International Workshop on
Performance Evaluation and Management of State Owned Enterprises

14-15 January, 2015
New Delhi, India
International Workshop on

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*Note*: The articles in the publication have been included by the Institute of Public Enterprises (IPE), Hyderabad, Knowledge Partner of the Workshop. The subject matter of these articles relates to the themes to be discussed in the workshop and have been taken from public domain.
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2. Brazilian Federal State Owned Enterprises’ (SOEs) Governance Structure and the Use of Participation in Profits and Results (PLR) to Increase Performance
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3. Corporate Governance and Performance Management Systems in State Owned Enterprises: Experiences from Bhutan
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4. Changing Patterns of State Owned Enterprises Governance Arrangements in East Africa:
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5. Performance Target Setting System and MoU Experiences in India
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6. Performance Contracting, Measurement And Improvement Systems In Selected African Countries
   Author: Richard Ndubai

7. Performance Evaluation system on SOE in Korea
   Author: Wonhee Lee
Despite the trend toward privatization over the past 20 years, state-owned enterprises (SOEs) are still significant economic players. Globally, SOEs account for 20 percent of investment, 5 percent of employment, and up to 40 percent of output in some countries. They continue to deliver critical services in important economic sectors such as utilities, finance, and natural resources. Even in competitive industries, enterprises in large-scale manufacturing and services remain in state hands in many countries.

Unlike in the past, however, SOEs today are under strong pressure to improve their performance. These pressures come from various sources, including the need to enhance their competitiveness and that of the economy as a whole, especially in countries where SOEs are major players; to provide essential infrastructure, financial, and other services to businesses and consumers more efficiently and cost effectively; to reduce their fiscal burden and fiscal risk; and to enhance the transparency and accountability of the use of scarce public funds. Increasing globalization, deregulation of markets, and budgetary discipline are also driving efforts to improve performance. A long history of efforts at reform shows that the key to better SOE performance is better governance.

Demand for good governance has led to a growing body of knowledge and analytical work. The World Bank Group has integrated corporate governance and fiscal and financial management into its broader SOE reform efforts, assessing the state of corporate governance in SOE sectors in various countries, providing policy recommendations and actions plans, and supporting reform implementation through its advisory and lending operations. Drawing from its Principles of Corporate Governance, the Organisation for Economic Co-operation and Development (OECD) issued its Guidelines on the Corporate Governance of State-Owned Enterprises (OECD 2005), which
provides a benchmark for assessing corporate governance practices in different countries. Since then, numerous OECD publications have been published on such important areas as SOE boards of directors, transparency and accountability, and competitive neutrality. Numerous other international, regional, and country-level organizations have also contributed to a growing volume of work on SOE governance.

Importance and Benefits of Good Corporate Governance

Chapter 1 shows that, despite extensive privatization over the years, governments around the world continue to own and operate commercial enterprises in such critical sectors as finance, infrastructure, manufacturing, energy, and natural resources. Evidence points to the continued presence, and even expansion, of state-owned sectors in high-income countries, in major emerging market economies, and in many low- and middle-income countries. Indeed, many SOEs now rank among the world’s largest companies, the world’s largest investors, and the world’s largest capital market players. In many countries, SOEs in strategic industries are increasingly viewed as tools for accelerated development and global expansion.

The performance of SOEs has improved in many cases due to greater competition, exposure to capital market discipline, and better governance practices. Yet many SOEs continue to underperform, with high economic, financial, and opportunity costs for the wider economy. Inefficient provision of critical inputs and services can increase costs for local businesses and divert scarce public sector resources and taxpayers’ money away from social sectors that directly benefit the poor. Assets that could be used more productively elsewhere in the economy may be tied up. And poorly performing SOEs cannot access financing through the capital markets, which is critical to infrastructure and financial sector development.

Past efforts at reform have made clear that poor SOE performance, where it occurs, is caused less by exogenous or sector-specific problems than by fundamental problems in their governance—that is, in the underlying rules, processes, and institutions that govern the relationship between SOE managers and their government owners. Driven by the divergence of political interests between ownership (by the government on behalf of the citizens of the country) and control (by the directors and managers that run the company), these governance problems can include complicated and at times contradictory mandates, the absence of clearly identifiable owners, politicized boards and management, lack of autonomy in day-to-day operational decision making,
weak financial reporting and disclosure practices, and insufficient performance monitoring and accountability systems. Where these shortcomings are more common, SOEs may also be a source of corruption.

Many countries have taken concrete and significant steps to address these challenges, improve their operations, and achieve the benefits of good corporate governance. Evidence shows that a good corporate governance system in a country is associated with a number of benefits for all companies, whether private or state owned. These benefits include better access to external finance by firms, which in turn can lead to larger investments, higher growth, and greater employment creation; lower costs of capital and higher firm valuation, which make investments more attractive and lead to growth and greater employment; improved operational performance through better allocation of resources and more efficient management, which create wealth more generally; reduced risk of corporate crises and scandals, particularly important given the potentially large economic and social costs of financial crises; and better relationships with stakeholders, which help improve social and labor relationships, help address such issues as environmental protection, and can help further reduce poverty and income inequality.

Taken together, these benefits can boost the efficiency of SOEs and, in turn, that of the economy as a whole and make transactions among companies more competitive and transparent; result in more efficient allocation of resources by reducing the fiscal burden and fiscal risk of SOEs; lead to greater public and private investment in critical sectors such as infrastructure that contribute to competitiveness and growth; and reduce vulnerabilities in the financial system and promote financial sector development more broadly.

**Key Corporate Governance Elements**

Chapters 2–8 of the toolkit focus on the overall framework and the key elements for improving SOE corporate governance, both for their state owners and for specific companies. The chapters describe a number of good practices, implementation steps, and tools and include experiences from a wide range of countries. Several elements contribute to improved SOE governance:

- **Establishing a sound legal and regulatory framework for corporate governance (chapter 2) by**
  - Bringing SOEs under company law and applying other laws and regulations to SOEs to create a level playing field.
  - Listing them on the stock markets to create capital market discipline.
Developing modern SOE laws and regulations.

Unifying SOEs under a national code of corporate governance or creating a specific SOE code to codify good practices.

**Creating proper ownership arrangements for effective state oversight and enhanced accountability (chapter 3) by**

- Identifying and separating the state’s ownership functions from its policy-making and regulatory functions.
- Developing appropriate arrangements for carrying out ownership functions.
- Creating safeguards against government interventions.
- Centralizing the state’s ownership functions to bring focus, consistency, and good practices to the SOE sector.

**Developing a sound performance-monitoring system (chapter 4) by**

- Defining SOE mandates, strategies, and objectives.
- Developing key performance indicators and targets, both financial and nonfinancial.
- Establishing performance agreements between SOE owners and SOE boards.
- Measuring and evaluating performance with the goal of holding SOEs accountable for results and ensuring good performance.

**Promoting financial and fiscal discipline (chapter 5) by**

- Reducing preferential access to direct and indirect public financing.
- Identifying, computing, and financing the true cost of public service obligations.
- Monitoring and managing the fiscal burden and potential fiscal risk of SOEs.

**Professionalizing SOE boards (chapter 6) by**

- Developing a structured and transparent process for board nominations.
- Defining the respective roles of the state, as owner, of boards, and of management and empowering boards with core responsibilities such as strategy setting, choosing and overseeing the chief executive officer (CEO), and managing risks.
- Enhancing board professionalism through the separation of chair and CEO, development of board committees, and the like.
- Putting in place board remuneration and evaluation policies and practices.
- Providing training to members of boards of directors.

**Enhancing transparency and disclosure (chapter 7) by**

- Applying private sector principles and international standards to SOEs.
Improving SOE reporting and disclosure.
Strengthening the control environment.
Carrying out independent external audits.

- Protecting shareholder rights in mixed-ownership companies (chapter 8) by
  - Overseeing minority government stakes.
  - Promoting shareholder participation and equitable treatment of shareholders.
  - Encouraging participation in shareholders’ meetings.
  - Ensuring representation of minority shareholders on SOE boards.
  - Protecting against abusive related-party transactions.

Implementing Reform

Chapter 9 concludes with a focus on reform implementation. Diagnosing governance challenges and developing appropriate policy and technical solutions are critical starting points in planning reform. But the real challenge is one of implementation. Given the variety of circumstances in different countries and sectors, no “one-size-fits-all” approach will work. Circumstances in low- and middle-income countries are widely different from those in OECD member states or in major emerging markets, while fragile postconflict states face unique challenges of their own. This variation suggests a need for flexibility in adopting good practices and in tailoring them to social norms and traditions, as well as to the realities on the ground.

Moreover, the entire package of governance reforms as described above may not be feasible, or necessary, to put in place all at once. Governance reforms—and SOE reforms more broadly—are politically contentious and can be challenging to implement. Vested interests within SOEs and government may render reforms more complex: SOE management may see better governance as a threat to its independence; SOE boards can see reform as a threat to their positions; and line ministries may be resistant to changes that threaten their capacity to use the SOEs within their control. Outside of government, stakeholders can also oppose change. Employees may be worried about job security, when reform is tied to efficiency or operational improvements. Preferred suppliers and customers may object to greater transparency in SOE commercial dealings, and other shareholders might prefer the status quo, particularly if benefits accrue to an SOE because of its government ownership.
Overcoming these challenges can be difficult. But experience shows that it can be done by devoting attention to the reform process itself. This involves:

- **Securing political leadership and commitment.** Without that leadership, reform is not likely to get off the ground.

- **Phasing or sequencing reforms on the basis of their political and institutional feasibility.** Not only is phasing important in overcoming entrenched interests, but it also supports the concept of governance reform and provides the confidence that policy makers need to take further steps. Where opposition is strong, reforms can start with less controversial actions, for example, by bringing in more independent directors from the private sector, providing training for board members, developing a performance-monitoring framework, and monitoring SOE disclosure. Where local corporate governance standards are reasonably strong and the country has a stock exchange, listing SOEs on the stock market can be a first step toward disciplining these enterprises and improving governance. More difficult reforms such as development of SOE laws and centralization of the ownership function may require time, and changes in mindset and public opinion are likely to occur as other reforms take hold and create pressures for these reforms.

- **Gathering and publishing comprehensive data on SOE performance.** Central agencies can build momentum for change by developing and publishing better aggregate information on the performance of SOEs and their true costs and benefits to government. Basic information is also important for diagnosing and implementing reforms. As a less contentious process, it can help build the capacity and ownership for reforms. Prioritizing this reform can also benefit the internal governance of SOEs since it drives capacity development within the enterprises and can lead to better internal information for management and the board of directors.

- **Supporting improvements in companies.** In countries with large SOE sectors, improving corporate governance of the sector as a whole can be daunting and will take time. Governance efforts could focus initially on a few companies to demonstrate concrete results. Good outcomes will help focus the state on its role as shareholder and lead to higher performance and better transparency of key SOEs. It also provides tangible improvements and benefits that could create momentum for implementation across all SOEs.

- **Building institutional capacity to manage and sustain the reform process.** Building and strengthening capacity at all levels is needed. Owners,
regulators, boards, and senior management will need a comprehensive understanding of corporate governance in general as well as from their individual perspectives. To remain steadfast in promoting good corporate governance, ownership units will need people with knowledge, skills, and experience in business; and when such employees cannot be recruited or seconded, existing personnel will have to receive the appropriate training and exposure to development programs in corporate finance and economics. In low-capacity countries, significant technical assistance may be required in the start-up phase. Companies’ boards, management, and staff too will require intensive training and capacity building. Corporate governance requires knowledge and skills that are not present in many SOEs in low-income countries or in countries that are just starting out on these reforms more broadly. The focus of training and capacity building should be on substance over form and on behavioral changes over structural.

- **Building support for reform among stakeholders and the public.** SOEs often have a long history and are seen as crucial components of a nation’s economy. Because SOE reform is frequently viewed as a precursor to privatization, the public is often highly skeptical of the value of such reforms. Conversely, where SOEs do not operate efficiently, waste and mismanagement issues can spark a public debate on the benefits of reform. In this context, effectively communicating the objectives of good governance and its potential outcomes can increase stakeholders’ support for those objectives and influence opinions, attitudes, and behavioral changes. Centralized ownership units can use their unique position to advocate change and to document its benefits. Aggregate ownership reports, such as performance scorecards, and benchmarking reports, can both illustrate the need for reform and document progress.

Finally, reforming governance alone will not solve SOE problems. Lessons from past experiences suggest that a comprehensive approach is needed. Corporate governance reforms should be accompanied by other reforms such as SOE restructuring and privatization. According to substantial evidence, privatization and public-private partnerships have brought big gains for many SOEs, in both competitive and noncompetitive sectors. Where privatization is not a preferred policy option, SOEs can still be exposed to capital market discipline through partial listings. Removing barriers to entry and exit are also important, and governments should continue with broader reforms to develop the private sector.
Notes

1. The toolkit does not address broader policy questions on state ownership.

2. Subnational governments and municipalities also have commercially oriented public enterprises; past reforms focused on those operating at the central or federal levels. Recently, governments and international financial institutions have begun to pay attention to municipal SOEs because of their performance problems and the fiscal burden and fiscal risk that they impose. These enterprises are beyond the scope of this toolkit. Nevertheless, governance measures similar to those discussed in the toolkit would improve their performance as well.

Reference

Context and Overview

Understanding the overall context—including the importance and benefits of good corporate governance—is a first and essential step toward reforming the governance of state-owned enterprises (SOEs). This chapter explains why countries the world over are seeking to improve SOE governance and provides an overview of the following topics:

- Past SOE reforms
- Role and importance of SOEs
- SOE performance and its impacts
- Governance challenges facing SOEs
- Benefits of good corporate governance
- Overarching framework for reform

Past SOE Reforms

Governments worldwide have long established SOEs with a variety of public policy goals in mind—building basic physical infrastructure; providing essential services such as finance, water, and electricity; generating
revenue for the treasury; achieving self-sufficiency in the production of basic goods and services; controlling natural resources; addressing market failures; curbing oligopolistic behavior; and promoting social objectives such as employment generation, regional development, and benefits for economically and socially disadvantaged groups.

While SOEs have come to play an important economic role, evidence from the 1970s and 1980s from a number of countries shows that, on average, SOEs have performed poorly relative to private firms, partly because multiple policy goals proved difficult to reconcile.1 SOEs often incurred substantial financial losses and became an unsustainable burden on the national budget and banking system. Government policies in support of SOEs slowed the development of the private sector, crowded out private firms from credit markets, and limited the potential for expansion of the private sector.

Since the 1980s, reforms have sought to improve performance by exposing SOEs to competition, imposing hard budget constraints, and introducing institutional and managerial changes. Many SOEs were commercialized and later corporatized into separate legal entities. In addition, governments developed performance contracts with SOEs to monitor performance and hold managers accountable for results.

Although these early reforms produced some improvements, they often fell short in implementation. The politicization of SOE boards made it difficult to provide greater autonomy in commercial decision making. The separation of commercial and social objectives was widely advocated, but few governments calculated the true cost of meeting public service obligations and transferred the necessary resources to SOEs. The achievement of financial discipline through a hard budget constraint proved difficult without corresponding restrictions on SOE borrowing from the banking system and from state-owned banks in particular. And while greater autonomy for SOEs hinged on having good accountability mechanisms, performance contracts were difficult to implement or were of mixed quality. Backsliding was common, and often reforms could not be sustained (Kikeri, Nellis, and Shirley 1992).

The modest outcomes of the reforms, difficulties in sustaining improvements in performance, and changing political systems led governments in the 1990s to turn to privatization as a way to remove SOE deficits from the national budget, to attract private investors with capital and managerial know-how, and to prevent backsliding and “lock in” efficiency gains from SOE reforms. During the 1990s and first few years of the 2000s, both financial and nonfinancial SOEs were privatized through various means, including strategic sales, auctions, vouchers, management and employee buyouts, leases and concessions, and public stock offerings.2 Countries around the
world witnessed a decline in the number of SOEs as a result of privatizations, mergers, and liquidations. Evidence also showed that privatization improved firm performance in competitive sectors and, when accompanied by proper policy and regulatory frameworks, in financial and infrastructure sectors as well (Kikeri and Nellis 2004; Nellis 2011).

However, when privatization was not done right and when the required institutional frameworks were lacking—often the case in low-income settings—privatization ended in failures and scandals that led to a backlash against the process (Nellis and Birdsall 2005). Privatization proved politically problematic, in large part because its economic benefits, while often substantial, tended to occur in the medium to longer term and were dispersed widely, in small increments, among a very broad range of stakeholders. Its costs, however, were concentrated, substantial, and immediate and felt by vocal and powerful groups. Moreover, privatization often raised sensitivities about foreign ownership of so-called strategic enterprises. It was generally unpopular with the public because of higher infrastructure tariffs, employment losses, and some corrupt transactions. Political opposition deterred many governments from privatizing large SOEs in complex sectors such as finance and infrastructure. Others privatized only partially, with the state remaining a majority or controlling shareholder, or governments imposed efficiency-diminishing conditions (for example, no layoffs) on new private owners.

Combined with the 2007–08 global financial crisis that led to turmoil in the capital markets and reduced investor interest, these factors further slowed privatization and brought it to a near halt after 2008. Indeed, the crisis itself triggered new debates on the role of the state in the economy. Together, these factors pushed governments the world over to refocus their attention on improving SOE performance.

**Role and Importance of SOEs**

Despite extensive privatization, governments continue to own and operate national commercial enterprises in such critical sectors as finance, infrastructure, manufacturing, energy, and natural resources. State-owned sectors in high-income countries, in major emerging market economies, and in many low- and middle-income countries have continued, and even expanded. Indeed, many SOEs now rank among the world’s largest companies, the world’s largest investors, and the world’s largest capital market players. In many countries, SOEs in strategic industries are increasingly viewed as tools for accelerated development and global expansion.
While systematic and recent data are hard to come by, a number of stylized facts have become clear. First, SOEs continue to play an important economic role, irrespective of geographic region or degree of economic development:

- Globally, in 2006 SOEs accounted for 20 percent of investment and 5 percent of employment (Robinett 2006).
- According to a 2009 OECD survey, 25 OECD countries had a total of some 2,050 SOEs valued at US$1.2 trillion. These SOEs accounted for 15 percent of gross domestic product (GDP), as measured by the valuation of SOE sectors relative to GDP, and, in countries still undergoing the transition to a more market-based economy, for 20–30 percent of GDP (OECD 2011).
- In less developed countries, SOEs produced about 15 percent of regional GDP in Africa, 8 percent in Asia, and 6 percent in Latin America in 2006 (Robinett 2006). In the Middle East and North Africa, SOEs account for 20–50 percent of economic value added across the region and close to 30 percent of total employment (OECD 2012). In Central Asia in 2005, they accounted for more than 50 percent of GDP in Tajikistan, Turkmenistan, and Uzbekistan and for 20–40 percent in others (Kikeri and Kolo 2006).
- SOEs remain central economic players in the major emerging markets of China, India, and the Russian Federation, even as the private sector share of GDP has risen over the years (box 1.1). In Indonesia, some 150 SOEs contribute 15–40 percent of GDP, mostly accounted for by the 22 largest SOEs (Abubakar 2010).
- In fragile and postconflict states such as Afghanistan, Iraq, Liberia, and others, SOEs play, and are expected to play, an important role in the transition to a sustainable economy.

Second, SOEs are especially prominent in sectors of the economy that provide critical services for businesses and consumers and that contribute directly to economic growth and poverty reduction:

- *Infrastructure.* In many if not most countries, SOEs continue to provide power, rail, and water services, as well as telecommunications services in some countries. Among OECD countries, SOEs in utility sectors account for 50 percent of total SOE value (OECD 2011).
- *Banking and other financial services.* State ownership in commercial banks has declined considerably over the past four decades, from an average of 67 percent of total banking assets in 1970 to 22 percent in 2009 (World Bank 2012). Yet, SOEs in this sector occupy a dominant
BOX 1.1
The Still Substantial Role of SOEs in Major Emerging Market Economies

In China, widespread reforms under the Ninth Five-Year Plan (1995–2000) greatly expanded the role of the private sector and reduced the size of the state-owned sector. The state’s share in the total number of industrial enterprises fell from 39.2 percent in 1998 to 4.5 percent in 2010, its share of total industrial assets dropped from 68.8 percent to 42.4 percent, and its share of employment shrank from 60.5 percent to 19.4 percent. The SOE share of China’s exports fell from 57 percent in 1997 to 15 percent in 2010. As a result, SOEs’ share of GDP declined from 37.6 percent in 1998 to just about 30 percent today, while the number of SOEs dropped from 262,000 to 116,000. Nevertheless, the “commanding heights” of the economy—most notably the 120 or so large central enterprises in such sectors as electricity, petroleum, aviation, banking, and telecommunications—remain largely state owned. State ownership is still present in competitive sectors such as wholesale trade, retailing, and restaurants, and SOEs accounted for 27 percent of industrial output in 2010 (World Bank and Development Research Center 2013). Moreover, the share of SOEs in total investment has increased with the postcrisis stimulus in construction and infrastructure (although the SOE share in production has not risen and the long-term trend is a decline). While private enterprises substantially outpaced SOEs before the global financial crisis, since the crisis the state and private sectors have been growing at broadly similar rates. And while the weight of SOEs in production and assets (of large industrial companies) has declined markedly, the decline has bottomed out in recent years.

In Russia, the SOE share in industrial production fell from 9.9 percent in 1994 to 6.7 percent in 2004. But federal SOEs remain concentrated in sectors that were declared “strategic” in a 2004 presidential decree, including machine building, natural resource exploration and extraction, the military complex, radioactive materials, and radio, broadcasting, and newspapers with a circulation exceeding 1 million. The national government also owns stakes of 10–20 percent in joint-stock companies (Sprenger 2008).

In India, the SOE share of GDP (central, state, and local) declined from 17.5 percent in 1993–94 to 13.1 percent in 2006–07. This decline in the contribution of SOEs occurred across almost all sectors as a result of the removal of entry barriers and other policy measures. Yet, in 2006–07 SOEs still accounted for 67 percent of output in the utility sector; 39 percent in transport, storage, and communications; and 20 percent in banking, insurance, real estate, and business services (OECD 2009).
position in many cases. In 2010, state banks exceeded half the assets of the banking systems in Algeria, Belarus, China, the Arab Republic of Egypt, India, and the Syrian Arab Republic. In other major emerging market countries—such as Argentina, Brazil, Indonesia, the Republic of Korea, Poland, Russia, and Turkey—state banks do not lead the process of credit creation but still have an asset market share between 20 and 50 percent (World Bank 2012). In 2010, at least 10 of the 18 largest banks in emerging markets were state controlled (Economist, May 15, 2010).

- **Oil and gas.** The 13 largest oil companies, controlling 75 percent of global oil reserves and production, are state owned, while conventional multinationals produce only 10 percent of the world’s oil and hold just 3 percent of known reserves (Economist, January 23, 2010).

- **Industry and services.** The presence of SOEs has generally declined in these sectors, with notable exceptions. In Vietnam, for example, SOEs enjoy near-monopoly status in the production of several goods and services, including fertilizer (99 percent), and have maintained a large presence in such consumer goods as cement (51 percent), beer (41 percent), refined sugar (37 percent), textiles (21 percent), and chemicals (21 percent) (World Bank 2011).

Third, many large SOEs, based in developed and major emerging market economies, are now global players:

- **SOEs are among the world’s biggest companies.** In 2009, four state-controlled companies made it to the top 25 of the 2009 Forbes Global 2000 list (Economist, January 23, 2010). Almost 25 percent of the top 100 multinational corporations from such countries as China, India, and Russia were state owned in 2006, predominantly in the primary sectors (oil, gas, and mining) and resource-based manufacturing (metals, steel) (UNCTAD 2007).

- **SOEs are among the world’s biggest investors.** Many large SOEs from countries such as Brazil, China, Russia, and India are actively investing abroad, in green-field ventures, as well as in cross-border mergers and acquisitions.

- **SOEs are among the world’s biggest capital market players.** Recent years have seen a noticeable trend of listing large and important financial and nonfinancial SOEs on stock exchanges as a way to raise capital, impose capital market discipline on the enterprises, and dilute state ownership. Between 2005 and 2007, initial public offerings of SOEs in China and Russia were among the largest in history (Kikeri and Burman 2007; Kikeri and Phipps 2008). In turn, initial public offerings of SOEs in these and other countries contributed to capital market development, with SOEs
accounting for about 30 percent of total market capitalization in Malaysia; 30 percent in Indonesia (Abubakar 2010); 20 percent in India (OECD 2009); and 45 percent in the Middle East and North Africa, taking into account 32 of the 100 largest listed companies, 29 of these based in the Persian Gulf area.

Fourth, some countries are establishing new SOEs to develop strategic industries and compete in an increasingly globalized economy:

- Russia has created state-owned holding companies and state corporations, such as the United Shipbuilding Corporation and the Joint Stock United Aircraft Corporation (Sprenger 2008).
- In the Middle East and North Africa, the Gulf Cooperation Council (GCC) countries have established new SOEs—often with explicit or implicit industrial development agendas—both planned and through state rescue of companies in the aftermath of the global financial crisis (OECD 2012).
- In Vietnam, the steady decline in the number of majority or wholly owned national and local SOEs—from 5,800 in 2000 to 3,300 in 2010—was reversed in 2009, when 175 new SOEs were added by the central government. These include large economic groups and general corporations that were created to develop strategic industries and carry out welfare and social responsibilities (World Bank 2011).
- Following the crisis, in a number of countries state development banks (that have explicit policy mandates and are funded primarily by deposits) and development finance institutions (funded mainly by nondeposit resources) played a countercyclical role by providing credit to private firms that were unable to access funding through private banks and the capital markets. New development banks are also being established in countries such as Malawi, Mozambique, and Serbia among others (de Luna-Martinez and Vicente 2012).

Fifth, a few countries have expanded state ownership through nationalization and through the acquisition of stakes in private enterprises:

- Beginning in 2006, Argentina, Bolivia, Russia, and the República Bolivariana de Venezuela nationalized companies as a matter of policy to increase the state presence in selected sectors (box 1.2).
- More recently, the 2007–08 global financial crisis led to an increase in government ownership as governments of developed countries, such as Iceland, the Netherlands, the United Kingdom, and the United States, bailed out financial institutions through capital injections and partial or full nationalizations—although these interventions were primarily temporary rescues rather than permanent takeovers.
In 2006, the government of the República Bolivariana de Venezuela took over majority control of 32 marginal oil fields managed by foreign oil companies and the following year adopted a decree giving the state-owned oil company PDVSA a majority equity share and operational control of four joint ventures. The government also declared energy and telecommunications “strategic.” As a result of recent agreements, the government now controls the country’s telecommunications company (CANTV) and electricity company (EDC).

Bolivia adopted a decree for the nationalization of oil and gas resources in May 2006, and the government renationalized the two refineries acquired by Brazil’s Petrobras during an earlier privatization program. It is now moving to take over ENTEL, the telecommunications company that was privatized in 1996.

In Russia, the state began increasing its presence in key sectors of the economy in 2007 through the acquisition of private company assets by government-related companies (those that are directly controlled by the state and in which the state owns more than 50 percent of common stock). Examples include Rosneft’s purchase of a small private oil company, Gazprom’s purchase of Sibneft, and the purchase of smaller competitors by five big state-owned banks.

In Argentina, the government took over the troubled airline and the private pension system in 2008. Because the pension funds had big shareholdings in many companies, the government, through the National Social Security Administration, now has the right to nominate directors to the boards of the firms, which it has done in 20 companies. The social security administration also ramped up spending on public works and the unemployed ahead of the congressional elections (Economist, February 27, 2010).

Finally, beyond directly owning SOEs, governments also hold indirect shares in companies through state-owned financial institutions and pension funds (data on this category of companies are scarce). In Brazil, for example, the state-owned oil company Petrobras raised its stake in Braskem—a private sector chemical company—by US$1.4 billion in early 2010, while the state-owned development bank BNDES and the pension funds of big state companies have increased their holdings in many of Brazil’s largest private sector firms (Economist, April 3, 2010).
SOE Performance and Impacts

Available evidence suggests that the financial performance of many SOEs and their contribution to the state budget have improved in the past decade as a result of budgetary reforms, restructuring measures, improved governance practices, and exposure to greater competition and capital market discipline:

- In China, SOE profitability has increased since the expansion of competition, corporatization, and the creation in 2003 of the State-Owned Assets Supervision and Administration Commission to exercise authority over state enterprises. The reported average return on equity rose from 2.2 percent in 1996 to 15.7 percent in 2007, before slipping back to 10.9 percent in 2009 (World Bank and Development Research Center 2013).
- In India, the 24 largest nonfinancial SOEs generated a 17 percent return on equity in 2010, and profits almost doubled in the past five years.
- In Indonesia, following restructuring and governance improvements, SOE profits grew at a compound annual rate of 18.9 percent between 2004 and 2009, while contributions to the state budget through dividends and tax payments amounted to 12 percent of budget revenue (Abubakar 2010).
- In Malaysia a program aimed at transforming government-linked companies (GLCs), now in the seventh of the 10-year program, has helped improve performance. The return on equity of 20 larger companies rose from 7.7 percent in 2009 to 10.5 percent in 2010, while total shareholder return grew by 16.4 percent from 2004 to 2011. Indicators such as operating cash flow and debt-to-equity ratios have also improved (Putrajaya Committee 2011).
- In the Middle East and North Africa, many countries in the Persian Gulf have created profitable and well-run SOEs in strategic industries. These include the Saudi Basic Industries Corporation, Emirates Airlines, Dubal, and Etisalat, all of which have made their mark domestically and internationally (Hertog 2010; OECD 2012).

However, SOE performance is not uniformly positive. Notwithstanding performance improvements, a disproportionate share of SOE profits often comes from a few large firms that earn high rates of return through limits on competition and access to cheaper land, capital, and other inputs. Moreover, even those SOEs that are performing well often lag behind private and other nonstate firms in financial, economic, and operational performance. Compared to the private sector, many state-owned banks suffer from a
number of vulnerabilities, including weak balance sheets and low capitalization, poor underlying profitability, and high nonperforming loans:

- In China, nonstate firms had an average return on equity 9.9 percentage points higher than that of SOEs in 2009 (World Bank and Development Research Center 2013).
- In Vietnam, although SOEs registered healthy returns on equity (17 percent), their returns were below the economy’s nominal growth rate (19 percent) and well below the returns of foreign firms (27 percent). Rapid growth in the capital and fixed-asset base of SOEs has not been accompanied by higher productivity: in 2009, the average ratio of turnover to capital was 1.1 for SOEs but 21.0 for all enterprises; the ratio of turnover to employees was 1.7 for SOEs and 16.3 for all enterprises; and the ratio of turnover to fixed assets fell for SOEs between 2000 and 2008, while remaining unchanged for all enterprises (World Bank 2011).
- In Malaysia, a 2008 study showed that government-linked companies tend to score lower than private sector companies on metrics of economic performance or economic value added (measured as the difference between cash flow returns on investment and the weighted average cost of capital) (Issham et al. 2008).
- A study of nine Middle Eastern countries found that state-owned banks have much lower profitability than private banks due to their large holdings of government securities, larger ratios of overhead costs to assets (because of much larger ratios of employment to assets), and higher ratios of loan-loss provisions to outstanding loans (reflecting much larger shares of nonperforming loans in their portfolios) (Rocha 2011).
- A recent survey of 90 state-owned development banks from 61 countries shows that their financial performance is mixed; 15 percent report nonperforming loans exceeding 30 percent of their total loan portfolio, while nearly 60 percent indicate that without government budget transfers their self-sustainability is a major challenge (de Luna Martinez and Vicente 2012).
- SOEs tend to perform particularly poorly in low-income countries, although there are exceptions. A study in Burkina Faso, Mali, and Mauritania found that of the 12 SOEs that provided information, 8 reported losses while 3 were operating at close to breakeven. Only one reported significant profits: Mauritania’s Société Nationale Industrielle et Minière, a mining company (Bouri, Nankobogo, and Frederick 2010).

Underperforming SOEs bring high financial and economic costs. In many countries, these enterprises remain a fiscal burden and a source of fiscal risk. In Indonesia, for example, subsidy payments to three SOEs alone—those
producing fuel, electricity, and fertilizer—averaged 4 percent of GDP between 2003 and 2006; yet the subsidy still fell short of what was needed to cover all quasi-fiscal obligations and arrears with other SOEs (Verhoeven et al. 2008). In Vietnam, many large SOEs receive subsidies and their capital investment funds from public sources, including state banks. Their growing size and the complex cross-holdings of charter capital across and within enterprises make it difficult to assess the inherent risks involved in their activities and the contingent liabilities they give rise to. Some SOEs acquire noncore assets and companies, saddling themselves with large debt burdens. The total liabilities of SOEs exceed the government’s own debt, posing a significant fiscal risk (World Bank 2011). In Vietnam, as elsewhere, the financial and fiscal risks from SOEs can spill over into the broader economy, especially if SOEs have strong links with state-owned banks.

Poor performance by SOEs can also impede competitiveness and growth. In many countries, SOEs continue to crowd out or stifle the private sector, while lack of competitive markets or a level playing field creates inefficiencies and limits the expansion of the private sector. Numerous surveys and studies show that the shortage of key infrastructure capacities, due in part to SOE inefficiencies and underinvestment, is ranked as one of the top three constraints on competitiveness and growth. One study shows that investment by many infrastructure SOEs is 50–120 percent lower (depending on the country group) than required to meet service delivery needs (Estache and Fay 2007). Achieving higher levels of economic activity will therefore require substantial improvements in the productivity and performance of existing infrastructure SOEs, along with private sector investments and public-private partnerships.

Loss-making and ineffective financial SOEs weaken the financial system as a whole, and, by lending mainly to unprofitable SOEs, they can create contingent liabilities that become a source of fiscal risk. By underpricing risks and engaging in business practices that displace commercial financial services of the private sector, financial SOEs hinder new private entry and undermine competition, which in turn retard financial market development, diminish access to financial services, and weaken the stability of the financial system (Scott 2007). Financial SOEs provide most of the financing for the great majority of enterprises and individuals, particularly in emerging markets, and weak institutions can harm economic growth and erode public trust.

The underperformance and high opportunity costs of SOEs are symptomatic of a number of underlying problems. Exogenous factors, such as shifts in commodity prices, may play a role, as do sector-specific factors such as public service obligations and regulated prices. But there is increasing recognition that poor corporate governance of SOEs is at the heart of
the matter. Understanding the governance challenges and addressing them in the SOEs that play significant roles in an economy are thus a central concern for economic growth and financial sector development.

**Corporate Governance Challenges in SOEs**

Corporate governance refers to the structures and processes for the direction and control of companies. It specifies the distribution of rights and responsibilities among the company’s stakeholders (including shareholders, directors, and managers) and articulates the rules and procedures for making decisions on corporate affairs (figure 1.1). Corporate governance therefore provides the structure for defining, implementing, and monitoring a company’s goals and objectives and for ensuring accountability to appropriate stakeholders. Good corporate governance systems ensure that the business environment is fair and transparent, that company directors are held accountable for their actions, and that all business contracts made by the company can be enforced. A company committed to good corporate governance has strong board practices and commitment, effective internal controls, transparent disclosure, and well-defined shareholder rights.

Compared with private sector companies, SOEs face distinct governance challenges that directly affect their performance. A useful lens through which to view these differences is the classic distinction between the

*FIGURE 1.1 Key Stakeholders in Corporate Governance*

*Source: IFC 2008.*
interests of a firm’s owner (its principal) and its managers (the agents). In any principal-agent relationship, the principal confronts two distinct tasks: to set the goals that the agent is to pursue and to manage the moral hazard problems associated with delegation of responsibility to an agent whose private incentives are likely to differ from those of the principal.

For private companies, the goal-setting challenge is relatively straightforward: the primary goal of owners is to achieve the best financial performance. Consequently, much of the focus of private sector corporate governance is to align the incentives of managers with those of the enterprise’s owners and shareholders. SOEs face the same challenge of aligning the incentives of managers and owners. However, they can encounter additional governance challenges arising from several sources:

- Multiple principals
- Multiple and often competing goals and objectives
- Protection from competition
- Politicized boards and management
- Low levels of transparency and accountability
- Weak protection of minority shareholders

**Multiple Principals**

The owners or principals of private companies play key roles in corporate governance. They seek to elect or appoint the best people they can find to the board of directors, set clear goals, monitor company performance, and provide capital to fund expansion. However, SOEs often lack a clearly identified principal or owner. Instead, the state frequently exercises its ownership responsibilities through multiple actors—such as line ministries, the ministry of finance, and a number of other government bodies. As a result, conflicts between the state’s ownership functions and its policy-making and regulatory functions can arise and leave the company vulnerable to being used to achieve short-term political goals to the detriment of its efficiency. Moreover, in carrying out its ownership functions, states often set inconsistent goals, fail to monitor company performance closely, and cannot supply sufficient capital. In the absence of clear legal frameworks or the proper implementation of laws and regulations, the state also often assumes functions that should be carried out by the board, such as appointing and dismissing the chief executive officer and approving budgets and investment plans. This provides scope for political interference and inconsistencies in direction and approach and can open opportunities for corruption.
Multiple Goals

While many private sector companies have the objective of increasing “shareholder value,” SOEs typically have multiple and potentially competing goals. In addition to profitability, SOEs are often subject to broad mandates and public service obligations (such as providing rail, mail, or telephone service at stipulated prices) and to broader social and industrial policy goals. Some of these objectives may be explicit; others, implicit but no less important in practice. State financial institutions such as development banks and development finance institutions can also have broad and general mandates that are not well defined, providing room for government direction. When SOEs have multiple, ambiguous, or conflicting objectives, a practical consequence is that managers may aim to achieve all of the objectives and end up achieving none. Others may have substantial latitude to run the firm in their own interests. Governments may also interfere in company affairs for political gain under the cover of their different policy goals and mandates. Without clear goals, assessing managerial performance is difficult, and opportunities for political capture of the SOE and its resources are increased.

Protection from Competition

Although SOEs may be burdened with multiple objectives, they do not always operate on a level playing field with the private sector. They often receive preferential treatment through access to subsidies, bank credit, procurement contracts, and, in some cases, special tax or customs rates. Preferential treatment may give SOEs advantages that crowd out the private sector and lead to anticompetitive behavior with other market participants. Concerns about a level playing field have also grown on the international front as SOEs have expanded and become investors in ventures outside their home region or country. Perceptions about how SOEs operate—including the extent of political backing, implicit government guarantees, preferential procurement practices at home, less severe regulations, and lack of transparency—have led private sector companies (foreign and domestic) to demand that SOEs be subjected to stronger governance and transparency requirements.

Politically Boarded and Management

SOEs often lack a board of directors with the required experience and range of competencies to perform the classic corporate governance roles: to guide
strategy, oversee management, and ensure a robust internal control system. Instead, SOE boards often represent different stakeholders, all of whom may have agendas that conflict with the interest of the company and that interfere with commercial decision making. Conversely, SOE boards may act purely as a “rubber stamp” for government decision making, exercising no oversight over managers (who in practice report directly to the government). Board members are often government employees without experience in managing companies and are appointed for political reasons rather than on the basis of technical and financial expertise. Independent directors are usually underrepresented on the board, and, where they do serve on boards, their independence is often called into question. Board-level committee structures are nascent, and board expertise in important areas such as audit and risk management remains weak in many SOEs.

Little Transparency and Accountability

Although publicly owned, many SOEs often have weak internal controls and processes, inadequate accounting and auditing practices, and weak compliance procedures, with low levels of financial and nonfinancial disclosure and few if any requirements to publicly report their accounts or other information. Many of these problems stem from the lack of a clear performance-monitoring system to ensure accountability and responsibility for performance, particularly of the board and the chief executive officer. Moreover, where such systems exist, they are often rudimentary, and aggregate reporting may not be carried out. A lack of transparency and disclosure can undermine SOE performance monitoring, limit accountability at all levels, conceal debt that can damage the financial system, and create conditions that increase the likelihood of corruption. Sectors such as extractive industries, natural resources, and infrastructure may be particularly prone to corruption risks.

Weak Shareholder and Stakeholder Protection

Many SOEs, especially listed SOEs, have minority shareholders. And like other controlling shareholders, the state may ignore minority rights, including carrying out transactions that benefit management or other SOEs at the expense of outside shareholders. Because SOEs also often have a powerful array of stakeholders, including employees, consumers, local communities, and state-owned creditors, balancing their competing interests can be a challenge.
The Benefits of Good Corporate Governance

As the toolkit shows, a number of governments in developed and developing economies alike are taking concrete actions to address the above challenges in order to: (1) enhance the competitiveness of SOEs and the economy as a whole; (2) provide critical infrastructure, financial, and other services in a more efficient and cost-effective manner; (3) reduce the fiscal burden and fiscal risk of SOEs while improving their access to external sources of finance through the capital markets; and (4) strengthen transparency and accountability.

A good corporate governance system in general is associated with a number of benefits for all companies, private or state owned. As documented by Claessens and Yurtoglu (2012), good corporate governance leads to a number of positive outcomes:

- **Better access to external finance by firms**, which in turn can lead to larger investments, higher growth, and greater employment creation.
- **Lower costs of capital and higher firm valuation**, which make investments more attractive to investors and thus also lead to growth and more employment.
- **Improved strategic decision making and operational performance**, through better allocation of resources and more efficient management, which create wealth more generally.
- **Reduced risk of corporate crises and scandals**, a particularly important outcome given the potentially large economic and social costs of financial crises.
- **Better relationships with stakeholders**, which improve social and labor relationships, help address such issues as environmental protection, and can help further reduce poverty and inequality.

Many, if not all, of these benefits apply to SOEs. While few empirical studies specifically analyze the direct impacts of corporate governance on SOE performance, anecdotal evidence shows that better governance benefits both individual companies and the economy as a whole:

- **Improved operational performance of SOEs**. A recent study of 44 SOEs in the water and electricity sectors of countries in Latin America and the Caribbean finds a positive correlation between six dimensions of corporate governance reform and the operational performance of the utilities (Andrés, Guasch, and López Azumendi 2011). The dimensions include the legal and ownership framework, the composition of the board, the performance management system of the enterprise, the degree of transparency and disclosure of financial and nonfinancial information,
and the characteristics of staff (for example, education, salary, and benefits). The study shows that the composite index of these dimensions is strongly correlated with labor productivity, tariffs, and service coverage.

- **Increased access to alternative sources of financing through domestic and international capital markets, while helping develop markets.** As governments face continued budget constraints, better-governed SOEs are more easily able to raise financing for infrastructure and other critical services through the capital markets. In turn, SOE issuances can help develop capital markets. Malaysia’s government-linked companies, for example, account for about 36 percent of the market capitalization of Bursa Malaysia and about 54 percent for the benchmark Kuala Lumpur Composite Index. In India, 41 centrally owned SOEs account for 20 percent of the market capitalization of the Mumbai Stock Exchange.

- **Financing for infrastructure development.** Most public spending on infrastructure passes through SOEs (Akitoby, Hemming, and Schwartz 2007). By reducing internal inefficiencies, SOEs can make that spending go farther. For example, a recent study suggests that of the roughly US$93 billion annual infrastructure investment gap in Sub-Saharan Africa (equal to 15 percent of the region’s GDP), nearly US$17 billion could come from savings produced by improving internal efficiencies through better governance and other means (Foster and Briceño-Garmendia 2010).

- **Reduced fiscal burden of SOEs and increased net contribution to the budget through higher dividend payments.** The Lithuanian government, which is working to improve the governance of its major SOEs, has estimated that annual dividends from better governance could be increased by 1 percent of GDP, helping reduce its budget deficit as part of efforts to join the Euro Area in 2014. In 2010, the Chinese government announced that it would start extracting more in dividends from its SOEs with the aim of forcing them to compete more fairly with the private sector and allocating resources to social expenditures. Improved governance also increases transparency of the contingent liabilities associated with SOEs, thereby reducing fiscal risk.

- **Reduced corruption and improved transparency.** Corruption remains a serious problem in SOEs and can influence the financial strength and valuations of the companies, negatively affect investor perceptions, lead to the misallocation of scarce government resources, and constrain overall economic and financial growth. Better-governed companies with integrity and accountability mechanisms are likely to be less corrupt and more transparent.
Framework for Corporate Governance Reform

In view of the above, many countries are pursuing fundamental governance reforms to improve the relationship between the companies and the government as owner. Such reforms have focused on improving both the role and the behavior of the state as an owner and on instigating corporate governance reforms within the SOE sector. As discussed in the subsequent chapters of the toolkit, the main elements in improving the overall corporate governance framework are the following:

- Developing a sound legal and regulatory framework for SOE governance (chapter 2)
- Improving the state's ownership role (chapter 3)
- Establishing a performance monitoring system for accountability (chapter 4)
- Enhancing financial and fiscal discipline of SOEs (chapter 5)
- Professionalizing SOE boards of directors (chapter 6)
- Enhancing transparency and disclosure (chapter 7)
- Ensuring shareholder protection in mixed-ownership companies (chapter 8)
- Building support and capacity for implementation (chapter 9)

In undertaking reform of their SOEs, governments often look toward the OECD's Guidelines on Corporate Governance of State-Owned Enterprises, which serves as the international benchmark of good practice. Established in 2005, the guidelines provide a framework for assessing and improving the governance practices of SOEs that have a distinct legal form, are commercial in nature, and are controlled by the state through full, majority, or significant minority-share ownership. They cover six main areas: the legal and regulatory framework for SOEs, the role of the state as owner, equitable treatment of shareholders, relations with stakeholders, transparency and disclosure, and the responsibilities of SOE boards (box 1.3).

Governments have also sought to learn from a growing body of knowledge and the many practical reform experiences that have unfolded in recent years, both in OECD countries and in emerging market countries. These show that while many technocratic solutions are available, implementation is not an easy task. Corporate governance reforms can be politically challenging. Entrenched groups may oppose reforms or find ways to resist them. And the wide range of political and institutional circumstances in different countries, as well as differences between sectors and types of SOEs, means that there can be no one-size-fits-all approach to reform.
BOX 1.3

**Summary of the OECD’s Guidelines on Corporate Governance of SOEs**

- **Ensuring an effective legal and regulatory framework for state-owned enterprises.** To avoid market distortions, the legal and regulatory framework for SOEs should ensure a level playing field in markets where SOEs and private sector companies compete. Such a framework implies clear separation between the state’s ownership function, simplified operational practices for SOEs, uniform application of general laws and regulations to all enterprises including SOEs, and no privileged access to SOEs for factors of production, including finance.

- **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 (for example, no involvement of government in the day-to-day management of SOEs; the state should let SOE boards exercise their responsibilities and respect their independence).

- **Equitable treatment of shareholders.** The state and SOEs should recognize the rights of all shareholders and ensure their equitable treatment and equal access to corporate information (for example, SOEs should be highly transparent with all shareholders, develop an active policy of communication and consultation with all shareholders, and protect the rights of minority shareholders).

- **Relations with stakeholders.** The state ownership policy should fully recognize the SOEs’ responsibilities toward stakeholders and request that they report on their relations with them (for example, large SOEs, and SOEs pursuing important public policy objectives, should report on stakeholder relations).

- **Transparency and disclosure.** SOEs should observe high standards of transparency such as developing consistent and aggregate reporting and an annual independent external audit based on international standards.

- **Responsibilities of SOE boards.** SOE boards should have the necessary authority, competencies, and objectivity to carry out their function of strategic guidance and monitoring of management. They should act with integrity and be held accountable for their actions (for example,

*box continues on next page*
For these reasons, successful reform implementation requires that close attention be paid to the local context and to the process of reform itself. Implementation of the corporate governance framework as a whole can be a daunting task for both governments and SOEs, especially in low-income settings where institutional and financial capacity are limited. Finding the right entry points for change and adopting a flexible, step-by-step approach for improving corporate governance will be required. The pace and sequencing of reforms will need to be calibrated to the economic, political, and institutional realities on the ground, as well as to the needs of individual enterprises. As the rest of the toolkit shows, reform is also a long-term process that requires constant attention to building political will, mobilizing public support, and strengthening implementation capacity.

Notes

1. Comparing the performance of state and nonstate enterprises is not straightforward, as the former often pursue a multiplicity of goals—including equity and service coverage—and not only profit maximization. Moreover, as noted in chapter 2, SOEs are often faced with disadvantages such as those related to labor market rigidities.

2. Early privatization efforts were concentrated in Latin America and the formerly centrally planned economies of Eastern and Central Europe. In Eastern and Central Europe, tens of thousands of small and medium enterprises were transferred to the private sector through voucher privatization.

3. A systematic inventory of SOEs worldwide by size, type, and economic weight is lacking. Many countries do not have centralized bodies that track SOEs as a whole or produce consolidated SOE reports. Where such data exist, they are often outdated or incomplete. These constraints are especially severe in low-income countries with little capacity to collect and analyze data.

4. The survey covers SOEs at the federal level, including publicly listed SOEs with majority or minority ownership, unlisted SOEs, statutory corporations, and quasi-corporations. Missing from the survey are such countries as Japan, Turkey, and the United States, which also have substantial SOE sectors.
References


CHAPTER 2

Legal and Regulatory Framework

A clearly defined legal and regulatory framework for state-owned enterprises (SOEs) is essential for communicating key expectations to SOE shareholders, boards, management, and all other stakeholders, including the general public. The underlying aim of such a framework is to make the broad policy directions of the state and the “rules of the game” clear for everyone. While no one-size-fits-all approach applies to all countries and contexts, the framework should set clear boundaries and define the relationship between the government as shareholder and SOE boards and management, separating legitimate government control and oversight for ensuring SOE accountability from the managerial autonomy necessary in commercial decision making.

This chapter describes various SOE legal forms and frameworks and the steps that governments are taking to improve and modernize their legal frameworks. It covers the following topics:

• Overview of SOE legal forms and frameworks
• Key issues in the legal framework
• Harmonization of SOE frameworks with private sector frameworks
• Development of a state ownership framework for SOEs.
Key Concepts and Definitions

The SOE sector in any given country can be broadly defined. It includes SOEs that are government owned or controlled and that generate the bulk of their revenues from selling goods and services on a commercial basis, even though they may be required to pursue specific policy goals or public service objectives at the same time. Such SOEs are the focus of this particular toolkit. SOEs are distinguished from public agencies, quasi-governmental organizations, or other parastatal organizations in the broader state enterprise sector that carry out public policy functions at arms’ length from government line departments and earn a significant share of their own revenues.

The definitional range with respect to SOEs is reflected in the three separate descriptions prepared by the Organisation for Economic Co-operation and Development (OECD), European Union (EU), and the Republic of Korea (see box 2.1).

BOX 2.1
Varied Definitions of SOEs and the Parastatal Sector

• The OECD’s Guidelines on Corporate Governance of State-Owned Enterprises. The guidelines focus on public entities that use “a distinct legal form (i.e. separate from the public administration) and [that have]... a commercial activity (i.e. with the bulk of their income coming from sales and fees), whether or not they pursue a policy objective as well. These SOEs may be in competitive or in non-competitive sectors of the economy. When necessary, the Guidelines distinguish between listed and non-listed SOEs, or between wholly, majority or minority owned SOEs since the corporate governance issues are somewhat different in each case.... [The guidelines] are also useful for non-commercial SOEs fulfilling essentially special public policy purposes, whether or not in corporate form....[The term SOEs refers]... to enterprises where the state has significant control, through full, majority or significant minority ownership” (OECD 2005).

• European Union. The EC directive No 80/723 defines a public enterprise (the term used is undertaking) as “any undertaking over which the public authorities may exercise directly or indirectly a dominant influence by virtue of their ownership of it, their financial participation therein, or the rules which govern it.” Under the landmark case of
Where SOEs are concerned, the legal framework varies greatly across jurisdictions, as well as within the same jurisdiction depending on the legal form of the enterprise. Some SOEs are established as statutory corporations with their own legislative act or other distinct legal foundation. Others may be noncorporatized entities in the form of SOEs or government departments, which usually fall under an SOE or public enterprise law. SOEs that are corporatized typically take the form of joint-stock companies or limited-liability companies and may fall under SOE law, company law, or, in some cases, both. These varying SOE legal forms and frameworks present a challenge but make it all the more important to establish a clear and suitable legal and regulatory framework for SOE governance.

