, or plan to adopt, a talent diversity strategy.

But diversity is a much misunderstood, with surveyed CEOs having a variety of interpretations ranging across gender, ethnicity, nationality, race, disability and age. Nevertheless, however defined, most state backed CEOs say that their diversity strategy has not only enabled them to attract talent, but has enhanced business performance and strengthened their ability to innovate (see Figure 20).

In addition to diversity, adaptability comes out strongly as important for tomorrow’s CEOs to cultivate. There are two essential ingredients to adaptability. First, the ability of employers to look differently at sources of talent. This means investigating new geographies and sectors as sources of new talent, as well as investing in existing employees, equipping them with the necessary skills and motivating them to adapt to meet new challenges. Secondly, the individuals themselves must be willing and prepared to embrace change and apply their skills somewhere new. Adaptability looks at both sides of the equation.

For more insights, see ‘Adap to survive: How better alignment between talent and opportunity can drive economic growth’, a 2014 global study by PwC which was commissioned by Linked.
In an increasingly borderless world, SOEs will continue to have an influential role to play, both domestically and abroad in the places where they operate. SOE leaders need to actively own and manage these SOEs in order to ensure that they not only achieve their stated objectives in an efficient, effective and socially responsible way, but that they deliver on wider societal outcomes that create value for citizens and stakeholders.

To do so, we believe that SOE leaders face a challenging agenda, as set out opposite.

**SOE owners**  
(e.g. national / regional / local government, line ministry, Sovereign Wealth Fund)

- SOEs should have a clear purpose and set of objectives linked to desired societal outcomes. These in turn should form a long-term view and balance goals relating to value creation and profitability.
- The SOE’s purpose and objectives should be continually evaluated to ensure they remain valid over time, and these (including prioritisation of the various objectives) should also be clearly communicated to all stakeholders, especially the SOE board, executive management, auditors and other SOE shareholders.
- The government’s ownership stake in SOEs should be monitored and evaluated on an ongoing basis to ensure that value continues to be delivered.
- For SOEs which no longer need to be under state ownership, they should be considered for privatisation in a way that extracts the most value for society.
- The owners should set forth a clear, transparent and structured way of nominating, evaluating and compensating the SOE board.
SOE board
(e.g. executive and non-executive directors, political appointees, employee representatives on the board)

• The SOE should be evaluated and steered according to its stated purpose, mission and strategic objectives.
• The SOE should find an appropriate balance between commercial and non-commercial objectives linked to its purpose and mission, as well as between internal and external perspectives.
• The SOE performance scorecard should capture the various SOE objectives and desired outcomes, especially where there might be trade-offs between different performance outcomes, to ensure that the right decisions are being made.
• The SOE board should ensure that they possess the right level of competence, professionalism, authority, integrity and independence, and fulfil the “4 Cs” test.

SOE executive leadership
(e.g. CEO, executive directors)

• The SOE should be managed according to principles of transparency and accountability, with its performance reported on a timely, consistent and transparent basis.
• The SOE should operate in an innovative and agile way, and use technology (especially digital) and service innovation to deliver products and services effectively and efficiently: ‘better for less’.
• The SOE executive leadership should ensure that they possess the right level of competence, professionalism, authority and integrity, and fulfil the “4 Cs” test.

By delivering on this agenda, SOEs can be catalysts for sustainable value creation for the wider public, and can also build trust by being transparent and accountable through proper communication and reporting of objectives, activities, relationships and performance.
Contacts
PwC Government and Public Services territories

Benson Okundi
Africa Central
benson.okundi@ke.pwc.com
+254 20 2855000

Norberto Montero
Argentina
norberto.montero@ar.pwc.com
+54 11 4850 4605

Tony Peake
Australia
tony.peake@au.pwc.com
+61 (3) 8603 6248

Miklós Revay
Austria
miklos.revay@at.pwc.com
+43 1 501 88 2920

Oliver Jordan
Barbados
oliver.jordan@bb.pwc.com
+1 246 626 6704

Serge Loumaye
Belgium
serge.loumaye@be.pwc.com
+32 2 7109791

Ricardo Ribas
Brazil
richard.ribas@br.pwc.com
+5521 3223 6279

Daniel Moncada
Bolivia
daniel.moncada@bo.pwc.com
+591 2 7506 37

Albena Markova
Bulgaria
albena.markova@bg.pwc.com
+359 2 93 55 294

John Moore
Canada
john.moore@ca.pwc.com
+1 (613) 794-1808

Todd Bradshaw
Central and Eastern Europe / Slovakia
todd.bradshaw@sk.pwc.com
+421 2 5935 0600