The legal basis for corporate governance in most countries is found in company legislation, which in many countries applies to corporatized SOEs. Company law lays out basic shareholder rights and board and disclosure requirements, often supplemented by legal requirements for accounting and auditing and standards and professional rules for listing and other capital
market requirements. While many governance practices are mandatory under the law, in certain instances they may be contained in a nonbinding corporate governance code, where the company is simply required to explain the reasons for the lack of compliance with the recommendations in the code (“comply or explain”).

Unlike listed companies, which have shares listed on a stock exchange and are subject to the legal and regulatory structure of the capital markets, unlisted companies tend to have simpler ownership structures and stakeholder arrangements and therefore simpler corporate governance requirements. Banks and other financial institutions usually have additional (and somewhat different) legal and regulatory requirements beyond those for listed companies, such as those applying to risk management and internal controls.

**Overview of SOE Legal Forms and Frameworks**

As noted above, SOEs come in many different legal forms and typically reside at the intersection of public and private law, with significant variation between and within countries. SOE legal frameworks range from a full-fledged application of public law to a private law framework or a mixed approach that places some SOEs under public law, others under private corporate law, and still others under both. In a few cases, constitutional and supranational law may both apply (box 2.2).

In some cases, an individual SOE may be set up as a statutory corporation established by an act of parliament and governed by its own special statute that gives it financial independence or certain special powers (for example, authority to collect specific fees). Often such SOEs are legally assigned a specific policy goal or tasks other than profit maximization. Such SOEs are typically wholly state owned and operate in sectors where public authorities are most directly involved, such as the supply of public services or utilities.

More typically, SOEs are in the form of public enterprises that may or may not be corporatized. In addition to their enabling legislation or articles of association, such SOEs may operate under a general public enterprise or SOE law (box 2.3), or regulatory requirements may be scattered in various decrees and regulations without any overarching law. General SOE laws aim to bring uniformity to SOEs as a whole and have been developed for a variety of reasons, including to ensure that these enterprises carry out specific objectives or meet social considerations, to provide greater flexibility and managerial independence to SOEs, to reduce direct administrative management by the state, to fund the operations of the public services by fees directly collected
BOX 2.2
Application of Constitutional and Supranational Law

National constitutions influence the role of companies, including SOEs, throughout a country and may significantly affect the subsidiary legislation that constitutes the legal framework under which SOEs operate. For example, in South Africa the 1996 constitution (section 27) confers a constitutional right to water, heightening the responsibility of government to deliver a universal service that can be limited only for compelling or urgent reasons. The 1998 National Water Act creates a comprehensive legal framework for the management of water resources, which is the responsibility of the government (see Gowlan-Gualtieri 2007 for a fuller discussion). Similar provisions exist in the constitution of Uruguay (Article 47), which includes the right to potable water and sanitation. Examples of other countries with a constitutionally recognized right to water include Ecuador, Ethiopia, Gambia, Uganda, and Zambia.

Supranational rules are an additional factor affecting the legal treatment of SOEs. For example, EU treaty obligations have effected SOE governance through the application of competition law in EU member states, particularly in sectors traditionally dominated by national monopolies (Albert and Buisson 2002). The Treaty on the Functioning of the European Union declares that “Member States shall adjust any State monopolies of a commercial character so as to ensure that no discrimination regarding the conditions under which goods are procured and marketed exists between nationals of Member States” (Art. 37; §1). Under the weight of EU competition law, most French SOEs, for example, are now regulated by the general company law rather than as individual public law entities (Établissement Public Industriel et Commercial). Provisions of the Treaty on the Functioning of the European Union, and their interpretation by EU courts, have driven the transformation of the public sector in EU member states. For a number of countries outside the EU, multilateral trade liberalization has lessened the influence of the state in SOE operations, even in countries where the political culture is supportive of state intervention for economic development.
from users and not solely through taxes, to link staff and users more closely to the delivery of a public service, and to provide for the deduction of expenses and revenues when a service is performed directly by the state as a legal person. SOE laws typically define the legal structure of SOEs, their administration, and the role of governing bodies such as boards and general assemblies (specific regulatory provisions with respect to these areas are covered in greater detail in the subsequent chapters of the toolkit).

In many countries, incorporated SOEs in the form of joint-stock companies or limited-liability companies are regulated by normal company legislation. In addition to company legislation, they may also be regulated by their own enabling legislation, by a general SOE law, or by SOE ownership policies, guidelines, and codes of corporate governance. Box 2.4 provides examples of countries where SOEs operate under company legislation or under SOE legislation as well. Where SOEs are listed on the stock exchange, they are also subject to the listing requirements of the exchange and to other securities laws.

In addition to SOE laws and company legislation, SOEs are also often subject to many other public sector laws and regulations. While these vary

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**BOX 2.3**

**Countries with General Public Enterprise or SOE Laws**

Some countries have general SOE framework laws. While some laws cover all SOEs, others exclude large strategic SOEs such as utilities, natural resources, and defense, which may have their own separate laws:

- **The Arab Republic of Egypt**, where commercial SOEs fall under the Public Business Sector Law, and where under the law SOEs are also subject to the company law. Utilities and defense SOEs, however, have their own separate laws.

- **Korea**, where the government-owned companies and government-invested companies are all subject to the Act on the Management of Public Institutions.

- **Serbia**, where nonincorporated SOEs operate under the Law on Public Enterprises and where such SOEs are also subject to the company law.

- **Turkey**, where the bulk of national SOEs, including corporatized and noncorporatized SOEs, operate under Decree Law 233 on SOEs, while others have their own establishment acts or fall under the Privatization Law.
from one country to the next, and within countries by type of SOE, they often include public sector employment rules, investment and budgeting regulations, public sector procurement laws, public financial management laws, public sector audit requirements, and sector-specific laws and regulations.

**Key Issues in the SOE Legal Framework**

In many countries, public enterprise or SOE laws are outdated and came into effect at a time when SOEs operated as vertically integrated enterprises with very little competition in the market. Many such laws have overlapping
and sometimes contradictory provisions that lead to inconsistent and conflicting frameworks and undermine the accountability of the state, boards of directors, and management. While the original intent may have been to put SOEs on a commercial footing and foster greater enterprise autonomy, instead they have often had unintended consequences:

- They may give powers and responsibilities to government owners that weaken the board of directors, such as the responsibility for setting company strategy or appointing the chief executive.
- They may require SOEs to be profitable and at the same time to carry out social objectives without any provisions for financing the costs of meeting those objectives.
- They may impose restrictions that reduce the operational autonomy of SOEs in key areas, such as budgeting, investments, pricing, and human resources.
- They may limit the means for altering the capital structure of SOEs or call for lengthy approval processes for budgets and investments that delay decision making.
- They may contain weak corporate governance provisions in areas such as boards, preferred rights, and disclosure.
- They may not stipulate how the state should behave as an owner or as a shareholder: for example, how it should vote its shares; how it should appoint, recall, and remunerate boards and management; and how it should monitor the companies.
- They may override general company law.

Shortcomings also arise when SOEs operate under private company law, especially in the absence of a proper framework that governs the state’s role as owner and its relations with SOEs:

- In the absence of a clear framework for board nominations, SOE boards may be composed of members, including government officials and sometimes ministers, who lack the necessary qualifications, skills, and experience for the job.
- SOEs may be responsible for social and policy obligations but without specific identification and adequate compensation for the provision of such services.
- Without a properly defined monitoring system, unsupervised SOEs may incur significant debts and acquire noncore assets, creating a source of financial and fiscal risk.

For these reasons, many countries are revamping and modernizing their legal and regulatory framework to create a strong foundation for improving
SOE governance and performance. Experience from a number of countries highlights two important steps in that effort: harmonizing SOE frameworks with private sector frameworks and improving or developing a clearly defined state ownership framework.

**Harmonizing SOE Frameworks with Private Sector Frameworks**

More and more countries are treating commercial SOEs just like other companies and are taking steps to harmonize their corporate governance frameworks with modern governance rules applicable to private companies. Unlike private companies, however, many SOEs, especially those providing public services and supporting other public policy goals, have to balance commercial and noncommercial objectives. Such SOEs are often explicitly established to carry out public service obligations, even though they operate in competitive markets. For such SOEs, additional measures (as discussed in greater detail in chapter 5) are required as part of a state ownership framework to ensure that noncommercial obligations are properly identified, compensated, and carried out in a transparent manner.

Eliminating or reducing differences between the rules governing SOEs and other companies aims to give companies greater operational flexibility and insulate them from political interference; to subject SOEs to the same corporate governance discipline as private firms, such as in financial reporting and disclosure; and to commit SOEs to improving their governance. Another important objective is to ensure that SOEs operate on a level playing field with the private sector. Creating a level playing field means ensuring that SOEs have neither an advantage nor a disadvantage on account of their ownership compared to private companies in the same market. It also requires that the participation of SOEs in economic activities not distort competition in the market. In OECD countries, *competitive neutrality* is the term applied to subjecting SOEs to the same laws and regulations as private firms, which is a key characteristic of a level playing field. Another important aspect is financial and fiscal discipline, which is covered separately in chapter 5.

The objectives above have led a number of countries to put SOEs on the same legal footing as the private sector to make them more commercially oriented and competitive. Important steps in the process include applying company legislation to SOEs, ensuring equal application of broader laws and regulations to both state and private sectors, and subjecting SOEs to capital market laws by listing them on the stock exchange.
Application of Company Legislation to SOEs

In many countries, SOEs are already operating under normal company legislation, while others are increasingly moving in that direction. Applying normal company legislation to corporatized SOEs is a relatively easy step. But bringing noncorporatized SOEs under the company law first requires a process of corporatization. Corporatization is the act of reorganizing an SOE into a legal entity with corporate structures similar to other companies, including a board of directors, management, and shareholders. The main goal of corporatization is to allow the government to retain ownership but still enable it to run SOEs efficiently and on a more commercial basis like other companies.

Larger SOEs typically take the form of a joint-stock company, while smaller SOEs may be organized in the form of limited-liability companies. The process of transforming or corporatizing an SOE into a separate legal entity with a company form varies across countries and within countries by type of SOE, but a few guiding steps can be mentioned:

- Determine if separate legislation is needed to change the status or ownership of SOEs, especially in the case of those established by a specific law. Some SOEs may be subject to specific legislation that may require statutory reforms.
- Determine the company’s mission and mandate.
- Define the government shareholding clearly.
- Identify noncommercial objectives and determine how to handle them. In some cases, they have been abandoned, while in others they have been costed out and financed separately (chapter 5).
- Identify and value the company’s moveable and fixed assets.
- Prepare balance sheets to determine the equity value of the company.
- Establish the reporting relationship to the shareholder.
- Determine the corporate governance structures of the company.
- Carry out internal reorganization and restructuring as required.
- Transfer assets and employees.
- Register the company in the company registry.

The state can be the sole shareholder or the majority shareholder in corporatized companies. In such cases, it exercises control over the SOEs by appointing the board of directors, voting its shares, and monitoring and reporting on SOE performance. In companies where the state owns minority shares, the state may exercise control through shareholder agreements or special legal provisions such as a “golden share” (chapter 8 covers issues related to minority state ownership in greater detail). A golden share refers to a special provision by which the state maintains a veto over corporate
decisions by holding onto special rights, notably through preferred stock holding retained by the state after privatization. Golden shares, however, are declining in use. For example, they were deemed illegal by European Union courts in 2000 and reconfirmed several times since.

Corporatization and the accompanying change in legal status are intended to reduce government interference, clarify SOE goals, provide operational flexibility, and bring better and more flexible governance standards and practices to SOEs. The goal is to move SOEs toward greater profitability and efficiency:

- A study of 25 Canadian SOEs examined the impact of corporatization on performance, covering the period 1976 to 1999 when corporatization took place. Performance is measured through a multicriteria approach, including indicators of profitability (return on sales and return on assets) and productivity (sales per employee, earnings before interest and taxes per employee, and asset turnover). The results suggest that corporatization had a significantly positive impact on the financial performance of SOEs. These effects are often perceptible as early as four years after revision of the firm’s mandate, with difference in performance caused by a fundamental difference in the firms’ objectives. Large SOEs performed better as they are better positioned to realize economies of scale. The main caveat involves the status of the SOEs, as they are often in monopolistic or oligopolistic sectors, which may make them profitable despite their special set of objectives and make comparisons with private firms difficult (Bozec and Breton 2003).

- A study using survey data from 442 Chinese SOEs over the period 1990–99 shows that corporatized SOEs performed better than noncorporatized SOEs in the sample (Aivazian, Ge, and Qui 2005). Improvements in profitability and efficiency are attributed to better monitoring of managers, better information-sharing channels, and less government interference. Unlike noncorporatized SOEs, corporatized firms set up a board of directors and chief executive officer (CEO) per the Corporate Law, as well as independent legal, financial, and marketing departments. The study also found that the influence of the Communist Party in selecting managers is weaker in corporatized firms than in noncorporatized firms (although the study shows that in most cases it was the government that issued the appointment letter, not the board as good practice dictates). It also found that corporatization did not fully instill financial discipline, with corporatized firms borrowing from state banks more than noncorporatized firms, and that there is significant room to reduce infringement on managerial autonomy even further.
However, experience also shows that corporatizing SOEs and bringing them under company law may achieve little in the absence of parallel corporate governance reforms as covered in the rest of this toolkit. For example, corporatization by itself may not eliminate SOEs’ protection from competition or subsidies. Board appointments may not be merit based. SOE managers may be government officials with salaries and job security on par with the public sector. And SOE performance may not be properly monitored. To achieve maximum results, the change of an SOE from a public entity to a corporate form must therefore be accompanied by the other reforms, as discussed in the rest of this toolkit.

**Equal Application of Other Laws and Regulations**

Equal application of broader laws and regulations helps create a level playing field and achieve competitive neutrality between state and nonstate companies so that “no business entity is advantaged (or disadvantaged) solely because of its ownership” [emphasis in the original] (Capobianco and Christiansen 2011, 3). It also aims to ensure that the participation of SOEs in all kinds of economic activities does not distort competition in the market.

When SOEs compete with private firms in markets for goods and services, the application of all laws and regulations equally to SOEs and the private sector becomes important for leveling the playing field. Yet, SOEs are often exempt from certain laws, such as competition and bankruptcy laws, and that exemption creates market distortions and reduces management accountability. At the same time, the imposition of other public sector laws and regulations on SOEs, such as human resource regulations and procurement regulations, can undermine their ability to compete. Apart from legal and regulatory barriers, an uneven playing field can also arise from financial and fiscal policies that give SOEs access to so-called soft budget constraints or require them to carry out public service obligations without adequate compensation (covered in chapter 5).

**Competition Law.** With the dismantling of monopolies, SOEs frequently compete with private firms in markets of goods and services, and this requires the application of competition law to offset the advantages that SOEs may enjoy:

- Outright subsidization, in the form of favorable tax regimes or exemptions (such as from customs duties, social security payments, or environmental standards) or in-kind benefits such as land-use rights and rights of
way at below-market prices, along with concessionary financing and guarantees—that is, situations in which SOEs enjoy borrowing directly from the government or from state-owned or state-controlled financial institutions at below-market interest rates.

- Preferential treatment by the state, in the form of loose regulatory regimes containing exemptions from antitrust regulations, building permits, or zoning regulations; favorable tax treatment; more lax corporate governance requirements than private firms; and preferences to SOEs in public procurement.

- Monopolies and advantages of incumbency (for example, in postal services, utilities, and the like).

- Captive equity, resulting from the nontransferability of SOEs’ equity, which implies that SOEs are relatively impervious to the forces of capital markets, which could lead to hostile takeovers, for instance. If SOEs are less constrained to generate dividends, they can more easily engage in exclusionary pricing strategies.

To offset these advantages, effective neutrality may be achieved through different regulatory pathways. For example, within the EU, competition law includes antimonopoly rules and limitations on state aid (which restrict injections of capital and grants), tax holidays, and reductions in social security costs and warranties. Under Article 87 of the EU Treaty, “Any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, insofar as it affects trade between Member States, be incompatible with the common market.” The EU Treaty also gives enforcement powers to the European Commission, which can require member states to apply competition rules to SOEs and even take measures directed at the SOEs that infringe these rules. Another implication of extending competition rules to SOEs is that these enterprises are then subject to sectoral regulators (for example, banking, insurance, electricity, telecommunications, and the like), which impose fair treatment of all competitors.4

Australia has adopted a policy not based strictly on competition law but on competitive neutrality guidelines backed by complaint units established within the Treasury, the National Competition Council, and the Independent Productivity Commission. The policy requires companies subject to competitive neutrality to have cost structures based on tax neutrality, debt neutrality, regulatory neutrality, rate of return, and costing of shared resources. Other legal tools frequently employed to promote competitive neutrality include merger control rules that carefully
scrutinize transactions involving foreign government–controlled entities. If a merger or acquisition is likely to produce a detrimental effect on consumers (higher prices, lower quality, or less choice) or to increase market concentration in a way that could permit price-fixing agreements among market participants, the competition authorities can block the transaction unless the parties offer sufficient safeguards and remedies such as divestiture commitments or a grant of access to key infrastructure or network technologies and the like.\(^5\)

**Bankruptcy Law.** Many SOE laws contain no provisions for bankruptcy or may exempt SOEs from general insolvency rules, giving them an advantage over private companies. Although in more and more countries, particularly in the OECD, SOEs are subject to insolvency laws, they may still remain subject to special laws (as in Poland). Alternatively, they may not be subject to the application of insolvency and bankruptcy procedures but have specific systems in place for the protection from creditors of the SOE assets used to further public service (as in Belgium and Turkey). The international standard on insolvency, embodied in the World Bank Principles for Effective Insolvency and Creditor/Debtor Regimes, recommends that state-owned enterprises be subject to general insolvency law.\(^6\) It also recommends that exceptions to this general rule be clearly stated in legislation.

**Labor Law.** SOEs fall under a wide variety of labor regulation, from the full application of the civil service regime to the application of private sector labor law. Hybrid regimes combine aspects of both. With corporatization, SOE labor legislation often becomes aligned with the general labor law regime, but many results are possible, as the example of France shows (box 2.5).

In general, however, SOEs face a number of labor restrictions that reduce their operational autonomy and disadvantage them vis-à-vis the private sector. In many if not most countries, SOEs’ limited flexibility to hire employees or to pay market salaries restricts their ability to attract and retain talent, especially for board membership and senior management positions. In addition, SOE employees are often protected from dismissal to a greater degree than their private sector counterparts. This often leads to overstaffing and reduced labor productivity.

Some countries apply private labor laws to SOEs to enable them to attract and retain higher-level technical and managerial positions, particularly where government pay scales for those positions are considerably lower.
than the private sector. Accurate comparisons between SOEs and private companies need to consider full compensation packages to determine the competitiveness of SOE pay structures, especially since the private sector typically provides fewer benefits and nonwage rewards such as greater job security and more generous retirement benefits.

BOX 2.5
Employee Outcomes during Corporatization in France

During the corporatization process in France, four different outcomes took place for SOE employees:

- The legal instrument organizing the transformation of the SOE may provide a transition period during which the employees may decide to accept the employment contract proposed by the new entity (regulated by general private labor law) or keep certain rights derived from their original status. All new hires are subject to the general private labor law (for example, corporatization of the Groupement Industriel des Armées Terrestres in 1989).
- If a new entity is created, the usual outcome is the immediate application of the general private labor law to all employees (for example, when the French Atomic Energy Commission was broken up to separate the regulatory and production activities, a new national company, Compagnie générale des matières nucléaires, was created).
- The contracts of workers subject to public law may be assigned without modification to the new entity, and the workers must accept those terms (such as those affecting salaries, leaves of absence, rights to retirement, work weeks, and the like). If the employee refuses the assignment, termination of the employment relationship is regulated by public law.
- When employees are civil servants at the time of the corporatization, the transferred employees may remain under the same regime until they retire (as when France Telecom was privatized). In the case of France Telecom, a law was adopted by Parliament in 2003 allowing the 104,000 civil servants still working at France Telecom at that time to retain civil servant status in the company until their retirement.

Others are moving toward a more neutral position on dismissal rules. In Brazil, for example, the Supreme Court ruled that SOE employees are not protected by civil service labor rules and could therefore be laid off; only those hired prior to 1988 were grandfathered in and are thus protected from layoffs (Cordeiro 2007). Staffing may need to be reduced as part of broader reform programs aimed at improving performance; but SOE layoffs may be difficult in practice even when permitted by the legal framework. The World Bank’s *Labor Issues in Infrastructure Reform Toolkit* (World Bank 2004) sets forth a menu of approaches and options that can be used for SOE labor restructuring.

The process of aligning public with private sector labor law is not without tensions and trade-offs, however. A gradual process may be warranted. New Zealand Rail provides one example where, through a number of stages, employment practices were progressively brought into line with private sector norms (see box 2.6).

**BOX 2.6**

**New Zealand Rail: From Civil Servants to Private Employees**

The status of workers in the New Zealand rail sector has changed several times. In 1982, New Zealand Rail was converted from a departmental enterprise in which workers had civil servant status to a statutory corporation (New Zealand Rail Corporation, or NZRC) in which workers were public servants. In 1990, the entity converted from a statutory corporation to a public limited-liability company; staff continued to be public servants. Finally, in 1993, shares of New Zealand Rail Ltd. were sold to private interests. The employees’ status then changed from public sector employee to private sector employee. There were also changes in the labor contracts. Until 1986, employees of NZRC served under the central civil service conditions of employment. In 1987, NZRC came under the legislation applicable to SOEs, which made NZRC independently responsible for bargaining over its own labor relations contract. Several key changes followed:

- Simplification of the collective labor–government agreement and removal of artificial distinctions among job categories.
- Removal of the state service seniority and appeals system for the appointments and promotions process.
Procurement Law. SOEs in many countries are bound by public procurement laws to guard against corruption and misuse of public funds. Such rules can be cumbersome and pose a constraint on the ability of SOEs to operate and invest in a timely manner to meet the competition. Complex, time-consuming procedures that are not commercially oriented can have a significant negative impact, especially when SOEs are purchasing commodities from world markets where speed and flexibility are paramount. In recognition of these factors, and with increasing competition between SOEs and the private sector, the European Union is drafting new procurement rules for transport, energy, water, and postal sectors where SOEs are prevalent. During the preparation of this toolkit, these rules were not yet finalized. Short of reforming public sector procurement laws more broadly, some countries such as Turkey exempt SOEs from the procurement law for purchases below a certain threshold, although such thresholds are so low that they cover only a fraction of total SOE procurement.

When institutions are weak and monitoring is lax, SOE procurement provides scope for corruption. Thus, a careful assessment of the procurement

BOX 2.6 continued

- Removal of senior management from the collective bargaining agreements to individual contracts with incentive-based performance measures.
- Simplification of the allowance structure and an increase in the base pay to absorb some of the allowances as well as the introduction of incentive-based compensation to most of the white-collar employees.

Nevertheless, the contract still retained many aspects of the state sector model in respect to work hours, overtime payments, and penalty payments. Following privatization in 1993, however, a privately owned company was able to make further changes to the labor contract: (1) more flexible work hours, including overtime after 80 hours each fortnight instead of after eight hours per day, were instituted; (2) fewer penalties on work outside the conventional eight-hour day, Monday to Friday, were imposed; (3) a change from one collective contract to five contracts was accomplished; and (4) no weekend or night work penalty payments for new employees were permitted.

A lump-sum payment was also made to those workers who lost out from the changes to the overtime, penalty, and allowance payments.

regulations and practices of SOEs should be carried out since any inefficiencies will directly affect their governance arrangements and their ability to procure in an efficient, timely, and transparent manner. The weaknesses can then be addressed either through SOE laws, through separate procurement laws for SOEs, or through improvements in the existing procurement law.

At the same time, states may also favor SOEs in procurement contracts, creating a different kind of market distortion in countries where public procurement accounts for a significant fraction of economic activity. Notwithstanding the care exercised by many public authorities in designing competitive tenders that try to prevent public sector entities from benefiting from advantages in the bidding process, distortions frequently arise in both design and implementation.⁸

Some countries, such as the United Kingdom, have specifically addressed competitive neutrality in procurement contracts through a set of principles of competition put together after consultation with stakeholders (box 2.7). As many possible adverse effects are possible—both advantaging

### BOX 2.7
**The United Kingdom’s Principles of Competitive Neutrality in Procurement Processes for Custodial Services**

The Ministry of Justice has separated its regulatory, commissioning, procurement, and bidding functions into different departments to try to avoid any conflicts of interest that arise when assessing public, private, and third-sector bids. The ministry also aims to provide all relevant information in a timely manner to try and reduce any incumbency advantages. The principles focus on five areas:

- **Costing.** A formula is given that must be applied to all public sector bids to reflect the allocation of indirect costs. Transition, contract administration, and monitoring costs will not be allocated to any bid unless they are additional costs arising out of a particularly novel approach in one bid.

- **Grant funding.** All bidders must declare any grant funding, including any received by subcontractors. Bidders must attest that no grant will be used to subsidize their bid, including the indirect costs.

- **Pensions.** Information is given about the Cabinet Office’s Statement of Practice on Staff Transfers in the Public Sector. It addresses pensions
and provides guidance on the broader issue of the treatment of staff who are transferred from the public sector. When there is a public sector incumbent, all public sector bids must apply an uplift of 3 percent per year to all payroll costs.

- **Risk.** A list of risks considered insurable is given, and the principles require that each bid include a limit of liability for each of the listed risks irrespective of bidder type. Any public sector bidder is required to obtain a quotation for commercial insurance coverage. Bidders must identify all other risks contingent on the contract and clearly attribute their true commercial value. These risks include contractor performance, asset and property maintenance risks, and pension costs and liabilities. If a part of the service does not meet the service level stated in the contracts, the contractor incurs a penalty; while a public sector bidder may not ultimately be subject to such financial deductions, its bid shall be evaluated as if these deductions were to apply.

- **Tax.** Special mention is made of the value-added tax, the corporation tax, and the different liabilities faced by different bidders. The evaluation of bids excludes both types of taxes, although bidders are required to provide details of expected liabilities for both.

*Source: BIAC 2011.*

and disadvantaging SOEs—public authorities should reflect on what competitive neutrality means in relation to procurement.* Recent efforts have been made to analyze the problems resulting from private and public incumbency advantages in procurement and to identify the characteristics that a competitively neutral procurement policy should have.*

**Listing of SOEs on the Stock Exchange**

Many countries are subjecting large SOEs to capital market discipline by listing shares of corporatized SOEs on the stock markets and applying the more stringent governance requirements under securities laws. Such laws contain stronger requirements for independent directors on the board, treat minority shareholders fairly, and mandate comprehensive and timely financial and nonfinancial reporting. Listing also exposes SOEs to capital market scrutiny, through oversight of expert analysts, rating agencies, and the financial media.
Major emerging market countries such as Brazil, China, India, Indonesia, Malaysia, and the Russian Federation have listed large SOEs on both domestic and international capital markets. Large SOEs have also been listed on stock exchanges in such diverse countries as Colombia, Kenya, Pakistan, Peru, South Africa, and Vietnam. Indeed, several successful listed SOEs are recognized as world leaders, such as Petrobras, Ecopetrol, Sabesp, and ISAGEN in Latin America.

Listing large SOEs on the stock exchange gives SOEs access to alternative sources of financing and provides greater flexibility for adjusting their capital structure, while contributing to the development of the capital markets. Listing also exposes SOEs to market dynamics and provides a measure of market valuation of net worth. It is also a powerful starting point for strengthening SOE commitment to corporate governance, as the case of Petrobras shows (box 2.8).

Listed SOEs come under the same regulation and scrutiny as other listed companies, including the oversight of the securities regulator, the stock exchange, and, for financial institutions, the central bank or

**BOX 2.8**

**The Listing of Petrobras on the Brazilian Stock Exchange**

Petrobras is one of the world’s major oil companies and is currently listed on Brazil’s largest stock exchange. In 2010, Petrobras was transformed from a purely state-owned company into a mixed company, through a process of share democratization that represents even today one of the largest capital-increase transactions in the history of capital markets.

The process provided an increase in the market value of the company and an opportunity for the company to access the necessary resources to support its growth strategy. Stock exchange listing also allowed to limit the risks associated with the participation of the state as the sole proprietor through strengthening its corporate governance.

When the state was the sole owner, the company faced the risk of political influence, of vulnerability to hijacking by interest groups, and of an absence of commitment by the board and management. The numerous new shareholders of the company now act as pressure groups that promote and supervise the performance of the company.
supervisory authority. Exercising regulatory oversight over very large and prominent SOEs can be difficult, however, and requires support and capacity from the relevant parts of the government. Through a stock listing, minority shareholders may also apply pressure and monitor the firm in ways that complement monitoring by lenders.

**Developing a State Ownership Framework for SOEs**

In many, if not most, countries, the basic objectives of state ownership are found in SOE laws and regulations that define the legal structure of SOEs; their administration, control, and regulation; and the role of governing bodies such as boards and general assemblies. Together, these laws and documents establish the overall legal and regulatory framework for SOEs.

But the *ownership* policies of the state—that is, the policy direction for SOEs, the institutional arrangements for exercising the state’s ownership rights, and governance practices of SOEs—are often scattered among a variety of documents. In addition to SOE laws and regulations, these may include the founding documents of SOEs or articles of association as well as formal and informal policies and guidelines. This dispersion can lead to unclear objectives; confusion about the roles and responsibilities of SOE shareholders, boards, and management; and inconsistencies in implementation of ownership policies across the SOE sector. It can also make it more difficult to identify policy gaps—gaps that would be more apparent in a single reference document.

Source: Bernal et al. 2012.
Many countries are establishing new and improved rules to bring greater clarity and consistency to ownership issues. They are doing so through the development of different and sometimes overlapping instruments, including ownership laws and regulations, ownership policies, and codes of corporate governance.

**Ownership Laws and Regulations**

A number of countries have revised their existing SOE laws or have developed new, more modern laws and regulations to provide strength and legitimacy to the government shareholder; to codify relations among the shareholder, board, and management; and to outline reporting functions (box 2.9 provides some recent examples).

Demand for better performance in the SOE sector has provided the impetus for adopting more modern legislation. Such laws generally aim to:

- **Finland.** In 2007, Finland replaced an older law from 1991 and passed the Act on the Management of State Capital, which was instrumental in separating the state's ownership function from its regulatory functions, clarifying decision-making authorities, and setting legal standards on corporate governance and management of state holdings. In addition, the most important document for the daily operations of the SOEs is the state's ownership policy that was issued in the same year.
- **Hungary.** In Hungary, the State Asset Law issued in 2007 specifies the rights of the state as owner, the management and use of state assets, and the structure and conditions for the consolidation of organizations managing state assets.
- **Philippines.** In 2010, the Philippines passed the Government-Owned and Controlled Corporation Governance Act. The act aims to rationalize the structure, existence, and operations of these corporations and is designed to reform the government corporate sector, improve the corporate governance of government-owned and -controlled corporations, and ensure efficient and effective delivery of public services.

*Source: World Bank staff.*

**BOX 2.9**

**Examples of Countries with Modernized State Ownership Laws**

- **Finland.** In 2007, Finland replaced an older law from 1991 and passed the Act on the Management of State Capital, which was instrumental in separating the state’s ownership function from its regulatory functions, clarifying decision-making authorities, and setting legal standards on corporate governance and management of state holdings. In addition, the most important document for the daily operations of the SOEs is the state’s ownership policy that was issued in the same year.
- **Hungary.** In Hungary, the State Asset Law issued in 2007 specifies the rights of the state as owner, the management and use of state assets, and the structure and conditions for the consolidation of organizations managing state assets.
- **Philippines.** In 2010, the Philippines passed the Government-Owned and Controlled Corporation Governance Act. The act aims to rationalize the structure, existence, and operations of these corporations and is designed to reform the government corporate sector, improve the corporate governance of government-owned and -controlled corporations, and ensure efficient and effective delivery of public services.

*Source: World Bank staff.*
to recast the state’s role as owner rather than as policy maker and manager of state assets and are typically based on several key principles: operation of SOEs on a commercial basis; separation of the state’s ownership functions from its policy-making and regulatory functions to avoid conflicts of interest, real or perceived; professionalization of corporate governance bodies; and greater transparency and accountability of the SOE sector.

The details of more modern SOE laws differ from one country to the next, but in general they contain several common elements:

- Designation of the state’s shareholder representative or ownership entity, including its structure, composition, functions, and accountability framework (covered in chapter 3).
- Broad outlines of a performance-monitoring system to hold SOEs accountable for results (chapter 4).
- Clarification of SOE objectives and, in some cases, the identification and separation of the costs and financing of specific public service obligations or noncommercial goals (chapter 5).
- Establishment of criteria and processes for the appointment of qualified and competent SOE boards, as well as processes for dismissal of board members and for identification of the rights and responsibilities of the board of directors and the management in guiding and managing SOE operations (chapter 6).
- Financial reporting and disclosure requirements for SOEs, which are often in line with private sector practices (chapter 7).

Development of better or new SOE laws and regulations provide the needed weight and legitimacy for improving SOE governance. But passing such laws may not be easy. It requires strong political support and broad consultation with stakeholders to build consensus and buy-in for reforms. A recent example is the 2010 Government-Owned and Controlled Corporation Governance Act in the Philippines. The key features of the act and its development are summarized in box 2.10.

Where the passage of a law is not feasible, new decrees or regulations can be issued to improve SOE governance. Romania and Tunisia provide two examples:

- In 2011, Romania passed an emergency ordinance for improving the process of appointing SOE boards and management. While the new law does not separate ownership from policy making and regulation, it defines in broad terms how ministries should act as owners and focuses on the requirements for the appointment of SOE boards and management.
The Philippines Government-Owned and Controlled Corporation Governance Act was passed in 2010 to institutionalize reforms in the public corporate sector. The urgency in reforming the sector came about because the total expenditures of government-owned and -controlled corporations (GOCCs) reached the equivalent of 28 percent of the total expenditures of the national government in 2009 and GOCCs accounted for 91 percent of total interagency receivables of the national government. Previous attempts to monitor and coordinate the activities and functions of the GOCCs were carried out through executive issuances that changed along with changes in government. The act aimed to ensure long-term reforms in the public corporate sector.

The act creates a full-time centralized oversight body called the GOCC Commission on Governance (GCG) to formulate, implement, and coordinate GOCC policies. The GCG is headed by a chairman with the rank of cabinet secretary and is authorized to evaluate the performance of GOCCs and ascertain whether they should be reorganized, merged, privatized, or abolished. It is tasked with creating an ownership and operations manual and corporate governance standards for GOCCs that are comparable to those required for banks and for companies listed on the stock exchange and with establishing an objective performance evaluation system and assessing performance periodically.

The act addresses the selection process for GOCC boards of directors, mandating the president to select directors from a shortlist of candidates prepared by the GCG based on fit and proper criteria adopted by the private sector. It empowers the GCG to set compensation, per diems, allowances, and incentives for board members. The law provides a clear definition of the fiduciary duty of board members and executives and requires them to act in the best of interest of the GOCCs. All GOCCs are required to maintain a publicly accessible website with their latest financial statements, corporate operating budgets, and summary of borrowings and other relevant information.
It also covers performance management, transparency and disclosure, and relationships with nonstate shareholders.

- In Tunisia, a new decree for amending the governance of state-owned banks has been recently issued (box 2.11). With this decree, banks can begin to apply new governance practices. The decree should also aid in speeding up the restructuring of state banks.

In addition to reforming general SOE frameworks, countries are also reforming company-specific laws with a view toward modernizing their corporate governance practices. One such example is Chile's state mining company, Codelco (box 2.12).

As discussed below, SOE laws and regulations are sometimes supplemented by ownership policies and SOE corporate governance codes. While they do not carry the same weight and legitimacy as laws and regulations, such policies and codes can be an alternative means for articulating and promoting good corporate governance practices where development of laws and regulations is not feasible.

Ownership Policies

To bring greater clarity and consistency to ownership issues, some countries have developed comprehensive ownership policies as a tool for communicating expectations and good practices to shareholders, boards, and
BOX 2.11

Decree for Improving the Governance of State-Owned Banks in Tunisia

The three state-owned banks in Tunisia suffer from an unfavorable strategic positioning and a weak operating environment. For several years, public banks have been following unsustainable strategic directions. Leveraged to serve economic development policies (agriculture, housing, hotels) and also sometimes used for easy access to finance for cronies of the prerevolutionary regime, the public banks must at the same time meet profitability targets (as listed companies), be financially sound (to guarantee the safety of their depositors), and be in compliance with the prudential norms of the central bank. In addition, as public entities, these banks are subject to Law 89-9 on State Owned Enterprises, which imposes on them significant bureaucratic constraints, notably on procurement and staffing.

The ownership function is absent from the banks, as in other state-owned enterprises in Tunisia. The role of any majority shareholder is to influence the running of a company based on a strategic plan and key performance indicators (financial and, in the case of public companies, social and economic). The legal and regulatory framework for SOEs does not contradict these principles; however, neither of the two criteria mentioned above is applied in practice in Tunisia. The contrat programme, which is the counterpart of the strategic plan in the private sector, is not implemented in public banks, while performance indicators appear very limited. In contrast, the presence of the state is particularly strong in the administrative control of its banks as in the rest of the SOEs.

The degree of professionalism of the banks’ boards of directors is insufficient: the boards lack seasoned experts in the relevant areas (banking, finance, audit, accounting, and information technology) and autonomy, given that the vast majority of the decisions taken by the board are valid and enforceable only after approval of the minister of finance.

All these constraints are directly and indirectly responsible for most of the financial difficulties the banks currently face:

• *Insufficient capital base.* Solvency ratios remain positive to the extent that the central bank has kept lax the prudential rules on classification of nonperforming loans and provisioning ratios. Public banks have
greatly benefited from these rules and have avoided the materialization of financial losses.

- **Degradation of the loan portfolio quality.** Alongside the gradual tightening of prudential norms by the central bank, it is expected that nonperforming loans, which are already nearly twice as high as among private banks (18 percent against 10 percent), will continue to grow rapidly, resulting in new provisioning (and therefore deeper financial difficulties) and a decrease in cash flow (and therefore additional pressure on liquidity).

- **Regular loss of their market share vis-à-vis private banks.** This share has decreased from 42 percent in 2007 to 36 percent today (despite the increased funding of public enterprises by public banks since the revolution). It is expected that, other things being equal, the loss of market share will continue at a rate of 1–1.5 percent per year.

Improving the governance of SOEs is the urgent initial step in addressing these issues, as a radical change in governance must accompany the recapitalization of the banks. Indeed, in the short term, a new governance framework is necessary for improving management practices and reducing financial losses, as well as for ensuring better implementation of the restructuring plan to be decided by the Ministry of Finance. In the absence of governance reform, the state would likely need to make new and larger recapitalizations in the future.

In view of the urgency, the minister of finance issued a decree in December 2013, which does three things: it excludes banks from most of the administrative burdens imposed by Law 89-9 (for example, human resources policies and procurement rules); it delineates clearly the division of responsibilities among the banks’ management, board of directors, and the state as shareholder; and it establishes a transparent and competitive process for the hiring of future board members. This measure is expected to improve banking sector competition and access to finance in the long run. In the medium term, it will stop further deterioration of the banks’ financial soundness and facilitate the implementation of restructuring.

*Source: World Bank staff.*
Chile has been making corporate governance improvements in its SOE sector, including in one of its most important companies, Codelco. Founded in 1976 after the merger of major copper mines in Chile and a government takeover of its administration, Codelco has become one of the largest mining companies in the world.

In 2010, the Chilean government enacted Law 20.392, which introduced important changes to Codelco’s corporate governance. The new corporate governance law established, among other things, a professional board of directors without the presence of the ministers of mining and finance and representatives from the armed forces. It also established rules on the rights, obligations, responsibilities, and prohibitions as set forth in the corporations law, which governs private companies.

These efforts had several specific aims: to make Codelco more a state company than a government entity; to break the dynamics of political business cycles; to establish a board without public officials; to establish requirements for the selection of board members; to secure a long-term decision-making structure; to establish adequate mechanisms for the capitalization and funding of projects; and to strengthen the financial reporting and transparency of the company.

After implementation of the law, a number of changes to the Codelco board took place. The board went from seven to nine directors. Before the law, the board consisted of the minister of mining (who served as chairman), the minister of finance, two presidential representatives, one armed forces representative, and two union representatives. Today, the board is composed of four directors appointed by the Public Management Council, three presidential representatives, and two union representatives. Board terms have gone from the “presidential term” to four years. Before reform, the board had established general policies, approved investments over US$50 million, had no liability (civil or criminal), and was not regulated by corporate law; after reform, it adheres to good practices, including designating and appointing the CEO; it has approval authority over the company’s strategic plan; it has both civil and criminal liability for its decisions; and it is governed by corporate law.

The new corporate governance law resulted in a new, independent, and technical nominating process for the selection of the CEO; a new
management. Less common than corporate governance codes, ownership policies are found in a few countries that have a centralized ownership entity charged with SOE oversight and able to drive the process. Table 2.1 provides some examples of countries that have developed ownership policies. In some countries, such as Finland, ownership policies have been developed to supplement SOE laws.

Ownership policies usually cover several relevant subjects:

- **Purpose of state ownership.** This section may describe the justification for state ownership and both short-term and longer-term goals. Common justifications include addressing social problems, promoting social goals, correcting market dysfunctions, encouraging development where the private sector is absent, and economic diversification. Justifications express desired outcomes and indicate which enterprises should be state owned.

- **Types of enterprises covered by the ownership policy.** Enterprises are usually categorized into two broad groups: commercial enterprises providing a product or service, that is, enterprises that could be subject to competition and could operate under private ownership; and enterprises with sectoral policy objectives that operate in a regulated environment (such as water and electricity). These categories are often revisited periodically to determine whether ownership criteria continue to be met and to adjust portfolio practices accordingly.

- **Criteria under which SOEs operate.** These criteria might address the commercial sustainability of SOEs; the importance of shareholder code of corporate governance and a code of ethics; a renewal process for the senior management team; clear definition of the strategy and long-term development plan; corporate restructuring and strengthening of environmental and social responsibility; market alignment of executive salaries; a 10 percent workforce reduction; and a capitalization process of US$376 million (20 percent of net income). These factors have had a positive impact on Codelco by making it a more competitive and efficient enterprise and have promoted value creation and long-term growth. The improvement in its corporate governance required active state involvement, which allowed for the implementation of a new legal framework aligned with good practices.

*Source: Bernal et al. 2012.*
value, or equity value, relative to social objectives; associated performance measures; and the calculation of (and compensation for) costs of noncommercial objectives. SOEs are usually expected to operate on a commercial basis and to be capable of generating enough cash and profit to replace spent assets and maintain the company’s equity value.

- **Roles and responsibilities of specific institutions.** The respective roles of the state, the ownership entity, the SOE board, SOE management, and independent regulators should all be specified, as well as the separation of financial and policy oversight. Clear definition of roles is a key part of the ownership policy. Management is responsible and accountable for operations. The board is responsible for the strategic direction of the SOE and, ultimately, for performance. The state is responsible for establishing the broad outcomes expected of the SOE and negotiating these with the board. Within government, departments that set policy objectives are usually separated from those that oversee financial performance. Where a centralized ownership entity exists, its role as a source of professional governance practices is described.

- **Requirements for transparency and public disclosure.** Both the state and SOEs are held accountable for their financial and social performance. Financial reporting requirements are established. Public disclosure covers both financial and nonfinancial information and describes the means of dissemination (including the Internet).

Norway, with a significant SOE sector and commitment to longer-term state ownership, has a detailed ownership policy that aims to insulate SOE operations from unwarranted government interference in operations, while at the same time ensuring that fundamental government objectives are met (box 2.13). Norway’s policy focuses, in particular, on the following elements:
• **Role separation.** The functions of the state, the board of directors, and management are distinguished.

• **Autonomy in operation.** Government is removed from operational decision making. SOE (political) direction control can be exercised only through official channels.

• **Fiduciary duty.** Decisions by boards and management executives must be made consistent with the common legal obligation of board members to exercise a duty of loyalty to the company.

• **Role conflict.** Important guidance is provided to boards in cases where an SOE’s commercial and noncommercial objectives conflict.

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**BOX 2.13**

**Summary of Norway’s Ownership Policy**

Norway’s ownership policy contains the following sections:

- **Foreword by the minister.** The foreword discusses the role of state ownership, sets out general principles of governance, establishes certain social goals, mentions prior studies, and underscores the importance of transparency and competent boards.

- **Scope of the state’s direct ownership.** The scope of the state’s direct ownership includes the list of companies covered by the ownership policy, the state’s shareholding in the companies, and the ministry with which companies are affiliated. The ownership policy covers companies for which the state has mainly commercial objectives and important companies with sectoral policy objectives.

- **The government’s objectives for state ownership.** The objectives cite the relevant SOEs, note that the ownership policy is based on a broad political consensus, and identify as key goals the continued presence of important companies in Norway as well as state ownership and control of revenues from natural resources. Other social objectives relate to infrastructure, culture, equality, and health issues.

- **Requirements of the companies.** The requirements cover the need for a positive return to shareholders, a positive rate of return for commercial SOEs, and efficient operation of social SOEs. They also cover the need for a rational, predictable, and flexible dividend policy; the role of share repurchases; and SOE reporting requirements in line with those for the private sector.

*(box continues on next page)*
• **The state’s expectations of the companies.** This includes the government’s expectations of sector-independent considerations that companies must take into account, social responsibility considerations, and the objectives for the ownership of individual companies.

• **The government’s policy on the remuneration of leading personnel.** Remuneration must be competitive but not market leading, with opportunity for capped incentive compensation but no stock options. Responsibility for approval of compensation plans lies with the boards and shareholders.

• **The division of roles in the state administration.** The roles of the state as policy maker and regulator are separate from its role as owner. The role of central ownership entity as well as line ministries and other government bodies is described.

• **The framework for the state’s administration of its ownership.** The framework describes the legal structure of SOEs as corporations, the applicability of normal company law including stock exchange requirements, and laws relating to state subsidies. The legal framework, executive and ministerial authorities, control of wholly owned as compared to mixed enterprises, voting thresholds, and equal access to information and insider trading are also covered, along with subsidies, freedom of information, principles of good governance and financial management, and the need for transparency of ownership.

• **The relationship between the board of directors, the management, and the shareholders.** The relationship of the state to the SOE is equivalent to that of an outside shareholder, responsibility for management of the company resides with the board and the executives, and ministerial decision making on operations is prohibited—even for unusual or controversial issues. Board and executive decision making must be based on the SOE’s interest, with the board and executive liable for proper management and defense of SOE interests. Boards nominate CEOs. The state exercises its authority through the annual shareholders’ meeting and the nomination committee, with nominations based on competence and a prohibition on ministers and civil servants serving as board members. The terms and remuneration for board members are specified. Performance-based pay, which is thought to compromise independence, is ruled out.

*Source: Ministry of Trade and Industry 2008.*
• **Noncommercial objectives.** Noncommercial goals to be achieved through state ownership are specified in writing—mainly environmental protection, gender equality, and health objectives.

Among developing countries, Bhutan is one of the few with an ownership policy (box 2.14). Its policy defines four objectives of state ownership: (1) to make SOEs more efficient (many are loss making); (2) to address public frustration with the quality of services provided by SOEs; (3) to adapt SOEs to challenges posed by increased global competition; and (4) to clarify social mandates and costs. It also specifies the tasks of Druk Holding and Investments (DHI)—the centralized body responsible for exercising the state's ownership rights—and provides guidance for DHI on how to translate high-level ownership goals into operational practice. DHI is directed to focus on maximizing the return to shareholders (the people of Bhutan), to separate ownership and management, and to promote the growth of the private sector.

Bhutan and Norway both seek to improve the efficiency and effectiveness of their SOEs through better governance, both set out similar principles of separation of policy oversight from shareholder oversight, and both opt for a centralized body to help the government exercise SOE oversight. Yet, these

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**BOX 2.14**

**Summary of Bhutan’s Ownership Policy**

Bhutan's state ownership policy is contained in two documents: the 2007 royal charter that establishes the centralized ownership entity Druk Holding and Investments, revised in 2008, and the more detailed ownership policy developed by and for DHI in 2010, updated in 2013. DHI also introduced a corporate governance code in 2013, which provides a set of guidelines for its SOEs based on internationally accepted good practices, as well as guidelines on corporate social responsibility.

The royal charter sets out the overall goals and objectives of state ownership: to accelerate socioeconomic development to achieve the goals of “gross national happiness” (social welfare); to safeguard, manage, and enhance national wealth through prudent investments; to build a strong, dynamic economy as the foundation for a vibrant democracy;

*(box continues on next page)*
BOX 2.14 continued

to enhance international economic partnerships; to lead and stimulate private sector development through a culture of innovation, creativity, and enterprise; to prevent corruption; and to promote the economy’s competitiveness by making SOEs more efficient and productive.

The charter establishes the objectives and tasks of DHI. Its main purpose is to ensure that SOEs meet the challenges of the corporate sector in a competitive global economy. DHI is to act as the holding company for SOEs transferred under a share transfer agreement entered into between the Ministry of Finance and DHI. It seeks to maximize returns to its shareholders (the people of Bhutan). In addition, its role is to strengthen corporate governance by ensuring clear separation of the ownership and management of SOEs, enhance the performance of SOEs by making them responsible and accountable for their performance, raise funds for investment, and promote the growth of a dynamic private sector.

DHI appoints the boards and directors of companies in its portfolio, tracks company performance, invests in companies, divests shares of SOEs, raises funds, and provides managerial and other support services on a fee basis to both the public and the private sector.

DHI’s ownership policy addresses in greater detail the interface among the government, DHI, and the companies; the roles and authority of company boards, chairs, and CEOs; and their appointments and terms of reference. The ownership policy is based on generally accepted principles of corporate governance as outlined in the OECD’s Guidelines on Corporate Governance of State-Owned Enterprises.


national policies differ in ways that reflect differences in the local context. Bhutan is undergoing economic and social change to facilitate integration into the global economy, and Norway is a developed economy with an established private sector and a history of SOE governance. Bhutan’s use of a royal charter to outline the overall goals of state ownership may reflect the socioeconomic changes envisioned and the attendant need for high-level political direction. Norway’s ministerial-level document suggests that its ownership policy, while important, does not imply profound socioeconomic change but is established mainly to provide guidance on the institutional and technical aspects of SOE governance.
The process of setting formal ownership policies is easier when there is a centralized ownership entity in place that can drive and manage the process of developing the policy. Where ownership responsibilities are fragmented among different line ministries, building support and managing the process can be more difficult and time consuming, especially when parliamentary approval is required. Developing a coherent policy can also be more difficult when there is a large and diverse portfolio of SOEs, with many different legal forms.

**Corporate Governance Codes and Guidelines**

As in private sector codes, SOE codes are of three main types:\textsuperscript{11}

- **Voluntary codes.** Some SOE codes are voluntary, encouraging but not forcing SOEs to comply with their provisions. Voluntary SOE codes are found in Bhutan and Egypt, for example.
- **Comply-or-explain codes.** Some codes are applied on a comply-or-explain basis. In the Seychelles, SOEs are expected to note their compliance with the 2009 Guidelines on the Good Governance of Public Organizations (equivalent to a code) and explain any areas of noncompliance. Another example is the Moroccan code developed in 2011. Like voluntary codes, comply-or-explain codes provide greater flexibility and scope for application of a more customized approach by company.
- **Mandatory codes.** Given the wide range of SOEs and the need to align commercial, political, and public policy goals, a mandatory or rules-based code is less common, as it may not allow the flexibility needed by different types of companies. (Listed SOEs, however, are required to follow the listing rules and codes of the stock exchange.) One example is found in Pakistan, which issued the Public Sector Companies Corporate Governance Rules in 2013. The rules apply to all public sector companies that fall under the Companies Ordinance of 1984. In India, the Guidelines on Corporate Governance for Central Public Sector Enterprises were issued in 2007 as voluntary guidelines but based on the experimental phase, and after due interministerial consultations they were made mandatory in 2010. They were also modified based on experience gained and were improved with additional provisions on the formation of remuneration committees and on monitoring compliance (discussed in further detail below).

One school of thought argues that SOEs should always follow private sector corporate governance practices and that no SOE-specific codes with
potentially weaker practices should be developed. But developing an SOE code can be a way of increasing awareness of governance issues not only within SOEs but also within the government and the ownership entity (where one exists) and among the public. A variety of SOE codes are in effect in a number of countries around the world:

- Many countries—such as Germany, Kenya, Malawi, Mauritius, Mozambique, Poland, and South Africa—have adopted SOE governance codes as a first step toward developing more substantive regulation, especially where the legislative process takes time or the issue of SOE governance is politically contentious.
- Estonia, Latvia, and Lithuania have developed a shared code, the Baltic Guidance on the Governance of Government-Owned Enterprises, which contains general policy recommendations directed at both government and SOEs on how to bring local practices close to the OECD’s *Guidelines on Corporate Governance of State-Owned Enterprises*.
- In Malaysia, the Putrajaya Committee on GLC High Performance, formed in 2005 to oversee the GLC Transformation Program, developed policy guidelines, rather than rules, in a *GLC Transformation Manual*, to be followed by government-linked corporations. The guidelines clarify the GLC mandate in the context of national development, upgrade the effectiveness of GLC boards, enhance the capabilities of government-linked investment companies as professional shareholders, adopt corporate best practices within GLCs, and implement and enforce the GLC Transformation Program.

In some countries, SOE codes have been inspired by private sector governance codes. In South Africa, for example, the Protocol on Corporate Governance in the Public Sector was influenced by the country’s well-known King Code. Like in private sector codes, SOE codes typically focus on board composition, the roles and responsibilities of board members, and reporting and audit requirements. In some countries, such as the Baltic countries and Egypt, SOE codes draw from the OECD’s *Guidelines on Corporate Governance of State-Owned Enterprises*, which are directed principally at the state as owner but also include the boards. These codes tend to be broader in scope, covering the regulatory framework for SOEs, the obligations of the state as owner, the equitable treatment of shareholders, the state’s relations with stakeholders, transparency, and the responsibilities of the SOE board.

Although a number of different bodies have developed SOE codes, for these codes to have the authority they need, it is usually best that they be developed at the behest of the government departments or ownership
units responsible for SOEs with the capacity to promote and monitor implementation. In India, Morocco, and South Africa, the government ministries responsible for SOEs developed the codes, while in Germany, the Netherlands, and Poland the equivalent of a ministry of finance created them. In Peru, the SOE code was developed by the state holding company, FONAFE, which acts as the ownership authority for SOEs. In some cases, third parties develop these codes. For example, in Egypt, the Egyptian Institute of Directors developed the SOE Code of Corporate Governance but under the auspices of the Ministry of Investment, which had ownership responsibility for SOEs. In Latin America, CAF—the development bank of Latin America—developed a set of regional corporate governance guidelines for SOEs, based on the OECD guidelines, aimed at encouraging the discussion of corporate governance in the region.

While voluntary codes and guidelines are meant to encourage SOEs to improve their governance practices, ensuring compliance can be a challenge, as companies face few incentives or pressures to comply—especially when codes are developed by third parties. In some cases, SOEs simply lack awareness of the code. Or they may lack the knowledge and practical guidance to implement the code, especially when it contains many aspirations but no clear priorities. In other cases, once the code is in place the ownership entity itself may take only modest steps to disseminate, promote, and monitor compliance with the guidelines, even though promotion of good corporate governance practices should be a key function of such agencies.

Governments can take a number of steps to promote and monitor compliance:

- **Disseminating** the code to build awareness.
- **Developing tools and manuals** to help SOEs adopt good governance practices from the code.
- **Providing training** on the code to companies, owners, and regulators to build understanding of the provisions and how to apply them: in Egypt, for example, the Egyptian Institute of Directors played a vital part not only in preparing and disseminating the SOE code but also in training SOE directors on the code’s implementation and developing a manual for implementation.
- **Focusing on companies** that understand the importance of good governance and use them to demonstrate an active commitment to applying the code, which can be a powerful inducement.
- **Developing the capacity** of SOE owners and regulators to monitor and evaluate compliance and elevating their role and profile in promoting compliance.
• **Including compliance with the code as a critical part of the performance-monitoring and disclosure systems.** In India, for example, the corporate governance guidelines mandate that the annual reports of companies contain a separate section on corporate governance with details of compliance, with a certificate on compliance from auditors or the company secretary. Companies are also required to submit quarterly compliance or grading reports in a prescribed format to their line ministries, which in turn submit a consolidated annual report to the Department of Public Enterprises. Initially, only few companies submitted reports, but the department’s reminders and follow-up meetings with line ministries led to higher compliance rates over time (Department of Public Enterprises 2013).

Ownership entities can also use their own codes to encourage change in their portfolio companies. In Peru, for instance, the state holding company FONAFE developed the Framework Code of Good Corporate Governance of SOEs and then required individual SOEs to draw up their own governance code based on that framework. Once SOEs had developed their code, they were asked to evaluate their performance against it.

More and more, countries require SOEs to report on how they comply with the provisions of their code; if not, to explain why they are not complying; and to highlight steps they are taking to improve compliance. In Pakistan, for example, the Securities and Exchange Commission has developed a template for monitoring compliance with its corporate governance rules. The compliance statement is required annually. It requires companies to indicate for each rule and subrule the extent to which they are fully compliant, partially compliant, or noncompliant, with explanations provided. The statements must be approved by an independent external auditor and be integrated into the SOE performance-monitoring framework. Companies will also be required to report on compliance with the rules in their annual reports. By evaluating SOE compliance regularly, the Securities and Exchange Commission—and ownership units in general—will also be better prepared to revise and update the code as needed.

Corporate governance scorecards are also growing in use. Scorecards use international standards as a benchmarking tool to assess corporate governance practices in a given country. While scorecards are commonly used in the private sector, they are catching on in SOEs as well. The Philippines, for example, developed a scorecard in 2009, and its experience shows how benchmarking by an independent external body—in this case the Philippines Institute of Corporate Directors—in collaboration with the government can professionalize the process and give it greater credibility (box 2.15).
In 2009, the Department of Finance of the Philippines, in partnership with the Philippines Institute of Corporate Directors (ICD), undertook the development of a corporate governance scorecard to benchmark the governance of 30 or so government-owned and -controlled corporations, virtually all of which were wholly owned by the national government. The initiative used the OECD’s 2005 *Guidelines on Corporate Governance of State-Owned Enterprises* as a benchmark and drew from the ICD’s experience with scorecards for all public companies in the Philippines. The goal was to raise awareness on corporate governance issues among GOCCs and to identify areas for improvement.

The ICD worked closely with the Office of the President, the Department of Finance, and key stakeholders to develop the scorecard and gather data. A survey was carried out to complement information gathering from available documents. Benchmarking initially fell under two categories: board responsibilities and disclosure and transparency. A questionnaire was developed based on these categories. The benchmarking relied on self-rating by GOCCs, which compared their practices with the questionnaire. Volunteers were then asked to validate the self-ratings, using documents submitted by the GOCCs to substantiate them. The results were then tabulated and analyzed.

GOCCs scored significantly lower than their private sector counterparts in the two areas rated. The gaps in good practice revealed by the benchmarking exercise helped identify many opportunities for improvement in the boards. The benchmarking was widely considered a useful tool for encouraging GOCCs to evaluate and improve their governance practices.

The scorecard was subsequently expanded to include all six OECD guidelines: the legal and regulatory framework, the state as owner, equitable treatment of shareholders, relations with stakeholders, disclosure and transparency, and boards of directors. Corresponding weights were 10 percent for the first four guidelines and 30 percent for the last two guidelines. The goal is to help raise the standard of GOCC corporate governance practices in the Philippines.

*Source: Moreno 2006; OECD 2010.*
The approaches used in Peru and the Philippines rely on SOEs to engage voluntarily in self-evaluation against the code (in the case of Peru) or against international standards (as in the case of the Philippines). In both countries, the codes and standards have served as tools of persuasion, and through monitoring instruments the government was able to engage the SOEs.

Given the voluntary nature of codes and guidelines, noncompliance carries few if any consequences. But this does not mean that voluntary codes should simply be made mandatory. Although some core parts of a voluntary code may find their way into compulsory formal rules and regulations, the objective of governance codes is not just to ensure compliance but also to motivate change in the governance culture and encourage SOEs to embrace the true spirit of corporate governance and not to view it as a mere box-ticking exercise.

Countries considering the development of an SOE code might follow the steps outlined in box 2.16.

Finally, measuring the impact of the code on SOE corporate governance practices through surveys, corporate governance assessments, and scorecards is important. But broader impacts can also be considered through measures such as the number of references to the code in the media, number of official endorsements of the code, and impact on broader corporate governance frameworks such as the passage of new laws and regulations.

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**BOX 2.16**

**Steps in Developing an SOE Governance Code**

SOE governance codes come in different forms. Who develops them, how they are developed, and what their purpose is differ from country to country. But any country seeking to develop an SOE code might consider these basic steps:

- Reach agreement within the government on the need for and purpose of the code and the desired outcomes. High-level support for developing and implementing a code is useful.
- Take time early on to consider the purpose of the code and develop an implementation plan. For example:
  - Consider whether the code should be used as a benchmarking tool, as a model for individual SOE codes, or as a formal requirement.
Notes

1. The term SOE here is used interchangeably with other terms that are commonly used in different countries, such as public enterprises, government-owned corporations, government business enterprises, public sector undertakings, and parastatals.

2. For instance, public entities that perform essential state functions—such as environmental protection or aviation administration—may generate significant revenues from compulsory licenses or user fees. And they may have a formal legal status similar to SOEs. Yet, these entities are not generally categorized as SOEs.

3. Company legislation may also apply to SOEs in other legal forms, such as foundations, limited or general partnerships, and limited partnerships with shares.
4. Several OECD countries as well as the European Union have established specific competitive neutrality frameworks. These frameworks go beyond addressing the anticompetitive behavior of SOEs to also establish mechanisms to identify and eliminate any competitive advantages that may exist, including with respect to taxation, financing costs, and regulatory neutrality. The experience so far with such formal arrangements shows that jurisdictions that have them have generally been successful in rolling back state subsidies and, on the evidence to date, have obtained significant economic efficiency gains.


7. The toolkit (World Bank 2004) provides detailed information on each aspect of a labor-restructuring program, from program design to execution and monitoring and evaluation, as well as on the importance of engaging with stakeholders throughout the process.

8. In other cases distortions arise from a true lack of commitment to a fair procurement policy by different levels of government (central, regional, local).

9. For example, sometimes direct purchase is used to facilitate contracting instead of public procurement. This happens when public authorities request delivery of products or services directly from the organizations they own instead of putting them out to tender.

10. Examples are provided by Julius (2008); Sturgess (2006); and Comisión Nacional de la Competencia (2010).

11. Use of the word code varies and sometimes leads to confusion. Code is often understood to mean a statute, particularly in civil law countries. In the usage employed in the toolkit, however, code means a voluntary document that provides guidance on best practices and is often “enforced” through disclosure requirements.

References


Performance Contracting System in Bangladesh

Introduction

This report is based on work done while serving as a United Nations adviser to the Ministry of Finance and the Ministry of Industries, Government of Bangladesh, between October 1985 and March 1986. In this period, I made three visits to Bangladesh and spent nearly five months there.

The report recommends an innovative approach to strategic planning and control of non-financial public enterprises (PEs) in Bangladesh. After reviewing briefly the fundamental problems governments face in controlling PEs, the report offers the Performance Contracting System as a possible "solution." Further, it describes the results of applying that approach on an experimental but serious basis to two PEs (NBPM and GEMCO) during the budget exercise for FY 1986/87.

Part I of the report contains the main recommendations and Part II the supporting annexures, including copies of the "performance contracts" drawn up for the two PEs. While the contract for NBPM is final, that for GEMCO was close to completion when I left Bangladesh and is expected to be complete in all respects before the start of FY 1986/87.

During my last mission in March 1986, the contents of this report were presented at an inter-ministerial meeting chaired by the Finance Secretary to which the secretaries of half a dozen economic ministries were invited. About a dozen chairmen or directors of PEs also attended the meeting. It was then decided that the Performance Contracting System

* Joseph G. Reisman Research Professor, General Management Department,
would be applied in the next two budget cycles to the ten largest PEs in Bangladesh, which account for more than 75% of the sales, assets, and employees of all non-financial PEs in Bangladesh.

The positive reaction among civil servants and managers to the proposed system and the initial contracts is a matter of great satisfaction to all concerned. But, clearly, it is only the end of the beginning, and not the beginning of the end, of the task at hand. The government's decision to move further with the system places an enormous responsibility on the Monitoring Cell in the Ministry of Finance, which will have to see the system through its very difficult initial cycles. In so doing, it is likely to face technical and organizational problems other than those already tackled in the initial contracts. These must be resolved effectively if the system is to work. Fortunately, officials in the Monitoring Cell and the Ministry of Finance are keenly aware of this fact.

The "experiment" underway in Bangladesh is one of a handful of attempts in the developing world to find better ways of managing PEs. Experimentation of this sort produced many of the management structures and systems that are commonplace in the private sector today. Without similar experimentation, developing countries risk rejecting a potentially valuable tool (public enterprises) without having applied it properly.

Finally, a word about this report. In the typical consulting assignment, the consultant works independently to produce a good report, leaving the burden of implementation on someone else. However, much of my time was spent guiding, prodding, or helping the managers and government officials involved in preparing performance contracts for NBPM and GEMCO move forward with the exercise. Given the limited time available and the newness of the exercise this went on almost to the last minute, leaving very little time for writing this report.

1 THE PROBLEM

1.1 The Challenge Before Government

Public enterprises (PEs) occupy a central role in the Bangladesh economy even after extensive denationalization in the last few years. Thirty-four non-financial PEs control more than 250 enterprises in turn and are expected to generate Tk. 8,000 crores in revenues in 1985/86 (US $2.7 billion approximately) to have total assets of about Tk. 19,000 crores.
in June 1986 (US $6.3 billion), and to be executing development projects totalling Tk. 17,000 crores (US $5.6 billion).\footnote{1}

A mere 5 percent increase in the efficiency of non-financial PEs would produce additional revenues of Tk 400 crores per annum for the government. This would equal two-thirds of the government’s direct tax revenues in 1984/85 and would have been sufficient, for instance, to raise government’s ADP outlay on health programs that year by 49 percent. If realized, it would have increased the net surplus generated by PEs by 260 percent.\footnote{2} The entire Tk 400 crores would represent a social gain, not a mere transfer of resources to the government from the rest of the economy as is the case, for instance, when PEs increase their surplus by raising prices. The challenge before the government is to find ways to achieve such improvement.

1.2 The Problem in Perspective

Before turning to possible measures to improve the performance of PEs, it is useful to recall the logic underlying their creation. In most countries, the PE, a hybrid institution, was created with the expectation that it would apply the strengths of the private sector to the pursuit of socially-relevant goals.

Private firms, it is widely believed, do things right (i.e., efficiently, quickly, innovatively), even if they do not always do the right things. Governments, on the other hand, often do the right things (such as providing housing, education, or health services) but do not always do them right. The PE, to put it simply, was expected to do the right things and also do things right. \textit{Managerial autonomy} was the method to ensure that PEs did things right and \textit{managerial accountability} the method to ensure that they did the right things.

Difficulties arose, however, in operationalizing these ideas. For the most part, governments relied on legal devices to ensure that the PE concept would work as intended. For instance, managerial autonomy was often “ensured” by making PEs legally distinct from the state, by placing them under an independent board of directors, by excluding their employees from civil service rules and privileges, and by allowing them to operate bank accounts and retain surpluses. Government involvement was restricted by law to setting objectives or policies and staying out of the operational matters. Similarly, accountability was “ensured” by
stipulating in the statutes or articles of association that PEs should promote the "public interest," follow government directives on goals and policies, and be subject to government or legislative audits.

Unfortunately, it took more than laws or regulations to make the PE concept work. New administrative systems, institutions, and personnel were necessary at the Government-PE interface, but most developing countries created PEs faster than they could develop those aids. Therefore, in the early years, they often borrowed readily available management systems from the private sector or the government, and used readily available institutions and personnel to manage PEs. These were not always appropriate for the hybrid institution. A few examples will illustrate this point.

In most countries PEs were not expected to maximize profits, although profit was often one of their goals. Yet, the accounting system used in PEs, generally borrowed from the private sector, was designed to measure just that and government often judged PEs based on their financial profit. Even if the government official was aware of the limitations of profit as a performance measure for PEs, there was often no alternative, composite measure he could rely on. Many others simply did not recognize its limitations. Consequently, governments were not well equipped to ensure that PEs were "doing the right things."

Turning to the other half of the PE concept — i.e. the expectation that they would "do things right" — once again the methods readily available were not always suitable for PEs. Systems for planning, budgeting, monitoring, performance evaluation, financial control, and personnel management in PEs were often modeled after those in government. Further, government controllers dealing with PEs tended to focus on issues they were used to controlling in government itself, such as headcount, perquisites, and discretionary expenses. Government controllers who tried to go beyond these issues to more fundamental ones were constrained by a shortage of time and supporting staff. Thus, in practice, "doing things right" often amounted to following proper procedures rather than accomplishing goals efficiently and creatively.

When government control took this form, at least five dysfunctional consequences followed. First, frequent intervention consumed a lot of time — and the time of senior policymakers is one of the scarcest resources in most developing countries. Second, it demotivated managers and
reduced operational efficiency. Third, managers could not be held accountable for results since so many internal decisions were made by outsiders. Fourth, managerial effort was often directed at finding ways to get around government controls, which, in turn, magnified the mutual suspicion between managers and government controllers. Finally, and perhaps most importantly—controllers and managers got so distracted by minor issues that fundamental questions regarding objectives and strategy often remained unaddressed.

To sum up, governments have found it difficult to implement both halves of the PE concept. Consequently, some PEs have done neither the right things nor done things right. Disappointed with such results, many countries have privatized PEs in recent years, but nowhere has this come close to liquidating the PE-sector. The fundamental problem of controlling PEs remains; it has merely grown a little smaller in size in some countries.

Getting rid of PEs (through privatization or liquidation) is certainly one solution to the problem of controlling PEs, and it may represent a socially desirable choice under certain conditions. But under other conditions, governments must seek other “solutions,” which can only be invented through a process of creative and planned experimentation. This sort of experimentation produced many of the management systems and tools that are commonplace in the private sector today, a classic example of which is the multi-divisional structure with its attendant administrative systems that was invented more than fifty years ago to manage companies with increasing product and market diversity. Likewise, new management systems and processes appropriate to PEs must be developed, tested, and applied. Otherwise, governments risk rejecting a potentially valuable tool (public enterprise) without having applied it properly.

1.3 Quantity and Quality of Control

Any organization, including a PE, can be thought of as a black box into which certain inputs go and from which certain outputs emerge. A good control system will focus on the outputs to be produced by the organization and specify the inputs required to produce those outputs efficiently. This approach — often called "management by objectives" or "management by results" — required few interventions but takes a lot of skill to execute.
An alternate approach is to probe the black box and control individual processes through which inputs are converted into outputs. This results in many interventions but it allows the controller to focus on those processes with which he or she is most familiar. Most governments are not organized to control by results, and, therefore, try to make up for it by controlling a variety of internal processes. The result is a high quantity but low quality of government control.  

The important point in all this is that if governments can find a way to raise the quality of control while lowering the quantity of control they can raise both managerial autonomy and managerial accountability. In other words, they do not have to "strike a balance" between the two, as is so often recommended in the PE literature. More accountability implies less autonomy only if accountability focuses on internal processes, not if it focuses on results.

If, indeed, there is no need to choose between managerial autonomy and managerial accountability, why do so few governments succeed in raising quality of control and lowering the quantity of control? The reason is that it is far easier to lower (or raise) the quantity of control than it is to raise the quality of control.

Managerial autonomy in such areas as pricing, financing, investing, diversification, or divestment can be raised (or lowered) almost with a stroke of the pen — through an executive order or even a new law, for instance. Not surprisingly, governments — and international agencies — trying to improve the performance of PEs quickly look for reforms in the quantity of control, hoping perhaps that that alone can solve the problem.

Unfortunately, managerial autonomy without managerial accountability is an undesirable and unstable situation: undesirable because it overlooks one half of the PE concept ("doing the right things") and unstable because it can result in managerial abuses, which will almost surely lead a future administration to cut back on managerial autonomy. The result will be the familiar "autonomy pendulum" observed in many countries.

The previous discussion is summed up in Exhibit 1-1. The two dimensions of the matrix shown are (i) Extent to which the internal processes of PEs are controlled (= Quantity of Control) and (ii) Extent to which PEs are controlled by results (= Quality of Control).
Many countries find themselves in cell 2, which is unsatisfactory since PEs enjoy more strategic autonomy and less operational autonomy in that cell than they were supposed to (See Note 1 of the exhibit for an explanation as to why strategic autonomy can be high if the quality of government control is low). Movement from cell 2 to cell 4 is not easy (because it requires an improvement in the quality of control) and neither is it particularly desirable; therefore, it is uncommon. Movement from cell 2 to 1 is relatively easy, but cell 1 is not a stable equilibrium, often generating a swing right back to cell 2 (producing the "autonomy pendulum"). Although cell 2 is not a satisfactory state of affairs, it is a stabler combination than cell 1, which is probably why more countries are found in cell 2 than in cell 1. Movement from cell 2 to cell 3 is what countries really need but find difficult to implement (for reasons to be discussed momentarily).

### Exhibit 1-1

**Quantity and Quality of Government Control**

*Extent to which internal processes of PEs are controlled (= Quantity of Control)*

<table>
<thead>
<tr>
<th>LOW</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low autonomy</td>
<td>pendulum</td>
</tr>
<tr>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td>Extent to which PEs are controlled by results (= Quality of control)</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CELL 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic autonomy = HIGH</td>
</tr>
</tbody>
</table>

| Operational autonomy = HIGH |

<table>
<thead>
<tr>
<th>CELL 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic autonomy = High</td>
</tr>
</tbody>
</table>

| Operational autonomy = LOW |

<table>
<thead>
<tr>
<th>CELL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic autonomy = LOW</td>
</tr>
</tbody>
</table>

| Operational autonomy = HIGH |

<table>
<thead>
<tr>
<th>CELL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic autonomy = LOW</td>
</tr>
</tbody>
</table>

| Operational autonomy = LOW |

**Notes:**

1. Strategic autonomy refers to autonomy in matters as objectives, strategies, and investments. While it is true that governments
governments are not organized to independently give direction to PEs in these areas. Therefore, managers can enjoy considerable autonomy in practice on strategic matters. This does not imply that all managers will exercise that autonomy; sometimes managers and government controllers may abdicate this autonomy to the environment i.e., the PE may drift in response to environmental forces and events.

2. The barriers to movement along the vertical dimension (quality of control) are discussed in the text.

Thus, the conclusion up to this point is not only that autonomy and accountability can be increased simultaneously but that they should be increased simultaneously. This turns our attention to the crucial question: Why do governments find it difficult to raise the quality of control? The reason is that in trying to do so they run into two kinds of barriers: technical and organizational.

1.4 Barriers to Improved Control

Technical Barriers

There are at least three types of technical barriers:

(i) Finding the ‘ideal’ performance criterion: Profitability (at market prices) is widely regarded as a reasonable measure of the performance of private firms, at least from the viewpoint of their shareholders. Economists have long pointed out the limitations of that criterion for PEs, which leads to the question: If not profit, then what? The question has been investigated in depth by Jones, who proposes the concept of ‘public profitability’ and offers a practical way to apply it. Certain theoretical compromises obviously become necessary, but the lack of a suitable performance criterion is no longer a strong enough reason for not trying to improve the quality of government control.

(ii) Distinguishing management performance from PE performance: Governments are often at a loss to separate the contribution of managers to a PE's performance from all other contributing factors. Since it is managers who must be controlled — and not abstract things called PEs — the distinction is important. Fortunately, this problem
has been faced in the private sector for years, and various practical methods are available for making the separation, some of which, unfortunately, cannot be used for PEs (because many PEs do not operative in competitive markets).

(iii) **Balancing short term and long term goals:** Managers of all firms, public or private, can usually improve short term results at the cost of long term results. Some method is necessary to ensure that PEs are making the correct trade-offs in this regard. This, too, creates complex technical problems, but, again, has been faced for years in the private sector. The "solution" in the private sector is called "strategic planning" or "long range planning," which is used to help set shorter term goals and targets.

**Organizational barriers**

These barriers arise for three kinds of reasons, and are more difficult to overcome than the technical barriers:

(i) **Asymmetry in Expertise and Information:** PEs invariably have more expertise and knowledge of their enterprises than those in government trying to control them. Without a good understanding of the technical relationships between inputs and outputs, the markets in which the organization operates, and so on, it is difficult to set "good" targets, i.e. targets which focus managers' attention on the right criteria and then require them to achieve difficult yet attainable results on those criteria.

Government controllers also have to depend on PEs for information to do the controlling. Here, they face the problem that the information supplied will be distorted or selective because PEs can easily guess how the information will be used by the controlling authority.

To be sure, problems of information asymmetry and information impactedness are common in most principal-agent relationships, but they tend to be particularly great in the Government-PE relationship. It is more the exception than the rule that a government controller has worked in the very industry or industries in which a PE is operating. The practice of rotating civil servants at regular intervals across an amazing range of assignments prevents them
from building expertise in any field. These points are even more true for the civil servant’s boss, the minister. Few developing countries have information or support systems that help make up for these problems.

(ii) **Conflict of values:** Even if all relevant facts are known (which is seldom the case), there is an element of subjectivity in choosing among alternative goals or strategies. In a small, owner-managed firm, the owner-manager makes these choices based on his personal values. The task is more complex in large, professionally-managed firms, but is routinely tackled in most of them through the organizational hierarchy, culminating with the chief executive officer or his board of directors. In the Government-PE structure, however, it is often not clear who the “boss” or the real “principal” is: is it the senior-most civil servant in the administrative ministry, the minister in charge of that ministry, the chairman or the board, the prime minister, or the head of state? Although the prime minister or head of state could always have the final say, that person is very busy doing many things and is far removed from the problem.

In practice, of course, many individuals get involved in any decision-making process in the government-PE hierarchy. Each brings a particular viewpoint to the issues at hand, depending on his or her role and personal values. The multiplicity and range of goals pursued by governments complicates the problem. Further, in the Government-PE context, individuals with three quite different "cultures" are forced to work together: professional managers, bureaucrats, and politicians. The three groups also tend to differ in how they would trade-off short term results for long term results. For these kinds of reasons, it has been argued that ministers and bureaucrats will be unwilling or unable to provide PEs with a clear set of goals and targets.

(iii) **Coordinating a Loosely-Coupled Organization:** Government is one of the most "loosely-coupled" organizations one can find. It is large and sprawling but not very tightly integrated. Even heads of state sometimes have difficulty coordinating decision-making across this organization, leave alone individual ministries or government agencies. Controlling PEs by results will demand time-bound coordinated activities and decisions, which may be difficult to organize.
Any proposal for improving the quality of control must address the above problems. Local or foreign experts can help solve the technical problems, but overcoming the organizational barriers will call for new centres of expertise and information in government, the creation of new "integrating devices," and the creation of new "integrating departments" to run those integrating devices. Therefore, the quality of control cannot be raised easily or quickly, although most countries need to embark on the task quickly. Unfortunately, there is no short cut or "quick fix." The only alternative is to abandon the attempt to control PEs by results (or to do so very poorly) and to revert to controlling their internal processes.

Much of the previous discussion is relevant in the Bangladesh context. Under the initiative of Consultative Committee of Public Enterprises (CONCOPE), the association of chairmen of PEs in Bangladesh, managers of PEs have been trying to redefine managerial autonomy through a PE Management Act. Like managers of PEs around the world, CONCOPE's members have been mainly concerned with reducing the quantity of control. However, the same ordinance or act could be used to improve the quality of control as well. This report contains recommendations for the latter.

It is argued here that the quality of control can be improved by implementing a "performance contracting system," which is offered as one method for controlling PEs by results. The main features of that system are discussed in Section 2. The lessons learned from in applying it to two PEs in Bangladesh between November 1985 and March 1986 are discussed in Section 3. Proposals for extending the system in the next two or three budget cycles to ten of the most important PEs are contained in Section 4.

2. An Outline of the "Performance Contracting System"

2.1 Basic Principles

The basic principles of the performance contracting system are discussed below with brief comments and explanations:

**Principle 1:** Government should negotiate a clear and comprehensive set of performance targets with PEs at the beginning of the year.
Improving Korea's Public Enterprise Evaluation Effort**

I. INTRODUCTION

Over the last four years, Korea has:

1. developed what is almost certainly the world's most sophisticated system for evaluating public enterprise performance; and,

2. implemented the system in a such a way that the enterprise behaviour has actually changed as a result.

Despite the obvious importance of the foregoing assertions, they will not be elaborated upon in this paper. Instead, the focus here will be on the problems with the existing system, and how they might to be solved. The goal is not a balanced evaluation of the current system, but a one-sided critique aimed at making a good thing even better.

II. INDICATOR OVERVIEW
A. Classification:

1. Quantitative versus Qualitative: Quantitative indicators are measured by objective statistics, while qualitative indicators are measured by subjective judgements.

2. Results versus Processes: Result-oriented indicators measure things which are good in themselves, while process-oriented indicators evaluate things which are good only in so far as they contribute to some

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** This Chapter is based on a set of notes prepared by Professor Jones for Korean Development Institute in 1985.
result. For example, "reducing unit costs" is result oriented, while "improving cost accounting practices" is process oriented, because it is desirable only in so far as it helps reduce unit costs.

3. Non-Duplicative versus Duplicative: Non-duplicative indicators measure a desirable attribute uniquely, while duplicative indicators provide a second (or third...) measure of an attribute already measured by a preceding indicator. For example, a profitability indicator gives credit for reducing the cost of intermediate inputs. Adding a separate indicator for the intermediate to sales ratio is duplicative since it gives credit a second time for reducing input costs.

4. Example: This method of classifying indicators is illustratively applied to KEPCO in Figure One.

<table>
<thead>
<tr>
<th>Figure One</th>
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<tbody>
<tr>
<td>INDICATOR CLASSES; KEPCO (1985)</td>
</tr>
<tr>
<td>(as % of total weight)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>QUANTITATIVE</th>
<th>QUALITATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESULT ORIENTED</td>
<td></td>
</tr>
<tr>
<td>NON-DUPE.</td>
<td>28%</td>
</tr>
<tr>
<td>DUPE.</td>
<td></td>
</tr>
<tr>
<td>PROCESS ORIENTED</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td>60%</td>
</tr>
</tbody>
</table>

B. Advantages and Disadvantages of Indicator Classes

1. General Principle: As a general rule, the best indicators are quantitative, non-duplicative and result oriented. In terms of Figure One, this means that the more indicators in the upper left cell, and the fewer in the lower right cell, the better. However, both theoretical and practical considerations limit what can be achieved in this regard, so that it is neither possible nor desirable to have all indicators at the upper left. Nonetheless, every effort should be made to move in this direction.
2. Quantitative versus Qualitative: Quantitative indicators have the obvious advantage of objectivity while qualitative indicators are necessarily subjective and reduce the credibility of the system because enterprises can accuse the evaluators of bias. Quantitative indicators are, therefore preferable. However, not all enterprise activities can be measured quantitatively in a meaningful way. For example, in 1984 KEPCO’s research and development (R&D) effort was evaluated quantitatively in terms of a target level of R&D expenditures, but in 1985 it was evaluated qualitatively. This is obviously a step in the right direction, since it is easy to spend money on R&D, but hard to use that money productively. Since the future benefits of R&D cannot be measured quantitatively, the only alternative is a qualitative evaluation.

3. Results versus Processes:

a. Advantages of Results-Oriented Indicators

i) Consistency with Decentralization Philosophy: The basic principle of Korea’s public enterprise reform is to make managers accountable for results while giving them increased autonomy for the processes of achieving those results. Evaluating their processes is inconsistent with this philosophy. Having the enterprises responsible to the Evaluation Task Force for processes may be better than making them responsible to the parent Ministry, but it still reduces enterprises’ autonomy in deciding how they should accomplish their directives.

ii) Trade-offs in Processes: There are many ways of accomplishing a given objective. Costs can be reduced by cost accounting, inventory control, purchasing, engineering studies, worker’s circles, internal performance evaluation, etc. Which of these processes is "best" is a decision to be left to managers. Evaluators might feel that several of these processes are being done badly (or differently from the way the evaluator thinks it should be done), but what counts is the bottom line result. If the manager gets costs down, fine. How he does it is irrelevant.
b. Limit to Results-Oriented Indicators

i) The results of some activities can not be measured. This is generally true of dynamic activities which have present costs but future benefits. R&D expenditures are an example. When results can not be measured, then processes must be substituted.

ii) When results can be measured, but imperfectly, then evaluating processes can provide a counterweight. While this argument is legitimate, the ideal solution is to improve the measures of results. For example, the present Korean system leads to high scores on results oriented measures and these are offset by low scores on processes to produce a "better" measure of performance. However, the main problem is the soft target selection for the results indicators, and once this is solved (see below) some process indicators become redundant.

4. Duplicative versus Non Duplicative

a. The Fundamental Principle of Performance Evaluation states that all benefits and all costs of operation should be included once and only once.

b. Duplicative indicators violate this principle and generally result in incorrect signals to the enterprise. This can most readily be seen in terms of a concrete example, presented below (Section III-C).

III. IMPROVING QUANTITATIVE INDICATORS

A. Overview

1. Problems with existing system

a. Criterion Value Determination: the most serious problem is that criterion values (targets) are set via trend analysis, resulting in "soft" quantitative targets which are easily achieved and almost guarantee a high grade.

b. Criterion Selection: a second problem is that the set of quantitative indicators includes duplicative indicators, biasing
enterprise efforts (e.g., cutting costs by reducing administrative labor is favored over saving energy inputs.

2. Solutions

a. There are a number of independent solutions to those problems; but

b. An integrated solution is recommended. This involves:

i) integration of criterion: including only a single non-duplicative criterion (for static operational efficiency; other indicators remain necessary for other aspects of performance);

ii) disaggregation of criterion-value determination: using information on duplicative, second-tier indicators to establish targets, and then aggregating them to establish the criterion value for the non-duplicative indicator.

B. The Criterion-Value Problem

1. Existing System: at present, most quantitative targets are set solely by statistical analysis of past performance. A base (‘C’) target is set using a 5 or 6 year regression trend or a 3 year Beta weighted distribution. Higher or lower grades are bounded by historic standard deviations. In English, what this means is:

a. If you do more or less what you’ve done in the past you get a ‘C’; and

b. If you do better (or worse) by more than can be explained by random luck, you’ll get a B or D.

2. Strengths of Existing System:

a. It is objective, avoiding arguments and negotiations;

b. Over time, it builds in pressures for further improvement, since improved performance in one year results in higher targets for future years.
3. Weaknesses of Existing System: The basic weakness is that in focusing solely on history, the system ignores all other sources of information about what can be reasonably expected next year. For example:

a. Next year may differ from the past in some predictable way. A new project may be brought on line or a new product may be introduced. If KEPCO adds hydro capacity and reduces thermal, then unit costs will fall significantly, even if no management changes take place. Or, if atomic capacity is added, intermediate costs will fall, but capital costs will rise.

b. Even if the future is like the past, it may sometimes be desirable to force more than marginal changes. If a public enterprise is really very inefficient, then giving a ‘C’ for continued inefficiency at the same level may be a bit too soft.

4. Possible Solutions

a. One way to toughen the system and increase pressure on the enterprises is to maintain the existing procedures, but;

   i) Make the base calculation a ‘D’ level, rather than a ‘C’;

   ii) Expend the deviation needed for an increase in grade (e.g. move the ‘C’/‘B’ boundary from the present 70% level to 80%).

b. A second alternative is to take the statistical analysis only as a useful starting point, rather than as the ending point and adjust it up or down using other information. This is more easily done if disaggregation is adopted (see below).

C. The Duplication Problem

1. An Illustration using KEPCO

   i) The first tier is a single summary indicator (public profitability) which combines the effects of all lower tier indicators. It meets the fundamental principle by including all measurable costs and benefits of current operations once and only once.
a. Tiers of Indicators (Figure Two):

**Figure Two**

**TIERS OF PERFORMANCE INDICATORS**

<table>
<thead>
<tr>
<th>FIRST TIER</th>
<th>PUBLIC PROFITABILITY (K^F)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OUTPUT (X)</td>
</tr>
<tr>
<td></td>
<td>EMPLOYEE COMP. (W)</td>
</tr>
<tr>
<td></td>
<td>FIXED CAPITAL (K^F)</td>
</tr>
<tr>
<td>SECOND TIER</td>
<td>INTERMEDIATE INPUTS (II)</td>
</tr>
<tr>
<td>(COMPLETE)</td>
<td>WORKING CAPITAL (K^W)</td>
</tr>
<tr>
<td></td>
<td>OTHER INPUTS (II^O)</td>
</tr>
<tr>
<td></td>
<td>ADMIN. INPUTS (II^A)</td>
</tr>
<tr>
<td></td>
<td>INVENTORIES (K^W^I)</td>
</tr>
<tr>
<td></td>
<td>FINANCIAL CAP (K^W^F)</td>
</tr>
<tr>
<td>THIRD TIER</td>
<td>ADMIN. WAGES (W^A)</td>
</tr>
<tr>
<td>(PARTIAL)</td>
<td>OPERATING WAGES (W^O)</td>
</tr>
<tr>
<td>FOURTH TIER</td>
<td>ENERGY EFFICIENCY</td>
</tr>
<tr>
<td></td>
<td>TRANSMISS. LOSS</td>
</tr>
</tbody>
</table>

ii) The Second tier decomposes the first tier into its major components. As shown in Figure Two, it is a complete decomposition, since everything affecting the first tier is listed.

iii) The third tier gives a further breakdown of the second tier indicators. As shown, it is partial in including only selected disaggregations which are needed to analyze KEPCO.

iv) The fourth tier gives additional indicators used by KEPCO. They are partial indicators in that while they contribute to the linked (by dotted lines) higher tier indicators, they are only one of many factors.
determining the value of that higher tier indicator.

b. Existing KEPCO Indicators (1985):

i) The left hand side of Figure Three gives all KEPCO indicators of current operational efficiency and their formulas in terms of Figure Three variables.

ii) The right-hand side of Figure Three gives the impact of an improvement in any variable on the indicator. For example, if operational wages are reduced (all other variables held constant), then public profit (indicator ‘1a’) and the sales to wage ratio (indicator ‘4b’) improve (as indicated by the ‘+’ signs).

Figure Three

ILLUSTRATION OF INDICATOR DUPLICATION
(KEPCO: 1985)

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>VARIABLES INCLUDED</th>
<th>EFFECT OF IMPROVEMENT OF VARIABLE ON INDICATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>II^1</td>
</tr>
<tr>
<td>1a Public Profitability</td>
<td>II/K^F</td>
<td></td>
</tr>
<tr>
<td>2b Power Sold</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4a Intmdt. In. Turnover</td>
<td>II/X</td>
<td></td>
</tr>
<tr>
<td>4b 1/(Labor Turnover)</td>
<td>X/W</td>
<td></td>
</tr>
<tr>
<td>4f Inventory Turnover</td>
<td>K^W^1/X</td>
<td></td>
</tr>
<tr>
<td>4g Admin. Turnover</td>
<td>(II^A+W^A)/X</td>
<td></td>
</tr>
</tbody>
</table>

| TOTALS                    | 6   | 3    | 2    | 3    | 2    | 2     | 1     | 1 |

c. Problems with KEPCO Indicator Set

i) The first problem with the KEPCO indicators is that, taken as a whole, they violate the fundamental principle in including
some costs and some benefits more than once. Most importantly, as shown at the bottom of Figure Three, some costs are measured only once, some twice, and some three times. The result is that one Won of savings in one area is not equal to one Won of savings in another area. For example:

- Reduction in administrative input are credited three times, while reductions in operational inputs are credited only twice. This says that the former is fifty percent more valuable to the nation than the latter. This is silly, since it tells the enterprise that saving electricity at the head office is more beneficial to the country than saving it at the plant, although the real savings are the same in both cases.

- Fixed capital costs are charged only once, while inventory costs are charged twice. This tells the enterprise that it is worth more to conserve on inventories of spare parts than to avoid buying new vehicles. The resulting problems are of two sorts.

(I) Managers are told that a Won is not a Won, since some savings are better than others. They can, therefore, improve their ratings while making the country worse off (for example, by reducing administrative energy consumption by 100 while increasing operational energy by 110). They would, therefore, be rewarded for hurting the country.

(II) In addition to such real changes, managers would be motivated to undertake accounting manipulations to shift costs from one category to another, thus, achieving the same effect as above. Such accounting manipulations cannot be successful if only the single summary indicator is used.

II) The second problem with the indicators is many of them are turnover ratios (that is, a cost category divided by sales or output). While this seems reasonable on the surface, a simple example will show why it is erroneous. Consider the wage turnover ratio and assume that in the base year it is $20/100 = .2$. Now assume that management hires workers
worth five who produce additional output worth 10. Clearly the nation is better off by \((10 - 5 = 5\). However, the wage turnover ratio worsens \((25/110 = .227\) because average unit costs have risen. The manager would therefore be penalized for making the country better off. Or, if the change were in the opposite direction, he would be rewarded for making the country worse off. Turnover ratios are simply incorrect.

(Note that for 1985, the target levels of wage ratios are measured as the numerator regressed against the dominator. If the intercept is zero, then this has no effect on the above conclusions. Otherwise, the above results are modified quantitatively (for better or worse) but not altered in substance).

iii) The third problem with the indicator set emerges when we consider weights, the way in which criterion-values are set and the method of demarcating one performance grade from another. This is difficult to see without a detailed numerical example, but an illustration from KEPCO’s actual 1984 evaluation will make the point. In 1984, KEPCO:

(I) Received a ‘B’ grade worth 10 weighted evaluation points for reducing the intermediate input ratio from the 57.03% trend to 49.06%.

(II) Received an ‘A’ grade worth 5 weighted evaluation points for improving energy efficiency by a very small amount for 36.88% to 37.08%.

(III) Received an ‘A’ grade worth 5 weighted evaluation points for reducing energy transmission losses from 7.83% to 7.65%.

The evaluation system therefore told the enterprise that the first action was worth the same 10 points as the second two together. However:

(I) The first action resulted in cost savings of the order of 150 billion Won;
(II) The second action resulted in cost savings of the order of 7 billion Won; and,

(III) The third action resulted in cost savings of the order of 3 billion Won.

The enterprise, therefore, received equal credit for saving 150 billion Won on the one hand and for saving 10 billion Won on the other. This is clearly undesirable because it provides distorted signals saying that a Won is not a Won.

d. Summary: Given these problems, the correlation between the company's performance ranking and its real contribution to Korea is likely to be weak, if not negative. The duplicative indicator system is unfair to the nation.

D. Possible Solutions

1. Mixed Tiers: One solution is to expand the present system by:

   a. adding additional indicators so that all costs and benefits are measured three times:

   b. converting turn over ratios to straight figures; and

   c. carefully adjusting all weights and criterion values so that equal credit is given for equal cost savings or revenue enhancements.

2. Second Tier: A second solution is to drop the first and third tier indicators and utilize only second tier indicators with attention to 'b' and 'c' as in the previous alternative.

3. First Tier: The third solution is to drop all duplicative indicators save the summary first tier indicator of public profitability. Second and third tier indicators would still play a critical role, however, in criterion value determination (see below).

4. Evaluation of options:

   a. The mixed tier solution is unnecessarily complex.
b. The first tier option is the simplest and most straightforward.

c. The second tier option can be equivalent to the ideal first tier option if weights and criterion values are assigned optimally. If this option is easier to sell, then it may well be chosen.

C. Criterion Value Determination:

1. Disaggregation Method: Even if the first tier strategy is chosen, the target level of public profit should not be set by looking at historic public profit figures, but rather by disaggregating public profit into its second (or third) tier components.

2. For example:

a. First, disaggregate public profitability into as many second tier (and in some cases, third tier) categories as necessary to focus on important variables which may move according to different forces.

b. Second, for each category set an independent ‘C’ level base target using statistical analyses adjusted for whatever additional data are available. For example, at KEPCO:

i) Fixed capital may be determined by a trend for small balancing and modernization activities, plus an exogenous estimate of new projects to be commissioned.

ii) Output might be estimated based on expected GNP growth.

iii) Intermediate inputs might be estimated based on historic unit costs, adjusted for expected changes in the distribution of generation capacity between hydro, thermal and atomic. Third tier disaggregation into natural gas, atomic fuel and other intermediate input may be useful here.

iv) Wage targets may be set, not on the basis of statistics, but on the (hypothetical view that there is excess manpower at KEPCO and that manpower should be reduced through attrition at, say, 5% per year (adjusted for personnel requirement evidence on the optimal levels for similar systems in other countries.
v) Inventory budgets might be determined by international evidence on the optimal levels for similar systems in other countries.

vi) Financial working capital targets might be estimated using trend analysis adjusted by independent knowledge of just what levels of receivables, cash, etc., are ideal.

c. Finally, given targets on each second tier variable, use simple arithmetic to combine them into the unified base target for the public profit indicator.

3. Note that while introducing such an information-augmented satistical method has major benefits in terms of fairness, it also has major costs in acquiring the necessary information. Sources include:

a. additional economics talent on the KDI team;

b. increased awareness of international experience, from travel, written materials and independent sources such as World Bank personnel working on the company.

c. increased discussions (if not negotiations) with enterprise and parent ministry representatives.

D. Other Ideas

1. Target Scheduling:

a. One major exogenous factor is demand levels. If the economy grows at 5%, KEPCO's expected performance will naturally be much worse than if the economy grows at 10%.

b. The solution is to create not one single vector of targets, but a matrix schedule of targets in which:

i. a base set (vector) of targets is established assuming projected GNP growth of, say 5%; and then,

ii. adding a supplementary set of target adjustment factors for each ± 1% deviation from the assumed GNP growth rate,
allowing conversion of the vector into a matrix (where one dimension is the targets and the other GNP growth rates).

c. An example of this adjustment is given in my 1982 paper. This is for an ex-post adjustment, but the same principles apply to ex-ante scheduling.

2. Disclosure Bonus:

a. The advantage of the disclosure bonus for setting criterion values are described in an earlier paper, as is the methodology.

b. This is somewhat complex, but the increasing sophistication of the enterprises in evaluation matters makes me believe it is time to try this on a pilot basis for one or two of the more progressive enterprises who can be persuaded to volunteer.

IV. IMPROVING QUALITATIVE INDICATIONS:

A. Substitute Quantitative Indicators:

Whenever possible, meaningful quantitative indicators should be substituted for, or used to complement, qualitative indicators. One general area where this should definitely be done is in the service sector. Here, survey methods should be used to reveal consumers’ evaluation of results. This has two distinct advantages.

1. In the service sector, results (benefits) are not directly measurable by price times quantity, so subjective evaluation is unavoidable. However, consumers are much better qualified to make this subjective judgement as compared to part-time external evaluators.

2. Managers of these enterprises need such indicators for their own internal control purposes. The goal of these organization is to provide services, and if the enterprise has no systematic way of obtaining feedback from those they serve, then it is difficult to see how they can perform effectively.

Examples include:

a. At Korea Broadcasting Corporation, KBS, both share of actual audience (% of those viewing at any given time) and share of potential audience.
b. At KLDC, customer satisfaction with hospital service.

c. At KOTRA, survey of exporters.

In administering such surveys:

a. an independent polling agent should conduct the surveys;

b. the companies themselves should commission the surveys and play a major role in developing the questionnaires; and,

c. the evaluation task force should:

   I. evaluate the quality of the methods developed and include this as a separate criterion in the first year; and,

   II. utilize the trend in results as a major indicator in future years.

B. Focus on Marginal Changes Rather Than Total Performance

1. There is a basic inconsistency in qualitative evaluations of processes.

   a. Many of the enterprises are extremely large and complex; but

   b. evaluators have only a few days or a week to conduct the evaluation; meaning that,

   c. the evaluation will necessarily be superficial and subject to legitimate criticisms of the form: “we worked terribly hard and committed hundreds or thousands of man-months to improve this area, and in a few days you couldn’t possibly understand or absorb the materials we gave to you”.

2. One solution is to greatly expand the task force time devoted to evaluation, but this is impractical. Instead, consider a two-part procedure.

   a. Conduct periodic detailed internal evaluations (say, every four years), and recommend specific areas for improvement.
Many such reports already exist (e.g., the EPB Project Evaluation Unit's report on KEPCO, or World Bank studies of KNHC). Such studies could and should be conducted by independent consulting firms, but paid for by the enterprise since the results will help then improve their performance.

b. In the annual evaluation exercise, review only the predetermined marginal changes, rather than the entire operation.

C. Matrix Organization of Task Force

1. At present each member generally reviews two companies.

2. An alternative is for each member to review a particular functional area across all companies (e.g., the KAIST review of computer capability).

3. What should also be considered is a “Matrix Organization” combining both approaches, in which each member has the responsibility for:
   
a. reviewing one functional area across all relevant enterprises; and

   b. reviewing all activities of one or two companies.

D. Increase Variance:

1. At present there is minimal dispersion of the qualitative scores. For example, in 1984, 20 companies received a 'C' average on qualitative indicators, 5 companies received a 'D' grade, and none received 'A', 'B' or 'E'.

2. Corrective Actions:
   
a. Increase categories from 3 to 5.

   b. Mandate a normal distribution of score (e.g. 10% 'A' and 'E', 15% 'B' and 'D', and 50% 'C').
V. DATA BASE:

A. Importance: Developing a computerized data base is critical for future development of the evaluation system, in order to:

1. Improve Accuracy: At present, enterprises make their own calculations of indicators. These are then checked by CPA’s. This is time consuming at best and leaves much room for errors, whether intentional or unintentional. The Devisia (or Laspeyres, for that matter) calculations are particularly questionable, as are the perpetual inventory estimates of capital stock. Done by hand, these are virtually guaranteed to produce errors. Done by hand by the enterprise, they are even more open to question, with the added danger of systematic bias.

2. Support Analyses: It is very inefficient to do statistical analysis by hand. With a good data base management system (DBMS), spreadsheet package, and statistical package, several times as much analyses could be produced by a given staff level.

3. Support Research: Over the next few years, it will be essential to examine the successes of the reform package using detailed econometric analysis (among other things). A consistent time series for each company is a prerequisite.

4. Support Reporting Requirement: A data base will allow rapid, accurate and consistent reproduction of regular annual and quarterly reports on the individual companies and the sector as a whole. Special-purpose reports can be quickly developed, without additional levies on the enterprises.

B. Basic Choices:

1. Data Entry:

   a. At present, PEPIS formats are filled out by the enterprise, then checked at KDI before entry.

   b. This creates major distortion potential.

   c. A superior procedure would be for the enterprise to supply
detailed (augmented) financial statements, with KDI mapping these data into the standardized formats.

2. Packaged Software versus Programming:

a. Here the choice is clear. Pure special-purpose programming is time consuming, inflexible and inefficient. Amazingly powerful off-the-shelf packages are now available, which allow researchers to run their own material without reliance on programmers. The only cost is an increase in RAM and disk storage, but today these are very cheap.

b. Packages needed:

i) DBMS (e.g., dBASE III equivalent):

ii) Spreadsheet package (e.g., LOTUS 123, version 2.0; or, 3-dimensional spreadsheet, such as BOEINGCALC): and,

iii) Statistical/Econometric package (many of these are available).

c. DBMS versus Spreadsheet:

i) It is perfectly possible to run without a DBMS and use only a spreadsheet package. The cost is slower computation time greater storage requirements. The advantage is simplicity of use.

ii) The alternative is to use a DBMS for entry, storage and report formatting and then use this to feed spreadsheet and statistical packages for analysis.

3. Main-frame versus Micro Hardware:

a. Advantages of Micros over Mainframe:

i) Infinitely greater variety of software available which is directly usable by researchers;

ii) Allows common systems to run at KDI, EPB and larger enterprises;
iii) "Wave of the future" in research organizations;

iv) Lower variable costs of programming, revision, etc.

**Figure Four**

**COMPUTERIZED PUBLIC ENTERPRISE PERFORMANCE INFORMATION SYSTEM (PEPIS)**

```
START

ENTERPRISE DATA  

NATIONAL PARAMETERS

STANDARD FORMAT

CPA CHECK

OPTN # 1

CPA CHECK

STANDARD FORMAT

OPTN # 2

DATA ENTRY

DBMS and/or SPREADSHEET PACKAGE

DATA BASE

DBMS and/or SPREADSHEET PACKAGE

STATISTICS/ECONOMETRICS/PACKAGE

BLOCK ONE: INPUTS

BLOCK TWO: STORAGE

BLOCK THREE: OUTPUTS

REGULAR REPORTS

ON-LINE INQUIRY

SPECIAL REPORTS
```
Methods for Controlling Public Enterprises

INTERNATIONAL COMPARISONS

In this paper, the Performance Contracting System is compared with two other innovative methods for controlling public enterprises (PEs): the 'Program Contract' System used in France and Senegal, and the 'Signaling System' used in Pakistan and South Korea.¹

Comparison with the 'Program Contract' System (France)

The upper half of the Exhibit summarizes the similarities and differences between the Performance Contracting System (PCS) and the French 'Program Contract' System.