Jiri Moser
Czech Republic
jiri.moser@cز.pwc.com
+420251152048

Frank Lyn
China
frank.lyn@cn.pwc.com
+86 (10) 6533 2388

Rodrigo Bucarey
Chile
rodrigo.bucarey@cl.pwc.com

Dorian Echeverry
Colombia
dorian.echeverry@co.pwc.com
+574 2662933 (Ext.)134

Tassos Procopiou
Cyprus
tassos.procopiou@cy.pwc.com
+357 22 555 750

Christian Klibo
Denmark
christian.klibo@dk.pwc.com
+45 89 32 55 14

Tarek Mansour
Egypt
tarek.mansour@eg.pwc.com

Carlos Loaiza
Ecuador
carlos.loaiza@ec.pwc.com
+593 4 2281 557 15

Teet Tender
Estonia
teet.tender@ee.pwc.com
+372 6141 892

Mirel Leino
Finland
mirel.leino@fi.pwc.com
+358 (0) 9 2280 1868

Jean-Louis Rouvet
France
jean-louis.rouvet@fr.pwc.com
+33 1 56 57 8578

Alfred Höhn
Germany
alfred.hoehn@de.pwc.com
+49 30 2636 1270

Felix Addo
Ghana
felix.addo@gh.pwc.com

Kyriakos Andreou
Greece
kyriakos.andreou@gr.pwc.com
+30 210 6874680

Marcello De Guisa
Hong Kong
marcello.de.guisa@hk.pwc.com
+852 2289 1922

Laszlo Deak
Hungary
laszlo.deak@hu.pwc.com
+36 1 461-9590

Ragnar Ingibergsson
Iceland
ragnar.ingibergsson@is.pwc.com
+354 5505236

Neel Ratan
India
neel.ratan@in.pwc.com
+91 124 4620540

Michael McDaid
Ireland
michael.j.mcdaid@ie.pwc.com
+353 (0) 1 7927950

Edouard Messou
Ivory Coast, Francophone Africa
edouard.messou@ci.pwc.com
+33 1 5657 6870

Noam Hadar
Israel
noam.hadar@il.pwc.com
+972 (0) 3 795 4 725

Giovanni Mariani
Italy
giovanni.mariani@it.pwc.com
+39 (06) 570833120

Adrian Tait
Jamaica
adrian.tait@jm.pwc.com
+1 876 932 8429

Yasuo Okada
Japan
yasuo.o.okada@jp.pwc.com
+81 3 3546 9195

Alper Akdeniz
Kazakhstan/Eurasia
alper.akdeniz@kz.pwc.com
+7 (727) 330-3200
Acknowledgements

The following individuals and groups in PwC and elsewhere contributed to the production of this report.

**Core editorial team**

- **Jan Sturesson**, Sweden
- **Nick C Jones**, UK
- **Egon de Haas**, The Netherlands
- **Linus Owman**, Sweden
- **Matt Liberty**, US
- **Scott McIntyre**, US
- **Sarah Lidé (Lead Author)**, Sweden

**Reference Group members**

- **Tony Peake**, Australia
- **Oliver Jordan**, Barbados
- **Ricardo Ribas**, Brazil
- **Frank Lyn**, China
- **Alfred Höhn**, Germany
- **Neel Ratan**, India
- **Adrian C Tait**, Jamaica
- **Benson Okundi**, Kenya
- **German Ganado**, Mexico
- **Hazem Galal**, Qatar
- **Ekaterina Shapochka**, Russia
- **Ammar Hindash**, Saudi Arabia
- **Todd Bradshaw**, Slovakia
- **Stanley Subramoney**, South Africa
- **Anders Christensson**, Sweden
- **George Alders**, The Netherlands
- **Adrian J Howcroft**, UK
- **Rami Naser**, United Arab Emirates
- **John R Glover**, US
- **Peter D Raymond**, US

**Other contributors**

- **Andressa Prado**, Brazil
- **Sotirios Ghinis**, Brazil
- **Jonathan Barlow**, China
- **Annie Han**, China
- **Holger Raddatz**, Germany
- **Jan-Frederik Zöckler**, Germany
- **Suhel Bidani**, India
- **Lunkelo Manyoni**, South Africa
- **Mie Torp Hansen**, Sweden
- **Victor Sundberg**, Sweden
- **Mona AbouHana**, United Arab Emirates

**External contributor**

- **Giuseppe Grossi**
  Professor of Business Administration
  Kristianstad University, Sweden
Join the debate. www.psrc.pwc.com

The Public Sector Research Centre is PwC's online community for insight and research into the most pressing issues and challenges facing government and public sector organisations, today and in the future.

The PSRC enables the collaborative exchange of ideas between policy makers, opinion formers, market experts, academics and practitioners internationally.

To access this free resource, and register for publications, please visit www.psrc.pwc.com