Starting first with similarities, the following features are present in both the systems:

1. In both systems, performance criteria and targets are derived from a long term plan or strategy negotiated between PEs and relevant ministries of the government. Therefore, both result in multi-party agreements and both have a multi-year time horizon. Most contracts in France had a four or five year horizon, whereas targets are specified for

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¹ Joseph G. Riesman Research Professor, General Management Department, Northeastern University, Boston.

## EXHIBIT
Comparison of the Performance Contracting System with the 'Program Contract' and 'Signaling' Systems

<table>
<thead>
<tr>
<th>Program Contract System</th>
<th>Features PRESENT in this system</th>
<th>Features NOT PRESENT in this system</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Features NOT PRESENT in this system</td>
<td>Features NOT PRESENT in this system</td>
</tr>
<tr>
<td>1. Criteria and targets derived from a long term plan.</td>
<td>1. Contracts more legalistic in nature.</td>
<td>2. Government also makes firm commitments 3-4 years into future.</td>
</tr>
<tr>
<td>2. Multi-ministry agreement.</td>
<td>2. Government also makes firm commitments 3-4 years into future.</td>
<td>Managerial autonomy negotiated as part of contract.</td>
</tr>
<tr>
<td>3. Multi-year time horizon.</td>
<td></td>
<td>4. PEs given financial compensation for meeting public service obligations.</td>
</tr>
<tr>
<td>4. Applied selectively to most important PEs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Formal link between results and rewards.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signaling System</th>
<th>Features PRESENT in this system</th>
<th>Features NOT PRESENT in this system</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Process is systematic.</td>
<td>1. Link between results and rewards is strong.</td>
<td>2. Uniform approach for all.</td>
</tr>
<tr>
<td>2. Integrated performance measure based on explicit weights used.</td>
<td></td>
<td>3. System supported by computer programs.</td>
</tr>
<tr>
<td>3. “Public profitability” or its variant, is used as one performance criterion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Constant price adjustments made where suitable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Systematic evaluation at end of year, which is made public.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Features NOT PRESENT in this system</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Members of PE-Govt. hierarchy actively involved in entire process.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
no more than three years at a time in the Performance Contracting System.

2. In both cases, "contracts" are drawn up selectively, i.e. only for some PEs and not for all, although the selection criteria are explicit in the Performance Contracting System but not so in the French case.

Turning next to the differences, these can be divided into two types: features found in one but absent in the other, and vice versa. The following features are present in the Program Contract system but absent in the Performance Contracting System:

1. In the Program Contract system, the contracts come closer to representing legal agreements than they do in the PCS.

2. In the Program Contract System, the government makes formal commitments to supply funds, allow price increases, or permit specified contractions/expansions in products or services. This feature is not present in the PCS, at least in the manner it was applied in Bangladesh in the initial exercises.

There were two reasons for excluding this feature in the PCS. The first reason, at least in the introductory stage, was that it could produce resistance from civil servants and ministers, who prefer to extract commitments from PEs but not make any themselves, especially if they have financial implications. The second reason, which is more important, is that it is hard to hold a government to commitments over a three or four year period. Government budgets are firmed up one year at a time, and changes in ministers or the party in power could make past commitments obsolete. Apart from these factors, a contract containing firm commitments over a three or four year period is much too rigid for the uncertain world all firms operate in. Not surprisingly, most of the first generation contracts drawn up in France in the late sixties and early seventies collapsed because they contained commitments that were very unrealistic, in the post oil crisis era, from the viewpoints of both the government and the PEs involved.

3. Among the commitments made by government in the Program Contract System is greater managerial autonomy in areas such as pricing, investment, borrowing, and changes in product or market scope. The Performance Contracting System provides for similar
redefinition of autonomy but only to the extent a PE has distinctive problems requiring special adjustment. Systemic changes in managerial autonomy in the usual areas of procurement, personnel, or financing are excluded on the grounds that these should not be changed on a case-by-case basis. However, PEs will be encouraged to draw government's attention to adjustments in managerial autonomy demanded by industry-specific factors.

4. Finally, the Program Contract System envisages financial compensation to PEs for "public service obligations" (PSOs), while such compensation is not envisaged in the Performance Contracting System, at least when it is applied in developing countries like Bangladesh. Financial compensation for such government-imposed obligations is useful if (a) PEs are judged on financial profitability, and (b) the economy has few price distortions, so that after adjusting for PSOs, financial results are a good measure of a PE's real, economic performance. In developing countries like Bangladesh, condition (b) seldom holds; and, if the Performance Contracting System is applied, condition (a) will not hold either.

To be sure, many PE managers in Bangladesh talked about their PSOs, but most grudgingly also agreed that their firms enjoyed other explicit and implicit subsidies. None had careful calculations to support the view that, all things considered, his firm deserved net compensation from government. Even a well-trained economist would have a hard time making the necessary calculations since, in a highly regulated economy, measuring the magnitude of implicit subsidies is hazardous and controversial.

The following are among the important features present in the Performance Contracting System but absent in the Program Contract System:

1. The Performance Contracting System is intended to be a system, i.e., a set of activities to be carried out on a regular and systematic basis, whereas program contracts were drawn up in France irregularly (one set in the late sixties and early seventies, and another in the early eighties).

2. Program contracts took far more time to draw up than performance contracts are expected to require; 1-2 years for the former
versus than six months for the latter. The legal nature of the program contract, its comprehensiveness, and its requirement that the government also make commitments, tend to delay the process considerably. In contrast, the philosophy of the Performance Contracting System is that all issues need not be resolved at once; some can wait to be resolved in a following cycle. As long as agreement on goals, performance criteria, and targets improves significantly, the system would be regarded as serving a useful purpose.

3. The Performance Contracting System envisages that economic costs and benefits should guide government's choices on strategy, whereas such calculation is not done explicitly in the Program Contract System. Again, if one assumes that price distortions are limited and that government compensates PEs for losses created by its directives, economic cost-benefit analysis may not be necessary. (Only time will tell whether economic cost-benefit analysis will continue to be used in practice in Bangladesh in future contracts.)

4. The Performance Contracting System provides an integrated performance measure using explicit weights for individual criteria. Program contracts specify several criteria and targets but no procedure for combining performance on those measures into an overall score.

5. The Performance Contracting System requires systematic evaluation of all ‘A’ category PEs every year through a pre-specified procedure. The Program Contract System provided for monitoring of the contract but not for systematic evaluation at the end of each year.

6. The Performance Contracting System recognizes the need to link rewards with actual performance, although the link is weak in the initial contracts negotiated for two PEs — the North Bengal Paper Mills Ltd. (NBPM) and the General Electric Manufacturing Co. Ltd. (GEMCO). However, it is hoped that the link will become stronger within the next cycle or two.² The program contract system, however, has no link between results and rewards. Of course, the question of such a link arises only if results are systematically judged in the first place, a condition that was not satisfied by the French Contracts.

² For further details regarding the Bangladesh system, in general, and these two PEs, in particular, see Chapter 6.1 in this book.
Comparison with the Signaling System (Pakistan, South Korea)

The lower half of the Exhibit summarizes the similarities and differences between the Program Contracting System and the Signaling System, which was first applied in Pakistan and then (with modifications) in South Korea.

Starting first with the similarities between the two systems:

1. Both systems are systematic, i.e. intended for application year after year according to some calendar of activities.

2. Both systems generate a composite measure of performance by requiring government to specify weights for various performance criteria. In fact, the Signaling System served as a useful model in this area for the Performance Contracting System.

3. In South Korea (but not in Pakistan), the Signaling System was introduced as part of a broad reform package enacted into law. This may turn out to be the case in Bangladesh as well, since there is a move afoot to introduce reforms in managerial autonomy and accountability in a single ordinance or act. It remains to be seen whether this will work out this way.

Turning to differences between the two systems, the following features are present in the Signaling System but absent in the Performance Contracting System:

1. The link between results and rewards is much stronger in both Pakistan and South Korea. A bonus of up to 3 months salary is paid in both countries, although in Pakistan only executives are covered by the scheme and workers receive bonuses according to pre-existing criteria (i.e. production, sales, and profits).

2. In the Signaling System, as applied in Pakistan or Korea, all PEs are subject to the same target-setting and evaluation approach, whereas in the Performance Contracting System comprehensive goals and targets are drawn up for only the most important PEs, with less sophisticated approaches for the large number of less important PEs.

The following features are present in the Performance Contracting
System but absent in the Signaling System:

1. An important difference is the fact that criteria and targets are derived in the Performance Contracting System from a medium term strategy for improving performance. The Signaling System, on the other hand, is mainly concerned with operational efficiency, i.e. getting more out of the existing resources, assuming products, technology, markets and government policies are more or less constant.

2. Following from the above, the Signaling System has a one-year time horizon, compared to the 3-5 year horizon of the Performance Contracting System.

3. Many quantitative targets are set through trend analysis in the Signaling System, especially in South Korea, whereas they are derived from a medium term strategy in the Performance Contracting System.

4. Performance improvement through improved inter-PE or inter-ministerial coordination of policies and decisions is explicitly emphasized in the Performance Contracting System.

5. Members of the PE-Government hierarchy are actively involved in finalizing the medium-term performance improvement plan, selecting criteria and targets, and evaluating performance. whereas some of these functions are performed in Korea by a part-time Task Force consisting of professors, Certified Public Accountants (CPAs) and other outside experts.

The collective impact of the differences just mentioned is to increase the procedural and technical complexity of the Performance Contracting System over the Signaling System. However, the gain (or so it is hoped) is a more meaningful set of targets and an improved understanding of issues and plans among managers and government officials.

REFERENCES


2.0 Introduction
In the era of privatization, the concern for public enterprises is right at the top of the policy maker’s agenda. This is true particularly for the less developed countries (LDC’S) where the public enterprises have spread themselves all over the key sectors of economy. The growth of the public enterprises in these countries is a direct measure of the success or failure of their economies. There is a general belief that the public enterprises have failed to deliver the goods, though there is no common view as to why this has happened, although, various alternative measures for the improvement of these enterprises have come up.

Public enterprises have conflicting objectives, being ‘enterprises’ they are required to function on commercial lines, making optimal use of the resources-(financial physical, material and human). At the same time unlike their counterparts in the private sector, being ‘public’ they have to serve public interest. However private an enterprise may be, it cannot escape its obligations towards the broader public good. Secondly, government as an overall supervisor can control these enterprises through a number of regulatory measures. This is a specific disadvantage, especially for the developing economies. The government must be conscious of the constraints imposed on the public enterprises. But if the government remains indifferent in this aspect, the public enterprises labour under severe structural handicaps, which endanger not only their performance but also the economy as a whole. This risk is all the greater in economies where the public sector is required to occupy ‘commanding heights’.

2.1 Concept of Performance Evaluation in Public Enterprises

The year 1967 marks a watershed in the annals of the French public enterprises. This is the year in which the Nora Committee was appointed to inquire into the functioning of the public enterprises and suggest measures for their improvement. The committee submitted its recommendations to the Government. The report brought out to light the confusion arising out of the excessive control by the government on the public enterprises it brought forth a sense of complacency or apathy, on the part of the different parties involved, towards the efficient functioning of these enterprises. The report called for a classification of the government — public enterprise relationship. This report envisaged essentially two-program measure (1).

i) Increased autonomy to the management of the public enterprises and

ii) A realistic pricing policy, in order that the units do not have to depend on the government ven fdr balancing their accounts.
The program contract gave a new orientation of relationship between the State and the public enterprises. It called for a multi-annual programming of the manpower and resources available to the enterprise, following posterior control over a priori control. This new orientation brought the public enterprise closer to the management pattern followed in the private firms. Thus the program contract came out as an instrument for rationalizing the management of public enterprises. The program contract removes the public enterprises from the enclave and returns them to the market economy. It ensures that the management of public enterprise would be similar to that of private firms, with the aims of rationality and efficiency. This would mean that the enterprise would know their objectives for the next several years and the financial targets, which it has to reach. This makes long term and medium term planning and programming necessary. Moreover the enterprises should not be burdened by excessive supervision, which would dampen initiative and dilute responsibility. The program contract serves as a planning tool at two levels, (2)

i) At the macro economic level, it is an additional instrument for National Planning, ii) At the micro-economic level it constitutes a true business plan.

According to the Nora report, “Its purpose is to improve efficiency in the management of the economy by seeking maximum consistency among the plans of individual economic agents. It by no means conflicts with the functioning of the market, rather it improves market action by clarifying it” and thereby permits” retention of context over the objectives of growth” (3)

As mentioned earlier the contracts had no standard format. However a few of them incorporated four essential elements in their contracts, this gave rise to high degree of subjectivity to the contract (4). 1) The strategy of public enterprise for a medium term (3 to 5 years), based on the governments macro-economic perception for the development plan. 2) Propositions formulated by the enterprises for adopting this strategy to the fundamental goals of the French government’s economic policy. 3) Areas of financial relations with government, especially the financial targets of the enterprise. 4) The government’s obligations to cover the additional costs of non-commercial objectives and relevant procedures for achieving this reciprocal commitment.

The Nora committee envisaged these measures in the framework of well-defined contracts, which would list out objectives expected to be fulfilled by the public enterprises as well as the financial assistance to be expected of the government. The contract would also quantify the constraints to the enterprises arising out of its obligations to the public interest and compensate the public enterprise fully on this count For the enterprises in the competitive sector, the report envisaged primarily the establishment of sound management principles in line with their counterparts in the private sector. Thus were born the first generation of contracts.
2.2 Performance Contracting in South Korea

South Korea has a history of embracing capitalist market forces, an industrious labour force and dynamic private entrepreneurs; these are complemented with a government which encourages economic growth through progressive economic policy. And yet surprisingly, the public sector played an important role in the development of a robust Korean industry. The role played by the public sector in Korean economic development was in line with Korean Government’s commitment to various economic goals such as export promotion, accelerated development of heavy industry and effective distribution of public utilities.¹

The Government Invested Enterprises (GIEs) however, were not successful in achieving the levels of performance that was expected from them. By the late 1970s the disappointing financial condition of the GIEs and their burden on public resources dented the reputation of the public sector and became a concern for the Korean public and government. Prior to introduction of the Government Invested Enterprises Management Act in 1984, several factors contributed to the inefficient performance of GIEs in Korea such as, a. Low Rate of Return on Capital; b. Increasing number of deficit enterprises and c. excessive government interference in operations of the GIEs.² Extensive Government control on enterprises was facilitated through various laws and regulations such as, Government Invested Enterprise Budget, Accounts Act and Government Invested Enterprise Administration Act. The aforementioned laws were supplemented by special laws such as the Government Invested Establishment Act. Government control was leading to inefficiency of Korean public sector enterprises; while the importance of government control in the early phases of the enterprises is accepted, such government intervention in the operation of well established enterprises leads to the poor performance of the enterprises. Autonomy is critical in public sector enterprises because the management must have the confidence to take decisions without being interfered by the government officials, which was absent in the Korean public enterprise prior to 1983. Performance of enterprises was also affected by appointments being made on political considerations instead of managerial professionalism. Multiple principals such as the Line Ministry, Ministry of Finance, Economic planning board and Board of Audit all exercised their respective spheres of influence on the enterprises giving rise to multiple and conflicting objectives, Korean enterprise hence, had to deal with multiple principals and multiple objectives hindering the decision making of managers who were unsure as to what the enterprise was expected to do.

2.2.1 Performance Management in Public Sector Enterprises


The public sector enterprises in Korea can be divided into four categories, namely,

1. Government Enterprises
2. Government Invested Enterprises (GIE)
3. Subsidiaries companies of GIEs
4. Other Government Backed Enterprises

Korea’s significant step for improving performance of Public Sector enterprise came in the form The Government Invested Enterprises Management Act passed on the December 16th of 1984. The legislation had two primary directives, to Enhance Managerial Autonomy, Accountability and to exercise effective control. The Act introduced a system of Management by Objective (MBO); preparation of budgets for example, was in line with this new system of MBO. The act also introduced a slew of other changes in policy such as increasing the autonomy of managers over a range of enterprise operations like procurements, budgeting and personnel policy. A two – tiered management organization was introduced, with the board of directors as the decision making body and enterprise president as the chief executive in charge of implementation. Audits of enterprises from outside were simplified and business supervision by technical ministries was removed. And importantly, an ex-post evaluation system with a linked incentive system was also introduced.

In order for this evaluation system to work and function effectively, several key institutions in the government machinery and in the GIEs had to be fine tuned. The Korean government machinery in place to evaluate enterprise performance is as follows:

- **GIE Management Evaluation Council**: It is the highest council concerned with the overall management of GIEs; this council formulates general guidelines for preparing the management objectives and budgets of GIEs and evaluates managerial performance of GIEs. The chairperson is the Minister of Economic Planning; the other members are the Minister of relevant technical ministries and three temporary commissioners from the private sector.

- **Public Enterprise Evaluation Bureau**: This bureau functions as the permanent secretariat of the Management Evaluation Council. The director of the bureau is the executive secretary of the council and also the de jure member of the Boards of Directors of all 25 GIEs.

- **GIE Management Evaluation Ad Hoc Task Force**: This task force is given charge of actually carrying out the performance evaluation. The members of this task force are experts in their respective fields such as professors in economics, business administration, experts from research institutes, businessmen and CPAs.

- **GIE special Task Force**: The purpose of this task force is to balance the skill, knowledge and expertise between the government and GIE, which is needed for performance evaluation. The task force consists of highly qualified personnel from within the GIEs, so essentially creating a unit within the GIEs.

- **Sectoral/ Technical Ministries**: The interference of the sectoral and technical Ministries has been reduced drastically by the Act, the ministries are directed to formulate sectoral policies to be carried out in sync with the national development strategy. The ministries are tasked, therefore, to discuss and reach agreement upon management objectives.
2.2.2 Performance Contract System in Korea

Performance Contract System traces its origin in the Korean public sector since 1984 as a part of the Management of State-Capitalized Enterprises (SCEs); it is a Management Performance Evaluation System. In 1999, the law was revised with the objective to increase operational autonomy, accountability and transparency of SCEs. The measures introduced included abolishing of government appointed board of director and adopting a system of standing and non-standing directors. Recruitment of CEOs of SCEs was changed and recruitment was done by a presidential nomination committee along with signing of management performance contracts for their jobs. A new management disclosure system was also stipulated under which SOEs were required to reveal management information such as financial reports and management review over the internet which was in the public interest. Citizen Charters were to be introduced by SOEs in order to promote consumer consciousness, regular customer satisfaction surveys were also to be conducted with the same objective. Lastly, several measures to improve efficiency and competitiveness of SOEs were introduced such as performance based salaries for senior management, external monitoring of management, knowledge based management systems and economic value added system (EVA).

Features of the Performance Contracts

1. Increased managerial autonomy over operational aspects such as budgets, procurement and personnel.
2. Incentivizing performance by linking incentives to performance results.
3. Comprehensive evaluation of performance through selection of specific and multiple objectives.
4. Implementation of Performance contracts within the organizational arrangements.

Indicators for performance evaluation

The PCS system employs two types of indicators for evaluation of performance, namely, Quantitative and Qualitative indicators.

1. Quantitative indicators: are objective indicators of measuring performance through numerical estimates. Quantitative indicators employ objective-performance, trend analysis, and Beta distribution methods. In the performance over management method, evaluation scores for SOEs range from 0 to 100 points.
2. Qualitative indicators: Korea utilizes a nine-scale grading evaluation method to evaluate the non-quantitative indicators(A+, A0, B+, B0, C0, D+, D0, E+, E0). As opposed to quantitative indicators qualitative indicators are evaluated by a sub-group in the ad-hoc task force by subjective judgment of managerial performance.

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3 Kim, Kwanbo; Kim, Pan S., ‘Restructuring, Management Innovation, and Privatization of State-Owned Enterprises in South Korea’, Pp. 67
An overall performance of the SCE is determined through an aggregate score which combines both the quantitative and qualitative indicators and multiplies it with their respective weighted values. These evaluations are then required to be submitted to the MPB, related ministries and the national assembly.

2.2.3 Incentives

The evaluation system is linked to the incentive system (in the form of bonuses). The task force conducts the performance evaluation each year and the bonus size would vary between 0% and 500% of monthly wages depending on the evaluation results in the nine categories. The system also incorporates non-pecuniary incentives and sanctions. Awards are handed to the highest scoring enterprises while the enterprises that are performing poorly can have sanction (e.g., dismissal of top management) imposed on them. Finally, an important part of the entire system is the wide publicizing of the results of the performance evaluation in mass media. Public recognition plays an important role in Korean society and is a powerful motivational tool for performance of top management.

Sources


2.3 Performance Contracting in Ghana

In Ghana, by the 1980s, the Ghana Cocoa board along with 16 other enterprises formed the core of public sector enterprises; the Ghana Cocoa board was a major source of revenue for the state, while the other 16 core public enterprise were in other important sectors such as energy, transportation and communication sectors. However, by the 70s and early 80s these core enterprises and their performance started suffering and prompted the public sector reform programme which was introduced in 1987.

The performance contracting (PC) system for public enterprises was introduced with the start of the public enterprise reform programme in Ghana. The PC system was introduced with the aim of improving the performance of the core State-Owned Enterprises (SOE). Performance Contracts proved to be an important tool for managing interaction between the government and enterprise, while initially it was seen only as temporary and contributing tool for improving performance of the core enterprises. Prior to this period, SOE governance, both in terms of
legal and institutional mechanism had seen deterioration coinciding with declining economic development and rising political instability. In 1982, first attempts were made to restore discipline in SOE governance through the Interim Management Committees (Public Boards and Corporations) Law. The enactment of the 1982 law meant that the existent SOE management system through boards of directors was removed, in its place Interim Management Committees were put in place. The legislation heralded a period of SOE self management for nearly a decade in which SOE management was virtually out of the hands of the sector ministries and was in the hands of committees of its own employees. It was in this background that performance contracts were first signed as part of the SOE reforms programme in Ghana.

The overall reform programme included tools like the Planning, Monitoring and Evaluation (PME) system which adapts the corporate plan to the economic realities, negotiating annual performance objectives and targets; quarterly reporting and annual evaluations. The reforms also included an annual cycle of setting performance objectives between the sectoral ministry and the enterprise; the State Enterprise Commission (SEC) and the Ministry of Finance and Economic Planning also formed party to this annual cycle, thus linking all these stakeholders.

2.3.1 Performance Management in Public Sector

In Ghana Performance contracting system forms part of the PME system, we will take a brief look at the elements of the PME system and its essential features before focusing on PCs. The PME system formed an essential cog in the SOE reform programme introduced by the government in Ghana in the early 1990s, in fact one of the main functions of the SEC was to manage and implement this system. As mentioned earlier the PME system was introduced as a mainstay to improve the performance of SOEs; the system incorporates three essential elements which are implemented in an annual cycle:

1. Updating of Corporate Plan;
2. Negotiation of Performance Contracts;
3. Quarterly monitoring and annual evaluation and reporting of performance.

2.3.2 Corporate Plan

The introduction of corporate plans was an important part of the PC system; prior to PCs corporate plan was not a standard feature in many of the core enterprises. Neither the sectoral ministries nor the enterprise management had much experience in preparing such corporate plans, and so, external consultants were relied on to prepare the corporate plans. However, using external consultants to prepare corporate plans did not meet with much success, as the sector ministries and the enterprise managers were confused and unable to adapt to these new corporate plans. By the early 90s, most of the SOE had started preparing their corporate plans without external consultants, but updating corporate plans annually was not common.
2.3.3 Performance Contracts

Performance contract system is a performance enhancing instrument which is entered into by the SOE management and the sector ministry; the SEC facilitates the negotiating and signing of the performance contracts.

In 1991, the contracts had a standardized format contained elements such as:

1. Objectives
2. Performance indicators to be monitored and annual targets to be achieved during the contract period.
4. Critical arrangements made in setting targets and reporting requirements.

Performance contracts set targets and objectives which are mutually agreed upon by the enterprise managers and the concerned ministries. Specific indicators are used to measure the performance of the SOEs against the objectives and targets in the PCs. In Ghana these targets are set under four main themes such as:

1. Financial/economic
2. Efficiency/productivity
3. Dynamic effects
4. Management improvements/projects

However, at the time of evaluation of performance the targets are categorized again, into three themes:

1. Financial/economic
2. Dynamic effects
3. Management improvement/projects

The first of the targets looks at indicators like profitability, output, productivity and efficiency, while the dynamic indicators look at human resources management, corporate planning and internal programmes for employees and maintenance of equipment. The last target focuses on proper audits, financial statement, and preparation of draft PCs, procurement and general operational efficiency.

2.3.4 Evaluation of Performance Contracts

Evaluation of performance is the next step after target setting in performance contracts. Once the targets for a specific year are decided between the enterprise and government and the PC signed, periodic reports are prepared by the SOEs to ascertain their progress. In Ghana these report are to be prepared on a quarterly and annual basis and sent to the SEC which is responsible for monitoring and evaluating the reports and also prepare an annual report which it sends to the government based on the quarterly reports it receives from the enterprises.

The quarterly reports are prepared by the SOEs 4 weeks after the end of the quarter and sent to the SEC for evaluation, and must contain the following:
1. An operating statement showing actual performance against budget for the quarter and year to date;
2. A balance sheet as at the end of the quarter;
3. Cash flow for the quarter showing actual against forecast;
4. A report of capital projects compared to budget;
5. A report on the achievements of agreed performance targets;
6. A report on progress achieved, explaining deviations and indicating the most important trends of the quarter.

The quarterly reports are the basis again for the preparation of annual reports by the SEC. This annual report prepared by the SEC is then sent to the government containing the following aspects:

1. Basic information sheet covering broad aspects of the operations of the SOEs such as outputs, inputs, pricing and other aspects.
2. Actual results measured against the performance targets set at the starting of the year in the PC;
3. Performance index sheet of composite scores based on actual against target performance;
4. Profit and loss statements;
5. Performance review assessment to ascertain reasons for departure from targets an importance of future planning.

2.3.5 Incentive System

The incentive forms the third essential step in implementation of performance contracts along with target setting and evaluation. Incentive can be in many forms such as pecuniary and punitive, but in most countries pecuniary incentives in the form of bonuses are given to employees over their standard pay as a reward for good performance. In Ghana is arrived at by the enterprise management by looking at the corresponding provisions in many collective agreements for payment of an annual bonus to all employees. Hence, the employees in SOEs that perform well can receive bonuses which are approximately 10-15 % of the salary of the employees.

2.3.6 Appraisal

An empirical study was conducted by Simpson (2013) to review the implementation of the performance contracts in Ghanaian public enterprises. Case studies were used, of enterprises from different categories based on their performance to analyze the impact PCs had on the functioning and performance of public enterprises. The study broadly found that the targets and objectives of the PCs were always specific, clear and measurable, but different SOEs in different categories set different targets and objectives in their PCs.

The study divided the different working cogs of the PC system to analyze their implementation in SOEs. Various aspects of PCs were analyzed such as, a. formulation of targets and objectives in PCs; b. Institutional arrangements; c. Resources; d. Politics. Firstly, the study focuses on formulation of targets and objectives in the PCs which the enterprises enter into; the study seeks to find out if the enterprises
have sufficient clarity with regard to PCs and the objectives set within them. The study finds that there are significant variations in the target setting process of different SOEs in different categories. For example, in the SOEs which are rated A have very different targets on a yearly basis compared to SOEs in the remaining categories where targets are the same excepting the incremental modification to the previous years objectives and targets. Secondly, Institutional Arrangements also differ in the different categories of SOEs in Ghana. The study finds that SOEs in categories A and B combine both a top-down and bottom-up approach while preparing the PCs, for example, SOEs in the top two categories employ a bottom-up approach while gathering information and setting of targets and objectives; however, they use a top-down approach when it comes to implementation, in the form of extensive supervision, monitoring and controlling in achieving targets. The SOEs in other categories predominantly use the top-down approach in both planning and implementation of the PCs. Thirdly, the study analyzes resources, which in this context refers to the resources that are available to the SOEs to enable them to effectively implement the PCs such as, funds and other incentives. In Ghana, SOEs receive funds from various sources such as, Central Government funds, Internally Generated Funds (IGF), and external sources (commercial loans and IMF/World Bank). The study finds that the resources that are available for the different categories of Ghanaian SOEs range from adequate to poor, where the SOEs in the category B have the best availability of resources. Category A enterprises also have relatively better resources, especially in the human resources area. But the resources in SOEs in the Category C and D are grossly inadequate. Fourthly, the study looks at political intervention; this is an aspect that is common to most SOEs around the world and can have positive or negatives effects. The study finds that in Ghana, SOEs are significantly affected by political interventions, though the level of control differs in the different categories of SOEs. The SOEs in category B are affected by political control in the form of diverting revenues from the SOEs to other areas, while in SOEs in the categories C and D, political interference appears in the form of delays in receipts of subvention from the central government.

The Study concludes that the objectives and targets set out in the PCs in Ghanaian SOEs are always clear and specific and measurable, but different SOEs in different categories formulate these targets differently. The SOEs implement the PCs with a combination of top-down and bottom-up approaches depending on the category in which the SOEs fall. However, all the SOEs in Ghana face similar problems with respect to availability of resources, both financial and human resources; and also face similar degrees or political control or political intervention.

Sources

2.4 Performance Contracting in China

Performance contracting plays a major role state owned enterprises (SOEs) in China with a large number of such contracts being signed between enterprise managers and the government. Starting in the mid-1980s, the Chinese started the PC system in China and by 1986 it had acquired a significant role. The PC system had become national policy for SOE reform between 1987 and 1994. China has one of the largest experiments with performance contracting, World Bank reports some 103,000 PCs in China in the manufacturing sector, utilities and other monopolies. (1)

In China, during the Cultural Revolution the remuneration for employees and managers was completely independent of individual or firm performance. In fact, the profits or losses that the firm incurred were absorbed by the state which left managers and employees having no incentive to improve the performance of the firm. In the 1970s, this system changed and reforms started moving towards incentivizing individual and enterprise performance, and so China transitioned from a centralized system where uniform wages were set by the central government to a decentralized system where compensation for managers and workers alike were influenced by enterprise performance, individual performance and local government policy. In the year 1978, select firms were chosen on a trial bases to try this new decentralized system where bonuses were linked to the performance of the individual; and in keeping with this policy use of performance bonuses and piece rate began. However, the first major step came in 1979 when the Sichuan province (local government) introduced SOE contracts, where the firm’s profitability was linked to the availability of performance bonuses and funds for investment. The SOE contracts set targets based on the previous performance of the SOEs and if the targets were met, then the SOEs were given 20% of the excess over the targets, for bonuses, employee welfare and investment activities to managers and employees, thus, encouraging the managers to actively seek profits for the SOEs. SOE contracts system was also accompanied by reforms which gave enterprise managers greater autonomy in operations, production and investment activities so as to adapt to the new incentive system. And by early 1980s reforms in enterprise autonomy and incentive systems were spreading far and wide in Chinese SOEs.

In China, the SOEs functioned under rigid and cumbersome system. The management of the enterprise had no autonomy to decide on any matter. Everything was decided by the planning bodies and communicated to the managers of the SOE’s; the enterprises had no claim on the profits either. The system was further complicated by the presence of a parallel management team at the top. The government and the ruling party appointed it. The contractual responsibility system was introduced into the SOE’s as an instrument for introducing reforms was first started with the farm sector. The system resulted in the release of huge potential, which was unrealized for many years.

The contractual management system follows the principles (25),

1. To strengthen the enterprise and help in realizing it’s potential.
2. The principal of autonomy of management.
3. The principle of responsibility binding by a contract.
4. Rationalization of the internal management by initiating reforms.
The system of contractual management has made clear the economic responsibility of the enterprise to the state, and has provided enterprises with relatively clearer and stable economic expectations, which have given a strong incentive to the management. The contractual system motivated by the contract incentives has promoted the reform of internal administration and thus increased the internal capacity.

**Impact of Performance Contracts in Chinese SOEs**

Xu and Shirley (2001) in their empirical study, analyze the PCs in about 500 SOEs in China to see the impact that PCs have had on their performance. The study categorizes the contracts according to the impact the PC provisions have on the enterprises such as:

i) Length of the contract  
ii) Wage elasticity  
iii) If the incumbent manager won the bid for the firm  
iv) If new manager won the bid for the firm  
v) If the primary target is profit targets  
vi) If the manager posted a bond as a guarantee for performance targets.

The two main questions that the study sought to ask was a. what impact has the PC system had on the SOEs in China? B. Are the PCs important in the context of the Chinese public sector? The study concluded that, the PCs did not improve the productivity of SOEs overall. However, on the question of whether the PCs are important for the SOEs in China, the study says that PCs are of great importance to the public sector in China. The study goes on to conclude that if the PCs are designed well, keeping in mind high powered incentives, sensible targets, commitment through longer terms for managers and bonds, then they can produce positive effects. But in the absence of these, the PCs could affect the performance of the PCs. So, the study reaffirms faith in the PC system as a potential solution for improving performance of SOEs only if done properly.

A more recent study by Zeitz (2011) identifies some of the problems with the incentive system for Chinese SOEs and their managers. The author argues that the damage caused by the performance incentive system in the long term in Chinese SOEs outweighs the short term increase in SOE productivity. He uses empirical analysis using data from the Iron and Steel industry in China to analyze his hypothesis.

The Chinese government introduced the incentive system for much of the same reason that other developing countries did, that is to incentivize performance of managers and make them more accountable and giving them greater autonomy in decision making. The incentive system in China faces several challenges; firstly, the lack of a level playing field means difficulty in implementation of the incentive system. In China, different enterprises operate differently; while some enterprises operate as protected monopolies other SOEs are subsidized make-works for a redundant work force. The result of such diversity in the SOEs meant that a consistent and uniform set of targets could not be set for all the SOEs. So, the government started signing enterprise specific targets and incentive system based broadly on enterprise profitability as a performance indicator. Secondly, ownership of the SOEs was at best a contentious issue among the various levels of government such as Central Government, multiple local
government agencies, enterprise managers, and workers. The complexity regarding ownership also cropped up problems during the multi-party negotiations, and as a result the local government could not formulate stable, long-term profit sharing terms with the SOEs. Finally, contracts tended to be for short periods and were fraught with pervasive negotiations; as a result the enterprises’ claims on the long term profits were in jeopardy. The managers feared that profits which would accrue from long term investment made by the SOEs would be absorbed by the government and would not come back to the enterprise and its managers, so managers sought to make short term investment as the benefits arising from these investments were more likely to come back to them.

The author concludes that the bonus system that was in place in China for SOEs between 1978 and 1988 actually had a negative impact on their performance. He attempts to contrast the short term benefits and long term effects of the incentive system and is of the opinion that the system’s negative long term effects are serious enough to justify the use of fixed wages. He also cautions policy makers to embark on determining the long term effects of the incentive system before implementation. In his example of the iron and steel industry the author believes that instead of the intended effect of aligning the interests of the principal and agents, the incentive system actually encourages the managers to pursue value destroying strategies.

Sources:


2.5 Performance Contracting in France

The French experiment in the late 1960’s was initiated with the primary objective of reducing the government’s budgetary support to the public enterprises. It was called contract de performance’ and was based on a report submitted to the French Govt. by a committee headed by Simon Nora. It was intended there would be a mutual agreement or a contract between the government and the public enterprises. It was to plan the activities jointly and to establish reciprocal commitments on the part of the government and public enterprises (5).

The French firms were facing highly competitive foreign firms, the state could not remain insensitive to the need for rationality in its budgetary decisions. The government action in the economic area had to be guided at all times by the criteria of economic efficiency. The policy of program contracts initiated by the Nora Committee Report originated the first generation of contracts.

In the first year, only two contracts were signed, one with the French State Railways (SNCF), and other with the French State Electricity Agency (EDF). For fixing targets for price and profitability certain
indicators of efficiency were considered like GDP, inflation rates, fuel prices, foreign exchange rates etc both parties agreed that the targets could be opened for mutual discussion and further modifications. The contract was for a period of five years.

The contract provided for certain investments in growth of the public enterprises and the government’s budgetary support for the growth was fixed. It was agreed that the prices of the goods and the services produced by the public enterprises could be adjusted without prior government approval to cover variable costs and two thirds of the financial needs on the new investment (6). The contracts proceeded well during the initial years but with the oil crisis in 1973, most of the macro-economic assumptions were thrown overboard and the government went back on the agreement. It did not allow the companies to increase the prices as per the contract. The EDF contract was not renewed, while that of the Railways was renewed for only two years.

It was again the report of de la GENIERE in 1977 which was the starting point for the contracts of the second generation — the “Contracts de enterprise” or the ‘Enterprise contracts’. While the basic approach of this report was similar to that of the Nora Committee Report, it strongly advocated the preparation of long term plans for each enterprise, which would form the basis for the contracts. The second round of contracts was initiated in 1978-79 with four enterprises namely SNCF, Coal Company, General Maritime and Air France. The duration was reduced to three years. It was to ensure better appreciation of the economic environment that might affect enterprise operations. But in 1981 when the Socialist party came to power, these contracts were subjected to rough weather. Only the contract with Air France was operational because it was in a globally competitive environment. These experiences dampened the spirits of the French enthusiasm for performance contracts.

In the French experiment, the institutional arrangements were quite simple. The Administrative machinery monitoring the public enterprise included the formation of a committee. It included all other ministries involved in the activities of the public enterprise. Another was also formed of the Board of Directors who would constantly monitor negotiations, with the CEO as the chief negotiating agent. There was a constant flow of information between the Board of the Directors, the CEO, other executives and the workers. Due to the information asymmetry between the government and the enterprise, there were long delays in negotiations and some of the contracts took years to negotiate and finalize (7). In addition the French system did not introduce any special rewards for achieving the targets and penalties for non-fulfillment of the terms of the contract.

2.2.1 Institutional Arrangements

In France, no separate institutional arrangements were set up for the formulation of the ‘contact de program’. The French thought that it would be adequate for one committee to be set up representing the government and negotiating the contract with the public enterprise. The administrative ministry was to preside over the committee. Several other ministries, such as ministry of Foreign Trade, Ministry of
Vocational Education, Ministry of Solidarity, were also to be on the committee. It was realized that if all the ministries affected by the performance of public enterprises were to be included the negotiations would take away lot of time. This difficulty was overcome by arranging a committee with representatives from only the ‘nodal ministry’ which sets the policies for the particular sector in question, and representatives of the Ministry of State Planning, Ministry of Economy dealing with Finance and External Affairs.

On the public enterprises side it was provided that the CEO should negotiate the contract, and report to the Director of the company. Constant flow of information between the Board of Directors and through the Board to the executives and workers was deemed necessary (8).

2.2.2 Appraisal

The problems that had come up with the French contracts were that they were subjective in nature and did not clearly specify the targets. There were many reasons for this lack of clarity. Often in addition to goals regarding financial and physical productivity, several qualitative and intrinsically un-measurable objectives were specified in the contracts. As a result a manager would not know how to prioritize between the conflicting objectives. Neither the evaluator would know whether to reward or punish the manager for a situation when the object is over achieved or under achieved.

A shortcoming of the French system was that it did not provide for any correction of the information asymmetry between the government and the enterprise. The French government was totally dependent on the enterprises for information, for setting the targets. This led to the long delays in negotiating the contracts, and specifying the targets in conditional terms. This conditionally led to frequent renegotiating of the contracts. Much of this could have been averted if there had been a Performance Information System.

2.3 The Signaling System

The system adopted by Pakistan, Korea and Venezuela for improving Public Enterprise Performance (PEP) is referred to as the Signaling system. Contracts between the public enterprise and the government are just one part of this system. The main objective of the system is to send signals to the managers to guide them in making decisions in the National interest and to reward them for doing so. The theoretical foundations of this system are more solid, because in the development of this system, the previous experience with performance evaluation in developing countries was carefully considered. Briefly, the Signaling System consists of three-sub systems (9).

(a). Performance Information System.
(b). Performance Evaluation System.
(c). Performance Incentive System.

In order to negotiate appropriate targets and monitor enterprise performance, it is essential that there should be a reasonable balance of information between the government and the public enterprise. The
The purpose of a Performance Information System (PIS) is to ensure this balance. It is different from the Management Information System (MIS).

In all the three countries that adopted the Signaling System, the development of a computerized Performance Information System was considered a necessary precondition. Accordingly, software entitled “Public Enterprise Performance Information System (PEPIS)” was developed. This software was initially developed for Pakistan and subsequently adopted for Korea and Venezuela.

The Performance Evaluation System consists of several steps. Firstly, one has to decide on a set of appropriate criteria for evaluating enterprise performance. The signaling system tries to measure performance on four fronts (10).

1] Static Efficiency
2] Dynamic Efficiency
3] Project Implementation
4] Achievement of non-commercial Objectives

(a). **Static Efficiency**: - Is the firm making the best use of its given stock of resources?

(b). **Dynamic Efficiency**: - Many decisions made by an enterprise have costs (benefits) in the present but generate benefits (costs) in the future. Therefore it is important to ensure that the enterprise is making optimum decisions in the dynamic sense also. This involves answering questions like Is preventive maintenance adequate? Is the company devoting enough attention to Research and Development?

(c). **Project implementation**: Are the projects being implemented efficiently?

(d). **Achievement of non-commercial objectives**: A system has to be devised to measure the efforts of the enterprise on this front.

### 2.3.1 The Pakistani Experience

Signaling system was established essentially in Pakistan to improve the operational efficiency of Public Industrial Enterprises. Until the late 1970’s, these enterprises were characterized by a combination of adverse financial and operational features, they were under severe declining profitability leading to weak financial structures. They developed imbalances in debt equity ratios and inefficient assets usage, etc. As a result in the early 1980’s the government entrusted the task of new investments to the private sector. The public sector was expected to improve its operational efficiency. The government of Pakistan took a decision to adopt the Signaling System for improving the efficiency of the public enterprises.
During 1981 in order to improve the efficiency of the Public Industrial Sector under the Ministry of Production, the Government decided to set up the Signaling System. In November 1981, the Experts Advisory Cell (EAC) was given the responsibility of setting up the project. The project had three components (11).

1] A Performance Information System to measure accurately actual behavior.
3] A Performance Incentive System to reward or penalize managers for their actual performance at the end of the period, i.e., one year.

The development of the system took about three years. During this process major efforts were made to evolve a Performance Information System. In 1983 the Government approved the operation of the system with modifications. The Signaling System originally envisaged social profitability, known as public profitability, as the primary indicator of performance. However, in approving the Signaling System, private profitability instead of proposed public profitability at constant prices, was kept as the primary criterion of evaluation.

Thus two thirds of the system, i.e. the Performance Information System sand Performance Incentive System survived. The third part suffered a major conceptual blow. According to Shaikh (1980), the real reasons for this conceptual compromise were as follows (12).

i) The government feared situations in which loss-making firms may have to be given a bonus because they performed well in terms of public profitability at constant prices.
ii) It was deemed that the public relations and political costs associated with such cases might be too heavy.
iii) Further, the government thought that by opting for financial profits as target, it would be able to deal more effectively with the constant nuisance of petitions for relief by loss-making enterprises.

Following this policy as the first step, several re-organizational measures were adopted to streamline the public sector. At the completion of this exercise, a fairly smooth control structure emerged. In this organizational set up, the ministry was operating like the head office of a large industrial conglomerate, the Experts Advisory Cell (EAC) an independent technical unit was created to assist the ministry in performing this function. The need for this unit was felt, since the ministry run by the civil servants was not equipped with the expertise required for the new function. One of the first tasks of the cell was to identify the ways and means of improving the performance of public enterprises. It was identified that there was a need for setting up institutional arrangements to guide and evaluate the performance of managers so that they could also be rewarded for good performance. It was against this background that the signaling project was developed at EAC.

The principles on which the Experts Advisory Cell in Pakistan sets the targets is,
1] Efficient targets setting should be carried out in a participatory process, without this approach targets tend to take the form of formal derivatives, which are often overtly accepted and covertly resisted.
2] Targets should be clear-cut.
3] Targets should neither be too low or too high.
4] Each enterprise must be looked at in its own unique environment, which must be taken into account.
5] The targets for incentives should ensure that the generation of a surplus is significantly more than distribution by way of bonus.
6] Targets must take into account the social tasks which enterprises are invariably asked to carry out.

2.3.2 Appraisal

The Signaling System was introduced in Pakistan in 1983-84, since then a number of studies have been carried out to determine the impact of the system on the enterprise performance. The World Bank undertook comprehensive study, (14) covering 12 enterprises and analyzed their performance for the period 1983-86. It was based on the quantitative measures as well as qualitative evidence. The study tried to answer two issues,

i) namely did the system succeeded in achieving its stated objectives of improving private financial profit and

ii) did it result in any efficiency gain, which was an underlying assumption of the system.

The study found it impossible to establish a link between the performance changes and the Signaling System. The factors examined were pricing, macro economic changes in management and changes in the market. Out of the four factors, pricing policy was the only one that definitely affected the extent to which achieving private profit targets. Efficiency trends in public profit did not show a strong correlation with growth in GDP thus indicating that macro economic changes perhaps did not have a strong bearing on enterprise performance. Similarly increased competition was not a major factor explaining the improvements in efficiency, but it was a reason for the deterioration in results in some cases. Lastly, changes in management did bring about some efficiency gain. The changes were caused by a variety of reasons in which the signaling system played an important role.

A later study, (15) which also combined quantitative and qualitative methods to identify the impact of the signaling system on the SOEs performance, came to the conclusion that the system in Pakistan at best has been a qualified success. The expectations that the system gave birth to, at the time of its initiation, have remained unfulfilled to a great extent. It highlighted that to a large extent the government, failed to appreciate the full potential of the system, which resulted in an unhappy outcome.
It was felt that the system had the capacity to increase productivity gains, to which the government paid very little attention. The government did not make any attempt to use the large volume of information thrown up by the system to review the macro economic policy framework. The study concluded that, “the logical consequence of this seeming apathy is that the system has been reduced to routine reporting exercise.

2.5 The African Experience

Though quite a few Less Developed Country’s may claim to have had a contractual relationship between their government and public enterprise, the credit for pioneering this system goes to Senegal. They were the first LDC’s to adopt the French model. Since the French government advisors set up the process, the Senegalese contract system turned out to be very similar to that of the French contracts. The initiative for adopting this system came from the Prime Minister Office (PMO). The Public enterprise managers welcomed it. They looked at it as an opportunity to get compensated for the non-commercial objectives imposed on them. Through it, they also hoped for increased autonomy and decreased outside interference. The technical and financial ministries, on the other hand, resented the curb on their powers and were not as enthusiastic.

The Senegalese contracts as already mentioned bear a remarkable similarity to the French contracts. The Prime Ministers office was involved in the design and execution of the contracts. The contracts did not work the way it should have been. It was primarily because preconditions relating to criteria were not satisfactorily fulfilled. The Senegalese contracts had terminology like “accommodate’, “obligation’, which were vague and made the whole exercise very subjective. The heavy emphasis according to a World Bank Report (18) was on the fact that, performance of virtually all enterprises in the sector began to show a dramatic deterioration in the contract periods. This result was a direct consequence of the way contracts were structured. The entire exercise had a positive influence too. The public enterprises started strategic planning for the first time. The government started seriously comparing the costs of social objectives and investment proposals with their benefits.

2.6 Performance Contracts in Gambia

The performance contract system for public enterprises was introduced in Gambia in 1987. As a prelude to identifying those public enterprises to come under the performance contract system, the public enterprise sector was divided into three schedules (19).

1] Enterprises in which the government is a minority share holder.
2] Enterprises in which the government is a majority shareholder
3] Strategic corporations/departments

In 1987, under the first phase, performance contracts were developed for three enterprises only. Under the second phase in 1990, performance contracts were developed for another three enterprises. In 1994 the third phases included another three enterprises.

The contracts were executed for a period of three years, and were signed by his Excellency the President on behalf of the Government, and by the Managing Director on behalf of the enterprise (20).

The performance contract followed the following steps,
1] Definition of the enterprise
2] Identification of the commercial and non-commercial activities of the enterprise
3] Development of the mechanism for reimbursement of non-commercial/social services
4] Selection of performance indicators and fixing targets for a particular year
5] Determination Of management incentive/sanctions scheme

2.6.1 Institutional Arrangements –

After the introduction of the performance contract system, the ultimate control and responsibility was taken over by the office of the President. The President, executed the contracts on behalf of the Government. The steering committees had representatives from the line ministries, the office of the President, National Investment Boards (NIB) and the enterprises themselves. These committees were given the responsibility of approving the budgets, deciding upon the performance indicators, targets, performance evaluation and management incentive (bonus)/sanctions. The line ministries were expected to concentrate their efforts on the development of sectoral policies, objectives and the framework within which public enterprises were expected to operate (21).

The following infrastructure arrangements were made for implementing the contract.
1] For each enterprise, a Steering Committee was set up comprising, the Chief Executive of NIB, Secretary General of the office of the President, Permanent Secretaries of the ministries of Finance, Economic affairs, Trade and Industry and the line ministry, and the Solicitor General.
2] NIB reviews the Corporate Plan, Annual Budget, performance indicators, targets, weights, and cost of non-commercial activities in the coming year.
3] Members of the Steering Committee also review the Corporate Plan, Annual budget, and performance indicators, targets and weights, along with the NIB comments, and agree on the contracts.
4] Contracts are signed by the President on behalf of the Government and by the Managing Director on behalf of the enterprise.
5] The enterprise submits quarterly and annual performance reports.
6] NIB receives the annual audited accounts and management’s self-assessment of performance, and makes an evaluation and a recommendation on the bonus to be paid or penalty to be applied.
7] Office of the President reviews and approves the evaluation and award of bonus or application of penalty.
8] Bonus is paid to management and distributed at their discretion.

2.6.2 Results

The Gambian system is generally counted as successful in achieving a sustained improvement in the performance of public enterprises (22). The system had commitment at the highest level with the President being a part of the contract signing process. The contracts were based on the Corporate Plan, which strengthened the enterprises information system further. The system also had a well-developed Incentive System, which boosted the working of the contracts. According to a study conducted by Pervaiz, the Gambian Ports Authority (GPA) significantly improved its performance. The net profits on port operations increased from 6.6 millions in 1986-87 to 28.2 in 1992-93. Gambia Produce Marketing Board showed substantial improvements after signing the contracts. Gambian Telecom Company too significantly improved its net profits after the contract.

2.8 The Experience in Bangladesh

Bangladesh initiated the process of contracting in the year 1985. Only those enterprises, which belonged to the category ‘A’ i.e., only those enterprises, which generated exceptionally good revenue, 89% of the total revenue are included in the category of contract signing enterprises.
The process of contracting in Bangladesh begins with preparing the performance improvement plan. Analysis of the objectives of the enterprise as well as the past performance of the enterprise is observed in order to formulate a true picture. This is followed by identification of critical success factors and classifying the factor of accountability. This leads to a discussion of strategic issues of the enterprise, which culminates, into the formulation of a performance improvement plan.

The next step of the process involves defining the performance criteria and assigning weightages to them. A process of negotiating the targets with the concerned ministries and committees and finalizing the draft follows this. The next steps is, monitoring the contracts both quarterly and bimonthly through a monitoring system and take necessary corrective action if necessary.

A typical performance contract of an enterprise would include; (24)
1) Production.
2) Profitability
3) FIRD
4) International Management Systems.

2.8.1 Institutional Arrangements

The institutional arrangements supporting the implementation of the contracts comprise of a Council Committee on Public Enterprise, Chaired by the President, and a Secretary’s Committee on Public Enterprises convened by the Ministry of Finance. These are supported by a Ad-hoc Task Force which comprises of experts of different areas of public Sector. The Council Committee on Public Enterprises manages issues pertaining to the public sector, reviews the contracts, gives guidelines, examines, evaluates the reports and initiates the corrective action. And the Secretaries Committee consists of Secretaries of Ministries divisions of ‘A’ category of enterprises, Secretary public enterprises, Secretary
2.10 The Sri Lankan Experience

Sri Lanka experimented with the performance contract system only for a very brief period. In 1991 two enterprises, namely Sri Lanka Tyre Corporation and Ceylon weather Products Corporation were selected for the purpose. However, with the privatisation of both the enterprises in 1993 the system was not tried out in other enterprises (26).

Sri Lanka adopted the signaling system for designing the performance contract for the two enterprises. The performance contracts focussed on financial performance (90% in the case of Sri Lanka Tyre and 97% in respect of Ceylon leather) and very little attention was paid to dynamic factors. Human resource development was the only dynamic performance criteria included in the performance contract system. it is quite possible that the designs of the performance contracts were influenced by the ultimate objective of privatization.

A study done by Dheerasesera and knight-John (27) says that the failure of performance contract system in Sri Lanka was due to the lack of political commitment.

Performance contracting should not be viewed as an alternative or competition to privatization. The study brings out the fact that the Sri Lankan government was not able to pursue the policy of gradual divestment because it was under pressure from the donor institutions to complete the privatization programme and this was the cause for the failure.

2.11 The Experience of Thailand

Thailand is the latest entrant in the performance contracting community. The Thai cabinet approved the introduction of the system in June 1995. The performance agreement system introduced in Thailand is similar to the signaling system. The evaluation is done on a five-point scale. The cabinet also approved an incentive scheme based on performance. The office of Auditor General is responsible for administering and implementing the system. The performance contracting system is applied to 53
Enterprises in 1998 (28).

<table>
<thead>
<tr>
<th>Name</th>
<th>Policy</th>
<th>Contents of the Contract</th>
<th>Institutional Arrangements</th>
<th>Special Features</th>
</tr>
</thead>
</table>
| France| Nora Committee Recommendation for setting up of a performance contracting system for improving the PE performance. | 1) Corp Plan.  
2) Strategy adopted by the enterprise.  
3) Areas of financial relations with the government.  
4) Government obligations. | 1) A committee representing the Govt.  
2) Representation from the PE. | Highly objective assessment. |
| Korea | The GIE Act 1983, empowering GIE’s more autonomy and powers.             | Qualitative Indicators  
1) Public Profitability  
2) Ad-hoc task Force. | 1) MEC  
2) Ad-hoc task Force. | Political Commitment at the highest level. |
**Summing Up**

The performance contracting for the public enterprises has been a process initiated by the European countries especially with France taking the initiative. The system has been duplicated in many countries. They have been adopted as it is in many of them while a few countries have modified them according to their conditions. The system has done not very well as it was expected to do at the time of initiation. A number of factors can be identified for the system for not being very successful. The other important features of the system like the infrastructure support, contents, duration are taken up in the coming chapters.

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Committee/Recommendations</th>
<th>Financial Indicators</th>
<th>Non-Financial Indicators</th>
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<tbody>
<tr>
<td>India</td>
<td>1985</td>
<td>Arjun Sengupta Committee</td>
<td>1) Profits.</td>
<td>1) HRD.</td>
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<tr>
<td></td>
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<td>Recommendations</td>
<td>2) Sales.</td>
<td>2) MOU Submission.</td>
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<td>5) Project Imp.</td>
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2) Reserves
3) Intermediate Cost/sales.
4) R & D Expenditure
Quantitative Indicators
1) Corp Planning.
2) R & D
3) MIS
4) Service Quality

1) HPC
2) Ad-hoc Task Force.
3) PE Bureau

1) Absence of commitment at the political level.
2) Minimum flow of information between the signatories.
Notes


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Contracts Between the State and its Enterprises
THE EXPERIENCE OF SENEGAL

Senegal’s government has negotiated contracts with five state-owned enterprises since 1980 and is in the process of negotiating five more. Although it is too early to draw any firm conclusions, initial results are promising and suggest some lessons for other developing countries.

The initial impetus for negotiating the contracts came from the Prime Minister. The SOE managers quickly saw a number of advantages in the contracts and were supportive. The technical ministries and the Ministry of Finance were less enthusiastic, rightly viewing the contracts as a curb on their power over the SOEs.

The contracts were modeled on the French example and the process was set up with advisers from the French government. The contracts were initially drafted by the SOE, then discussed by a negotiating committee consisting of representatives of the company, the oversight ministries, and the Prime Minister’s office. An interministerial meeting chaired by the Prime Minister was called to resolve any major issues that the negotiators could not. To date, contracts have been concluded with three transport companies (the railways, airline, and bus companies) and two rural development agencies.

and operating revenues. Ultimately, senior ministers decided to concentrate new investment on freight, rather than passenger traffic. The government also adopted formulae for regular tariff adjustments linked to increases in the costs of inputs (especially fuel) for most enterprises. It agreed to place limits on staff numbers to protect enterprises from pressures to take on excess or ill-qualified personnel.

Some of the contracts have produced measurable improvements in SOE performance. For example, the bus company, SOTRAC, has been guaranteed regular tariff increases, quarterly payment of a specific subsidy for money-losing suburban lines, and financial support for more buses and a second maintenance terminal. For its part, the company has set strict targets for worker productivity, maintenance, and more efficient fleet utilization—targets which, so far, it has met. Improvements in cash flow alone enabled SOTRAC to eliminate its bank overdraft and 30 percent of its arrears to suppliers in the first year of the contract.

The results of the contracts with the agricultural SOEs have been less encouraging than those in the transport sector. In part, this is because climatic conditions and world price fluctuations negated the projections, and the SOEs’ commitments were then ignored rather than revised. Contracts may be less well suited to rural development enterprises because of their greater vulnerability to unpredictable exogenous changes and the greater difficulty of quantifying targets.

The least successful contract was with one of the rural development enterprises in need of serious restructuring. It proved politically impossible to reach agreement on the major changes required to restore the company’s finances—including deep cuts in staff and overhead, radical changes in production methods, and greater cost recovery from farmers. Not surprisingly, SOE managers are disinclined to propose drastic reductions in operations or repudiate their past decisions, and the pressure for consensus during negotiations militates against imposition of radical changes. This illustrates a combined weakness and strength of the contracts. Because of the stress on negotiated agreement, neither party can impose changes where there is strong resistance. For the same reason, the changes that are agreed to are more likely to be taken seriously.

One grave weakness of the Senegalese contracts was the failure to estimate the global financial constraints or the total indirect as well as direct cost of the SOEs to the Treasury. As a result, they commit the
government to an unrealistically high level of financing. This has reduced the pressure to limit SOEs’ operating deficits or to set priorities for investments and trim accordingly. Many of the contracts increased rather than decreased the levels of subsidies in real terms, even though one of the main objectives of the exercise was to relieve the SOE drain on the budget.

The Government has since begun to develop a consistent set of realistic macroeconomic assumptions for the contracts. A study is underway to estimate total indirect as well as direct subsidies that could make a sizeable difference. SOTRAC’s exemption from taxes on fuel and imported vehicles, for example, has been estimated to be equivalent to 50 percent of its direct operating subsidies.

Another major omission had been the failure to monitor performance seriously and to develop incentives or sanctions linked to results. The Senegalese government has since instituted six-month joint reviews of contract execution to examine why targets have not been met and to revise the contract if necessary. The next step would be to develop incentives linked to performance.

Lessons of Experience

The experience of Senegal provides some useful lessons for implementing contracts in developing countries:

* High-level political commitment is essential. Contracts provoke powerful enemies, particularly in the ministries that will lose some of their power.

* Without a consistent and feasible set of assumptions, the contracts become an intellectual exercise. The targets of the firm and the government’s financial commitments must recognize real constraints and be based on a realistic appreciation of the future. The financial and administrative implications of the contracts must be spelled out and integrated into the budget and national plan. Investments should be evaluated in terms of global priorities and constraints and not just on a project-by-project basis.

* Even the most realistic projection can be overtaken by events. The contracts should be revised as circumstances change. For primary product producers, especially where exogenous factors like climate
and world price fluctuations play heavily in production targets, such flexibility is essential.

* Procedures for monitoring results and incentives or sanctions linked to performance are an essential part of the contract process.

* Technical assistance and training may be needed to implement comprehensive audits and to help prepare the SOE corporate plans. It may be preferable to begin with simpler, less ambitious plans to reduce the cost and time of preparation.

Conclusions

Although the extent and success of contracts to date has been limited, the idea keeps resurfacing and the present government of France has made it a major tool of SOE policy. Contracts have several advantages that account for their enduring appeal:

* They force the state and the enterprise to set out their intentions clearly, to transform vague targets into quantifiable goals. This also forces the enterprise to develop a comprehensive corporate plan as the basis for negotiation and requires the government to clarify its objectives. Both parties are forced to plan for the medium as well as the short term to think and act more consistently.

* They allow the negotiators to anticipate areas of potential conflict, work out disagreements beforehand and set up procedures for resolving future conflicts.

* They establish the two-way nature of state-SOE relations, setting out the mutual obligations of each party.

* They often produce the first quantification of the cost of using SOEs to achieve government's broader policy objectives.

Contracts between the state and its enterprises are amorphous documents, not really legally binding on either party. In France the state did not always keep its end of the bargain; in Senegal some of the SOEs failed in their commitments. In both countries, the important benefits of the contracts came not from the documents themselves, but from the process of preparation, negotiation and revision. This process can be
lengthy and costly. It took about two years to prepare the contract for Senegal’s railway and the Air France contract negotiations took 26 months. Because preparation and negotiation are so cumbersome, the contracts are vulnerable in times of crisis when governments search for a "quick fix." For the same reason, critics question whether contracts have too high a transaction cost to be a useful tool. Yet this disadvantage could be a benefit, if the negotiators — who are also the implementors — were strongly motivated to assure the success of their contract since they have invested considerable time and effort in it.

Contracts are most likely to be effective when they are linked with comprehensive reforms of the SOE environment. Measures to eliminate price distortions, expand competition, select and train SOE managers with commercial skills, selectively reduce government subsidies, and the like are integral to the success of the micro-reforms introduced by the contracts.

Why Performance Contracts for State-Owned Enterprises Haven’t Worked

Mary Shirley

Written contracts between governments and state enterprises have been widely used in World Bank projects since the first Bank operation supporting performance contracts, a 1975 operation in Senegal. A Bank survey of developing countries found 565 such contracts in thirty-two countries, and another 103,000 in China as of June 1994 (World Bank 1995). Although these performance contracts go by different names—contrat-plan, memorandum of understanding, signaling system—they share common features. All are negotiated, written agreements between governments and the managers of state enterprises that specify targets that management pledges to achieve in a given time frame and define how performance will be measured at the end of a specified period.

The case for performance contracts

Despite a global wave of privatizations, state enterprises still account for about 10 percent of gross domestic product (GDP) in developing countries. These enterprises are often the largest and most valuable or problematic firms, with monopolies in mining, petroleum, infrastructure, and heavy industry. For these firms performance contracts have often seemed to make good sense. Before the contracts were put in place most governments were trying to run their state enterprises without any form of performance evaluation. As one architect of performance contracts noted, this was like playing football without rules, scoreboards, or referees. Performance contracts seemed a logical solution to this problem, since similar contracts had been successful in the private sector.

No one, including the proponents of performance contracts, minimized the problems governments would face in designing such contracts, however. Much has been written about the problems that principals (in this case, governments) face because they cannot accurately measure the effort expended by their agents (managers) or sort it out from other factors affecting performance. These agency problems are compounded in the public sector, where politicians have many points of view and bureaucrats have many different agendas. Under such circumstances it is hard to judge performance and to motivate managers and hold them accountable for results. Moreover, unlike private owners, politicians may not benefit from better performance, and so may try to make managers serve objectives that conflict with efficiency, such as rewarding political supporters with jobs or subsidies.
Why Performance Contracts for State-Owned Enterprises Haven’t Worked

Proponents of performance contracts argue that they can be written in ways that clarify multiple objectives and make it easier to judge performance. For example, a contract could apply weights to the multiple objectives, spell out the obligations for which managers will be held accountable, and specify rewards (such as bonuses) and penalties (such as demotion or firing). Even where a government seeks to maximize social or political objectives, a performance contract can improve efficiency by setting appropriate targets. For example, a state enterprise required to retain redundant workers could still achieve contractual targets aimed at improving quality. And an overstaffed firm could still improve labor productivity by making better use of plant and equipment. The fact that managers operate under such constraints could be taken into account by judging performance against past trends.

The contrary evidence

The logic of performance contracts is persuasive, but the reality has been disappointing. Two empirical studies—one analyzing the effect of such contracts on profitability and productivity in twelve companies in six countries and the other examining statistically the correlation between performance contracts and productivity in hundreds of state enterprises in China—found no evidence that performance contracts had improved efficiency. The first study analyzed the effects of contracts in monopoly enterprises (in water, electricity, telecommunications, and oil and gas) in Ghana, India, the Republic of Korea, Mexico, the Philippines, and Senegal. It found no pattern of improvement associated with the performance contracts in productivity or profitability trends (figure 1).

The second study used a much larger sample in manufacturing but in only one country, China. The results showed that the increasing use of performance contracts in China could not stem the fall in productivity among state enterprises (figure 2). More important, the study found no robust, positive association between performance contracts and productivity. And a comparison of a sample of state enterprises that had signed performance contracts with a sample of firms that had not found no significant difference between the two groups.

Is it possible that performance contracts failed to improve productivity because managers were told to maximize social benefits, such as increasing employment or developing backward regions? Although the studies did not measure social benefits, the weights that contracts assigned to productivity targets (two-thirds on average) and the stated goals of the parties to the contracts suggest that improving operating efficiency was the prime objective. Moreover, most social and political goals imposed constant costs on state enterprises during the period and so should not have affected the trends being measured.

Why not simply judge performance contracts on whether the firms met the targets specified in the contract? All the firms in the first study did achieve at least satisfactory ratings where some sort of score was assigned, and all the contracts assign a high weight to economic goals. The problem is that many of the targets are soft or flawed measures of economic performance. For example, 30 percent of the score for one of the electricity companies (India’s National Thermal Power Cor-
poration) depended on the volume of electricity it generated. The company achieved its target and received a score of excellent, yet its total factor productivity actually fell below precontract levels. Output went up, but inputs rose three times faster. The target was flawed because it could be met by increasing inputs, even if efficiency declined. The contracts have many such flaws, for reasons explored below.

What is the problem?

The theory of contracting suggests that to improve performance, performance contracts must:

▪ Reduce the information advantage that managers enjoy over owners.
▪ Motivate managers through rewards or penalties to achieve the contract’s targets.
▪ Convince managers that the government promises in the contract (such as to pay bonuses or impose penalties) are credible.

The performance contracts in the two studies failed on all three counts. First, managers were able to use their information advantage to negotiate targets that were either hard for outsiders to evaluate or easy for the firm to achieve. Performance is hard to evaluate, for example, when there are many targets (the contract for Korea’s telecommunications company had forty) or when targets change frequently (a third of the targets for Ghana’s water company changed every year). Targets can also simply be soft; in India, for example, negotiations dragged on so long that targets were set equal to ex post performance. The managers’ information advantage was compounded by governments’ failure to give the bureaucrats responsible for negotiating the contracts and evaluating results the power, resources, and status they needed to face enterprise managers on a level playing field. Managers were thus able to negotiate targets that they could achieve without making additional efforts to improve productivity.

Second, the incentives provided under the contracts failed to motivate managers. The first study found that only two of the twelve contracts paid a bonus or punished underachievement. And the second study, in China, found that the incentive (wage increases linked to profits) was set too low to motivate improvements in most of the firms and was aimed only at workers.

Finally, governments’ commitment to enforcing the contracts and keeping their promises was not credible. All the contracts lacked neutral, third-party enforcement mechanisms (the state enterprises could not take the government to court, for example), and governments often reneged on their promises. In Ghana, India, and Senegal, for example, the government did not force public entities to pay their bills to the electricity companies.

There is evidence that a performance contract that overcomes the three contracting problems can improve efficiency. The study of China simulated what would have happened with a “good” performance contract—one that addressed the information, incentive, and commitment problems—and found that it would have had a statistically significant and large positive effect, boosting productivity growth rates by 10 percent. But only 2.2 percent of the firms in the sample had “good” performance contracts. All the other performance contracts had either insignificant or negative effects on productivity.

Why did so few performance contracts contain the provisions necessary for success? Performance contracting assumes that government
Why Performance Contracts for State-Owned Enterprises Haven’t Worked

objectives can be maximized and performance improved by setting targets that take into account the constraints placed on managers. For this to occur, politicians and bureaucrats must state their objectives explicitly and agree to weights that reflect their priorities, empower a supervisory body to translate these objectives into monitorable targets negotiated with managers, punish and reward managers on the basis of their performance, and keep any promises made in the contract. Few of these actions occurred for the contracts studied.

Why would governments sign performance contracts and then not try to make them work? Some governments may have been motivated to pledge actions that were politically unrealistic because it enabled them to meet conditions of a World Bank loan. Some governments may have underestimated the political costs of adhering to a performance contract, such as firing politically loyal but underperforming managers, paying incentives that might raise a manager’s salary well above a minister’s, shifting funds from other purposes to pay electricity bills, or allowing overstuffed state enterprises to lay off workers. All governments seem to have underestimated the extent of their information disadvantage relative to managers.

Improving enterprise performance

Chile’s successful experience in reforming its state enterprises points to actions that are key to improving efficiency: Chile increased competition by ending any legally mandated state monopolies and barriers to entry, reducing import tariffs to 10 percent across the board, breaking up monopolies in such sectors as electricity, and pushing state enterprises to contract out competitive activities under strict rules of competitive bidding. It placed state enterprises under private commercial law, and members of the boards of directors became liable for their decisions. Private parties were named to boards, and boards were kept small (five people) to reduce the political value of keeping companies public. The government eliminated all subsidies, transfers, and government guarantees for debts of state enterprises and instructed banks to lend to them under the same criteria as for private enterprises. State enterprises were required to pay a 10 percent return on assets as a dividend, and money losers were required to sell assets to pay their dividend. The government privatized almost all commercial and financial firms and most utilities, allowing it to concentrate its supervision on relatively few firms (such as the water and sewerage companies).

Do these findings mean that World Bank operations should not support or encourage performance contracts? Although the studies found few successful contracts, they did show that in those rare cases where a performance contract is properly written, it can improve efficiency. But they also found that performance contracts can do harm. If targets are set too low, managers might reduce their efforts to improve performance. And flawed targets can have perverse effects, as in the case of India’s electricity company. Since a well-designed and carefully enforced performance contract can be as politically costly as a well-designed privatization, performance contracts are not likely to be successful in countries that lack the political will to privatize, where they may be viewed as a soft alternative to privatization. The findings suggest that performance contracts should be used only where governments are politically prepared to make tough decisions and the contract is part of a broader package of state enterprise reforms.

References


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Does Autonomy Matter in State Owned Enterprises? - Evidence from Performance Contracts in India

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Indira Gandhi Institute of Development Research, Mumbai
August 2014
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Abstract
The empirical effect of enterprise autonomy on the performance of state-owned enterprises is surprisingly scant despite autonomy being a preferred reform instrument in many countries, and often chosen over privatization. Using longitudinal data on performance contracts for state-owned enterprises in India, this paper empirically examines whether granting increased autonomy to state-owned enterprises through such contracts positively impacts enterprise profitability. Further, using the unique reform experience of India as a natural experiment, whereby enterprise autonomy has been simultaneously pursued with partial privatization for a sub-set of enterprises, a unique contribution of the study lies in investigating whether ownership divestiture through partial privatization has any effect once enterprises are imparted managerial autonomy, or whether ownership per se matters. Classifying state owned enterprises into three types, namely those that have been granted autonomy, those with autonomy and partially divested ownership, and those with neither, the study finds robust evidence of a positive impact of managerial autonomy on enterprise profitability. Additionally, once autonomy is controlled for, the study finds at best a weak effect of partial privatization. These results raise doubt on earlier findings of a robust positive effect of partial privatization in India in studies that did not explicitly control for enterprise autonomy thereby raising the possibility that the positive privatization effect that showed up was in actuality, an autonomy effect.

Keywords: state-owned enterprises, autonomy, performance contracts, partial privatization, performance, India

JEL Code: D2, D73, L23, L33, P31
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Does Autonomy Matter in State Owned Enterprises? – Evidence from Performance Contracts in India

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1. Introduction

One of the sources of inefficiency of state owned enterprises (SOEs) that has been widely recognized across both developed and developing countries is the lack of managerial autonomy in decision making. This is on account of excessive intervention and control exerted in most operational matters by the de facto caretakers of SOEs, namely the politicians and bureaucrats (Bolton, 1995; Lioukas et al., 1993; OECD, 2005). Inefficiencies on account of political intervention are said to arise as the objectives of the politicians are driven by their desire to seek rents and their need to cater to the demands of various interest groups that constitute their vote banks (Shleifer and Vishny, 1994; Gupta, 2008). Control by politicians, by distorting pricing, investment, location, production and resource allocation decisions lead to excessive labor employment and wages (Bolton, 1995; Shleifer and Vishny, 1994), and are found to adversely affect allocative and dynamic efficiency in general. As suggested by theories of decentralization, agency theory, and incentive contracts, imparting greater decision making control to SOE managers can generate efficiency gains through better use of local information on operational factors such as costs, technology and demand, and through alleviating agency costs arising from asymmetric information between the government and the SOE management (Bolton, 1993; Li and Wu, 2002; Shirley and Xu, 1998).

The objective of this paper is to empirically examine the impact of granting increased autonomy to SOE managers on enterprise performance using longitudinal data on performance contracts for SOEs in India, spanning a period of thirty years. A performance contract is essentially a negotiated incentive contract between the government and SOE management designed to create appropriate incentives and greater autonomy for SOE managers. Such autonomy is expected to reduce information asymmetry between the government and SOE managers, to bring clarity to multiple SOE objectives by setting specific targets for the management to achieve, and to link the targets set in the contract with high-powered incentives and meaningful penalties for managers and employees, along with ensuring commitment of both parties, namely the government and SOE management to the contract (Shirley and Xu, 1998; 2001). As noted by Mishra and Rishi (2013), in the last twenty five years or so, more than thirty developing countries have introduced the performance contract system to impart greater operational autonomy in order to improve SOE performance. Performance contracts have also been introduced in developed countries but their use has been largely restricted to government owned utilities in natural monopoly settings. Significantly, contracts in developing countries have been implemented in the initial years of SOE reforms, in lieu of

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2The World Bank (1995) in a survey of 32 developing countries in 1994, found evidence of over 565 performance contracts and in China alone they found over 103,000 such contracts.

3 Developed countries include United Kingdom, United States, Canada, Denmark, Finland, and most importantly France where the system originated.
outright privatization as the latter faced a host of political and institutional constraints\(^4\), with few governments in practice being able to relinquish completely the ownership and control of SOEs to private owners (Bortolotti et al., 2001)\(^5\). Keeping the ownership and control structures of SOEs largely unchanged, the weight of reforms shifted to implementing organizational changes, including imparting greater autonomy to managers and strengthening their incentives, in order to positively impact the environment in which SOEs operated (see for example, Djankov and Murrell, 2002). For instance in the case of Chinese SOEs, Naughton (1994) observed that formulating policies that granted autonomy and incentives were so “fundamental” to the SOE reform process that these could be viewed as “privatization from below.”

Notwithstanding the theoretical arguments favoring enterprise autonomy as well as its wide adoption as an SOE reform measure, empirical evidence on the impact of autonomy on performance is surprisingly scant and far between. This we think is a serious lacuna in the literature on SOE reforms despite autonomy being a preferred reform instrument in many countries for improving SOE performance. Barring a few empirical studies with respect to China, questions regarding the effectiveness of enterprise autonomy as a reform measure have largely gone unanswered and unaccounted for despite being an integral part of the SOE reform package. Additionally, among the existing studies, the results on the impact of autonomy are mixed (Xu et al., 2005). The limited number of studies and the lack of robust evidence in the literature pertaining to the long term effects of autonomy and incentives on enterprise performance are particularly stark in comparison with the innumerable and ongoing studies on privatization across countries\(^6\). From a policy perspective, it is important to contribute to the body of evidence on how enterprise level autonomy can impact SOE performance, in view of the continuing constraints on privatization particularly in developing and emerging economies that have a substantial presence of SOEs on the one hand, and the persistent tendency of politicians to intervene in SOE activities on the other.

The choice of India as a setting to examine the impact of autonomy on SOE performance is dictated by the availability of a unique and comprehensive longitudinal data set that enables us to evaluate the effect

\[^4\] These conditions have included political factors (Biais and Perotti, 2002; Gupta, 2005), budgetary constraints (Roland, 2000; Guislain, 1997), legal origins and level of financial sector development (Boubakri et al., 1998) and the absence of important pre-conditions for privatization (World Bank, 1995).

\[^5\] In the reported public offerings between 1977 and 1999, the majority of stock was sold in only 30% of the 617 companies being considered, and it never happened in 11 out of 76 countries.

\[^6\] The large number of privatization studies is most evident from the numerous comprehensive surveys of empirical studies till date with respect to developed, developing and transition economies, among these being Megginson and Netter (2001), Parker and Kirckpatrick (2005), Megginson and Sutter (2006), Nellis (2007) and Estrin et al. (2009).
of autonomy in the medium to long run. The scant evidence on autonomy and performance in the existing literature, in our opinion, has to do with the scarcity of appropriate large sample data needed for empirically evaluating its effects on different metrics of SOE performance. In the case of India, however, the introduction of the performance contract system in the late eighties and the continuation of the system till date make available relevant data on Indian SOEs for a period spanning more than twenty years. This together with the availability of pre-reforms data starting in 1982 enables us to choose a sample period of thirty years, 1982 – 2011, by far the longest duration study on autonomy, with 5500 firm year observations over 214 SOEs in the non-financial sector that are owned and controlled by the Government of India. With three decades of information, roughly one decade prior to the introduction of autonomy through the performance contract system in the country and two decades since the introduction of the system, the data set of our study thus has both sufficient across time and across firm variation.

Along with the long panel, the value of an Indian case study lies in the reliability and exhaustive coverage of the data on SOEs. Most of the existing empirical studies on SOE reforms including that with respect to autonomy, and predominantly focusing on Chinese SOEs are based on sample survey data rather than on mandated self-disclosures as is the best-practice in developed countries like the US. This in turn leads to problems of selection bias and omitted variables (Megginson and Netter, 2001). This is not the case with India where all operating SOEs owned and controlled by the Government of India (centrally owned SOEs) have to make mandatory annual disclosures in a prescribed format to the Government, which are then publicly available in officially published reports. Our dataset is based on these reports and cover almost all centrally owned SOEs in the non-financial sector.

The richness of the longitudinal data on Indian SOEs allows us capture with greater precision and robustness the long run impact of performance contracts on SOE performance relative to existing studies. As several researchers have argued (Willner, 2001; Brown et al., 2005) in the context of privatization studies, the dearth of longitudinal data works against estimating with reasonable precision, post-reform effects on firm performance due to sparse pre and post reform observations. Estimated effects in such cases are predominantly derived from cross-section variations in the data rather than from comparisons of pre- and post-reform performance for a panel of firms. For instance, studies evaluating the impact of performance contracts in Chinese enterprises do not go beyond a decade of post-autonomy observations, as China’s experiment with enterprise autonomy lasted for approximately a period of ten years up to the late nineties. The absence of any definitive evidence on performance contracts in the empirical literature to date could very well be due to the fact that the post-autonomy effects have been studied over too short a period for the performance effects to unravel and be captured. In contrast, in the case of India, the
performance contract system has been in vogue since 1988 when it was put in place to impart increasing autonomy and flexibility to SOEs, and is in existence since then, with an increasing number of SOEs coming under the system over the years. With an average of around 25 observations per enterprise, and with an almost equal split of pre- and post-performance contract observations, the Indian experience thus makes available longitudinal data that allows us to not only exploit the cross-section variation in performance across SOEs with and without autonomy, but also allows us to capture the before and after effects of autonomy on a balanced panel of SOEs.

Along with the availability of suitable data, a second and equally important consideration for focusing on Indian SOEs is that the Indian public sector reform experience over the period of our study enables one to evaluate not only the marginal effect of autonomy per se but also to compare it vis-à-vis the effect of ownership changes through privatisation. Such an exercise has seldom been undertaken in the context of examining the impact of autonomy, nor has it been done in the context of privatization studies. Yet as several researchers point out (Djankov and Murrell, 2002; Nellis, 2007) points out, SOE reforms like autonomy and privatization seldom are “stand alone” policy interventions and it is important to separate out their effects and establish possible complementarities and substitutabilities between different types of interventions7. The Indian SOE reform experience since the nineties provides us with such an opportunity to identify autonomy effects and their implications if any for the benefits that can be further accrued through privatisation. This is on account of the fact that since the 1990s, India has followed a ‘dual track’ policy of imparting increasing managerial autonomy through performance contracts on the one hand, and effecting ownership changes through partial privatization, on the other. The objective of partial privatization in India as in many other countries has been to divest government ownership to private owners so as to subject SOEs to greater capital market discipline without relinquishing state control and upsetting the voter banks, and to buy time to build political consensus about full privatization in future (Jones, 1999; Qian, 2003; Gupta, 2005, 2011). However, what is different in the case of India is that such privatization has proceeded hand in hand with organizational autonomy where several SOEs which have been under performance contracts have also been partially privatized while continuing to remain under such contracts. The moot question that can therefore be addressed in light of the Indian experience is, does autonomy matter, or does ownership matter, or is it both?

7 Arguing in the context of privatization, Nellis (2007) argues that in the presence of other accompanying reforms that increase competitive pressures for SOEs, it is challenging to isolate the effects of privatization from other effects.
The motivation underlying this question lies in the still unresolved debate of whether, as argued by the property rights and public choice theorists, it is the ownership structure of the public sector that is *per se* primarily responsible for its underperformance relative to private sector entities, or whether, as other researchers argue, it is the environmental imperfections and distortions in which SOEs operate, such as the lack of autonomy and non-competitive environment, that are responsible for the relative inefficiency of SOEs so that ownership does not matter. Applying the latter argument, if performance contracts are effective in removing political interference and giving managers the autonomy and incentives to take decisions that seek to maximize SOE performance, further ownership changes through privatization may be redundant. Empirical studies on organizational autonomy have largely bypassed testing this hypothesis even in contexts where both policies were pursued, as in the case of China. In China both autonomy and partial privatization were pursued, but performance contracts and privatization were pursued in phases with such contracts being prevalent for only ten years in the first phase, from 1984-93, and the second phase of corporatization and privatization from 1993 onwards (Aivazian et al., 2005). Existing studies of autonomy in China largely concentrated on the first phase with little overlap with the second phase. This has been less by choice than by design, as data sets used for empirical estimation seldom captured both kinds of reforms over an extended period of time (Groves et al., 1994; Shirley and Xu, 2001).

In contrast, the Indian reform experience is unique in terms of both autonomy and partial privatization being pursued side by side for perhaps the longest duration. This is reflected in our longitudinal data set where we can identify essentially three types of SOEs, *Type-1* that did not undergo either autonomy or privatization throughout the period of study, 1982-2011, *Type-2* which were granted autonomy under the performance contract system since the late eighties, and *Type-3*, which were granted both autonomy and were also partially privatized at some point of time starting early nineties. As is clear from this typology, the Indian data set is naturally suited to measuring the marginal effect not only of autonomy vis-à-vis no reform, but also the marginal effect of partial privatization vis-à-vis that of autonomy. Earlier work on India which has looked at partial privatization effects seem to suggest that ownership indeed matters (Gupta, 2005; 2011). However, the study overlooked the fact that partial privatization in India was not a “stand alone” reform in the sense that apart from changes in the competitive environment, those SOEs that were partially privatized, were also under performance contracts and continued to remain so post-disinvestment. While the results of Gupta’s (2005; 2011) studies suggest that partial privatization is beneficial, the fact that the studies do not control for the autonomy effect in partially privatized

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9 See for example, Vickers and Yarrow (1991), Shirley and Xu (1998), Anderson et al. (2000), Djankov and Murrell (2002); Holz, 2002.)
enterprises, could have confounded the effects of partial privatization to the extent that the positive privatization effect that showed up was in actuality, an autonomy effect.

Our empirical strategy of measuring the impact of performance contracts and partial privatization on SOE performance closely mirrors that of Brown et al. (2005) in their longitudinal study of estimating the productivity effects of privatization in four transition economies. Like Brown et al. (2005), we follow a “difference-in-difference approach” to estimate the ‘treatment effects’ of autonomy and partial privatization, by comparing the outcomes of the treated group of SOEs that have been subject to a particular policy reform to that of the untreated group that has not been subjected to similar reform measures. Additionally, we also undertake a “before-after analysis” by exploiting the long time series data in our sample to compare the outcomes of the treated group before and after the treatment to identify policy impacts. However, the measurement issues in our study are somewhat more complex than those in Brown et al. as we have to separate out the marginal effects of two types of treatments pursued sequentially over time, namely, autonomy and partial privatization while in Brown et al., the focus is only on privatization. We disentangle the marginal effects of these two types of reforms by exploiting the significant cross-sectional variation across the three types of SOEs that we have in our sample and which we have outlined earlier.

One empirical issue that is of particular concern for our study and indeed that of all impact evaluation studies is that of selection bias, namely the random assignment of units to the treatment group. The random assignment assumption ensures that the estimated differential effect between the control and treatment groups can be unconditionally attributed to the stimulus rather than been driven by the specific characteristics of the treatment group. While random assignments are easier to implement for experiments in medical sciences, it is difficult to do so in social sciences like Economics where the treatment units are chosen with an eye towards the success of intervention. Given the large number of observations of different types of enterprises in the cross section as well as before and after the policy intervention that we have in our sample, we address the issue of selection bias by carefully selecting alternative sub-samples rather than by employing the usual econometric technique of instrumental variable which is a preferred choice in a situation of sparse data. In other words, there are many control and treatment groups in our study. If the differences in the behavior of the treatment and control groups remain robust for various alternative choices of the control and treatment groups, then the inference that the observed difference is due to the stimulus becomes stronger. We elaborate our empirical strategy in greater detail in the empirical section.
The key finding of our study is that enterprise autonomy through performance contracts matter in SOE performance. Specifically, enhanced autonomy has a statistically significant positive effect on SOE profitability. Further, when the impact of partial privatization is estimated after controlling for the impact of autonomy, in most cases, partial privatization has no independent impact on profitability while autonomy continues to have a positive impact. At best, partial privatization is found to have a positive impact only when the extent of share disinvested is substantial in comparison to the median level of disinvestment. In effect, one major finding of our study with important policy implications for SOE restructuring is that while deregulation and hard budget constraints could have important complementarities with enterprise autonomy, partial privatization, post enterprise autonomy, does not lead to enhanced SOE profitability.

The paper is organized as follows. Section 1 being this introduction, Section 2 discusses the evolution and practice of performance contract system in India keeping in background, the relevant theoretical and empirical literature. The data, variables and estimation methodology are outlined in Section 3, while the empirical results are presented in Section 4. Concluding comments are made in Section 5.

2. Background Literature
The granting of autonomy through performance contracts (PCs) has been a preferred mode in reforming SOEs over privatization through ownership divestiture due to a host of factors ranging from strategic considerations requiring government ownership, to political constraints that render privatization infeasible, to being a less radical but potentially an equally effective policy option as compared to privatization. Theoretically, performance benefits associated with PCs can arise from combination of factors that include reducing agency problems arising from asymmetric information and managerial shirking, eliminating multiple principals with multiple goals, and improving accountability of SOE managers through pre-set performance targets (see Shirley and Xu, 2001 and Trivedi, 1990 for a detailed discussion).

Applying a principal-agent framework (Shirley and Xu, 2001), a PC can be viewed as a negotiated incentive contract in the form of a written agreement between the government (the principal) and SOE managers (the agent) that specifies pledges by management to achieve key performance targets within a time period, in return for which the government makes some fixed commitments in the form of autonomy and incentives. The benefit of such a contract is that, it can solve the moral hazard problem arising from asymmetric information and unobservable managerial effort by revealing information and motivating
managers to exert effort that maximize SOE performance (Ghosh, 1997; Jones, 1991; Shirley and Xu, 1998; Trivedi, 1990). Further, negotiated contracts can clarify the multiplicity of objectives that the SOE manager faces from the various governing bodies (like different ministers, legislatures, bureaucrats etc.) by setting specific targets for the management to achieve, thus encouraging governments to reduce control \textit{ex ante} and through the delegation of decision making authority, giving managers more freedom and motivation to improve SOE performance (Jones, 1991; Ghosh, 1997). Benefits also arise from linking targets set in the performance contract with high-powered incentives and meaningful penalties for managers and employees, along with ensuring commitment of both parties (government and management of SOEs) to the contract that would ensure the success of these contracts in improving the SOE performance (Shirley and Xu, 1998). Finally, the enhanced delegation of formal authority to SOE managers as envisaged to some extent under performance contracts can effectively increase their real authority and improve the quality of their decision making and thereby organizational performance (Aghion and Tirole, 1997).\(^{10}\)

While, theory predicts that greater autonomy in decision through policy instruments such as performance contracts should translate into better SOE performance as managers have greater incentives to acquire information valuable for the efficient functioning of the enterprise, as well as cut down on political agency costs, these benefits may at the margin be neutralized if increased managerial independence (and less government oversight) gives rise to the typical managerial agency that arise on account of moral hazard in manager-controlled corporations (Xu et al., 2005). In fact, by eliminating political control and thereby government oversight from the day to day operations of SOEs, such agency problems are likely to become more acute in SOEs as the disciplining effect of different markets such as the takeover market and the managerial market that are considered effective in the case of private sector enterprises (Manne, 1965; Fama, 1980), and virtually absent in public enterprises due to the attenuation of property rights in public enterprises whereby their shares are non-transferable and cannot be traded in the markets. This can therefore leave public management that has more autonomy, with even far more discretion to pursue its own objectives at the expense of that of the shareholders (Lindsay, 1976, Kay and Silbertson, 1984, Millward and Parker, 1983). Adding to this is the possibility that measures through which managerial autonomy are granted may be more cosmetic in nature that does little to transfer real decision making control to managers so that ‘formal authority’ does not necessarily transfer into ‘real authority’ (Aghion and Tirole, 1997). Given the opposing effects of autonomy on managerial incentives and agency, and the possibility that meaningful autonomy may be difficult to implement in practice, the resultant impact of

\(^{10}\) A similar point is made by Xu et al. (2005)
managerial autonomy on SOE performance is not \textit{a priori} evident and is therefore an open empirical question (Xu et al., 2005).

Although PCs are known by different names in different countries (like contract plan in Senegal, performance monitoring and evaluation system in Philippines, memorandum of understanding in India, contract responsibility system in China), they all share the common feature of being written agreements between the government and the managers of SOEs, that specify targets that management pledge to achieve in a given time frame along with defining the criteria for measuring the performance, and the benefits that managers earn in return for meeting the set targets. PCs in Indian SOEs are known as the Memorandum of Understanding (MOU) and were introduced for the first time in 1988-89 on the recommendation of the Arjun Sengupta Committee which was set up in 1984 as a first step towards reviewing extant policy of SOEs and suggesting policy measures to improve SOE performance. The committee in its report, Report of the Committee to Review Policy for Public Enterprises, 1986 (Arjun Sengupta Committee) (CMIE, 1986), recommended the introduction of MOUs that would provide management of SOEs with more operational autonomy and distance the government from the day-to-day operations of the enterprises\textsuperscript{11}.

As in the case of other countries, the MOU system in India was adopted in light of the inefficiency of the public sector vis-à-vis its private sector counterparts that was perceived to arise from the presence of multiple principals for any SOE, with multiple and often conflicting objectives, the fuzziness of SOE objectives and the resultant lack of accountability of management, and in general, the absence of functional autonomy for SOE managers (Rajya Sabha, 2011; LBSIM, 2013)\textsuperscript{12}.

An MOU has typically entailed SOEs signing performance contracts on an annual basis between the Government, the \textit{de facto} owner of SOEs, and the senior management of the SOE. The objectives underlining the signing of the MOU have been to enhance SOE performance by empowering them through reducing formal and informal government interference without necessarily impairing the Government’s right to control the SOEs, increase autonomy and accountability of its management, strengthen the performance of SOEs in an increasingly competitive environment post the liberalization of the Indian economy in 1991, and to ensure a level playing field for SOEs vis-à-vis their private sector.

\textsuperscript{11} Specifically, the Arjun Sengupta Committee noted that “(A)utonomy of a public enterprise consists in the ability

\textsuperscript{12} For instance, the report on Public Sector Enterprises and Memorandum of Understanding: Charting New Frontiers (LBSIM, 2013) note that the lack of autonomy of SOEs has “stifled their growth” and there was a need to limit the involvement of the government in the activities of SOEs in lines with the “principles of an independent professional organization.”
counterparts. In general, the MOU system has tried to remove the fuzziness in the goals and objectives that the SOE pursued by clearly laying down performance targets along with stating the intentions, obligations and mutual responsibility of both the parties involved in the contract (GOI and SOE management). The MOU contracts thus made an attempt to move the management of SOEs from management by controls and procedures to management by results and objectives.

As far as the government’s obligations to the SOE are concerned, conditional on the signing of the MOU and the attainment of the pre-specified targets, financial and administrative autonomy is granted to concerned SOEs broadly in the areas of capital expenditure, setting up joint ventures and subsidiaries, organizational restructuring and human resource management, resource mobilization through debt issuance, undertaking mergers and acquisitions, wage revision, incentive schemes for employees, and in utilization of foreign exchange (KPMG, 2011; PES, several issues). However, the particular structure of MOUs and the specific heads under which autonomy given to individual enterprises have varied. Over the years, as increasing number of SOEs have come under the MOU, the system along with being a vehicle for delegating autonomy to SOEs, has also become a major incentive-based compensation mechanism in the sense that MOU performance in terms of the achievement of targets, has become one of the major criteria for rewarding SOE managers through Performance Related Pay (PRP)/variable pay of SOE managers. Finally, as a non-pecuniary incentive associated with MOUs, the GOI instituted the MOU Excellence Award, where the top performers under the system are publicly recognized.

As in the case of many transition and emerging economies that have been pursuing SOE reforms, the move towards greater managerial autonomy through performance-linked contracts was accompanied by a host of other reforms at the level of the enterprise, as well as in the operating environment of the SOEs. In India, following the structural reforms since 1991, SOEs have been operating in an increasingly competitive environment. This has been primarily accomplished through the deregulation and liberalization of SOE activities in the form of de-reservation and deregulation of most productive activities that were the sole domain of SOEs, partial disinvestment of SOEs, and by seeking to implement hard budget constraints by restricting the free flow of funds to these enterprises and forcing SOEs to live within their budgets. With regard to the de-reservation of SOE activities, the GOI decided to withdraw the monopoly status of SOEs in most of the sectors, except those in the areas where security and strategic

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13 These objectives have been highlighted from time to time in the various committees/reports that have examined the workings of the MOU system, which include NCAER (2004), GOI (2008), Rajya Sabha (2011), and GOI(2012).

14 From the perspective of the GOI, the MOU Excellence awards are seen as “an expression of the commitment of the policy makers to the CPSEs and the MoU system” (GOI, 2009).
concerns predominated\textsuperscript{15}. Along with de-reservation, the government also undertook deregulation of industries, particularly deregulating progressively the pricing of several products that enjoyed some form of subsidy or price support, like cement, iron and steel, electronic products, aluminum among others, since 1991\textsuperscript{16}. Notwithstanding these measures, the importance accorded to internal restructuring through the MOU system continued unabated. In fact the potential complementarity between external market pressures and internal restructuring is most evident in the ‘Statement on Industrial Policy’ issued by the GOI in 1991 in the wake of the adoption of the structural reforms programme, which specifically called for a “greater thrust” on improving the performance of SOEs through the Memorandum of Understanding, and for making the MOU system more effective (Rajya Sabha, 2011).

Finally, as stated in the introduction, the move towards granting autonomy to an increasing number of SOEs was accompanied by limited ownership changes through partial privatization. As in the case of subjecting SOEs to increased competitive pressures, policy makers perceived a complementarity between the MOU system and partial privatization in the sense that both these policy interventions were pursued almost simultaneously. Implicit in this is that notwithstanding enterprise autonomy, ownership still matters. Several of the SOEs that were MOU signatories were partially privatized but continued to remain under the MOU system post equity divestiture. Among the objectives listed by the GOI in disinvesting SOE shares were those that were similar in motivation to those underlying the MOU system, of the need for the government to move away from “controlling, managing and running” SOEs that were in non-strategic sectors\textsuperscript{17}. The additional consideration for partial privatization, in line with the theoretical arguments for divestiture of government ownership was that such divestiture, albeit limited, will be instrumental in exposing SOEs to greater market discipline, improve their governance, and increase their efficiency (GOI, 2001). Starting in 1991-92, till 2010-11, the government divested its equity stakes in 63 SOEs through open auction, strategic sales, public offering, global depository receipt in the domestic and the international stock markets\textsuperscript{18}. Of these, a large majority, 57, were partially divested in the sense that the government continued to have majority ownership and control. Only in 6 enterprises were majority

\textsuperscript{15}Of the seventeen areas reserved for investment by the public sector since 1956, the government under the Industrial Policy Resolution of 1991, decided to de-reserve over time 13 industries, leaving only four strategic sectors exclusively for the public sector (Handbook of Industrial Policy and Statistics, 1992, 1993 and GOI, 2001).

\textsuperscript{16}While most of the 22 cognate industry groups were deregulated in the years following 1991 liberalization, some firms/ products manufactured by SOEs under cognate groups like Coal and Lignite, Petroleum (Refining and Marketing) and Fertilizers remain under administered pricing system (PES, 2010-11).

\textsuperscript{17}The other important objectives were to release the large amount of public resources locked up in non-strategic SOEs for redeployment in areas that were much higher on the social priority, such as, basic health, family welfare, primary education and social and essential infrastructure. Divestment was also seen as means to reduce the public debt that had catalysed the financial crisis in 1991 (GOI, 2001)

\textsuperscript{18}www.bsepsu.com “Master Table of all Past CPSE Disinvestments in India till date.”
control transferred to private sector management. With the exception of one, all SOEs that were partially privatized came under the MOU system at some point of time preceding partial privatization.

Table 1 presents for the period 1987-88 to 2010-11, the total number of SOEs owned by the central government (also termed as centrally owned public sector enterprises, CPSE), the total number of SOEs signing MOUs in any given year, the total number of partial disinvestments made in a year, and the average percentage of equity divested. As can be seen from the table, an increasingly large number of SOEs came under MOU since its introduction. While there have been some marginal fall in the number of signatories in some years, the predominant picture emerging from the data presented is that starting from only 4 out of 238 enterprises in 1987-88, an increasing number of SOEs became signatories of the performance contracts, accounting for 40-50 per cent of total enterprises for the larger part of the study period and touching around 90 per cent at the close of the period. Compared to the scope of the MOU system, the coverage and scale of the partial privatization programme was relatively limited. While the total number of partial disinvestment transactions during the twenty year period was 129 involving 57 distinct enterprises, the average percentage of government equity divested was at a maximum around 20 per cent, and mostly in the range of less than 10 per cent during the period under study.

Turning to the existing empirical evidence across countries on the impact of enterprise autonomy through performance contracts, much of the evidence has come by way of evaluating the impact of performance contracts on the profitability or productivity of Chinese SOEs. Additionally, apart from a handful of large sample studies with respect to China (Shirley and Xu, 2001; Xu et al., 2005; Li and Wu, 2002), existing evidence is based on case studies of a small number of PCs, either with respect to a country, with a relatively small number of observations (see Trivedi, 2007). Whatever the case, the evidence is far from conclusive. On the one hand are studies that do not find that performance contracts improved the productivity or profitability of SOEs (Shirley and Xu, 1998; Shirley, 1999; Li and Wu, 2002). On the other hand, however, Song (1991) in the context of Korea, Ahmed (1999) in the context of Bangladesh, Trivedi (2006) in the context of Kenya, find case-study based evidence supporting the effectiveness of performance contract in increasing SOE performance.

The few large-sample econometric studies on PCs in a multivariate framework that do exist, have all been based on survey data pertaining to a select sample of Chinese SOEs located in four provinces in China.

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19 As a case in point, Shirley and Xu (1998) examined twelve PCs across six countries including two from India, Ghosh (1997) analyzed twelve SOEs from India, and Trivedi (1990) examined the success of PCs for 16 commercial corporations over a period of one year.
The first among these is the study by Shirley and Xu (2001) that examined a panel data set of about 500 Chinese SOEs between 1987 and 1994, a period which marked the peak of implementation of PCs as a reform measure. The same data set was later used by Li and Wu (2002) who analysed for the period 1980-94, the relative importance of production autonomy and managerial incentives vis-à-vis partial privatization, without however, directly focusing on PCs as was the case in the study by Shirley and Xu (2001). As stated earlier, Shirley and Xu (2001) do not in general find empirical evidence of the beneficial effects of PCs on SOE productivity, although they find that PCs become more effective in impacting productivity in competitive environments, and that better PCs were designed in SOEs that were administered by local governments, were relatively small and were better performers in the past. Li and Wu (2002) similarly do not find any statistically significant effect of increased autonomy and stronger incentives on SOE profitability and productivity. Finally, Xu et al. (2005), in their study of autonomy and ownership reform for a cross-section of Chinese enterprises find significant negative effects of managerial autonomy on ROA as well as for ROA changes, suggesting that the benefits at the margin of greater independence in managerial decision-making due to lower political control, are outweighed by the agency costs arising from reduced oversight by the State following increased autonomy.

In contrast to a sizeable number of large-sample empirical studies with respect to Chinese SOEs, in the case of India, existing evidence is largely based on case studies and on studies conducted periodically by various working groups under the auspices of the GOI. Ghosh (1997) for instance, in his analysis covering six years of twelve Indian SOEs that signed the MOU contracts with the central government in 1988-89, finds positive effect of PCs on SOE profitability20. On the other hand, the Eleventh Five Year Plan documented that the MOU system “has proved to be ineffective and dysfunctional” as the autonomy and financial delegations granted under the MOU by the GOI have been largely marginal (GOI, 2007-12).

Finally, turning to the evidence on whether ownership reforms through partial privatization still matter in SOE performance post-managerial autonomy, most of the studies examine the effect of one to the exclusion of the other. Thus, while Shirley and Xu (2001) focus on managerial autonomy through PCs in the case of China, Gupta (2005; 2011) examines the impact of partial privatization in India without controlling for the fact that many of the SOEs undergoing disinvestment were also under the MOU. As discussed in the introduction, the MOU effect if not controlled for suitably, the finding of a positive partial privatization effect in Gupta (2005; 2011) could very well be the impact of MOU rather than of

20 Similar favourable views are found in (Rajya Sabha Secretariat, 2011) where the Working group based on the survey of the MOU system found that the system has developed into a “robust mechanism” to ensure autonomy and accountability of Indian SOEs and that most of the enterprises under the MOU system were of the view that MOUs have made a positive impact on SOE operations.
ownership changes. The only study that examined the relative efficacies of autonomy and ownership, to the best of our knowledge, is the aforementioned study by Li and Wu (2002) that estimated a pooled fixed effects regression to find out the relative effects of managerial reforms and ownership reforms. The key finding of this study based on data in the eighties and nineties is that while ownership divestment through partial privatization improved both performance and productivity, managerial autonomy and incentives did not have any significant impact. Apart from the fact that the findings are rather dated, the empirical methodology to estimate the effects of ownership and autonomy suffer from the type of measurement problems that have been discussed in the introduction.

3. Data, Variables and Estimation Methodology

3.1 Data

The data for our analysis, spanning the thirty year period 1981-2011, are compiled from the Public Enterprises Survey (PES, several years) published by the Department of Public Enterprises (DPE) under the Ministry of Heavy Industry, GOI. This document is officially published annually and covers all Centrally Owned Public Sector Enterprises (CPSEs) in India. The PES publishes data that are collected through an Annual Survey conducted by the DPE across all SOEs. Survey forms are sent to each SOE soliciting detailed information under the following heads, namely (i) Balance Sheet Data (ii) Profit and Loss Accounts Data (iii) Other Financial Details (iv) State-wise fixed assets and employment (v) salary and wages (vi) employment and social overheads, and (vii) miscellaneous information. The data on MOU is also collated, year-wise from the PES which shows for each SOE, whether it has entered into an MOU with the GOI in a particular year. As reported in the PES, the number of SOEs signing MOUs increased from 4 out of a total of 230 SOEs in 1988 to 202 of a total of 220 SOEs in the year 2011. In the first five years of the inception of the MOU system, the number of SOE signatories sharply increased to 100.

Our sample covers all centrally owned SOEs operating in the non-financial sector owned by the GOI operating across different industry groups, except for those that were being constructed at the time of data collection21. Of the SOEs in the 19 industry groups that constitute the sample, there is however some year to year variation in the number of SOEs. This is due to the setting up of new SOEs during the study period or due to the exclusion of SOEs in a particular year. The latter was on account of one of the

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21 Centrally owned state owned enterprises are owned by the Government of India and these are distinct from public sector undertakings that are owned by individual State Governments.
following three reasons, namely that an SOE did not submit the completed survey form on time, due to full privatization of an SOE, or due to its winding up.

The final sample for our analysis consists of an unbalanced panel of 214 SOEs with data for at least one year, accounting on an average for more than 95 per cent of the number of SOEs and of total SOE assets in any year. Of these 214 SOEs, 133 have come under the MOU system at different points of time, and 81 have not. Of those under MOU, 39 SOEs in our sample have been partially privatized at least once during the period of study. Thus the sample data based on the type of reform that the SOEs have undergone, can be classified into three distinct categories, namely Type-1, Type-2 and Type-3. Type-1 firms, 81 in number, are the ‘no-reform’ SOEs, i.e., those that neither signed the MOU contract nor underwent partial privatization at any point of time during the sample period. Type-2 SOEs, 94 in number in our sample, are those that have been subjected to only enterprise reform through the MOU system. This is the group that includes firms that were MOU signatories at some point in the sample period, but were not subjected to partial privatization at any point during the period under consideration. Typically, once an SOE has entered into an MOU contract, it has signed such contracts in all subsequent years.

The third category of SOEs, the Type-3 SOEs, is those which have been partially privatized during the sample period. This type comprises of SOEs that have been under the MOU system as well as were partially privatized at some point of time. There are 39 such firms in our sample, for which, on an average, the government’s equity holding declined by around 15 percent. Of the 39 partially privatized SOEs included in the present study, 29 of them had undergone the first tranche of partial privatization by 1992-93, very close to the time when performance contracts were also introduced. Further, in 37 of the 39 SOEs partial privatization have followed autonomy, whereas in the remaining two, the opposite has happened with partial privatization preceding the signing of MOU by a year or two. Finally, the average gap between the first signing of MOU and first tranche of partial privatization in Type-3 firms is around 1.5 years, with no gap between the two interventions for 13 firms.

The cross-section variation in our sample in terms of the three types of SOEs, along with over time variation where the first ten years of the data set are the no-reform years and the latter twenty mark both autonomy reforms and ownership changes pursued predominantly in a sequential fashion, yield sufficient firm-year observations to allow us to conduct a rigorous empirical analysis to measure the marginal impact of both reforms with a reasonable degree of precision by allowing us to select appropriate control and treatment groups and also in dealing with the problem of selection bias. We discuss these in greater detail below while outlining the empirical methodology of the study.
3.2 Variables

Turning to the key model variables, we measure the dependent variable $Y_{it}$, denoting SOE performance in terms of the return on assets (ROA), which captures the ability of management to convert a firm’s capital into profits. The use of profitability as a yardstick for measuring SOE performance has gained importance over the years when governments world over started to feel the burden of loss-making SOEs on their budget deficits. Accordingly, a large number of empirical studies examining the impact of reforms on SOE performance have adopted ROA as a measure of performance (Boardman and Vining, 1989; Boubakri and Cosset, 1998; Aivazian et al., 2005). The choice of ROA in examining the performance effect of autonomy on Indian SOEs is particularly relevant in view of the importance given to financial performance ratios in MOU contracts from the very beginning of the MOU program. Financial ratio as target criteria has been mandatory in the MOU contract, and by 1993-94, 50 percent weight was given to financial profitability in the composite score evaluation of targets set under the MOU contract, with almost 20 percent weight given to ROA by almost all SOEs signing the MOU contracts. The importance of profitability in defining performance targets in MOU is also borne by the fact that the profit earned by an SOE is one of the core criteria for the selection of SOEs for MOU Excellence Awards and Certificates.

In our study, ROA is defined as the ratio of profit before taxes to total assets. A similar definition of ROA has been adopted by most SOEs since 1993-94 as targets in their MOU contracts.

Our main variable of interest is the performance contract or memorandum of understanding, which we denote by $MOU$ which captures the effect of enterprise reform on SOE performance. Under an MOU contract, individual enterprises sign the contract with their respective administrative ministries under the GOI at the beginning of a financial year. The enterprises are then evaluated at the end of the financial year against the targets set in the MOU contract. With the signing of an MOU contract, the signatory firm is expected to start striving towards fulfilling its targets set in the MOU. Thus, in our analysis, signing of the MOU contract is taken as the differentiating factor between firms that have not undergone enterprise reforms and those that have.

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22 Some studies have used multi factor productivity (MFP) as a measure of performance of state owned enterprises. While this is an encompassing measure that captures the technical side of the operation of an enterprise, it does not capture the behavioral practice of an enterprise in terms of cost minimization and revenue maximization. Also, MFP estimation requires data on raw materials as inputs which is missing in many studies. This is an important issue as the relative importance of materials may vary substantially across industries and within an industry, over time.
With respect to the MOU signatories, it is expected that MOU will have an impact on the performance of the enterprise, but with a lag. The study captures this with a dummy variable $MOU$ as has been the approach in existing studies on autonomy (see for example, Shirley and Xu, 2001; Xu et al., 2005). In our case, to take account of the time difference between the signing of the MOU and its evaluation, $MOU$ takes the value 1 in period ‘$t$’ if the enterprise had signed a MOU contract in the period ‘$t-1$’. Given the opposing theoretical predictions on the effect of performance contracts as discussed in the previous section, with the positive effect on the one hand of delegation of greater functional and operational autonomy to the top management to facilitate the firm in achieving targets, and the negative impact of increased managerial agency problems due to the reduction of government oversight, the net direction of the impact of MOU is a priori indeterminate. Though the first MOU contract was signed on an experimental basis by four SOEs in the year 1988, the system was re-cast a year later in 1989, with the core structure remaining the same since then23.

While $MOU$ is our key variable of interest, we consider an additional explanatory variable, namely partial privatization, $PPVT\_SHR$, in order to evaluate whether ownership changes has an independent effect on performance notwithstanding enterprise autonomy through $MOU$. $PPVT\_SHR$ is measured by share of private equity in total equity of an SOE. Any positive value of $PPVT\_SHR$ measures the extent to which government ownership has been disinvested in an SOE.

To capture the impact of the two variables of interest, $MOU$ and $PPVT\_SHR$ accurately and to avoid any spurious relationship between these variables and performance, the present study controls for other firm characteristics and environmental factors that may also affect SOE performance. A description of these and their possible effects is given next.

Given that most SOE activities were de-reserved at some point of time during our period of study, we define an indicator variable $DEREG$ that controls for the effect on profitability of exposing an SOE to private sector competition. The dummy variable takes the value 1 for a firm for period ‘$t$’ and all subsequent periods if the SOE belongs to the industry that was de-reserved in period ‘$t$’ by the government. As much of the industrial organization literature predicts, increased competition through entry of firms is likely to put pressure on monopoly profits and reduce profit margins. Thus, de-reservation, $DEREG$, is expected to reduce a firm’s profit ratio.

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23 The original system introduced in 1988 was modeled after the French system of performance contracts, but was restructured in 1989 in line with the signaling system introduced in Pakistan and S. Korea (Trivedi, 1990).
Another control variable widely regarded to be relevant for SOE performance is the soft-budget constraint. As Kornai (1989, 2003) argues, an SOE under state ownership is seldom allowed to fail even with consistent losses as the state typically acts as the universal insurance company compensating for every loss. A crucial feature of such a soft-budget constraint syndrome is that the bailouts are not completely unexpected, nor are they limited to one-off interventions. They include prolonged support by the state of SOEs suffering from persistent financial problems. Hence, in the presence of soft budget constraints, SOE managers feel little pressure to ensure SOE profitability. The impact of a soft-budget constraint, $SOFTLN$, is captured in terms of the ratio of loans borrowed by individual enterprises from the central government to total loans borrowed, lagged by one year, and is expected to have a negative impact on SOE profitability.

The other control variables that we include in our estimation are (i) export intensity, $EXPINT$ which controls for the effects of exposure to international competition and measured as the proportion of exports to total sales (ii) depreciation intensity, $DEPINT$, proxying for capital intensity of the company's technological process and measured as the ratio of depreciation expenditure to sales (iii) size of the SOE proxied by log value of firm assets, $LNAST$, to reflect the effect of unobserved factors related to size 24 (iv) the effect of economy wide structural reforms, measured in terms of a dummy variable $LIB$ that takes the value 1 for the financial year 1990-91 and all subsequent years and zero otherwise, seeks to capture the impact of industrial and trade liberalization initiated in India since 1991, wherein licensing requirements were abolished for all except 18 industries25, and finally (v) year dummies, $YEAR$, to capture other economy wide shocks which might have an impact on SOE performance, but have not been fully accounted for by the other variables. The list of variables used in the study along with their descriptions is presented in Table 2.

### 3.3 Estimation Methodology

Our empirical methodology is closest in conception to the approach adopted by Brown et al. (2005) for measuring the effect of privatization for a large panel of firms in four transition economies. In applying the treatment-control framework to measure the effect of performance contracts on SOEs and subsequent ownership changes through disinvestment, we deal with two estimation problems that arise in measuring

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24As pointed out in the literature (Majumdar, 1998 and Sarkar and Sarkar, 2000), in the product market, size reflects possible entry barriers that might result from economies of scale. Size also reflects the extent of market power of a company. It is postulated to have positive impact on firm performance.

25These industries were exempted because of their strategic and environmentally sensitive nature or their exceptionally high import content.
impacts of policy interventions. The first is the choice of appropriate benchmarks or control groups relative to which performance effects of a policy reform needs to be measured, and second is that of selection bias.

At the conceptual level, the effect of stimulus or treatment can be uncovered by contrasting the behavior of the treatment group with that of a control group with similar characteristics that did not receive the treatment. The challenge in most empirical work is to find a proper control group with respect to which the effect of the stimulus is to be measured. In many studies the control group is the treatment group itself prior to the application of the stimulus. These studies, known as “before-and-after” studies exploit the difference in behavior of the sample units before and after the application of the stimulus to quantify its effects. These studies perforce require long time series data to ensure adequate number of observations to get statistically meaningful estimates. This ensures that the estimated before and after difference reflects the permanent effect of the stimulus and not some transitory effects which may be difficult to disentangle when the after-treatment period is short. However, the disadvantage of these studies is that effect of the stimulus can be confounded by effects of other time varying factors which can operate in the post-treatment period.

Studies using the “difference-in-difference” (DID) approach try to handle the effect of confounding time varying factors by selecting a control group, similar in characteristics to the treatment group, and then studying the difference in their behavior before and after the application of the stimulus. The assumption is that since the control and treatment groups are similar in characteristics, the effect of confounding time varying factors are likely to be the same, and hence any difference in the difference of group behavior after the stimulus must be on account of the stimulus only. However, while in medical sciences the control group can be chosen to have the same characteristics as that of the treatment group so that the assumption of similarity of effect of confounding time varying factors after the application of the stimulus is satisfied, it is not easy to accomplish this in social sciences and therefore the differing characteristics of the control and treatment group need to be controlled. The usual assumption in empirical work is that the effect of each of these factors can be parameterized via a known functional form and therefore can be netted out using a regression framework.

However, both the before-and-after as well as the DID studies assume that the selection of the units in the treatment group and the control group is random so that the effect of the stimulus measured based on the sample units are applicable to the population as a whole. This is the issue of selection bias. Specifically in context of our study, a potential source of selection bias that better performing SOEs can be
systematically picked up by the government to prove the success of the reforms when faced with opposition from certain interest groups (Frydman et al., 1999). Such ‘cherry-picking’ (Chang et al., 2003), is likely to overestimate the effect of the reforms compared to that what would be obtained if the SOE’s were selected without regard to their success probability. The main issue here is the random assignment of units into the treatment group so that unconditional inferences may be made. A sample consisting of large cross section increases the probability that there could be potentially many sample units that could be subjected to the stimulus and accordingly the problem of selection bias can be relatively low compared to those in samples which have few cross sections and large time series observations. Coupled with such a large cross section sample, a long time series data ensures that the measured effects are permanent. Thus, a longitudinal dataset with both a large number of cross sections as well as long time series data provide a great opportunity to measure the effect of a treatment that is both unconditional and permanent.

In our estimation methodology we address the issue of an appropriate control group by undertaking both before-and-after analyses as well as a difference-in-difference analysis. Our longitudinal data of 214 cross sections (firms) which comprise of nearly 95% of the total SOEs in India, with an average of 26 years of time series observations per SOEs enable us to carry out both these analyses with large amount of precision. The long time series data per SOE has at least 10 years of data, on an average, each for the pre and post reform periods which ensure that the estimated effects are not transitory in nature. However, with such a long time series, confounding effects can be caused by unobserved factors that change over time. We account for these factors by including time specific fixed effects in our empirical models. Recognizing that time specific effects themselves may not be uniform across all cross sections, we also include industry level fixed effects in our empirical specification.

With respect to selection bias we handle the problem in two ways. First, we address the problem of cherry-picking by including group specific fixed effects for the different types of SOEs in our empirical models. The group specific fixed effects ensure that any improvement in post reform performance is measured relative to the pre reform performance of the same selected group. Second, exploiting the advantage that we have in terms of a large number of observations of different types of enterprises with varying types of reform experience over time, we address the issue of selection bias by carefully selecting alternate sub-samples to estimate reform effects rather than by the usual econometric way of undertaking instrumental variable estimation. In many empirical studies, the instrumental variable method is adopted due to limited number of observations. However, the challenge of finding the correct instruments sometimes makes the estimation results sensitive to the choice of the instruments. As outlined earlier, the SOEs in our sample can be split into three types namely, those with no reform (Type-1), those with only
autonomy (Type-2), and those with autonomy and partial privatization (Type-3). Thus the effect of autonomy can be uncovered by contrasting the performance of the Type-1 SOEs with that of Type-2 and Type-3 SOEs or alternatively by contrasting the performance of the Type-1 SOEs with that of Type-2 SOEs or Type-1 SOEs with that of Type-3 SOEs. In other words, there are many control and treatment groups in our study. If the difference in the behavior of the treatment and control group remains significant for various alternate choices of the control and treatment group, then the inference that the differential effect is due to the stimulus only becomes stronger.

Finally, in estimating the effect of SOE reforms via performance contracts and partial privatization, we allow for the possibility that enterprises may be “prepared for reforms” through preemptive changes in organization structure and modes of operation before the actual reform is implemented. We term such possible run-up as the ‘preparation effect’ and estimate for each relevant sample, two specifications, one without, and one with such preparation to illustrate the point. Evidence of such preparation effects has been well documented in studies focusing on measurement of policy changes (Brown et al., 2005; Malani and Reif, 2011).

To incorporate preparation effects we create three dummy variables, mou_prep1 and mou_prep2 and mou_prep3, each of which represents a particular year before the enterprise signed the MOU contract. Thus, the dummy variable mou_prep1 represents one year prior to the year the enterprise signed the MOU contract, mou_prep2 represents two years prior to the year the enterprise signed the MOU contract, and mou_prep3 represents three years prior to the year the enterprise signed the MOU contract. These dummy variables are expected to capture preparation effects one to three years prior to the year of signing the MOU contract. In addition, we also include a dummy variable mou_prep0, to capture possible preparation effects in the year of signing the MOU as there is generally a lag between the signing of the MOU and the actual operation of the enterprise under the MOU contract. For capturing preparation effects for disinvestment, we similarly create three dummy variables ppvt_prep1, ppvt_prep2, and ppvt_prep3 which represent the first, second and third year respectively, prior to the year the enterprise was disinvested. We do not include the corresponding dummy ppvt_prep0 since there is no lag between disinvestment and actual operation of the enterprise under partial private ownership.
Given the above discussion, our empirical model for estimating the effect of autonomy and partial privatization on SOE performance takes the form:

\[
Y_{it} = \alpha_G + \lambda_t + \eta_I + \beta'X_{it} + \eta'W_{it} + \gamma'Z_{it} + \varepsilon_{it}
\]  

(1)

Where,

- \(Y_{it}\) represents the performance variable, ROA, for firm ‘i’ at time ‘t’
- \(\alpha_G\) represents the group specific effects for Type-1, Type-2 and Type-3 SOEs
- \(\lambda_t\) represents the time fixed effects
- \(\eta_I\) represents the industry fixed effects
- \(X_{it}\) represents the variables of interest, MOU and PPVT_SHR
- \(W_{it}\) represents the preparation effects
- \(Z_{it}\) represents the control variables
- \(\varepsilon_{it}\) represents the error term

Given the general specification of the empirical model in Equation (1), we now elaborate our choice of the appropriate sub-sample and hence the control group against which the marginal effect of MOU and that of partial privatization on firm performance is estimated. Table 3 and Table 4 highlight the sample details and the variations in the cohort groups that one can construct from our full sample. As can be seen from Table 3, there are a total of 5500 firm year observations during the period of our study of which 1851 observations belong to 81 Type-1 SOEs, 2569 observations to enterprises that have been under the MOU system at some point during the period of our study, i.e., Type-2 SOEs, and finally 1080 observations across enterprises subject to partial ownership divestiture at some point during the sample period, and also by and large being under the performance contract system, i.e., Type-3 SOEs.

For the 94 Type-2 SOEs, the number of pre-MOU observations per SOE, on an average is 16.85 and the corresponding number of post-MOU observations is 10.48. For the 39 Type-3 SOEs, 31 were subjected first to MOU and then partially privatized, and eight were first partially privatized and then subsequently brought under the MOU system. In both cases, the lag between partial privatization and autonomy was on an average less than a year, as is evident for example from the few firm year observations (31) pertaining to Type-3 firms that have been granted autonomy, but have not yet been partially privatized. For Type-3
SOEs we have substantial pre- and post-partial privatization observations on an average, around 10\textsuperscript{26} and 17, respectively.

The importance of segregating the sample observations by Types of SOEs to estimate the effect of the reforms under question is brought home by the fact that if we pool observations across types of SOEs and consider all the three types together to estimate the effect of either autonomy or partial privatization, we automatically find that there is a striking imbalance between per unit pre-reform observations and post-reform observations, both with respect to MOU and partial privatization; the average number of pre-reform observations being 17.74 and the average number of post-reform observations pertaining to MOU and partial privatization being 4.74 and 3.21, respectively. As Brown et al. (2005) have pointed out, such sparse post-reform observations stand in the way of reliably identifying a reform effect and of controlling for possible selection bias in the reforms process. Based on the estimates provided in Table 3, one can make the limited observation that our sample has substantial variation in terms of the status of reforms undergone by the SOEs over a thirty year period, as well as sufficient number of pre- and post-reform observations allowing us to identify both a post-autonomy effect and a post-partial privatization effect by exploiting not only cross-section variation but also by estimating before and after effects using long time series observations. If one considers comparable studies estimating the impact of autonomy and other organizational reforms such as corporatization and partial privatization on SOEs (see for example Shirley and Xu, 2001; Xu et al, 2005; Aizabian et al., 2005) predominantly all of which are with respect to Chinese SOEs between the eighties and nineties with limited pre-reform and post-reform observations, much of the results in these studies are driven by cross-section variation of a sample of SOEs that have undergone a reform initiative during the period of study\textsuperscript{27}.

Finally, as seen in Table 4, our sample with both cross-section and longitudinal data allows us to estimate Equation (1) to capture the effect of MOU and partial privatization on SOE performance on a variety of sub-samples (SS1 – SS6). Each estimation is distinct in terms of measuring the impact of a reform measure against a different cohort of SOEs. As we discuss below in Sections 3.3.1 and 3.3.2, we measure the MOU and partial privatization effect using different combinations of SOE types, ranging from including only one type at a time such as in Sub-Sample SS3 and SS6, to including a combination of types such as SS1, SS2 and SS5, to pooling all types as in Model SS4.

\textsuperscript{26} If we club the pre-privatisation observations (including those pertaining to MOU) with the no-reform observations for Type-3 SOEs, the average number of pre-reform observations is 10.07.

\textsuperscript{27} For instance, Shirley and Xu (2001) analyzes the impact of performance contracts on 769 SOEs over a ten year period, 1980-89, considering only SOEs that had come under the performance contract system. Hence, both the pre- and post-reform observations were limited and the results were primarily drawn by cross-section variation. Similarly, Xu et al. (2005) considered annual data on 442 SOEs for only a ten year period, between 1990-99.
3.3.1 Measuring the MOU Effect

Since our primary focus is on the effect of enterprise autonomy, our estimation strategy is to first measure as cleanly as possible the impact of MOU on SOE performance. For this purpose, we estimate three variations of Equation (1) over sub-samples SS1—SS3, each with a different cohort of SOEs against which the impact of MOU is measured.

In SS1, we consider a sub-sample consisting of all SOE observations in our sample excluding those pertaining to post-partial privatization (Table 3). That is, the sub-sample comprises of all observations related to Type-1 and Type-2 SOEs, and in the case of Type-3 SOEs, all observations prior to their share divestment. By excluding the post-partial privatization observations, we focus solely on the performance of SOEs that have signed MOUs vis-à-vis firms that have not. Thus the cohort against which the MOU effect is measured is Type-1 comprising only of the ‘no-reform’ SOEs. The model to be estimated is given by Equation (1) above, but excluding a truncated set of observations for Type-3 firms. Both cherry-picking dummies are included as the sample includes Type-2 and Type-3 SOEs. Equation (1), estimated for SS1 is therefore specified as:

\[ Y_{it} = \alpha_2 + \alpha_3 + \lambda_i + \eta_i + \beta_i MOU_{it} + \gamma_i Z_{it} + \eta_i W_{it} + \epsilon_{it} \] (1-SS1)

Compared to the number of firm year observations of 5500 over the entire sample as given in Equation (1), Equation (1-SS1) is estimated over 4813 observations excluding those pertaining to partial privatization. Thus, the coefficient of MOU in Model (1-SS1), i.e., \( \beta_i \) captures the effect of enterprise autonomy on SOE performance relative to all SOEs that have not been under the MOU system.

The second estimation is based on sub-sample SS2, which excludes Type-1 SOEs, and focuses only on SOEs that came under the MOU contract. The sample in this case comprises of all pre- and post-MOU observations of Type-2 firms and pre-privatization observations (like SS1) of Type-3 firms. Thus, the effect of MOU is measured in SS2 against the pre-MOU performance of MOU signatories. This eliminates the need to control for the first source of selection bias of better SOEs self-selecting to becoming more autonomous and as discussed earlier, is expected to lend more precision to the estimates.

\[ Y_{it} = \alpha_3 + \eta_i + \beta_i MOU_{it} + \gamma_i Z_{it} + \eta_i W_{it} + \epsilon_{it} \] (1-SS2)

Finally, while both the samples SS1 and SS2 enable us to control for self-selection by incorporating the cherry-picking dummies, these could albeit be imperfect, and our best case scenario would be to choose a
sample that do not suffer from potential self-selection bias. This is done through a before and after estimation of only Type-2 firms, i.e., comparing performance levels of Type-2 firms before and after signing MOU. In this case, the control group is identical in all other respects except for the policy intervention, so that specification errors that may arise from time-variant statistical differences in the inherent characteristics of the ‘treated,’ and the cohort used for benchmarking, are eliminated. As stated earlier, with a sufficiently long panel of pre- and post MOU observations on Type-2 firms, such estimation is possible in our case and is carried out over sample SS3. Equation (1) can then be re-written as follows (1-SS3) where, as compared to Equations (1-SS1) and (1-SS2), we drop the unobserved group specific effects $\alpha_m$ as we consider the same set of SOEs before and after coming under the MOU contract.

$$Y_{it} = \lambda_i + \eta_i + \beta_2MOU_{it} + \gamma'Z_{it} + \eta'W_{it} + \varepsilon_{it} \quad (1-SS3)$$

3.3.2 Measuring the Partial Privatization Effect
As discussed in the introduction, an on-going debate on the desirability of enterprise autonomy vis-à-vis privatization, apart from the question of whether the former is necessary, is whether it is sufficient for increasing SOE performance, or whether ownership still matters. The Indian experience, where some SOEs have been partially privatized, post enterprise autonomy, allows us to address this question.

The methodology measuring the effect of partial privatization on SOE performance is guided by the same rationale underlying measuring the MOU effect, of controlling for unobservable firm fixed effects and for increasing the precision of estimates through choosing different cohorts to take care of selection bias problems that can arise from time-variant unobservable firm-specific characteristics.

As in the case of MOU, the estimation of the effect of partial privatization measured in terms of $PPVT\_SHR$ for the different sub-samples is based on Equation (1), with specifications differing across sub-samples in terms of the inclusion of firm-specific fixed effects in the models. In particular, we estimate the partial privatization effect over three sub-samples, SS4-SS6, each model distinguished by a different cohort against whom the partial privatization effect is measured. However, before estimating these three models, we run a similar partial privatization model ignoring the fact that some of these enterprises had been given autonomy prior to partial privatization. We run this regression to illustrate the point that studies which ignore autonomy aspects may mistakenly pick up the autonomy effect as the partial privatization effect.
Starting off with SS4, we estimate the impact of partial privatization on the entire sample of firm-year observations comprising of Type-1, Type-2 and Type-3 firms. That is, for the entire sample, we estimate, Equation (1). Given that all partially privatized SOEs were also under MOU, the coefficient of the partial privatization variable in this case captures its incremental effect over and above that of MOU. The regression incorporates the two group effect variables \( \alpha_2 \) and \( \alpha_3 \) as all SOE types are included. So the relevant equation to estimate on SS4 is given by:

\[
Y_{it} = \alpha_2 + \alpha_3 + \eta_i + \lambda_i + \beta_1 MOU_{it} + \beta_2 PVT\_SHR + \gamma Z_{it} + \eta_i W_{it} + \epsilon_{it} \quad (1-SS4)
\]

With regard to SS5, we exclude the Type-1 firms and estimate Equation (1) for all observations pertaining to Type-2 and Type-3 firms. Thus, sample observations include pre-MOU observations of Type-2 and Type-3 firms, post-MOU observations of Type-2 firms, and pre-and post MOU and partial privatization observations of Type-3 firms. However, given that Type-1 firms are excluded from the sample observations, the fixed effect \( \alpha_2 \) is dropped from Equation (1), as we have to deal with only one source of selection bias, that of the better SOEs under MOU being potentially chosen for partial privatization. Given that selection bias is never perfectly controlled for, one would expect a greater precision in estimates using SS5, as compared to SS4.

\[
Y_{it} = \alpha_3 + \lambda_i + \beta_1 MOU_{it} + \beta_2 PVT\_SHR + \gamma Z_{it} + \eta_i W_{it} + \epsilon_{it} \quad (1-SS5)
\]

Finally, similar to SS3 in the context of MOU, we use sub-sample SS6 to conduct a before and after study on only Type-3 SOEs, those that have undergone both autonomy and partial privatization and compare their performance before and after partial privatization. Given that in SS6, the sample observations are restricted only to Type-3 firms, we do not need to deal with measurement issues related to time variant factors that can lead to differential effect of MOU on Type-2 and Type-3 firms which can otherwise be picked up by the partial privatization variable in Equations (1-SS4) and (1-SS5). Hence with SS6, Equation (1) assumes the following specification:

\[
Y_{it} = \lambda_i + \beta_1 PVT\_SHR + \gamma Z_{it} + \eta_i W_{it} + \epsilon_{it} \quad (1-SS6)
\]

Like the case of autonomy, in estimating all these models we allow for the possibility that enterprises may get ready to be partially privatized subsequently, and therefore estimate two specifications for each sub-
sample, SS4-SS6 one without and one controlling for such partial privatization preparation effects, along
with controlling for the corresponding MOU effects wherever relevant.

4. Regression Results

4.1 Descriptive Statistics
All regressions are estimated after taking care of the presence of influential observations by truncating the
distribution of the dependent variable at 1 percent low and 1 percent high ends of the distribution.

The mean and standard deviations for our performance measure, ROA, along with the main control
variables, for the three categories of SOEs, Type-1, Type-2 and Type-3, are given in Table 5 (a). Further,
the null hypothesis of equal means for various sub-groups is tested using paired t-test28, results of which
are given in Table 5(b). As is evident from Table 5 (b), for most variables, the null hypothesis of equal
means was rejected. Specifically, with respect to ROA across all categories, it is found that as compared
to the no-reform SOEs (Type-1), the profitability of SOEs under MOU (Type-2) as well as those which
were partially privatized (Type-3), is on the average, higher. Similarly, when one compares Type-2 with
Type-3, one finds that the profitability of SOEs which have been granted autonomy as well as been
partially divested of government ownership, perform significantly better (at 1 per cent level of
significance) than those with only enterprise autonomy (11 per cent as compared to around 4 per cent).

Given that the profitability measures for SOEs undergoing reforms show a higher average for Type-3
SOEs as compared to Type-2 SOEs, which have higher averages compared to Type-1 SOEs, there is a
possibility of cherry-picking, of better performing SOEs being systematically selected for policy
interventions. The other possibility is that present or absent selection bias, reforms have had a positive
impact on SOE profitability. Among the other firm characteristics, what is notable is that Type-3 SOEs
are seen to be significantly larger in size, followed by Type-2 SOEs and Type-1 SOEs. Type-3 SOEs as
compared to the other categories of SOEs are found to borrow significantly lower (at 1 % level of
significance) than both Type-2 and Type-1 SOEs. Export intensity is the highest for Type-3 SOEs and
depreciation intensity for Type-2 SOEs the lowest.

28The Satterthwaite method was used to test the means.
4.2 Estimation Results
4.2.1 The MOU Effect

Column (i) of Table 6 shows the regression results run on sub-sample SS1, without controlling for MOU preparation. The variable MOU is positive and highly significant in the regression implying that granting of autonomy to SOEs significantly increases their profitability performance. The associated coefficient implies a 6.0 percent increase in average return on assets per year.

The effect of the control variables are along expected lines. Availability of soft loans, SOFTLN, has a negative effect on enterprise performance while liberalization of the industry in which the enterprise operates, has a positive effect. While there could be a potential reverse causality issue with respect to soft loans, to some extent this endogeneity is broken by measuring this variable with lags. We re-estimated the model by using a one-year lagged measure of SOFTLN and we do not find any substantive change in the sign, size or significance of the coefficients of interest. Larger enterprises as proxied by the variable LASSET, experience lower rates of return possibly due to diminishing returns while enterprises with higher export intensity, EXINT exhibit higher performance possibly due to exposure to foreign competition. Finally, enterprises with higher capital intensity, as proxied by DEPINT, experience lower rates of return.

The coefficients on the variables, $\alpha_1$ and $\alpha_2$ that control for group effects and potential selection bias are suggestive. Both coefficients are positive and highly significant, confirming that there is indeed selection bias in the choice of enterprises that are subjected to reforms. Noticeably, the coefficient on $\alpha_2$ is significantly larger in magnitude than that on $\alpha_1$ implying that the enterprises that were selected for partial privatization following the grant of autonomy under MOU were better-performing than those selected only for MOU. We have more to say about this selection bias while discussing the regression results that follow.

Column (ii) of Table 6 presents the regression results, again run on sub-sample SS1, but now with control for possible preparation for MOU. As argued earlier, enterprises might be "prepared" for the granting of autonomy so that the devolution of autonomy does not lead to any unexpected results. The coefficient on all the four dummy variables mou_prep0, mou_prep1, mou_prep2 and mou_prep3 that allow for enterprise performance to differ in the year and up to three years prior to granting of autonomy are all positive and highly significant. Controlling for such preparation, the coefficient on the variable MOU continues to be positive and highly statistically significant. Noticeably, the magnitude of this

\[ \text{The dummy variables that allow performance to differ in years beyond three are not significant in the regression.} \]
coefficient is higher than those associated with the preparation variables suggesting that the actual grant of autonomy increases performance beyond those observed in the preparation years. The *F*-test with the null hypothesis that all the coefficients associated with the preparation variables and the *MOU* are same vis-a-vis the alternative hypothesis that the coefficient on *MOU* is higher than that associated with the preparation variables (confirmed to be equal), returns an *F* value of 40.71 which is significant at one percent. It is also instructive to note that the magnitude of the *MOU* variable in Column (ii) is higher than that associated with it in Column (i), implying that once the preparation effect is controlled for, the effect of granting autonomy is significantly higher at 7.6 percent compared to 6.0 percent as reported in Column (i). The coefficients on all the control variables in Column (ii), retain their sign and significance as observed in Column (i). In Columns (i) and (ii) of Table 4, the dummy variables *α₁* and *α₂* represent the difference in average performance of the Type-2 and Type-3 enterprises from the Type-1 enterprises, i.e., those which were neither granted any autonomy nor were subject to partial privatization. As outlined earlier, an implicit assumption in the above two specifications is that the difference in performance between the Type-1 and the Type-2 enterprises, as also the difference between the Type-3 and Type-1 enterprises, remains constant over time. This assumption, as we have argued earlier may be suspect, because the performance of Type-1 firms may deteriorate over time. Indeed declining performance may be the reasons why these enterprises have not been given autonomy or subjected to partial privatization. If this is indeed a possibility, then *α₁* and *α₂* will not be able to control for this time variant effect and accordingly the large magnitude of the coefficient associated with *MOU* may be picking up the deteriorating performance of the Type-1 enterprises rather than the improved performance of the Type-2 and Type-3 counterparts. As we have argued earlier, one way to handle this time variant effect with respect to the Type-1 firms is to drop them from the sample and re-run the models with only the Type-2 and Type-3 enterprises i.e., with SS2 as the relevant sample.

Columns (iii) and (iv) report the regression results of without and with preparation for *MOU* when the regression is run on the SS2. In both Columns (iii) and (iv), *MOU* remains positive and highly significant, and with very high magnitude. The results in Column (iii) show that granting autonomy increases ROA by 6.3 percent. In Column (iv), which controls for the preparation for autonomy, the effect is significantly higher, estimated at 8.1 percent. Thus, our earlier finding of a positive and significant effect of autonomy on performance is not caused by the deteriorating performance of the Type-1 enterprises which provide the base for the measurement of effect. Omitting Type-1 enterprises from the estimation in fact leads to a higher estimated value of the coefficient associated with the *MOU* variable. These results provide strong evidence that granting autonomy to SOEs significantly improves their profitability.
In Columns (iii) and (iv) of Table 6, we again observe that the coefficient associated with $\alpha_2$ is positive and highly significant. Carrying forward our earlier argument that the coefficient which captures the difference in average performance of the Type-3 enterprises from the Type-2 enterprises, may not be able to perfectly control for time-variant factors. In particular, if there is preparation for privatization then any corresponding positive effect would be picked up by the MOU variable. Alternatively, the effect of granting autonomy may itself be different for the Type-3 enterprises. While it is possible to control for these factors by including additional dummy variables and interaction effects in the above models itself, another way to account for these effects is to drop the Type-3 enterprises altogether and estimate the models only with the Type-2 enterprises which were granted only autonomy with no subsequent partial privatization. This obviously leads to a loss in the degree of freedom but the large number of observations that we have for the Type-2 enterprises allows us to adopt this relatively cleaner approach compared to the inclusion of dummy variables and interaction effects which themselves require an assumption of time invariance.

Accordingly in Columns (v) and (vi) of Table 6, we re-estimate the two models, without and with MOU preparation, by considering only the Type-2 enterprises, i.e., sub-sample SS3. Accordingly, the results of these two regressions can be looked at as a pure "before-and-after" study. We observe that in both these models, the variable MOU retains its high statistical significance, is positive and of similar magnitude. In the Model without controlling for preparation for autonomy, granting of autonomy leads to 6.2 percent increase in ROA while in the model that controls for the preparation for autonomy, the effect is again higher and estimated at 8.0 percent. Both coefficients are comparable to those found using sub-sample SS2. In summary, the results presented in Table 6 provide very strong evidence that granting of autonomy to SOEs in India improves their profitability performance. The effects are large and robust and are not due to selection bias or due to lack of proper control for time variant factors.

4.2.2 Interaction Effects

An important research question with regard to SOE restructuring through various policy initiatives is to examine the possible complementarities or substitutability among different reform measures. As Djankov and Murrell (2002) point out in their survey of the literature on restructuring of SOEs in transition countries, while the answer to this question is important from the view of policy making, neither existing theoretical nor empirical literature have unambiguously resolved it.

In the context of our study, bringing SOEs under the performance contract system over time in India has been accompanied by the deregulation of many of the industries in which SOEs have traditionally
operated. Estimation results in Table 6 consistently show that deregulation does not have an independent impact on SOE profitability, whereas MOU does have a strong positive effect. However, given that deregulation can potentially increase competitive pressures, an open empirical question in this regard that we examine is whether the impact of MOU would be greater in SOEs that were opened up to competition from private sector entities relative to those that were not, i.e., the reforms are complementary, or whether the two have had substituting effect on performance. In a similar vein, one of the major concerns for SOEs worldwide have been the absence of hard budget constraints for weakly performing SOEs, a point that we made earlier while discussing the inclusion of SFTLN as a control variable. The earlier results show that the availability of soft loans, in general, has a negative effect on enterprise performance, whereas MOU has a positive effect. The relevant question here is whether a relaxation of the soft budget constraint at the margin reduces the incentives of managers to meet their performance targets under the MOU system, or conversely, whether a hardening of the soft budget constraint motivates the managers to exploit more the potential performance benefits to be realized through increased autonomy.

We examine the impact of deregulation and soft loans on the marginal impact of autonomy on SOE performance by interacting MOU each with DEREG and SFTLN to create two interaction terms respectively, DEREG \( \times \) MOU and SFTLN \( \times \) MOU. Using these variables, we re-estimate the regressions on the SS1, SS2 and SS3 samples. In all these models we control for the preparation for the MOU effect for which we have earlier found strong evidence. The results of these three regressions are presented in Columns (i), (ii) and (iii) of Table 7.

The coefficient estimates show that the interaction effects are significant in all but one case. With regard to deregulation, coefficient estimates of DEREG \( \times \) MOU in columns (i) and (ii) of Table 7 show that the coefficient of the interaction term is positive and significant at the 5 per cent and 10 per cent levels in sub-samples SS1 and SS2 respectively. As in the previous estimations, MOU continues to have a positive and significant effect at the 1 per cent level, and the coefficient of DEREG insignificant, for all three sub-samples. The positive and significant effect of DEREG \( \times \) MOU suggests that while deregulation is not found to have an independent effect on profitability, it complements the impact of autonomy on SOE performance as the effect of MOU is stronger in SOEs that were deregulated compared to those that were not. We do not find such a significant complementary effect in SS3 that considers only Type-2 firms. The weakening of this coefficient is possibly due to the fall in discriminatory power of this variable in this sample which does not contain the Type-3 firms for whom the complementary effect of deregulation on MOU is likely to be higher.
Turning to the interaction between soft loans and autonomy, the coefficient estimates of $SFTLN \times MOU$ does indicate that the availability of soft loans weakens the effect of autonomy on enterprise performance. The coefficient on the interaction variable $SFTLN \times MOU$ is negative and statistically significant in all the three sub-samples. In Column (i) the positive effect of granting autonomy is weakened by 4.2 percent in the SS1 sample. The corresponding estimates in sub-samples SS2 and SS3 are higher and estimated at 6.4 percent and 6.2 percent, respectively. However, in all the three samples, the estimated coefficient on the interaction variable is similar in magnitude to that on the $MOU$ variable suggesting the effect of granting of autonomy is almost neutralized by the availability of soft loans to SOEs. A statistical test fails to reject the null hypotheses that the total effect of MOU (which is the sum of the coefficient on the MOU variable and the interaction term) is zero at the one percent level in all the three models. These results show that the autonomy effect is weaker in enterprises with higher availability of fall back options in the form of soft loans. This is to be expected as managerial incentives to improve performance through exploiting greater autonomy in decision making is likely to be weakened if managers do not face hard budget constraints.

Our findings on the effect of $MOU$ on profitability of Indian SOEs strongly suggest that delegation of autonomy to SOE managers under the performance contract system in India has had a statistically significant positive effect on the return on assets. Our findings are robust after controlling for selection bias and across a variety of sub-samples and control groups that include the three types of SOEs, excluding SOEs that have not undergone any reforms (Type-1) as well as focusing only on SOEs that have been only reformed through performance contracts (Type-2).

The positive effect of performance contracts that we find in our study are in contrast to the findings of studies examining the effect of autonomy and incentives on profitability and total factor productivity with respect to Chinese SOEs. While Xu et al. (2005) find that increased autonomy leads to both a decrease in the return on assets as well as changes in ROA, Li and Wu (2002) find mixed evidence of autonomy on total factor productivity. The findings by Shirley and Xu (2001) on the productivity effects of performance contracts in China are inconclusive too. However, similar to our finding, the study does find that the effect of performance contracts is stronger in competitive environments.

The positive impact of performance contracts through the memorandum of understanding that we find in the case of Indian SOEs suggest that the beneficial effect of increased managerial autonomy outweighs

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30 As in the case of the estimates in Table 4, we re-estimated the models in Table 6 using a lagged value of soft loans. All our results go through with the lagged specification.
the increased managerial agency costs that may arise due to less political monitoring. In the Indian scenario, managerial agency costs on account of increased autonomy are unlikely to be exacerbated as the appointment and tenure of chief executive officers of SOEs are under the control of the government so that, as Xu et al. (2005) argue, SOE managers would have to be accountable to the government and therefore less likely to abuse the power that comes with autonomy.

4.2.2 The Partial Privatization Effect

We now turn to the measuring of effect of partial privatization on enterprise performance conditional on the fact that partially privatized SOEs were also under performance contracts prior to or coinciding with partial privatization, and continuing to be under MOU, post privatization. The key point of inquiry in this exercise is to find out whether ownership matters notwithstanding enterprise autonomy.

The empirical literature on measuring the effect of partial privatization as opposed to full privatization has been rather scant. Existing studies have typically measured the impact of partial disinvestment by contrasting the performance of enterprises post-partial privatization, with their performance prior to partial privatization as well as with the performance of enterprises that were never partially privatized (see Gupta, 2005, 2011; Chen et al., 2006; Li and Yamada, 2013)\(^{31}\). However, partially privatized enterprises may have been granted autonomy prior to partial privatization, and this autonomy effect can potentially influence the measurement of the partial privatization effect. Our earlier results in Tables 4 and 5 point to this possibility. Many empirical studies have been unable to address this issue either because autonomy and partial privatization may not have been implemented together in the settings in which these studies are set (Nahadi and Suzuki, 2012), or even if both were implemented as in China, were not reflected in the relevant datasets (Shirley and Xu, 2001; Li and Yamada, 2013). The only exception in this regard is the study by Li and Wu (2002) which examined the relative efficacy of managerial autonomy versus ownership reforms over a fourteen year period 1980-94 using a panel data of 680 firms. In this case, the underlying methodology was a fixed-effects pooled cross-section time series analysis rather than a before and after study with respect to each type of reform. After accounting for both reforms, the main finding of the study was that while autonomy had mixed effects on productivity, ownership changes positively impacted it.

In the case of Indian SOEs, as mentioned earlier, while the impact of partial privatization has been estimated by Gupta (2005; 2011), the studies do not control for the effect of enterprise autonomy in order

\(^{31}\) This is the case for privatization studies too as observed by Megginsson and Netter (2000).
to find the marginal effects of partial privatization. Since autonomy through MOU and partial privatization have been adopted sequentially since the early 1990s, our submission is that not accounting for the former while evaluating the partial privatization effect may bias the findings. This is all the more so in light of our findings of a robust positive impact of MOU across samples, which begs the question of whether the positive partial privatization effect that is found in earlier studies that do not control for the autonomy effect.

To find out the ownership effect after taking into account enterprise autonomy, our estimation strategy, as in the case of MOU, is to consider three distinct sub-samples discussed above, namely SS4, SS5 and SS6, comprising of different combinations of SOE types, and estimate respectively two versions of Equations (1-SS4), (1-SS5) and (1-SS6), one without and one with the preparation for partial privatization effects. As and where applicable, we control for possible selection bias through the introduction of the two group dummies namely $\alpha_1$ and $\alpha_2$. The results of the estimations are presented in Table 8. Columns (i) and (ii) of Table 8 report the results of the regression on the SS4 sample which uses all three SOE types, namely Type-1, Type-2 and Type-3, and all the observations from Regimes 1, 2 and 3. We observe from the estimates in column (i) of Table 8 that while the variable MOU and the associated preparation variables all retain their sign and significance as found earlier in Tables 6, the partial privatization variable PPVT_DUMMY, is negative and significant in the regression. However, once we control for the preparation for partial privatization for the duration of three years prior to the event, we do not find any partial privatization effect. With control for preparation for partial privatization, the partial privatization variable PPVT_DUMMY itself loses its statistical significance with the P-value reducing from around 3 percent to 16.2 percent. Estimates of the partial privatization preparation variables, ppvt_prep1, ppvt_prep2, and ppvt_prep3 also show the absence of any preparation for partial privatization, which is consistent with the findings with respect to PPVT_DUMMY.

In contrast to the partial privatization effect, the autonomy variable MOU continues to remain significant and positive with a large magnitude comparable to the results found earlier. Note that the SS4 sample contains all observations from all three regimes compared to only Regime 1 and Regime 2, and part of Regime 3 used in the analysis of autonomy in Tables 6. This suggests that the effect of autonomy found earlier in a smaller time series sample holds up in the extended sample. These results show that once we

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32 Both of Gupta’s studies, in estimating the impact of partial privatization, have controlled for firm-fixed effects, which one may argue would take care of the autonomy effect. However, as has been the case with partial privatization, Indian SOEs have come under the MOU system at different points of time since 1989, and hence its effect on firm performance cannot be taken as unobservable fixed firm level characteristics that can be accounted for with firm-level fixed effects.
control for autonomy, its preparation effects and partial privatization preparation effects, there is no incremental improvement in enterprise performance following partial privatization over and above that which result from the granting of autonomy.

We seek to confirm these results by re-estimating the above two models, one without and one with preparation for partial privatization, by first dropping the Type-1 enterprises from the sample (i.e. using the Sample SS5) and second by further dropping the Type-2 enterprises from the sample (i.e., using Sample SS6). We do this in keeping with our earlier argument that the fixed group effects captured by the variables $\alpha_1$ and $\alpha_2$ may not be able to control for time-variant effects which could then show up in the partial privatization variable. We discussed earlier that the time variant effect could be present due to deteriorating performance of Type-1 enterprises and the differential effects of autonomy on Type-2 and Type-3 enterprises. Columns (iii) and (iv) of Table 8 show the regression results when the models are estimated using sub-sample SS5, while Columns (v) and (vi) of Table 8 show the results when the models are estimated as a before-and after analysis using sub-sample SS6. The latter is analogous to the use of sub-sample SS3 to undertake a before and after analysis of MOU.

In Columns (iii) and (iv) of Table 8, we observe that the partial privatization variable, along with partial privatization preparation variables continue to remain statistically insignificant while the $MOU$ continues to remain positive and highly significant in the regression under both specifications. Thus omitting the Type-1 enterprises does not influence the estimation of the partial privatization effect. Similarly, in Columns (vi) of Table 8, that report the before and after estimation results on only Type-3 SOEs, we observe that the partial privatization variable is statistically insignificant while the autonomy variable retains its sign and magnitude. The results obtained in Columns (ii), (iv) and (vi) of Table 8 thus provide us with strong evidence of absence of any effect from partial privatization while the effect of autonomy continues to be positive and robust in all the regressions. Further, comparing the P-values associated with both autonomy and partial privatization across the three sub-samples, SS4-SS6, we find that considering the more general models with both MOU and partial privatization preparations, while the level of statistical significance of the MOU variable remains unchanged at one per cent, that with respect to $PPVT\_DUMMY$, dips from around 16 per cent in column (ii) to 57 per cent in column (iv) to 60 per cent in column (vi) (not reported).\(^3\)

\(^3\)In unreported results, we also estimated the regressions reported in Columns 3 to 6 by the dropping the Regime 1 observations pertaining to the Type-2 and Type-3 enterprises to take into account the presence of possible time variant effects in the performance of these enterprises. All our results remain robust both qualitatively and quantitatively.
In the estimations presented in Table 8, the effect of partial privatization is measured in form of a dummy variable. A dummy variable measures the average effect of all partial privatization events without taking into account the level effect. However, the effect of partial privatization can depend critically on the level of ownership that is disinvested. In particular the sale of very low amount of equity stakes may not generate enough incentive for the buyer to exert much effort for enterprise gains. In particular, devolution of too little stakes may not give the buyer the minimum threshold of control that is required to effect changes in the organization structure as well as the operation of the enterprise so that the government remains the de facto owner and the manager. It is only when a sufficient amount of equity stakes is privatized can one expect to see results from partial privatization.

To address this argument, and to take into account possible level effects in the partial privatization variable as has been done in many privatization studies, we re-estimate our partial privatization regression with these three alternative level specifications for the three samples SS4-SS6 by introducing instead of the dummy variable, the percentage share of equity held by private entities, PPVT_SHR through a simple linear specification. We estimate this regression with control for preparation for partial privatization effects to conserve space. Our results remain robust if we omit the preparation variables.

Columns (i), (ii) and (iii) of Table 9 report the results using the SS4, SS5 and SS6 subsamples respectively. In Column (i) we find that PPVT_SHR is statistically insignificant with a very high P-value. With regard to SS5 too, we find PPVT_SHR lacking statistical significance at the conventional levels. Finally, with regard to SS6 which estimates the effect of partial privatization for all Type-3 SOEs in a before and after set up, we find, in departure with the earlier results, both with the privatization dummy as well as with respect to privatization levels, the coefficient of PPVT_SHR is positive and significant at the 5 per cent level.

In an attempt to reconcile the apparent conflicting results obtained with regard to Type-3 SOEs when we use two different indicators of partial privatization, namely the dummy PPVT_DUMMY and the level variable, PPVT_SHR, we specify a piece-wise linear spline specification that allows for the marginal effect of the private shareholding to change at different threshold points known as spline nodes. The rationale underlying the spline specification is that only when private shareholding crosses a certain threshold would capital market discipline be an effective channel through which private shareholders can influence SOE performance. This is all the more relevant for partial privatization where it is argued that so long as the government controls an SOE, no amount of disinvestment would be effective in impacting performance. To examine whether the marginal impact of partial privatization depends on a threshold
level of such disinvestment, we adopt the spline specification. We set our threshold at the median value of disinvestment of 10 per cent. Any disinvestment above 10 per cent, we can dub as substantial partial disinvestment, the highest in our data set being 47 per cent. The results of the spline estimation, with the node set at 10 per cent reveal that the coefficient of $PPVT_{SHR}$ is insignificant for the shareholding below 10 per cent, and positive and significant for shareholding equal to and above 10 per cent is positive and statistically significant with a P-value of 0.02.

Our inconclusive results on the impact of partial privatization, statistically insignificant in two sub-samples and positive impact beyond a threshold of 10 per cent are in line with the mixed evidence emerging from the limited number of empirical evidence on partial privatization and SOE performance. On the one hand, Chen et al., (2006) find that partial privatization in China did not lead to an improvement in economic performance; in fact it led to a deterioration of performance. The authors argue that while shares of SOEs are partially divested, the control of the enterprises continued to remain in the hands of the government with most decisions dictated by government objectives rather than by market considerations. On the other hand, the findings of a positive effect that we find with regard to sub-sample S6 seem to be consistent with the findings of Gupta (2005; 2011) who evaluated the impact on disinvestment on a host of performance variables, namely SOE profitability, productivity and investment. These findings are explained in terms of the disciplining role that capital market exerts in reducing managerial agency costs. While the results of Gupta’s (2005; 2011) studies cannot be exactly comparable given that both the sample and period of study are somewhat different, we cannot rule out the possibility that the positive partial privatization effect that Gupta (2005) finds in the first twelve years of disinvestment, could have reflected the positive impact of the organizational changes that were taking place on account of many of the SOEs simultaneously coming under the MOU system. A similar argument can be made with respect to her more recent study (Gupta, 2011). We illustrate this point using our sub-samples SS4 and SS5 for which we find no effect of partial privatization using either the dummy or the level indicator of disinvestment. Specifically, we re-estimate samples SS4 and SS5 to find the impact of partial privatization, $PPVT_{SHR}$, without controlling for MOU, which in turn means re-estimating columns (i) and (ii) of Table 9 without the MOU variables. The estimates are presented in Table 10.

34 The period of study in Gupta(2005) is 1990-2002, with the sample comprising of both centrally owned public sector enterprises as well as enterprises under the ownership and control of state governments. Our sample includes not only the pre-reform period, but also covers a decade more of partial privatization and autonomy.
As is evident from the estimates in Table 10, partial privatization, $PPVT_{SHR}$ is positive and statistically significant both for sub-sample SS4 and SS5, at 5 per cent level in the former and at 10 per cent for the latter. Moreover, while in Table 9, while most of the privatization preparation variables were statistically insignificant consistent with the insignificant effect of $PPVT_{SHR}$, in Table 10, all these variables are positive and statistically significant at the 5 per cent level.

The presence of a positive partial privatization effect when we do not control for autonomy and the disappearance of this effect once autonomy is controlled for together with a positive and statistically significant effect of autonomy raise an important question. Can enterprise autonomy be considered as a substitute for partial privatization? Both performance contracts and partial privatization are policies aimed at incentivizing and disciplining managers accompanied by lesser political control. In case of autonomy, the government partially divests decision making control that is tied to the performance of the SOE, and in the case of partial privatization, the government partially divests control to private entities, which through the capital markets exert pressures on managers to perform. Our estimates of the marginal effects of performance contracts and partial privatization (when not controlling for autonomy) on ROA in fact indicate that the former ranges from 6 to 8 per cent depending on the sample considered, whereas the partial privatization effect is less than one per cent. Based on our findings, it is safe to conclude that if ownership changes in SOEs are effected through partial privatization, there is little to gain in terms of performance effects especially at low levels of disinvestment if the enterprises are already under the performance contract system. It is only when the extent of share divested is substantial can capital market discipline be functional.

5.0 Conclusion

The objective of this paper has been to examine the impact of managerial autonomy on SOE performance in the context of India. Using a longitudinal data set on Indian SOEs spanning thirty years with more than 5000 firm year observations, we focus on estimating the effect of performance contracts, dubbed as Memorandum of Understanding in the Indian context, on the return on assets of SOEs. Additionally, we use the Indian SOE reforms experience of pursuing both autonomy and partial privatization concomitantly as a natural setting to examine whether enterprise autonomy is both necessary and sufficient for SOE performance or whether private ownership, albeit partial, still matters. Our study contributes to the sparse evidence on enterprise autonomy and performance and on how the effects of autonomy match up with those with respect to partial privatization. Such an analysis is particularly important in view of the fact that state owned enterprises continue to play an important role in both
developed and developing countries and the relative benefits of various reform measures continue to be debated in view of the inconclusive evidence emerging from existing empirical studies.

We acknowledge that being restricted to one country, our results however become specific to those countries that share the same institutional structure as India. A similar observation can be made with respect to other country-specific studies such as those with respect to China. This is a tradeoff we face between measurement and applicability. We reason that India is representative of many emerging market economies that have both public and private sector enterprises operating in their industrial landscape and as such our results are applicable to these economies. Our longitudinal panel is restricted to only one country and hence avoids country specific issues that arise in many cross-country regressions. Pertinent to our case, in a cross-country setting the effect of autonomy/partial privatization may itself depend on the institutional setting in which the state-owned enterprises operate in the pre-autonomy/partial privatization era. For example in Brown et al. (2005) that uses longitudinal data from Hungary, Romania, Russia and Ukraine and looks at the effect of privatization (rather than partial privatization), starts from a base scenario where 36.1 percent of the firms in Hungary are already privatized, compared to 20 percent in Romania, while none of the firms are privatized in Russia and Ukraine. Accordingly, the benchmark and the competitive environment from which the effect of privatization is measured are different for different countries. A single country study bypasses such problems.

Our findings with respect to India strongly suggest that enterprise autonomy through performance contracts has a positive and statistically significant effect on SOE performance as measured by the return on assets. This finding is robust after controlling for selection bias and across different control and treatment groups that our sample allows us to define. These results by and large contrast with the largely negative findings of several empirical studies with respect to Chinese SOEs, as well as that of case studies on select developing countries including India.

In view of the policy discussion on the possible complementarities between different types of SOE reforms, we also examine in terms of our empirical exercise, the impact of deregulation and hard budget constraints on the marginal effect of autonomy. Our findings suggest such complementarities with competitive pressures through deregulation found to strengthen the autonomy effect on ROA, and softer budget constraints to weaken the effect.

One of the major findings of this study has been with regard to the effect of partial privatization on SOE performance conditional on the fact that the partially privatized SOEs continue to remain under the
reform experiences in other countries typically entail autonomy to the exclusion of ownership reforms and vice-versa. This has not been the case with respect to India and hence the findings of our study on the relative impacts of both in an integrated framework are of value.

By and large, we find that partial privatization has no independent effect on ROA once we control for performance contracts, whereas the positive and significant effect of performance contracts persists even after taking into account partial privatization. At best, we find that partial privatization matters when private shareholding exceeds 10 per cent, with the result holding only when we consider Type-3 SOEs in the sample. Given our findings, the only rationale for partial privatization to be undertaken in contexts like India is revenue generation for the government with no expectation of any real effect on performance.

Overall our study highlights the sizeable effects of enterprise autonomy which have not been reported in most other empirical studies using a data set that has much more cross-sectional and over-time variation than any of the existing studies, allowing us to estimate the impacts using various combinations of control and treatment groups. In that sense, the findings of the study, that enterprise autonomy through performance contracts is necessary, and is sufficient in relation to partial privatization, can be considered to be robust with respect to the performance parameter under consideration, namely profitability.
Chapter-5

MoU System in CPSEs

MoU is a mutually negotiated agreement between the management of the CPSEs and the Government of India/Holding Company. Under this agreement, the CPSEs undertakes to achieve the targets set in the agreement at the beginning of the year and submits itself to evaluation on the basis of its achievements at the end of the year.

5.2 Genesis of the MoU system in India

5.2.1 The Government of India introduced the system of MoU in the year 1986, based on recommendations given by Arjun Sengupta Committee report (1984). The report recommended that the CPSEs enter into agreements with their Administrative Ministries for five years, while progress would be reviewed annually. The MoU system was given broader thrust by the Government after the announcement of the New Industrial Policy of 1991. In view of the above policy statement, the scope of MoU system has been extended to cover nearly all CPSEs over a period of time and this is given below:

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of MoU’s signed</th>
<th>Year</th>
<th>No. of MoU’s signed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987-88</td>
<td>4</td>
<td>2007-08</td>
<td>144</td>
</tr>
<tr>
<td>1991-92</td>
<td>72</td>
<td>2008-09</td>
<td>147</td>
</tr>
<tr>
<td>2001-02</td>
<td>104</td>
<td>2009-10</td>
<td>197</td>
</tr>
<tr>
<td>2002-03</td>
<td>100</td>
<td>2010-11</td>
<td>198</td>
</tr>
<tr>
<td>2003-04</td>
<td>96</td>
<td>2011-12</td>
<td>197</td>
</tr>
<tr>
<td>2004-05</td>
<td>99</td>
<td>2012-13</td>
<td>196</td>
</tr>
<tr>
<td>2005-06</td>
<td>102</td>
<td>2013-14</td>
<td>197</td>
</tr>
<tr>
<td>2006-07</td>
<td>113</td>
<td>2014-15</td>
<td>199</td>
</tr>
</tbody>
</table>

5.2.2 NCAER study on MoU and Performance Evaluation: The Department assigned a study to the National Council of Applied Economic Research (NCAER) in 2003 to examine afresh the choice of criteria for performance evaluation and the allocation of weights to the different parameters. While the performance evaluation under the earlier system allocated 60% weight to ‘financial parameters’ and 40% weight to ‘non-financial parameters’, the NCAER recommended equal weights (50%) to both ‘financial’ and ‘non-financial’ parameters. In this respect, it is similar to the ‘balanced score card’ approach of performance evaluation. The ‘non-financial parameters’ were further sub-
divided into ‘dynamic parameters’, ‘enterprise-specific parameters’ and ‘sector-specific parameters’. The recommendations of the NCAER were subsequently accepted by the Government and the new methodology for setting up performance targets came into force since financial year 2004-05.

5.2.3 **Objectives of MoU System:** The specific objectives of the MoU system are to:

(i) Improve the performance of CPSEs though increased management autonomy;

(ii) Remove the haziness in goals and objectives;

(iii) Evaluate management performance through objective criteria; and

(iv) Provide incentives for better future performance.

5.2.4 **Institutional Arrangements for Implementation of MoU Policy—High Power Committee (HPC) on MoU:** The High Power Committee (HPC) on MoU is a Committee of Secretaries (COS) set up by the Government as the Apex Committee to assess the performance of MoU signing CPSEs with reference to the commitments made by them in the MoU and also to assess how far the Administrative Ministries/Departments have been able to give the necessary support as committed by them in the MoU. HPC is headed by the Cabinet Secretary and comprises of Finance Secretary, Secretary (Expenditure), Secretary (Planning Commission), Secretary (Statistics & Programme Implementation), Chairman, Public Enterprises Selection Board; Chief Economic Advisor, Department of Economic Affairs; Chairman, Tariff Commission; and Secretary (Performance Management). The HPC on MoU has been, from time to time, giving directions in regard to the determination of the principles and parameters for evaluating the performance of CPSEs.

5.3 **Task Force on MoU**

5.3.1 The Committee of Secretaries in its meeting held on 26th December, 1988 decided to constitute a Task Force for determining the parameters and weights and also for evaluation of performance of the CPSEs. The Task Force also assists DPE and HPC on MoU for determining the MoU format, parameters and inter-se weights. The Task Force is further divided into different groups called syndicates and each syndicate is entrusted with the tasks relating to MoU of CPSEs of a particular sector.

5.3.2 In order to lend greater technical and professional expertise as well as diverse and rich experience to Task Force on MoU for the year 2014-15, CPSEs were categorized into 13 syndicates, which are as follows:-

1. Agriculture, Fertilizers, Chemicals & Pharma
2. Steel, Lignite, Other Minerals & Metals
3. Crude Oil, Gas and Petroleum
5. Engineering, Transport Equipment and Consumer Goods –II
5.3.3 **Linkage with PRP**: MoU performance evaluation is one of the basic criteria for Performance Related Pay (PRP). The signing of MoU by the CPSEs with their parent Ministries/Departments/Holding Companies has been made mandatory for making them eligible for performance related pay/variable pay. The MoU rating forms one of the basis of PRP, with all the key result areas identified in the MoU. The PRP is payable at 100% eligibility levels in case the CPSE achieves the MoU rating as “Excellent”. In respect of “Very Good”, “Good” and “Fair” MoU ratings, the eligibility levels for PRP would be 80%, 60% and 40% respectively. If the MoU performance of a CPSE is rated as ‘Poor’, it is not eligible for PRP irrespective of the profitability of the CPSE.

5.3.4 **Applicability**: All CPSEs (Holding as well as Subsidiaries), without exception, are required to sign MoUs. While the Apex/Holding companies sign MoUs with their administrative Ministries/Departments, the Subsidiary companies sign MoUs with their respective Apex/Holding companies on the same lines as MoU is signed between a CPSE and Government of India.

5.3.5 **Exemption from MoU**: In respect of CPSEs, which are closed/not in operation, merged, wound up, shell companies or are sick and on the verge of being closed or merged with no revival package in sight, the administrative Ministry shall send the proposal for exempting them from MoU with its recommendations to DPE.

5.3.6 **Revision of Targets**: Once the MoUs are signed, revision of targets is not permissible. MoU targets are unconditional and non-provisional. However, during performance evaluation of MoU for happenings beyond the control of CPSE, the Task Force on MoU may consider offset and give their recommendations to DPE. Final decision on such cases is taken by High Powered Committee (HPC) on MoU.

5.3.7 **MoU Guidelines 2014-15**: DPE after consideration of suggestions received from administrative Ministries/Departments, CPSEs and recommendations of external studies/evaluation including the Working Group chaired by Chairman of Task Force on MOU has made significant changes in MoU Guidelines 2014-15. CPSEs have been given greater flexibility to select parameters more suitable for their
operations. A common format has been formulated for all CPSEs except sick and loss making CPSEs, under construction CPSEs and Section 25 CPSEs. The MoU guidelines emphasize greater weight to project implementation and CAPEX. Salient features of the guidelines are as follows:

a) **Principles for Target setting:** MoU targets should be realistic yet growth oriented inspirational and consistent with the proposed Annual Plan, Budget and Corporate Plan of the CPSE and Results Framework Document (RFD) of the Ministry/Department. It should be fixed keeping in mind the targets/goals indicated in the Plan document or during annual plan discussions and as per allocations approved by Ministry of Finance. Directions by statutory or regulatory bodies, as applicable should also be factored in. Targets should be the maximum achievable under the given and anticipated circumstances. The financial information disclosed to potential investors in IPO/FPO documents and interest of the shareholders should also be kept in mind.

b) **Physical Targets:** In addition to the financial performance, quantifiable physical targets which reflect productivity and efficiency of CPSEs are to be taken as parameters by CPSEs in MoU. The guidelines emphasize CAPEX and project implementation.

c) **Fixation of Targets-Non Financial:** There are no mandatory non- financial parameters for 2014-15. The non-financial parameters are Corporate Social Responsibility (CSR) & Sustainability; Research & Development (R&D); Initiatives for Growth, Project Management & Implementation; Productivity and Internal Processes; Technology, Quality, Innovative Practices; Human Resource Management and Sector Specific Parameters/ Enterprise Specific Parameters.

d) **Group Targets:** The performances of some CPSEs are inter – dependent because their operations cut across more than one CPSE and/ or Ministries/Departments. In such circumstances, MoU targets of the concerned CPSEs are so fixed that they are jointly and severally responsible for their performance and for achievement of the targets.

e) **Research & Development (R&D):** “Research& Development”, a ‘Non-financial parameter” may be included for CPSEs desirous of taking up R&D projects. R&D is not meant as fundamental scientific research (though it is not excluded). It should be linked to improvements in operational efficiencies in all activities, including manufacturing, processing, product development, packaging, marketing, and even work processes, through innovation, adaption, and application of available and emerging technologies and techniques.

f) **Commitment and assistance from Government:** Performance of Central Public Sector Enterprises (CPSEs) is assessed with reference to the commitments made and actual assistance given to CPSEs by Administrative Ministries/Departments. This is to be quantified and a Report along with Performance Evaluation Score Sheet of CPSEs is to be submitted by Administrative Ministries/Departments to DPE which will
be reviewed by HPC. Commitments/assistance expected from the Government should be relevant and related to the fulfilment of the agreed performance targets. The commitments/assurances in the MoU document are to be incorporated appropriately in the Result Framework Documents (RFD) of the concerned administrative Ministry/Department.

g) Negative Marking: There is provision for negative marking in cases of non-compliance with guidelines of Corporate Governance and other DPE Guidelines

5.4 MoU Evaluation

5.4.1 Evaluation of MoU of the CPSE is done at the end of the year on the basis of actual achievements vis-à-vis the MoU targets. CPSEs (Holding as well as Subsidiaries) are required to submit performance evaluation reports on the basis of audited data to Department of Public Enterprises and the Task Force of the Syndicate Group, after approval of the Board of CPSE and through the administrative Ministries/Departments within the target date of 31<sup>st</sup> August. A description of MoUs evaluated during the last three years is as under.

<table>
<thead>
<tr>
<th>Item</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total MoUs Signed</td>
<td>198</td>
<td>197</td>
<td>196</td>
<td>197</td>
</tr>
<tr>
<td>Evaluation Report Submitted</td>
<td>161</td>
<td>175</td>
<td>189 + 1*</td>
<td>Due from 31.8. 2014</td>
</tr>
</tbody>
</table>

* Provisional

5.4.2 A comparison of the MoU ratings secured by the CPSEs in the last 9 years is as under:-

<table>
<thead>
<tr>
<th>Rating</th>
<th>Number of Public Sector Enterprises under each rating over Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>45</td>
</tr>
<tr>
<td>V. Good</td>
<td>31</td>
</tr>
<tr>
<td>Good</td>
<td>12</td>
</tr>
<tr>
<td>Fair</td>
<td>10</td>
</tr>
<tr>
<td>Poor</td>
<td>01</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
</tr>
</tbody>
</table>

* Provisional

5.5 Determination of Excellence Awards under MoU system

5.5.1 CPSEs are eligible for non-monetary incentives in the form of MoU Excellence Awards. The total number of MoU Excellence Awards are 12 (one from each of the 10 Syndicate groups, one from the best listed CPSEs, one from amongst the sick
and loss making enterprises on way to turnaround). All other ‘Excellent’ performing CPSEs get MoU Excellence certificates.

5.5.2 The following basic principles for selection of CPSEs for MoU Excellence Awards and Certificates from amongst the Syndicate groups are followed:

(i) The profit of the CPSE in the year should be higher compared to the previous year.
(ii) It should not be a loss-making enterprise.
(iii) The composite score of the CPSE should not be more than 1.5 (Excellent rating).

5.5.3 The Award is given to the CPSE which has shown exceptional performance on MoU and has the lowest MoU composite score in the respective Syndicate Group. In case two or more CPSEs score the same MoU composite score in a Syndicate Group, the CPSE recording the highest growth rate of net profit over the previous year is eligible for the excellence award.

5.5.4 For the category of Excellence Awards for Listed CPSEs, the condition is that the percentage growth in the market capitalization exceeds the percentage growth in sensex of the Bombay Stock Exchange. The listed CPSE with the highest percentage growth in market capitalization is eligible for this award.

5.5.5 For Excellence Awards for Sick and Loss making CPSEs on way to turnaround, the conditions are that the CPSEs should have earned profit before tax for the year of the MoU under consideration as well as during the immediately preceding financial year, to ensure that the turnaround is on firm ground. The CPSE having the lowest composite score is eligible for the excellence award.

*****
Government and Industry in France
A CONTRACTUAL APPROACH

Industrial policies in France have long been dominated by one main aim: to promote economic and industrial development, pushing France as rapidly as possible up the 'league table' of economic and industrial power. This has been pursued by a dual strategy, a mixture of protectionism and selective entrepreneurship — that is, picking and promoting industrial winners and then insulating them, as far as possible, from 'unfair' competition.

State intervention in industrial affairs is facilitated by very close links between industry and the civil service. This dates from the early days of French capitalism, which was largely created by State rather than shareholder participation. Today, senior officials, drawn from France's highly competitive intellectual elite, move freely in and out of leadership positions in the private and public corporations and in the financial sector, reinforcing these links and widening the State's extensive information-gathering network. Rather surprisingly from the British viewpoint, intervention is both accepted and looked for by French businessmen, who see nothing inherently odd in the notion of a partnership between government and industry in the pursuit of a common aim.

This notion, popularized in the phrase 'concerted economy' in the early 1960s, took the form of bilateral contracts, or agreements between the State and individual firms in pursuit of specific and mutually agreed objectives. An early example was the 'contrats de stabilité,' introduced in 1965 in an attempt to secure agreement on price controls. Later 'contrats de programme,' or planning agreements, were introduced to counter the

* Principal Lecturer in Political Economy, City of London Polytechnic.
tendency of Governments to focus on the problems of day-to-day management. At this stage, these planning agreements had no legal force: despite their legal-sounding name, they only had moral force, rather on the lines of the 'indicative' nature of French planning. Gradually, the original concept was redefined, with the sense of commitment being strengthened by the introduction of sanctions.

From the point of view of the State, the contractual approach was attractive both financially and ideologically. The fact that contracts were only available to efficient firms enabled the State to claim that 'helping the strong' was a particularly economical way of mobilizing public funds for investment purposes. At the same time, the 'arms-length' nature of the contractual relationship was politically attractive to a basically conservative Government. The approach was also welcomed by the business sector, as agreements not only spelled out the conditions of the State's involvement but also left the managers, within mutually agreed limits, free to manage.

How has this approach turned out, nearly two decades on? Has it proved to be successful means of planning and mobilising investment in the public and private sectors in France? What lessons are there for the UK? We look, first, at the public sector.

**Public Sector Failure**

The French nationalized sector is of a similar size to its British counterpart, in terms of its percentage share of GNP, and in terms of the industrial sectors it spans. As in the UK, state monopolies control the energy, transport and communications sectors. But France has a rather wider range of nationalised firms competing in the market — the equivalent of British Leyland, BP, and so on (see Table 1). During the 1970s, the boundary between the public and private sectors became increasingly blurred, partly as a result of the market-oriented approaches of the more dynamic public enterprises. These diversified their activities, spawning subsidiaries at home and abroad, a strategy at least partly motivated by the desire to escape State control.

As in the UK, management of the nationalised sector has always been a controversial issue. French government control appears to be tight. Investment programmes require annual approval and much of the external financing is provided either directly by the State or by institutions owned
or controlled by it. Enterprises are supervised jointly by a sponsoring
Minister and a technical director. Civil servants generally occupy about
one third of the seats on the supervisory board, whose chairman is
appointed by the Government. Senior civil servants — inspecteurs de
finance — oversee day-to-day operations in each enterprise, while the
Finance Ministry has a veto not only on investment financing but also on
all wage and price decisions.

Table 1
Main Public Enterprises in the Market Sector

<table>
<thead>
<tr>
<th>Group</th>
<th>Sector</th>
<th>Place in top 100 firms, ranked by turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renault</td>
<td>cars</td>
<td>3</td>
</tr>
<tr>
<td>SNIAS*</td>
<td>aerospace</td>
<td>21</td>
</tr>
<tr>
<td>CDF-chimie</td>
<td>chemicals</td>
<td>23</td>
</tr>
<tr>
<td>ATO-chimie</td>
<td>chemicals</td>
<td>27</td>
</tr>
<tr>
<td>EMC</td>
<td>chemicals</td>
<td>29</td>
</tr>
<tr>
<td>COGEMA</td>
<td>nuclear</td>
<td>30</td>
</tr>
<tr>
<td>SNECMA</td>
<td>aerospace</td>
<td>44</td>
</tr>
<tr>
<td>SANOFI</td>
<td>pharmaceuticals</td>
<td>65</td>
</tr>
</tbody>
</table>

* Excludes subsidiaries

Yet, in practice, the extent of control varies considerably, with some
erprises, like Renault, enjoying considerable autonomy. Others, such
as the public monopolies like Electricité de France (EDF) and the Société
Nationale des Chemins de Fer Français (SNCF — the French railways), as
well as those in the market sector which depend heavily on State subsidies,
like Air France, are subjected to extensive interference.

A step towards devising a more coherent system was made in 1966,
when a committee was set up to examine the role of public enterprise in the
Government's economic and social policy, and to recommend new
guidelines for management. The Nora Report, published the following
year, proposed a greater emphasis on the entrepreneurial nature of public enterprises; they should be encouraged to operate according to commercial criteria, such as efficiency and profitability. It also recommended that for quasi-monopolies, such as Electricité de France, programme contracts should be drawn up, to increase corporate autonomy and restrict the role of State to fixing the rules of the game. Increased profitability would reduce the need for State funding, which in turn would lead to better management and the provision of better services.

An attempt was made to implement the Nora proposals between 1969 and 1972. Programme contracts were drawn up with the Railways in 1969 and Electricité de France in 1970. An agreement with the Office de la Radio et Télévision Française (ORTF) was also drawn up in 1971, but lapsed when the Office was restructured in 1974.

The introduction of contracts into the public sector in this first phase was, at most, a qualified success. Part of the problem lay in the nature of the contracts. Broadly speaking, these were medium-term planning agreements (initially timed to coincide with the current national plan), in which the enterprise secured autonomy over decisions relating to pay, borrowing and marketing. In return, it made a firm commitment to policy objectives set by the Government — for the particular sector, for regional policy, for wages and price stability, and so on — as well as agreeing to specific performance targets — for investment, output, exports, and so on. The contracts were seen, then, as a means of establishing standards to measure managerial performance. While not legally binding on the State, their bilateral nature meant that some measure of commitment was assumed, on both sides.

In practice, the contracts manifested the same weaknesses as France's famous 'indicative' plans (see a note on "French Plans" at the end). Being fixed, they could not anticipate, nor accommodate changes in the economic and political environment. Thus, the 1973 energy crisis rendered the terms of all the contracts redundant. Moreover, since, after 1974, the Government's first priority became the fight against inflation, public enterprise programmes once again fell victim to short-term economic management. Managerial autonomy quickly became a dead letter, as one example will show. ²
Electricité de France

In order to achieve its long-term aim of becoming the main domestic supplier of energy by the year 2000, the management of Electricité de France persuaded the Government that the development of nuclear energy was in the national interest: not only was it cheaper and less polluting, it would drastically reduce France’s dependence on imported energy and help the balance of payments. The resulting ambitious nuclear programme required massive investment, so management argued that it was in the national interest, as well as that of the corporation, to boost electricity sales. A programme contract was signed in 1970, which gave Electricité de France greater autonomy over its tariffs in return for agreeing to performance targets for productivity, the rate of return on capital investment and sales.

The terms of the original contract were never fulfilled. Indeed, changing circumstances led to four successive re-drafts. In effect, what had been designed as a fixed plan became a rolling plan (see, for example, in Table 2 what happened to the amount of investment capital it was expected to generate from sales). Nor was the commitment to pricing freedom ever fully honoured. In 1975, for example, as a result of large wage increases (agreed as part of a productivity deal) and the steep rise of oil prices, management estimated that its tariffs should be increased by 20 per cent, to cover increased production costs: the Government limited the increase to 5 per cent.

Similarly, a change of policy not only rendered the contract redundant, it also jeopardised management’s long-term strategy. At issue was the decision to enter growing domestic central heating market as part of management’s plan to boost electricity sales. This decision was initially backed by the Government, through the national plan (a target of 2,000,000 homes to be electrically heated by 1985) and in the programme contract. The energy crisis prompted a change in Government policy, however, to greater emphasis on energy conservation. Electricité de France was, therefore, instructed to slow down its central heating programme, stop publicity designed to encourage energy consumption, and structure its tariffs to penalise heavy users. Further, a tax was introduced on new housing equipped with electric heating.

Not surprisingly, relations between Electricité de France and the Government deteriorated, the former reflecting bitterly on the problem of squaring its long-term investment plans with the shorter-term political
cycle, while the Government accused management of putting its own commercial interests in front of the wider national interest. The experiment with a contract — and its failure — have paradoxically resulted in a tightening of the State’s control over Electricité de France.

Surprising Renaissance

Nevertheless, the late 1970s have seen a new series of public enterprise contracts. Contrats d’entreprise were drawn up with the coal industry in 1978, the SNCF and la Compagnie Generale Maritime (the State-owned shipping company) in 1979, and Air France, in 1981. There are three possible explanations of this surprising renaissance. First, the success of ‘priority investment projects’ such as the telecommunications plan in the 1976-80 national plan, demonstrated that government could, if it wanted to, keep its pledge to refrain from arbitrary cutbacks despite macro-economic pressures. Second, the philosophy underlying the Nora Committee’s recommendations found support with a Giscardian Government which emphasised the need to increase the competitiveness both of public and private sector firms, while ‘rolling back the frontiers of the State.’ Third, contracts were clearly working in the private sector, suggesting that, as a mechanism, they were potentially effective.
These ‘second-phase contracts’ are three-year rolling plans, the lesson having been learned from the experience of Electricité de France. The State undertakes to cover the cost of the public service activities of the company and to act as its banker, providing capital and subsidies if it gets into difficulties. They are also investment plans, the enterprise agreeing to a detailed investment programme and specific performance targets. Thus, for example, Air France agreed to modernise its fleet of freight aircraft, increase its self-financing ratio, reduce its indebtedness, and increase its competitiveness relative to other European companies, in return for increased managerial freedom. The State agreed to pay for the maintenance of the ageing Caravelle aircraft (a decision imposed on management under the last contract) and subsidise Concorde’s operations, as well as contributing to the cost of financing its investment programme.

Unfortunately, enterprise contracts appear to be subject to the same problems as the earlier model. For example, SNCF agreed to modernise and rationalise the railway network, improving the level and quality of service offered. Increased profits, as a result of the introduction of economic pricing, would compensate for the reduction of State subsidies. Some autonomy was conceded: it was free to fix freight tariffs, but passenger tariffs were still subject to government approval. It was here that the agreement broke down: under the terms of contract, the SNCF planned to raise 2nd class fares by some 13 per cent on 1 January 1981. This was during the run-up to the presidential elections and Prime Minister Barre desperately needed some evidence that his restrictive policies had worked. Only half this increase was, therefore, allowed, and even then it was delayed until the end of March, leaving the SNCF with a shortfall of 600 million francs. Once again, when the Government’s short-term aims clashed with the longer-term aims of the public enterprise, the contract became a dead letter.

The SNCF also complains that it cannot meet the agreed targets anyway because of the Government’s insistence on introducing competition between nationalised industries. Thus, the introduction of the ‘rapid passenger train’ between Paris and Lyons has resulted in direct competition between the SNCF and the domestic airline, Air Inter, on certain routes. The airline has responded by undercutting the railways on its cheaper routes. The SNCF is in turn being forced to adopt a selective pricing policy, which can only lead to a further fall in traffic, a further increase in its deficit and, eventually, a further reduction of services.
These examples suggest that the problem is not only one of conflict between the interests of the enterprise and the State; there is also a conflict of aims within government itself. The State is not a homogeneous unit. In practice, a public enterprise faces an array of unreconciled — and perhaps irreconcilable — goals, which change according to economic and political circumstance.

Yet, as was indicated earlier, contracts have also been introduced into the private sector, where they have proved to be an effective mechanism for orienting private sector investment. We now turn to those.

Private Sector Success

During the 1970s, there was a significant increase in the number of industrial policy schemes involving a contractual agreement between the State and individual firms.

In the wake of the 1973 energy crisis, which had halved French growth at a stroke, it was even more crucial to the Government to assist French industry to adapt to the changing international economic environment. Arguing that management decisions were the prerogative of the firm, not civil servants, the Government pledged it would reduce its intervention in industry's affairs.

In the event, intervention became more selective: there was a shift from the old-style sectoral support plans and increased interference in the investment decisions of individual firms. 'Growth' contracts, for example, were used to accelerate the expansion of selected firms in the electronics sector. The novelty of these medium-term planning agreements lay in the fact that they combined a 'carrot and stick' approach. Financial assistance was provided by the State, generally up to about 12 per cent of the cost of the planned investment programme, often in the shape of soft loans. Sanctions were also included for non-fulfilment of the agreed performance targets, and were rigorously applied — for example, a retrospective increase in the rate of interest charged on the loan.

Of the six firms signing growth contracts in the mini-computers sector, for example, five met their targets before the due date, and the output of the sector grew by more than 28 per cent within 18 months. In the case of one of these firms, Benson, rapid growth was clearly facilitated by the signature of a growth contract. The company was initially set up, in
1955, as a European subsidiary of an American firm producing design machines. After a buy-out by the French management in 1968, it ventured into automated design and printing equipment. Under the growth contract signed in 1977, Benson has expanded into the American market (via the takeover of the graphics division of Varian) and now has a one-fifth share of the world market for design equipment and advanced technology printing equipment. It is currently growing at about 25 per cent annually.

‘Development’ contracts are a refined version of the earlier growth contracts. They were the main policy mechanism used to implement the strategies devised by CODIS, an interministerial committee set up in 1979 as part of the Government’s ‘strategic reinforcement’ approach to industrial problems. This strategy centred on promoting the expansion of successful firms in fashionable new technology areas, such as robotics and biotechnology. Here, too, the State’s financial contribution was limited, in line with the belief that public funds should be used as efficiently (and economically) as possible, to mobilise private capital. Development contracts went further than other contracts, however, to the extent that any additional State action needed to help the firm achieve its targets was also spelt out — for example, the introduction of temporary import controls to allow a firm to meet its import substitution targets.

Despite its ideological opposition to the notion of ‘winner-picking,’ the new Socialist Government has honored the contracts signed under the last regime and even signed new ones. Thus, in February this year (1982) a contract was signed with Intertechnique, the computer peripherals subsidiary of the Dassault group. In this contract, Intertechnique has agreed to the creation of between 350 and 400 new jobs at a new factory at Montpellier. In return, the Government has agreed to inject 61.5 million francs into the company in the form of direct subsidies and a further 24 million in the shape of a subordinated loan at a very low rate of interest, phased over the term of the contract. The company has also agreed to increase its own capital by a rights issue, and to plough back profits at a rate of 26.5 million francs up until 1983.

There have been failures, notably the case of Logabax, a leader in the mini-computer sector which received similar assistance. Its financial structure had been shaky for some time, and despite several government backed reprieves, it finally collapsed in 1980. But, on the whole, as we have seen, bilateral contracts, specifying clear growth targets in return for financial assistance from the State, have been used in the private sector with some success.
Why the Difference?

Why were contracts more effective in the private than in the public sector? There are a number of possible reasons. Contracts were primarily used in the private sector as a means of ‘helping the strong,’ i.e., the State backed proven industrial ‘winners.’ At the same time, the existence of sanctions was clearly vital to their success, reinforcing the discipline of the market. Financial assistance was phased, and conditional on the achievement of clearly specified targets; non-achievement meant non-payment of retribution in respect of a sharp (and retrospective) increase in interest payments. And, since the financial viability (as well as the commercial potential) of each firm was carefully vetted, the imposition of sanctions was rarely a threat to its survival.

The public sector contracts, on the other hand, were all signed with firms burdened with heavy deficits. Indeed, the scheme was partly motivated by the desire to reduce the State’s involvement by ensuring that the enterprises financed a greater proportion of their capital expenditure out of profits. Pressure on them to behave in a more entrepreneurial fashion was motivated by the same concern. Yet French public enterprises are not — nor can they be — commercial undertakings. They might adopt a more entrepreneurial style — operating at least cost, attempting to earn higher profits, and so on — but they are sheltered from the discipline of the market: as the rescue of the steel industry showed a State-owned enterprise is rarely allowed to go bankrupt.

For the public enterprise, the ultimate sanction is government approval. In other words, public enterprises are subject to the discipline of the non-commercial market. At the same time, the fragmentation of control complicates the task of laying down clear, operational guidelines for public sector management. Not surprising, bilateral contracts have proved to be inoperable — if not totally unsuitable — as a tool for public sector management in France. Undirected decision-making and arbitrary intervention have characterised the relationship between managers and their political masters.

The contractual approach was welcomed by public sector managers to the extent that it appeared to offer a chance of increasing their bargaining power with the State and running their operations with the minimum of interference. Although previous experiments have failed, managers remain optimistic, hoping that under a Socialist government,
committed to managerial autonomy in the public and private sectors, this might become a reality. In the light of available evidence, we can only remain skeptical.

**French Plans**

French national plans continue to fascinate foreign observers. British Governments, for example, have persisted in seeing it as a kind of philosopher’s stone, producing very high growth rates — close to 6 per cent a year between 1958 and 1973. National plans have exerted an important influence compensating, in part, for political instability during the Fourth Republic 1945-1958 — but the French economy is not planned in the same way as the Soviet economy.

French plans are indicative plans, which spell out the government’s medium-term priorities and which, in consultation with the business community (including the nationalised industries) and the unions, establish a basis for the allocation of public and private resources. They are intended to supplement market forces rather than replace them, providing information to reduce uncertainty and generate a climate of expansion.

Possibly, the high point of French planning was the fourth plan, which ran, under De Gaulle, from 1962 to 1965. Subsequently, and particularly during the 1970s, the plans declined first into ‘strategies for development,’ and then into mere ‘frames of reference’ for economic policy decisions. However, the seventh, which ran from 1976 to 1980, did identify 25 priority action programmes, or medium-term investment plans, which the Government pledged would be shielded from arbitrary cut-backs.

**Source:** Public Money, September, 1982.
CORPORATE GOVERNANCE OF STATE-OWNED ENTERPRISES IN CHINA

Empirical Effects of Performance Contracts:
Evidence from China
by
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Empirical Effects of Performance Contracts: Evidence from China

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Empirical Effects of Performance Contracts:
Evidence from China

Abstract. Performance contracts (PCs)—contracts signed between the government and state enterprise managers—have been used widely in developing countries. China’s experience with such contracts was one of the largest experiment of contracting in the public sector, affecting hundreds of thousands of state firms, and offered a rare opportunity to explore how PCs work. Our findings indicate that on average PCs did not improve performance and may have made it worse. But China’s PCs were not uniformly bad. Surprisingly, PCs improved productivity in fully 38% of the participants. Successful PCs were those which simultaneously provided sensible targets, stronger incentives, longer terms, and were in more competitive industries. Selecting managers through bidding and requiring managers to post a bond against a target was not associated with performance improvement.

JEL code: D2, production and organization; L2, Firm objectives, organization, and market performance; and L3, nonprofit organization and public enterprises

I. Introduction

Performance contracts (PCs) are widely used to reform state-owned enterprises (SOEs). Since France pioneered their use in the 1970s, PCs have been tried in more than 50 countries (Ghosh, 1997). The World Bank (1995) found 565 PCs in 32 developing countries as of June 1994, where they were principally used for large utilities and other monopolies, and another 103,000 in China, where they were also used for manufacturing SOEs.

This article analyzes the experience with PCs in China, the country that experimented most extensively with this tool. We define PCs broadly as written agreements between SOE managers, who promise to achieve specified targets in a given, usually short, time frame, and government, which usually promises to award achievement with a bonus or other incentive. PCs are thus a variant of pay-for-performance or incentive contracts, which are often used to motivate private managers. PCs have been suggested as a way to improve central government agencies (Mookerjee 1997), as well as state enterprises (Jones, 1991, Ghosh, 1997).

1 New Zealand, for example, has used incentive contracts for ministries and other government bodies.
This paper, using a panel data set, analyzes the experience with PCs in roughly 500 Chinese SOEs. As a natural experiment, China’s experience offered many advantages. First was the large number of contracts. The Chinese experiments with performance contracts could well be the largest experiment in contracting in the public sector ever conducted. Second, Chinese PCs exhibited interesting variations, differing in term length, targets, intensity of incentives, method of selecting managers, and whether the manager posted a bond as a pledge to improve performance. Third, the enterprises that signed PCs were in many different industries with large variations in size, capital-labor ratio, markup ratio, pre-contract performance and the level of jurisdiction of the government that owned them. Firms in this data set also faced different widely degrees of market competition (Li, 1997).

This paper addresses two questions. First, did PCs work? To what extent did Chinese PCs enhance firm productivity on average? Second, can PCs work? How was firm performance affected by different PC provisions, in particular, incentives, targets, bidding, contract length, managerial bonding, and the extent of product market competition? These are important questions given the wide use of PCs and the interest in ways to improve SOE performance when privatization is not an option.

Neither economic theory nor empirical evidence provides clear-cut answers to these questions. Principal-agent theory (see Ross 1973; Stiglitz 1974; Sappington 1991) suggests that PCs can be useful in reducing agency problem as long as they can systematically reduce information asymmetry and improve incentives. The principal (government officials in the case of state enterprises) can only observe outcomes and cannot measure accurately the effort expended by the agent (the SOE manager) or distinguish the effects of effort from other factors affecting performance (Laffont and Tirole 1986, 1993). A negotiated incentive contract is viewed by its proponents as a device to reveal information and motivate managers to exert effort (Jones 1991, Ghosh 1997). Proponents also argue that the contract can translate the multiple objectives of the multiple principals who govern state owned firms (different ministries, the president, and the legislature) into clear targets measured by specified criteria and weighted to reflect priorities. Moreover, targets can be set to take into account circumstances where SOE managers have less control over their firms than comparable managers do in the private sector. For example, performance might be judged against the firm’s past trends, rather than against an industry standard, to take account of situations where the firm’s performance is sub-standard because of government imposed constraints (such as prohibitions on layoffs, price controls, etc.). By specifying targets and evaluating results ex post, the PC is seen by its advocates as a way to encourage governments to reduce ex ante controls, giving managers more freedom and motivation to improve operating efficiency.
However, several factors could reduce the positive effects on performance which PC proponents expect. The information problem may not be solved by contracts, because of lack of information on SOEs whose shares are not traded in a stock market and weak accounting and controls in developing countries. Empirical studies (Berle and Means 1932, Jensen and Murphy 1990, Crocker and Masten 1991) suggest that high-powered incentives are a problem even for private firms in developed countries. Owners may fear that because of information asymmetry they will not be able to measure achievement well and waste their bonus (Laffont and Tirole, 1993) or reward managerial self-dealing (Shleifer and Vishny 1994). In SOEs there may also be political barriers to paying successful managers considerably more than ministers or legislators.

Another problem common to state owned firms is that some of the multiple principles may derive benefits from objectives that run contrary to the PC’s goal of improving efficiency. Politicians may benefit when SOEs maximize the employment of their constituents; bureaucrats might benefit from SOE activities that increase their power, prestige or perks (Shleifer and Vishny 1994). Many of these objectives are likely to be harder to contract on than profit maximization. Even if all parties agree, the full set of things they care about are rarely quantifiable (multi-task problem, Holmstrom and Milgrom 1991) and don’t lend themselves to automatic or mechanistic types of contracts. But less formulaic contracts which leave grounds for interpretation ex post rely on institutions such as reputation, arbitration, or courts to reduce opportunistic behavior (Crocker and Masten 1991). These institutions are likely to be weak in developing countries and non–existent where one of the parties is the government.

Commitment (Williamson 1976 and 1985) is thus an especially severe problem for PCs because one of the signatories is the government. There are likely to be no neutral third parties with the power to compel government to meet its commitments. Furthermore, in developing countries the institutions that curb arbitrary actions by governments and bind administrations to the promises of their predecessors, such as checks and balances or reputation, are often weak (North and Weingast 1989, Levy and Spiller 1996). Managers may not exert effort if they expect government will renege on, for example, paying the promised incentive.

The existing few empirical assessments of PCs reached different conclusions. Song (1988) suggests positive outcomes based on experience in Korea, but he partly relied on employee and management opinions that could be biased. Trevedi (1990) finds that India’s variant of a PC (Memorandum of Understanding) improved the dialogue between SOE management and government, but does not rigorously analyze their impact on firm performance. Ghoph (1997) examines econometrically the experience of 12 Indian companies in implementing PCs and finds positive effects; but he does not control for simultaneous reforms such as liberalization and government disinvestment. Nellis (1989)
finds ambiguous PC effects in France and many African countries, in part because at the time of the study the experience was still recent. Shirley and Xu (1998) find that PCs did not improve total factor or labor productivity or profitability because they failed to reduce information asymmetry, provide sufficiently high-powered incentives and credibly commit both parties to the goals of the contract. The sample, however, was small (12 company cases in six developing countries), and limited to natural monopolies.

This study is, as far as we know, the first econometric study to systematically evaluate the productivity effects of performance contracts in China. More importantly, it is also the first study to relate PC effects to contract provisions along three dimensions suggested by the contracting literature: information, incentives and commitment.

Our primary findings are three. First, PCs on average were not significantly correlated with improvements in productivity in a large sample of competitive SOEs in China. In fact, on average PCs were found to have a negative and significant correlation with productivity when the endogenous nature of PC participation was taken into account. Our second finding is more surprising: PCs can improve productivity when they simultaneously specify sensible targets, offer strong incentives, and signal commitment, especially in a competitive environment. Thus, productivity was higher in more competitive firms whose PCs had higher wage incentives, longer terms, and profit-oriented targets. Bidding, in contrast, was associated with lower productivity, perhaps reflecting the design of the auctions or weak enforcement of bidding contracts. In addition, managerial bonding had no systematic effect on productivity. Third, most PCs in China did not include these productivity-enhancing provisions. Surprisingly, some 38% of the PCs were associated with productivity improvements.

Our analysis differs from other studies of Chinese contracts. Byrd (1991) describes in rich detail the principal types of performance contracts, and suggests some of the main advantage of PCs over the traditional mode of government oversight. He argues that the main problems with PCs are the strong bargaining power of managers, not enough risk-bearing on the part of firms, ambiguous ownership type, and non-credibility of contracts. Byrd (1991), however, does not offer systematic evidence about the effectiveness of PCs. Groves et al. (1995) examines the contractual provisions that affect SOE managers (such as length of the contract, management turnover, and the changing management pay sensitivity) and find that these provisions are consistent with a well-functioning managerial labor market. Groves et al. (1995) also analyzes the determinants of many other provisions, but does not systematically assess how they affected productivity, with the exception of the impact of management turnover. In contrast, our focus is on the quantitative importance of alternative specifications of performance contracts—such as
profit orientation, managerial bond, firm level pay sensitivity, competition, the length of contract term -- most of which Groves et al. did not examine.

The next section briefly describes the implementation of PCs in China. Section III presents our hypotheses about the effects of PCs. Section IV then investigates the effects of PCs on performance of our sample, and compares the effects of alternative provisions. The final section draws policy implications from our findings.

II. Performance Contracts in China.

The Chinese government began to experiment with PCs for SOEs in the mid-1980s. Not until 1986, however, did the government implement PCs on a significant scale; in fact, PCs became the national policy for reforming SOEs between 1987 to 1994. In our data set, the share of state enterprises under PCs grew from 8 percent in 1986 to 42 percent in 1987; it then skyrocketed to 88 percent by 1989.

Table 1. Definitions and Descriptive Statistics of PC features:

<table>
<thead>
<tr>
<th>Definitions</th>
<th>Mean (standard error)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PC</strong> Dummy variable: one if a firm was under a PC</td>
<td></td>
</tr>
<tr>
<td>Conditioned on that a firm was under a PC:</td>
<td></td>
</tr>
<tr>
<td><strong>W.ELASTICITY</strong> Firm-level wage elasticity, the percentage increase of total wage bill of the firm when the profit increase by 1 percent.</td>
<td>0.525 (.314)</td>
</tr>
<tr>
<td><strong>BID.INCUMBENT</strong> Dummy variable that is one if the manager signing the PC was an incumbent manager.</td>
<td>0.149 (.356)</td>
</tr>
<tr>
<td><strong>BID.NEWCEO</strong> Dummy variable that is one if the manager signing the PC was a new manager.</td>
<td>0.020 (.136)</td>
</tr>
<tr>
<td><strong>TERM</strong> The length of the contract (in years).</td>
<td>2.858 (1.523)</td>
</tr>
<tr>
<td><strong>PROFIT</strong> Dummy variable that is one if the primary target of a PC was profit.</td>
<td>0.427 (.495)</td>
</tr>
</tbody>
</table>


3 See Byrd (1991), Lin, Li, Cai (1997), and Ghosh (1997) for more details about the implementation of PCs in China.
We defined a firm as being under a PC if the questionnaire indicated the existence of a contract that the manager had signed with the government. We captured the differences between the types of contracts by analyzing the impact of the PC provisions summarized in table 1.

One provision was duration of contracts (LENGTH), which ranged from one to eight years. Seventy one percent of the contracts explicitly specified a wage elasticity (W.ELASTICITY) that was ex ante specified and remaining constant throughout the length of the contract; W.ELASTICITY is imputed from the questionnaire that asks the percentage by which total wages would increase when profits increased by 1 percent. W.ELASTICITY varied from 0.1 for the 5th percentile to 0.8 for the 95th percentile, with a median of 0.6. The managers in charge of implementing the contracts could be selected by a number of methods: by the government, by election, or by bidding (BID). Bidding was used to select managers for 17 percent of the contracts signed. The more local the government in general, the more likely it was that bidding was employed to select the manager for the contract. Among firms whose managers were chosen through bidding, roughly 13% (11 firms) appointed new managers (BID.NEWCEO), and 87%, incumbent managers (BID.INCUMBENT).

In a few cases (16 percent of the companies) the manager posted a bond that was forfeited if he failed to achieve the contract’s goals (BOND). As with bidding, posting a bond was more likely, the more local the government authority. The amounts are non-trivial, averaging about 32,400 yuan, several times a CEO’s annual wages. On average SOE managers under the central government, some of the largest firms, posted the smallest amount, followed by county firms, which are some of the smallest SOEs.

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4 This incentive measure differs from a related measure of wage incentive used in recent study of Chinese SOEs: bonus/total wage bill (Groves et al. 1994, for instance). This bonus share, observed both before and after PC adoption, was more susceptible to simultaneity bias. W.ELASTICITY, in contrast, was set ex ante and remained constant throughout the period, thus is less susceptible to simultaneity bias. Note that we have controlled for more complete list of reforms than similar studies using the same data (Groves et al. 1994, 1995; Li, 1997): for instance, another wage incentive is the managerial discretion to determine employee wage, which we control for but other studies do not. Viewing the bonus/wage bill ratio was a result of these reforms, and to avoid simultaneity bias, we do not control for the bonus ratio variable.

5 This category also includes those firms whose managers were directly appointed by the contract signer.
The targets specified by the PCs also varied in the weight given to output goals, tax receipts, or profits. Almost 42 percent of firms in our sample reported that their PCs’ primary target was total before-tax profits (PROFIT hereafter), another 28 percent reported profits plus taxes remitted to the government as the primary PC goal, and 26 percent, output quantity and value and labor productivity. The choice of primary target also varied by oversight authority. The PC targets for firms governed by municipal and county governments tilted more frequently towards profit than PCs for firms governed by the two upper levels of government.

III. PCs Effects, Information, Incentive, and Commitment

We draw on agency theory (Ross, 1973; Grossman and Hart, 1983; Laffont and Tirole, 1993) and contracting literature (Williamson 1983, 1985) to shed light on how the PC features might affect firm performance. A performance contract can be understood as a game between risk-adverse managers with disutility of effort, and a risk-neutral government with imperfect information about the managers’ effort. Theory suggests that PCs will improve performance when they reduce the information advantage enjoyed by managers, increase managers’ incentives to overcome their disutility of effort, and strengthen the government’s and the firms’ commitment to honor the contracts.

Should PCs not reduce information asymmetry, we expect that managers will exploit the opportunity to shirk, perhaps by negotiating lower targets than they could potentially achieve, and performance will not improve. In our empirical analysis, the reduction of information asymmetry is represented by bidding and targets that focused on profits. First, we expect that bidding, by providing government with more information about the firms and potential managers (as well as by adjusting the manager’s incentive to the conditions of the firm, as shown by Nalebuff and Stiglitz 1983 and McAfee and McMillan 1987), will reduce information asymmetry, thus allowing the government to use strong incentives and reduce shirking. Hence bidding should be associated with better performance. As suggested by Groves et al. (1995), we also try to distinguish the effects when the bid was won by the incumbent or by a new manager. Incumbent managers’ information advantage allows them to cherry-pick firms with better prospects. Consequently, we expect firms whose contract bids were won by incumbent managers to have better productivity than those won by non-incumbents.

Second, we expect that profit targets, by providing a more comprehensive signal about a firm’s performance than targets based on taxes or output, will also be associated with better performance. When the primary target is output, the firm may over-produce low-quality or high-cost products without

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6 We know from the questionnaires whether the primary target of the contracts focused on profitability, taxes or outputs.
increasing profits or efficiency; when it is tax, the firm may sacrifice investment or other expenditures important to long-term growth to be able to pay the tax. Profitability targets, in contrast, measure whether firms maximize revenues and minimize costs; as long as the firm does not enjoy monopoly power (in which case it can meet the target by raising prices), higher profitability should be associated with higher effort. Because the majority of our firms were competitive, we expect that PCs with targets that focus on profitability are more likely to improve performance than those focused on tax or output goals.\textsuperscript{7}

Finally, we expect that PCs signed with firms facing more competition benefit from less information asymmetry and hence should be associated with higher productivity. In competitive sectors “there is more information about the circumstances in which the manager operates . . . competitive markets provide a richer information base on which to write contracts” (Holmstrom and Tirole, p. 96). As a result, shirking will be more evident in competitive firms relative to firms with more market power, and performance measures will be more meaningful there. Moreover, contracts with competitive firms may be more formulaic and easier to enforce, thus less likely to be exposed to renegotiations (Crocker and Masten 1991). In the empirical analysis competition was measured by the markup ratio (based on Li 1997; see appendix).

Not surprisingly, we expect incentives to raise productivity. We also expect that the strength of the incentive is likely to be constrained by information asymmetry. Since incentives to SOEs have a cost to society--for instance, government revenue would drop--governments will try to assure that the incentive payment does not exceed the social gain from increased firm efficiency. Hence, when information asymmetry is severe, government will tend to set the incentive too low to motivate much improvement in performance. Thus, without solving the information problem, introducing incentives can bring about only limited change (Laffont and Tirole, 1994). In our analysis, the incentive we investigate is firm level wage elasticity. This incentive device has limitations. First, it may be distributed equally among employees in a context where there are limited ways to punish shirking (for example, there are often restrictions on firing SOE workers), which may reduce its incentive effects. Second, it reduces funds available for investment, which may reduce the long-term growth rate. Finally, since it is aimed only at workers, it will not have a sustained impact unless the manager is also motivated to improve management practices and take other steps to enhance productivity.

---

\textsuperscript{7} Many economists emphasize the importance of a profit orientation in reforming SOEs in China. Lin, Li and Cai (1997), for instance, suggest that profitability could be a sufficient statistic for performance in competitive industries without soft budget constraints. Implicit in the ideas of market socialism was also the belief that SOEs could perform well when they pursued profit goals.
Our third hypothesis is that PCs will improve performance if they elicit both the government’s and the firms’ commitment. When managers are not committed—perhaps because they expect to use their information advantage to bargain down the targets ex post—then ex ante they will exert only enough effort to fulfill the anticipated bargained-down targets. In this case a PC will fail to improve the manager’s incentives, and fail to turn around the firm’s performance. Alternatively, when government is not committed, it will fail to enforce the contract and/or will renege on paying the promised incentives. Since government is both a signatory and the enforcer of the contract, it is especially important that its commitment be credible. If the manager and employees do not believe that the government will honor the contract and pay the incentive if they meet their targets, they will hesitate to put in more effort or optimal investment for fear of ex post expropriation. Unfortunately our data do not permit us to test this hypothesis by assessing measures of commitment such as contract enforcement, reputation, or the like. Instead we proxy commitment by the length of the contract and by bonding. Longer term contracts signal managers that government is more committed; managers then may invest with a longer time horizon and therefore expand the production possibility frontier. As for bonding, it has been suggested as a first-best solution to agency problems (Becker and Stigler, 1974; Williamson, 1983). Managers, concerned with the possibility of losing their bonds if performance tends out to fall under the targets, will naturally work harder. We thus expect that longer contracts and the use of bonds will be associated with greater improvements in performance.

IV. Effects of PC Participation and Provisions

We examined how PCs affected the productivity of SOEs using a panel data set consisting of 769 firms from 1980 to 1989 located in four provinces of China from A Survey of Chinese SOEs: 1980-1989. (See the data appendix for more details.) We assume the following Cobb-Douglas production function (the use of translog production function produced quite similar results about PC effects):

\[ y_{it} = \beta_{0} + \beta_{1} L_{it} + \beta_{2} K_{it} + \beta_{3} R_{it} + \beta_{4} PC_{it} + \epsilon_{it} \]

where \( i \) indexes firm, \( j \) indexes industry, and \( t \) indicates year. To take into account the potential differences in technology for firms in different industries, we decomposed the firms into four industries: chemical, light, machine, and material industries.\(^8\) The variables are defined as follows (see the data appendix for details of variable construction):

\[ y_{it}^j : \log(\text{value added per worker}) \text{ for firm } i \text{ of industry } j \text{ at year } t \text{ (see the data appendix for the construction of variables and the associated deflators.)} \]

---

\(^8\) We follow Li (1997), which uses the same data set. The data contains firms in 36 two-digit industries, but many industries contain too few observations to justify more disaggregated treatment.
\( \beta \): industry-specific TFP level. 9

\( t_j \): separate year dummies for each industry (to control for industry-wide shocks such as overall credit cycle effects and other business cycle-related effects, and industry-wide technological progress). 10

\( \ln L_{it} \): the number of employees, excluding those absent for more than half a year.

\( \ln k_{it} \): capital per worker with capital constructed by the perpetual inventory method.

\( Z_{it} \): captures the effects of other controls such as provincial-specific growth rates.

\( R_{it} \): other major reforms and changes in the market environment that were applied to both PC and non-PC participants, including marginal profit retention rates, managerial wage discretion (i.e., letting managers determine employee wages), delegating production autonomy to managers, the share of output under state plan, the presence of new managers, and reducing markup ratio.

PC: either the PC dummy or a vector of PC variables.

\( \beta_{PC} \): The corresponding coefficient of PC variable(s).

\( \beta_{i} \): fixed effects for firm \( i \), to capture all firm-specific time invariant factors to account for productivity.

\( \epsilon_{it} \): the time-varying error term for firm \( i \) at year \( t \)

This “institutionalized” production function assumes that, besides physical inputs, a firm’s output also depends on how production is organized, its internal incentives, and the economic environment (degree of competition, etc.). 11 Note that we include “other reforms” in the production function; It is important to bear in mind that these are not part of the contents of PCs; they had different timing and cross-sectional incidence than PC variables, and were regarded as different reform measures by the Chinese government. Since other studies based on the same data have found the importance of such reforms in explaining performance (Groves et al. 1994; Li, 1997; Xu, 1997), one has to control for these reforms to isolate PC effects. 12

**Empirical Issues**

9 We have also tried allowing industry-specific coefficients for capital and labor as well as industry-specific TFP levels. The results about the PC effects—both for PC status and for PC provisions—remain quite similar.

10 Statistical tests—for both our FE model and our OLS models—show that the year effects across different industries are different.


12 This is the first study about PCs—as far as we know—that control for other reforms in disentangling the PC effects. See, for instance, Song (1988), Nellis (1988), Trivedi (1990), Ghosh (1997), and Shirley and Xu (1998).
One issue is whether the PC variables could be endogenous. We have already controlled for firm and industry effects, but the PC variables could still be correlated with the firm’s time varying error term, $\beta_{it}$. This seems unlikely since a large portion of the variation of PC provisions across firms was due to local governments’ discretion in implementing PCs. We can see this in Table 2, which gives the R squares for regressions in which the dependent variable is a PC variable for firm i and the independent variable is the mean of that PC variable for a province, excluding firm i from the calculation of the mean. The R squares in general are large.13

Table 2. Explanatory power of provincial patterns of PC variables on firm-level PC features

<table>
<thead>
<tr>
<th>PC</th>
<th>$R^2$</th>
<th>PC</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>0.667</td>
<td>TERM</td>
<td>0.234</td>
</tr>
<tr>
<td>W.ELASTICITY</td>
<td>0.415</td>
<td>PROFIT</td>
<td>0.473</td>
</tr>
<tr>
<td>BID.INCUMBENT</td>
<td>0.127</td>
<td>BOND</td>
<td>0.318</td>
</tr>
<tr>
<td>BID.NEWCEO</td>
<td>0.009 $^a$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. The regression is $PC_{it} = \sum_{j} b_j PC_{it}^j$ (provincial mean of $PC_{it}^j$), where $j$ means PC status or a PC feature.

$^a$ The coefficient is low because only 11 SOEs had this feature at the end of the period.

To address the possibility that the PC variables are correlated with the time-varying productivity shock, $\beta_{it}$, we conduct the Hausman’s test for the PC variable(s), treating the provincial-year mean(s) of the PC variable(s) as the maintained exogenous variable(s). There is no good reason why these regional means of PC variables should be correlated with the time-varying error terms specific to the firm under consideration, especially since (i) we have excluded that firm in computing the means and have controlled for provincial growth rates, and (ii) we have controlled for provincial-trend and industry-time dummies. When a PC feature is found to be endogenous, we use a fixed-effects two-stage-least-square estimation.

A second issue is the possibility that the results are skewed by firm outliers. To address this we also present the fixed effects regression using the median firm. When the outlier problem is not serious, the median regression should generate similar results to an ordinary regression. But when the outlier problem is severe, median regression generally provides better estimates in predicting the central

13 Staiger and Stock (1994) have emphasized the need to check if the instruments are significant predictors for the endogenous variables. If not, the bias of instrumental estimates may also be quite large.
tendency of the dependent variable (Narula, S.C. and J.F. Wellington, 1982). Moreover, the behavior of median firm itself is interesting.

**Effects of PC participation: Benchmark Results**

For the empirical application, we deleted any observation (1) missing the dependent variable or (2) missing capital-labor ratio, or (3) having an unbalanced panel.\(^{14}\) This leaves us with a balanced panel of 503 PC participants and 63 non-PC participants. Table 3 reports the benchmark results of how PCs on average affected productivity.

### Table 3. The Benchmark Results of PC Effects: Dep.=-ln(value added per employee)

<table>
<thead>
<tr>
<th></th>
<th>Including “other reforms”</th>
<th>Excluding “other reforms”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FE</td>
<td>FE-median</td>
</tr>
<tr>
<td>No. Obs.</td>
<td>5660</td>
<td>5660</td>
</tr>
<tr>
<td>R. Square</td>
<td>0.474</td>
<td>.</td>
</tr>
<tr>
<td>ln(capital-labor ratio)</td>
<td>0.138**</td>
<td>0.123**</td>
</tr>
<tr>
<td></td>
<td>( 0.025)</td>
<td>( 0.024)</td>
</tr>
<tr>
<td>ln ( number of employees)</td>
<td>0.105</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>( 0.071)</td>
<td>( 0.053)</td>
</tr>
<tr>
<td>markup Ratio</td>
<td>-0.537**</td>
<td>-0.641**</td>
</tr>
<tr>
<td></td>
<td>( 0.077)</td>
<td>( 0.047)</td>
</tr>
<tr>
<td>PC</td>
<td>-0.005</td>
<td>-0.038</td>
</tr>
<tr>
<td></td>
<td>( 0.033)</td>
<td>( 0.033)</td>
</tr>
<tr>
<td>Marginal Profit Retention Rates</td>
<td>0.104*</td>
<td>0.122*</td>
</tr>
<tr>
<td></td>
<td>( 0.061)</td>
<td>( 0.065)</td>
</tr>
<tr>
<td>Dummy: Production autonomy</td>
<td>0.053**</td>
<td>0.064**</td>
</tr>
<tr>
<td></td>
<td>( 0.026)</td>
<td>( 0.028)</td>
</tr>
<tr>
<td>Dummy: Manager had discretion to determine wage (W_discretion)</td>
<td>0.010</td>
<td>0.036</td>
</tr>
<tr>
<td></td>
<td>( 0.043)</td>
<td>( 0.043)</td>
</tr>
<tr>
<td>W_discretion (\times) year</td>
<td>0.029*</td>
<td>0.021</td>
</tr>
<tr>
<td></td>
<td>( 0.016)</td>
<td>( 0.014)</td>
</tr>
<tr>
<td>Dummy: the presence of new CEO (NewCeo)</td>
<td>0.057**</td>
<td>0.072**</td>
</tr>
<tr>
<td></td>
<td>( 0.025)</td>
<td>( 0.028)</td>
</tr>
<tr>
<td>NewCeo (\times) year</td>
<td>0.037**</td>
<td>0.046**</td>
</tr>
<tr>
<td></td>
<td>( 0.008)</td>
<td>( 0.007)</td>
</tr>
</tbody>
</table>

Note. *, ** represent significance at the level of 10 and 5 percents. Reported in the parentheses are heteroskedasticity-corrected standard errors. (a) For all the specifications, other controlled variables include: industry dummies, industry-specific year dummies, province-specific growth rates; missing

\(^{14}\)Roughly nine percent of observations dropped because of (3). They involve larger measurement errors because the deflator for the output and capital stock were imputed based on industry-year cells. In addition, markup ratio, an important feature with which PC status will interact, could not be reliably estimated. The estimation of markup ratio requires the data about each year’s price information on outputs and inputs (see the data appendix).
indicators for marginal profit retention rates, for firm-level wage elasticity. (b) PC is considered endogenous, and was instrumented by the average percentage of PC participation in the province year that a firm was affiliated with; in computing the average, the firm itself was excluded.

Column (1) presents the FE estimates, which finds that PCs were not significantly associated with productivity. In column (2), we present the FE median regression, which yields quite similar results. The PC dummy is again negative and insignificant, though now with a larger magnitude, -4%.

Next we conducted Hausman’s test,\(^\text{15}\) to see if the PC dummy might be endogenous, using the percentage of PCs adopted in the province as the instrument. The P-value of the F-test statistic is 0.031, thus rejecting the exogeneity of the PC dummy at the five percent level.\(^\text{16}\) This suggests that we should rely on the fixed-effects two-stage least-square (FE-2SLS) results in column (3). In this estimate the PC dummy has a negative and significant coefficient of –17.5%. The FE-2SLS results imply that firms probably signed PCs when their productivity was higher.

Some observers have been concerned that PCs might have provisions similar to other reforms and thus by controlling for other reforms we might reduce the possibility that PCs have a positive correlation with productivity. To check this possibility, we re-run the column (1)-(3) specifications excluding other reforms. The results, in column (4)-(6), still imply that PCs did not have positive effects, and in all specifications they are statistically insignificant. Thus, all our estimates suggested that PCs on average did not improve productivity. This finding is similar to that of Shirley and Xu (1998) for PCs in market economies. However, we still wish to know if PCs can work when properly designed. We next test whether some PC designs did improve productivity, and whether the ways different PCs affected productivity are consistent with our previous conjectures.

*Effects of PC Provisions*

To identify the effects of PC provisions we allowed the PC variables to affect both the

\(^{15}\) Under the null hypothesis that the PC dummy is uncorrelated with \(\bar{\epsilon}_i\), both the FE and the FE-2SLS will be consistent though the FE will be efficient but the FE-2SLS will not. Under the alternative hypothesis, the FE is inconsistent but the FE-2SLS is consistent. The maintained exogenous variables are the province-year-mean of the percentage of firms participating in PCs.

\(^{16}\) We implemented the test as follows (see Berndt, p. 379-380). First we regressed the endogenous variable with the included exogenous variables and the maintained excluded instrumental variables, and obtained the fitted value. Then we use FE to run the expanded regression equation with the fitted value of the endogenous variables included. The Hausman’s test amounts to testing the significance of the fitted value. If significant, the suspected endogenous variable is rejected as exogenous.
productivity level and growth rate. Where only the level or rate effect was found to be statistically significant, we kept only the significant term in the final specification. If neither was significant we kept at least one type of effect for each PC provision, choosing whichever was closer to statistical significance. The results are reported in table 4.

Table 4. Effects of PC provisions

<table>
<thead>
<tr>
<th>No. Obs.</th>
<th>Including “other reforms”</th>
<th>Excluding “other reforms”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FE</td>
<td>FE-median</td>
</tr>
<tr>
<td></td>
<td>5660</td>
<td>5660</td>
</tr>
<tr>
<td>R. Square</td>
<td>0.478</td>
<td>.</td>
</tr>
<tr>
<td>PC</td>
<td>-0.142** (0.058)</td>
<td>-0.185** (0.052)</td>
</tr>
<tr>
<td>Firm-Level Wage Elasticity</td>
<td>0.205** (0.062)</td>
<td>0.179** (0.056)</td>
</tr>
<tr>
<td>BID.INCUMBENT</td>
<td>-0.095** (0.046)</td>
<td>-0.130** (0.047)</td>
</tr>
<tr>
<td>BID.NEWCEO</td>
<td>-0.408** (0.087)</td>
<td>-0.356** (0.109)</td>
</tr>
<tr>
<td>TERM</td>
<td>0.014 (0.011)</td>
<td>0.020* (0.010)</td>
</tr>
<tr>
<td>PROFIT (i.e., profit-oriented targets)</td>
<td>0.056 (0.037)</td>
<td>0.061* (0.033)</td>
</tr>
<tr>
<td>BOND □ (years since the posting of managerial bond)</td>
<td>-0.007 (0.023)</td>
<td>0.006 (0.020)</td>
</tr>
<tr>
<td>PC □ markup ratio</td>
<td>-0.036 (0.033)</td>
<td>-0.057** (0.028)</td>
</tr>
</tbody>
</table>

*, ** represent significance at the level of 10 and 5 percents. Reported in the parentheses are heteroskedasticity-corrected standard errors. The Markup ratio is standardized (i.e., normalized to have a mean of 0 and a standard deviation of 1). For all the specifications, other controlled variables include: (1) “Other reforms”, labor, capital-labor ratio. These coefficients are not reported here; they are quite similar to those reported in table 3. (2) Industry dummies and industry-specific year dummies, province-specific growth rates; missing indicators for marginal profit retention rates, for firm-level wage elasticity.

The Hausman's test cannot reject the hypotheses that the PC variables are exogenous after we have controlled for “other reforms” and industry controls. The maintained exogenous variables in the

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17 There are plenty of PC-participants with sufficient post-PC histories to identify the rate effects. There were 15 firms with more than or equal to 6 years of experience, 16 firms with 5 years, 27 firms with 4 years, 265 firms with 3 years, and 313 firms with 2 years.

18 As mentioned in an earlier footnote, the endogeneity test was done as follows: (1) regress the potential endogenous variables with respect to all exogenous variables (including excluded ones), and obtain fitted
test are the means of the PC variables for the province-year with which a firm was affiliated. In light of these results, we only report the FE and the FE-median regressions, in column (1) and (2) of table 4. A quick glance through column (1) and (2) suggests that the qualitative and quantitative conclusions are similar from both columns, though the FE-median regression provides better precision.

In both columns (1 and 2) the interaction term of PCs with the markup ratio is negative, though only significant in the FE-median regression. This suggests that PCs were associated with better productivity in firms with lower markup ratios. Since we have controlled for the markup ratio in other reforms, the significance of this interaction term cannot be attributed to the effects of markup ratio itself, but to the complementary effects of competition on the contracts. The magnitudes indicate that a one-standard-deviation increase in the markup ratio is associated with a productivity improvement of roughly 4 to 6 percent. This finding is again consonant with Shirley and Xu (1998)’s finding that PCs did not improve productivity in natural monopolies (for which the markup ratio should be relatively high).

Bidding had a negative association with productivity, both for incumbent and new managers. The information asymmetry hypotheses put forth in Groves et al. (1995) is confirmed. Although both were associated with lower productivity, contracts under incumbent managers worked better than contracts under new managers, a fact consistent with the hypothesis that incumbent managers have inside information.20 The failure of bidding in general may be because the auctions were not properly conducted, for instance, the process may not be transparent. This explanation is supported by the fact that incumbent managers won 83 of the 94 bids. Alternatively, bidding may only succeed when contract enforcement is effective, which is hard to achieve when government is one of the parties.

Our hypothesis that PCs with targets emphasizing profits should perform better than PCs focusing on taxes or quantity of output is supported. Although not significant for the FE results, the FE-median specification suggests that firms with profit-oriented PCs had a productivity advantage of roughly 6 percentage points.

---

19 Markup ratio was standardized to make interpretation easier. After normalization, the mean is zero, and the standard deviation is 1.

20 The slight difference between our results and those of Groves et al. (1995) can probably be attributed to differences in measuring the outcome and the specifications. They used relative performance of a firm within an industry; and they did not control for capital, labor and other reforms.
Our hypothesis that PCs work better when they provide higher powered incentives is also supported: in both specifications, firm-level wage elasticity is positively correlated with productivity. The magnitude indicates that the productivity level of a firm signing a PC with a one-standard-deviation increase in wage elasticity (0.31) would go up 6 percentage points.

Finally, our hypotheses about commitment received mixed support. The duration of the contract, consistent with our hypothesis, had a positive association with productivity growth rates in both the FE and FE-median estimates, although it was only significant in the latter. An additional year in the length of the contract term is associated with a productivity increase of 1.4 to 2 percentage points. The posting of a managerial bond, however, was not correlated with productivity improvements in either specification. This finding could suggest that other conditions are necessary for bonding to secure managerial commitment, such as government’s commitment not to agree to softer targets ex post. Alternatively, it could be that winning managers had the chance to reap such large positive private gains net of the bond posted that bonding gave PCs no additional positive impact.21

Once again we tested if the results would survive if “other reforms” were dropped (column 3 and 4). As is apparent from the table, the findings on PC effects remain largely intact, though in general less significant.

**Comparison of Alternative PC Provisions**

Finally we wish to know the effects of PCs with different combinations of provisions. Using the FE -median estimators in column (2) of table 4, we calculated the combined effects, reported in Table 5. (We get similar results if we use the FE estimates in column (1)). To simplify the presentation, for each dimension of PC provisions and market competition (mark up ratio), PCj, we classify firms either as having PCj good or PCj bad.

The diversity of PC effects appears to be enormous. The effect of a PC on productivity levels rises from -28% for a PC that used bidding, with no profit orientation, no managerial bond, short TERM, low W.ELASTICITY, and high markup ratio (see northwest region), to +15% for a PC without bidding

21 The winning managers seemed to have ample opportunity to reap private benefits. The managers had much more discretion in selecting managing positions in the firm and in hiring and firing decisions; as a result, many employees had more incentives to bribe the manager (personal observations of one author).

22 In particular, for the dummy variables, good PC features were no bidding, targets with a profit orientation and managerial bonding and bad was the opposite. (The bidding dummy is based only on BID.INCUMBENT; we ignore BID.NEWCEO since it would yield similar, albeit somewhat larger, negative effects on productivity and had only 11 firms). For the continuous variables, a good PC feature was those above the mean for that provision or the markup ratio below its mean. The evaluation was conducted with the following numbers: W.ELASTICITY \_bad = 0.16, W.ELASTICITY \_good = 0.66; TERM \_bad = 2.08, TERM \_good = 4.28; MAKRUP \_bad = 0.55, MAKRUP \_good = -0.81. The values are the means for the good or the bad subsamples.
and with profit orientation, managerial bond, long TERM, high W.ELASTICITY, and low markup ratio (see southeast region). Since a positive effect is more
### Table 5. Distribution of imputed PC effects by contract type (total PC participatns=499*)

<table>
<thead>
<tr>
<th></th>
<th>TERM: low</th>
<th>TERM: low</th>
<th>TERM: low</th>
<th>TERM: low</th>
<th>TERM: high</th>
<th>TERM: high</th>
<th>TERM: high</th>
<th>TERM: high</th>
</tr>
</thead>
<tbody>
<tr>
<td>BID: yes</td>
<td>-0.276</td>
<td>-0.197</td>
<td>-0.181</td>
<td>-0.103</td>
<td>-0.231</td>
<td>-0.152</td>
<td>-0.136</td>
<td>-0.058</td>
</tr>
<tr>
<td>PROFIT: no</td>
<td>(4.56)</td>
<td>(3.27)</td>
<td>(3.01)</td>
<td>(1.69)</td>
<td>(3.79)</td>
<td>(2.51)</td>
<td>(2.28)</td>
<td>(0.96)</td>
</tr>
<tr>
<td>BOND: no</td>
<td>-0.266</td>
<td>-0.188</td>
<td>-0.172</td>
<td>-0.093</td>
<td>-0.215</td>
<td>-0.136</td>
<td>-0.120</td>
<td>-0.042</td>
</tr>
<tr>
<td></td>
<td>(4.50)</td>
<td>(3.16)</td>
<td>(2.86)</td>
<td>(1.54)</td>
<td>(3.11)</td>
<td>(1.97)</td>
<td>(1.73)</td>
<td>(0.59)</td>
</tr>
<tr>
<td>BID: yes</td>
<td>-0.214</td>
<td>-0.136</td>
<td>-0.120</td>
<td>-0.041</td>
<td>-0.169</td>
<td>-0.091</td>
<td>-0.075</td>
<td>0.004</td>
</tr>
<tr>
<td>PROFIT: no</td>
<td>(3.49)</td>
<td>(2.24)</td>
<td>(1.96)</td>
<td>(0.68)</td>
<td>(2.68)</td>
<td>(1.45)</td>
<td>(1.20)</td>
<td>(0.06)</td>
</tr>
<tr>
<td>BOND: yes</td>
<td>-0.205</td>
<td>-0.081</td>
<td>-0.110</td>
<td>-0.032</td>
<td>-0.153</td>
<td>-0.075</td>
<td>-0.059</td>
<td>0.020</td>
</tr>
<tr>
<td></td>
<td>(3.44)</td>
<td>(1.32)</td>
<td>(1.84)</td>
<td>(0.53)</td>
<td>(2.18)</td>
<td>(1.07)</td>
<td>(0.83)</td>
<td>(0.28)</td>
</tr>
<tr>
<td>BID: yes</td>
<td>-0.146</td>
<td>-0.067</td>
<td>-0.051</td>
<td>0.027</td>
<td>-0.101</td>
<td>-0.022</td>
<td>-0.006</td>
<td>0.072</td>
</tr>
<tr>
<td>PROFIT: yes</td>
<td>(3.49)</td>
<td>(1.55)</td>
<td>(1.22)</td>
<td>(0.61)</td>
<td>(2.38)</td>
<td>(0.51)</td>
<td>(0.15)</td>
<td>(1.66)</td>
</tr>
<tr>
<td>BOND: no</td>
<td>-0.136</td>
<td>-0.058</td>
<td>-0.042</td>
<td>0.036</td>
<td>-0.085</td>
<td>-0.006</td>
<td>0.010</td>
<td>0.088</td>
</tr>
<tr>
<td></td>
<td>(2.84)</td>
<td>(1.16)</td>
<td>(0.85)</td>
<td>(0.71)</td>
<td>(1.33)</td>
<td>(0.10)</td>
<td>(0.15)</td>
<td>(1.33)</td>
</tr>
<tr>
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<td>-0.084</td>
<td>-0.006</td>
<td>0.010</td>
<td>0.089</td>
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<td>0.039</td>
<td>0.055</td>
<td>0.134</td>
</tr>
<tr>
<td>PROFIT: yes</td>
<td>(1.90)</td>
<td>(0.13)</td>
<td>(0.23)</td>
<td>(0.84)</td>
<td>(0.82)</td>
<td>(0.82)</td>
<td>(1.21)</td>
<td>(2.84)</td>
</tr>
<tr>
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<td>0.019</td>
<td>0.098</td>
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<td>0.055</td>
<td>0.071</td>
<td>0.150</td>
</tr>
<tr>
<td></td>
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<td>(0.07)</td>
<td>(0.38)</td>
<td>(1.88)</td>
<td>(0.35)</td>
<td>(0.82)</td>
<td>(1.07)</td>
<td>(2.20)</td>
</tr>
</tbody>
</table>
For each cell, the first row refers to the increase in productivity level associated with a specific PC provision. The second number (in parentheses) is the *t* statistic of the level effect.

Here are the values used for imputing the PC effects in this table: (1) BID: yes, 1; no, 0. (2) PROFIT: yes, 1; no, 0. (3) BOND: yes, 1; no, 0; (4) TERM: low, 2.08 years; high, 4.28 years. (5) W.ELASTICITY: low, 0.16; high, 0.66. (6) markup: high, 0.55, low, -0.81.

The growth rate effects of BOND is translated into level effects by the following formula: \( \beta_{BOND} \frac{(1 + \text{TERM})}{2} \), which is the average level effects of BOND over the period.

a. We excluded those firms with bidding won by new managers (in total 11 firms). Its effects will be similar to those bidding firms won by incumbent managers except that there is an additional productivity disadvantage of -23 percentage points.

likely to appear when one sees cells in which W.ELASTICITY is high, the markup ratio is low, the term is high, the primary target is profit-oriented, and no bidding is involved, these five elements seem to be crucial to the success of PCs.

Finally, we projected the effects of PCs on total factor productivity (TFP) using the coefficient for each provision in column (2) of table 4, and the actual combinations of PC provisions used in China.\(^{23}\) We projected that PCs on average would reduce TFP by roughly 4%. PCs had positive effects in about 38% of the PC-participants, and for these firms the mean gain in TFP attributable to PCs was 6.5%, with a standard deviation of 4.2%. For the other 62% of firms, the mean TFP loss from negative PC effects was –10.3%, with a standard deviation of 7.9%.

V. Conclusions

Our analysis suggests that PCs on average did not improve the productivity of state enterprises in China. We also find that PC provisions mattered: PCs can improve productivity when they provide high powered incentives, use targets less vulnerable to information problems (profit orientation), and signal commitment through longer terms – and when they are implemented in a more competitive environment. The absence of these good features in PCs can hurt productivity.

Our findings send a mixed message. On the one hand, the fact that on average PCs had negative effects, coupled with our similar earlier findings in six other countries, urges caution in using PCs as a tool to reform SOEs, and may explain why China stopped signing PCs after 1994. On the other hand, PCs, when properly designed and implemented, can indeed improve productivity.

A surprising finding in light of Shirley and Xu (1998) is that PCs had positive effects in fully 38% of the participants. Without further study of the political economy of incentive contracts in government settings, we can only conjecture about why most contracts were poorly specified but many were not. Lack of knowledge about how to specify an efficient contract is not very plausible explanation

\(^{23}\) The rate effect of managerial bonding is transformed into level effect by 0.04 \( \beta_{BOND} \frac{(1 + \text{TERM})}{2} \), where 0.04 is the FE-2SLS estimates of DBOND \( \beta \) (year since posting managerial bond).
under the circumstances. Some of the reasons we discussed earlier may provide better explanations. One is that politicians or bureaucrats structured PCs to maximize their political benefits or rents rather than productivity (Shleifer and Vishny, 1994; World Bank, 1995). This explanation seems especially feasible given that PCs failed across many different institutional settings and contract designs. Successful PCs might arise when politicians or bureaucrats are constrained, by a hard budget constraint, perhaps.

A related explanation for poor PCs is that government’s multiple principals may have targeted many goals (profitability, investment, worker benefits) such that the PCs’ targets deviated from productivity, or the contracts incentives were lowered to avoid maximizing one goal at the expense of the others (multitask problem as in Holmstrom and Milgrom, 1991). The fact that SOE shares are not traded even where stock markets exist and the absence of good accounting practices may have given SOE managers an information advantage and bargaining power that PCs could not circumvent. Thus, our earlier research found evidence of strong managerial bargaining power in decisions about performance targets in six developing market economies (Shirley and Xu, 1998). This information asymmetry may also explain the generally low power of incentives since government would be reluctant to risk wasting its bonus if achievements cannot be measured (Laffont and Tirole, 1993).

To what extent are our results applicable in other countries? We believe the message is general. First, since we are interested in contracts between government and state enterprises, the differences between China and other countries are less important than they would be if we were drawing conclusions for private firms. Studies of SOEs (such as World Bank 1995) suggest that the situation of SOEs in developing market economies closely resembles that of state enterprises in China (although not township and village enterprises) and other transitional economies. In most developing countries governments intervene widely in SOE operations, extend them protection from competition and bankruptcy, and provide subsidies and debt relief. Second, our study of PCs in China produced results strikingly similar to our earlier analysis of PCs in six market economies (Ghana, India, Korea, Mexico, the Philippines, and Senegal). Finally, we postulated that the productivity effects of PCs are a function of how well the contracts addressed problems of information asymmetry, incentives, and commitment, contractual features which, judging from the literature on information economics, are the most important generic elements in characterizing contracts and country circumstances. At the same time we attempted to control for as many aspects of the unobservable as we could, such as other reforms, the competitive environment, etc., all of which should reduce the influence of factors special to China in our results.
Appendix A. the Data Set

The data set we use is *A Survey of Chinese State Enterprises: 1980-1989.* It covers 769 SOEs in 21 cities of four provinces (Shanxi, Jilin, Jiangsu, and Sichuan). The 769 firms constitute a stratified random sample of all SOEs in manufacturing. There was substantial variation in the size of these SOEs: the median SOE had 930 employees, the SOE at the 10th size percentile had 304, and that at the 90th percentile had 3175.

The data set has two parts. Part one is a quantitative table filled out by the accountants of an enterprise. It includes 321 variables covering details about products, costs, wages and labor utilization, investment, financing, fixed assets, profit distribution, taxes, prices, and material inputs. Part two is a questionnaire answered by the manager of the enterprise. The manager answered questions about performance contracts signed with the government, the relationship between the enterprise and the government, production autonomy, the characteristics of the management, and so on.

Appendix B. Construction of Key Variables for the 1980-89 Data Set

In constructing these variables, we have followed other users of this data set, especially Li (1997), and Gordon and Li (1995). All quantities (value added, capital stock) are expressed in 1989 market values. We assume that the 1989 prices reflected best the opportunity costs of the resources.

**Capital Price Indexes and Capital Stock**

The survey contains answers to questions about the inflation rate of the mixed price of equipment between the periods 1965-1975, 1975-1980, 1980-1984, and for each year between 1985 and 1988. Based on these answers we computed average inflation rates for equipment. For 1980-1984, we assumed equal yearly inflation rates. For 1989, since we did not observe equipment inflation, we used the output inflation rate in the machine industry as a proxy.

Since the survey did not provide information on prices of buildings or plant, for that inflation measure we used the percentage increase in aggregate construction costs compiled by the State Statistical Bureau. This series has also been used by Li (1997).

We computed the composite price index for capital goods by averaging the equipment price index and the buildings and plant price index, the weights being the investment expenditures on equipment and plant.

We based our measure of capital stock on capital assets “for productive use”, which includes plant and equipment for industrial production. (In contrast, capital assets “for non-productive use” are mainly buildings and expenditures on dormitories, cafeterias, employee housing, and other social welfare functions.) Following Li(1997) and Gordon and Li (1994), we did not use the net value of capital stock as the base to compute capital stock because it “tends to exaggerate the increase in enterprise capital stock during the sample period in which the inflation rate was high, because the accounting rate of depreciation was artificially low and the depreciation was based on historical costs.” (Gordon and Li, 1994)

Realized investment at year $t$ is imputed by subtracting the nominal value of productive capital assets at the end of year $t-1$ from that at the end of year $t$. The reported investment, usually different from our imputed figures, is not used because it measures the value of capital expenditure (rather than capital formation) in a given year. It includes, e.g., expenditure on ongoing construction projects; while it excludes prior investment projects completed in the year.

Assuming that investment occurs smoothly over the course of a year, we can compute the capital stock in 1980 ($K_{1,80}$), the initial year, as

\[
K_{1,80} = 0.5(K_{1,79} + K_{1,80}^*) P_{89}^K / P_{80}^K
\]
where $K_t^*$ is the productive capital asset in year $t$, and $P^K_t$ is the cumulative price index for the composite capital goods. The capital stock for the following years is then constructed by the following formula:

$$K_{it} = K_{it-1} \times 0.5I_{it-1} \times \frac{P^K_{89}}{P^K_{89}} \times 0.5I_{it}, t = 81, \ldots, 89$$

where $I$ is the imputed realized investment.

With this procedure, there are still a little more than 700 missing $K_{it}$. Their values are imputed as the industry-year averages for 36 industries.

**Price Index for Value Added**

The price index for added value is based on the price indexes of output and material inputs. Let $P_{it}$ be the price index of value added in year $t$, and $P_{Qit}$ be that of output, and $P_{Mit}$ be that of intermediate inputs. Let $Q_t$ denotes output units, and $M_t$ input units. By definition, the Laspeyres price index of value added is computed as follows:

$$P_{Vit} = \frac{P_{Vit}}{P_{Vit-1}} \times \frac{P_{Qit}}{P_{Qit-1}} \times \frac{P_{Mit}}{P_{Mit-1}}$$

Tyler expansion along $(P_{Qit-1}, P_{Mit-1})$ gives the following formula for the percentage price increase of value added based on those of output and of intermediate inputs:

$$\ln \left( \frac{P_{Vit}}{P_{Vit-1}} \times \frac{Q_{it}}{Q_{it-1}} \times \frac{P_{Qit}}{P_{Qit-1}} \times \frac{M_{it}}{M_{it-1}} \times \frac{P_{Mit}}{P_{Mit-1}} \times \frac{P_{Mit}}{P_{Mit-1}} \right)$$

(Below we discuss the construction of the output price index $(P_{Qt})$ and intermediate input price index $(P_{Mt})$.) In the empirical implementation, we value the value added for each year at the 1989 price of value added.

**The Output Price Index**

The survey reports the mixed (plan and market) price index for the firm’s main product. While most firms reported cumulative price indexes, some reported year-to-year price inflation. We checked carefully and corrected those obvious coding errors. When in doubt, we treated them as missing. Consequently, we have around 500 firms reporting a reasonable mixed price index. For the rest of firms, we computed the average year-to-year mixed price inflation rates for their industry-year sample, then assigned that value as the imputed mixed price inflation rate. Then, we converted them to a cumulative mixed price index.

We then estimated the market output price index. The survey has information about the sales under the state plan and to the market, and their respective prices. Based on this information, we constructed the market price index for output. Again, firms with missing values for the market price index were assigned their industry-year averages.

These price indexes were then used to compute the gross value of output (GVO). The survey reports GVO in current mixed prices. We first obtained GVO in current market prices by multiplying the reported GVO by the ratio of market output prices to mixed output prices in year $t$. That number was then translated into GVO in 1989 market prices by multiplying it by the ratio of the market price index in 1989 to the market price index in year $t$.

**Price Index of Intermediate Inputs**

---

24 $K_{it}^*$, unobserved in the data set, is extrapolated as in Li (1994): 

$$\frac{(\text{end } - \text{ of } - \text{ year total capital})_{80}}{(\text{end } - \text{ of } - \text{ year total capital})_{80}} \times \frac{(\text{beginning } - \text{ of } - \text{ year total capital})_{80}}{(\text{end } - \text{ of } - \text{ year total capital})_{80}}$$
The data set has detailed information about the plan and the market prices of the two primary materials but it does not provide information about energy and other intermediate inputs. We therefore computed price indexes for intermediate inputs based on the assumption that the inflation rate for intermediate inputs was the same as that of materials. This is reasonable since materials accounted for the vast majority of intermediate inputs. A significant portion of the reported material price variables was missing: roughly 40 percent of the answers were useful.

We first computed the mixed price of each material input using the physical shares of the plan and the market inputs. Then we computed the year-to-year Laspeyres index of mixed material prices. Year-to-year Laspeyres indexes of market prices were computed similarly. Again, the missing values were imputed using the industry-year averages.

The quantity of intermediate inputs was then computed using these price indexes. We first obtained the quantity of intermediate inputs valued at the current market price by multiplying the reported intermediate inputs—in current mixed prices—by the ratio of the current market price to the mixed price of intermediate inputs. This number in year $t$ was then translated into intermediate inputs in 1989 market prices by multiplying it by the ratio of the cumulative market price index of intermediate inputs in 1989 and that in year $t$.

The Markup Ratio

We follow Li (1997) in constructing the mark up ratio. Specifically,

$$M_{it} = \sum_{j=1}^{4} D_{it} \beta_{ij} C_{it}$$

The first term on the right hand side is the industry-specific markup ratio, assumed to be the markup ratio for all the firms in four industries (Light, Material, Chemical, and Machine). It is assumed that the markup ratios were identical in 1989 within an industry, but differed across the four. The second term was calculated by assuming that the change in markup ratio was proportional to the change in output prices relative to input prices ($C_{it}$ being enterprise-specific inflation in market prices of output, and $\beta_{it}$, the enterprise-specific inflation in input prices). Thus, the markup ratio, though assumed to be a industry-specific constant in 1989, is allowed to vary across firms and over time between 1980 and 1988. Li (1997) estimated it to be 0.158. In addition, $\beta_{1}$ is normalized to be 1, $\beta_{j}$ for material, machine, and chemical industries are estimated to be 0.41, 0.35, and 0.48. These estimates are used to compute $M_{it}$. It is important to note that the $\beta_{j}$’s are identified only up to the proportion with respect to $\beta_{1}$; thus, if the markup ratio is 1 for the industry with the smallest markup ratio, the markup ratios for the rest of the industries are $(1/0.35) \times \beta_{j}$, respectively.

25 To see this, note that (see Li 1995) when $P_{it}/MC_{it}$ and its lagged value are close to 1,

$$\frac{P_{it}}{MC_{it}} \ln\left(\frac{P_{it}}{MC_{it}}\right) \approx 1$$

which implies

$$\frac{P_{it}}{MC_{it}} \ln\left(\frac{P_{it}}{MC_{it}}\right) \approx \ln\left(\frac{P_{it}}{MC_{it}}\right) \ln\left(\frac{P_{it}}{MC_{it}}\right) \ln\left(\frac{P_{it}}{MC_{it}}\right) \ln\left(\frac{P_{it}}{MC_{it}}\right) \ln\left(\frac{P_{it}}{MC_{it}}\right) \ln\left(\frac{P_{it}}{MC_{it}}\right) \ln\left(\frac{P_{it}}{MC_{it}}\right)$$

The first term of the last equation is output inflation rate, and the second term is proxied by the inflation rate for intermediate inputs.
References


Incentivising Performance in Indian CPSEs through Performance Related Pay: Experiences and Perspectives

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Abstract

Companies take numerous initiatives to ensure higher performance. The role of Government has become indispensable for companies to ensure performance and survive in the competitive world. Memorandum of Understanding (MoU) system is an age old process in India which underwent numerous modifications over the years and has ensured greater involvement of people with higher individual and organizational performance. The initiatives of Indian government in encouraging Performance Management System (PMS) for CPSEs’ have made a remarkable change in the operation of the organisations. Effective PRP implementation requires the presence of a transparent and robust PMS. To have a better understanding of the implementation of the Performance Related Pay (PRP) and its challenges both primary and secondary data has been collected as a part of the research. The paper is an attempt to understand the implementation of MoU and PRP system in Indian CPSEs. The paper studies the perception of the employees towards PRP and PMS. The paper also highlights the PRP challenges in CPSEs.

Key Words: Memorandum of Understanding, Performance Related Pay, Performance Management System, Central Public Sector Enterprises, India.
Incentivising Performance in Indian CPSEs through Performance Related Pay: Experiences and Perspectives

Introduction

Since inception, the Central Public Sector Enterprises (CPSEs) in India have been the mainstay of the Indian economy and were set up with the mandate to serve the broad macro-economic objectives of higher economic growth, achieve self-sufficiency in production of goods/services, facilitate long-term equilibrium in balance of payments and ensure stability in prices and create benchmarks for prices of essential items. The Indian Public Sector has always played a dominant role in shaping the path of the country’s economic development. With the economy embarking on the process of Liberalization, Privatization and Globalization since the early-1990s, the role of the Indian Public Sector has subsequently undergone a rapid change. Integration of the domestic economy with global markets has thrown up a plethora of opportunities and challenges.

According to the Report of Panel of Experts on Reforms in Central Public Sector Enterprises (CPSEs), (Nov 2011), CPSEs are losing in terms of global competition and there strong presence is needed in manufacturing, may be, defence, nuclear power, specialized capital goods industries, green technologies and the like? The above mentioned areas are ones which are strategically significant as well as we do not see private sector investments in these areas. So the evident question that needs to be addressed is about the new ‘avatar’ / role that CPSEs needs to adorn and how should it be structured to taking its challenging role forward.

The Government of India is committed towards empowering the CPSEs and their managements so as to build a performance oriented culture in CPSEs and one such initiative in this direction is the development of evaluation of performance of CPSEs through Memorandum of Understanding (MOU). The Public Enterprise (PE) Survey (1988 – 89) presented to parliament on 15th March, 1990 spelt out the purpose and mechanism of Memorandum of understanding MoU, in the following words: ‘In order to improve the performance of the public sector, government took a policy initiative by introducing the concept of (MoU)’. MoU is an instrument which defines clearly the relationship of the PSU with the government and clarifies the respective roles of the PSU’s as well as the government, to achieve better performance. PSU’s in
India are classified differently under the category of Central Public Sector Enterprises, (CPSE’s), Public Sector Banks, (PSB’s) and State Level Public Enterprises, (SLPEs).

The present MoU system envisages to put in place an objective and transparent mechanism to evaluate the performance of the CPSEs in a way encouraging them to have a Performance based focus. DPE constituted the Second Pay Revision Committee (2nd PRC) in 2006 with the specific objective of defining the guiding principles for an objective performance management system (PMS) across all CPSEs as well as a mechanism for sharing of a part of the profits generated by the CPSE with employees through performance related pay (PRP).

Considering the strategic importance of MoU system in creating a performance driven culture in India Public Sector and also with the introduction of the concept of Performance Related Pay for the first time in CPSEs by the latest pay revision, the paper is an attempt to understand the implementation practices of MoU and Performance Related Pay system in Indian CPSEs. Since the concept of PRP is newly implemented, it is important to study the perception of the employees towards PRP. Effective PRP implementation requires the presence of a transparent and robust Performance Management System, in the given context, the paper additionally reflects on the employees’ perception towards PMS using both primary and secondary data. The paper also highlights the PRP challenges in CPSEs.

Need for Performance Based focus in Indian CPSE’s

The overall performance of the public sector in the era of intense competition in India has been a concern to the Government for long. Lack of goal clarity, leadership, authority, transparency and accountability has been identified as an important factor contributing to the performance of the public sector. The fact that public sector organizations have high competition from the private sector organization has compelled the government to design a mechanism that enhances the performance of the CPSE’s.

A large number of CPSE’s did not have of an appropriate instrument to evaluate performance of the public sector with complex social and financial objectives. In many CPSE’s employees are mostly evaluated on the grounds of Annual Confidential Reports (ACR) or Annual Appraisal
Reports (AAR) in many CPSE’s. These reports merely contained updation of education of the employee during the year, conduct and attendance. Performance appraisal system in CPSE’s have been subjective and religiously followed as a yearend practice. The performance appraisal systems were not transparent which leads to biasness. This acted as the base for undergoing a Memorandum of Understanding (MoU), followed by evaluation of MoU performance. Leadership, autonomy and accountability must go together in the management of the public sector and this is the crux of the MoU policy. The MoU system attempts to bring changes in the quality of management of the public sector. The concept of MoU is based on the principle of management by results and objectives, rather than by controls and procedures and has been used worldwide in the management of public sector enterprises.

**Performance Management in CPSEs - Memorandum of Understanding (MoU) System**
The Memorandum of Understanding (MoU), as applicable to public sector enterprises, is a negotiated document between the government and the management of the enterprise specifying clearly the objectives of the agreement and the obligations of both the parties. The main purpose of the MoU system is to manage CPSEs by results and objectives instead of by control and procedures. The ‘management’ of the enterprise is made accountable to the government through promise for performance or ‘performance contract’. Performance evaluation is done based on the comparison between the actual achievements and the annual targets agreed upon between the government and the CPSE. The targets constitute of both financial and non-financial parameters with different weights assigned to the different parameters. In order to distinguish ‘excellent’ from ‘poor’, moreover, performance during the year is measured on a 5-point scale. Table 1 provides a summary of the performance of MoU signing CPSEs as reflected in their MoU rating during the last five years.

MoU is a device used to improve the performance of CPSE’s. The concept of MoU is very simple. Trivedi, (1990) has explained MoU as the freely negotiated performance agreement between government, acting as an owner of the public enterprise, and the public enterprise itself. A MoU system intends to specify the intention, obligation and responsibilities of the two parties. In this system the government as the owner, formally commits the management of its enterprise to secure a particular level of performance during a period, as agreed upon in advance. The
philosophical foundation of the MoU system is – ‘What gets measured gets done’ Trivedi (1995). The approach is to define the ‘Rules of the game’ and ‘Boundaries of operation’ in advance. The objective of the MoU system is to simultaneously increase autonomy and accountability.

The MoU system in India is based on the performance contracting approach. There are two distinct varieties of performance contracting approach French Contracting System and Signaling System. The French contracting system as defined by Cadic, (1979) is a priori to a posteriorio controls. The result in a French contracting system is a high quantity and low quality of governmental control over public enterprises (Jones, 1985; Ramamurty, 1986). On the other hand the Signaling system emphasizes on sending appropriate signals to the managers to guide them in making decisions in the national interest and reward them for doing so. Jones, (1981), Jones and Trivedi (1983), Mehdi (1984), Hartman and Nawab (1985), and Nawab, (1985) have elaborated that the signaling system consists of 3 subsystems: Performance Information system, Performance Evaluation System and Performance Incentive System. The MoU system in CPSEs prevalent since 1986 was revamped in 1989, and it moved closer to the ‘signaling system’ of the Pakistani and the Korean models as developed by Prof. Leroy P. Jones. The genesis of MoU can be traced to the Report of the Committee to Review policy for Public Enterprises, headed by Dr. Arjun Sengupta. MoU was one of its major recommendations that was accepted in 1986 and the first set of 4 MoUs was signed in 1987- 88. Based on the report of National Council for Applied Economic Research (NCAER) the new methodology for setting up performance targets has come into force since financial year 2004-05.
Table 1: MoU rating of CPSEs, last five years

<table>
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<th>Grades</th>
<th>2007-08</th>
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<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
</tr>
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<tr>
<td>Excellent</td>
<td>55</td>
<td>44</td>
<td>44</td>
<td>64</td>
<td>66</td>
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<tr>
<td>Very Good</td>
<td>34</td>
<td>34</td>
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<td>44</td>
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<tr>
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<td>15</td>
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<td>24</td>
<td>33</td>
</tr>
<tr>
<td>Fair</td>
<td>08</td>
<td>17</td>
<td>20</td>
<td>24</td>
<td>25</td>
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<tr>
<td>Poor</td>
<td>00</td>
<td>01</td>
<td>01</td>
<td>02</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>124</td>
<td>145</td>
<td>161</td>
<td>175</td>
</tr>
</tbody>
</table>

Source: PE survey 2011-12 published by the DPE.

Structure of MoU in India: As described in the Department of Public Enterprise (DPE), Government of India (GoI), equal weights (50%) are assigned to both ‘financial’ and ‘non-financial’ parameters, which is on the lines of the ‘balanced score card’ approach of performance evaluation. The ‘non-financial parameters’ are further sub-divided into ‘dynamic parameters’, ‘enterprise-specific parameters’ and ‘sector-specific parameters’. Whereas the ‘static/financial’ parameters generally relate to profit, size and productivity, the ‘dynamic’ parameters refer to project implementation, investment in R&D and extent of globalization etc. Similarly, while the ‘sector-specific’ parameters refer to macro-economic factors like change in demand and supply, price fluctuations, variation in interest rates etc. beyond the control of the management, the ‘enterprise-specific’ parameters relate to issues such as safety and pollution etc.

Process of Performance Management System in India CPSE’s has basic 8 steps initiating with defining the vision/mission of the Public Enterprise. The steps involved are Performance Planning, Identifying KPA’s weightage and measures, Selection of competency attributes depending on level & type of activity, Joint review of performance (Mid Year Review), Documentation of Mid Year Review discussions, Documentation of changes in KPA’s if any during the Mid year Review, Annual Assessment, Review by reviewing officer, Normalization and Bell Curve approach, Feedback and communication of scores and Counseling and Individual
Development plan. Performance evaluation at the end of the year indicates the extent to which the mutually agreed targets between the CPSEs and the administrative ministries were achieved. The methodology of performance management system has, however, undergone several changes over the years.

**Incentivizing Performance - PRP as a tool for Incentivizing Performance**

The presence, performance and potential of the Central Public Sector Enterprises (CPSEs) are considered to have huge importance and impact in the performance of the Indian economy. The public sector enterprises in India have always been considered as ‘model employers’. The brightest of candidates dreamt of working for a public sector enterprise. However, with the opening of economy, the situation has taken a U-turn, the public sector enterprises are in a war for talent with its private counterparts. It is not only losing its talent pool to the private sector but the fresh talents are more attracted to join private sector or MNCs were there is tremendous career progression along with attractive pay packages. With increase in opportunities, the CSPES are also finding it difficult to retain talented employees. As a result, public sector is under huge pressure in terms of attracting and retaining talent.

Linking compensation with performance is commonly referred as Performance Related Pay (PRP) is been followed worldwide in all sectors for attracting, motivating and retaining talent. Performance related pay links the compensation of the employees to their performance and their contribution to the organizational goals. Therefore, periodic performance reviews play a vital role and provide the basis of performance related pay. It is because of this reason that the CPSEs have to first develop a transparent and robust Performance Management System before the implementation of PRP in their organization. As per the recommendations of the 2nd Pay Commission review committee for the CPSEs in India, the committee has recommended variable pay along with the fixed pay as an integral component of compensation structure in CPSEs in India. The committee proposed to change the current pattern of compensation and bring in the component of variable pay as part of the total compensation. The variable component will be relatively low for lower level executives and progressively increase to as high as to 200% of the basic pay at the level of the CEOs. The variable component is what is referred to as Performance Related Pay and will be linked to individual, group, business-unit and company performance.
Recently, there has been greater emphasis on the use of variable pay structure, as substitute to fixed scheme of pay (e.g., Greene 2003; Marks, 2001), the reason cited is to improve employee performance in terms of productivity and thus improvement in firm performance. An obvious benefit is that the cost of variable pay “flex in sync” with incomes if well designed plan is in place. (Green, 2003). Pearce, et al. 1985; Marsden 2004; OECD 2005b; Marsden 2009, in their work have mentioned the reasons for PRP implementation in public sector. PRP leads to enhance the overall effectiveness of public sector by motivation existing employees. It also helps to attract highly skilled employees at the same time retain talent. PRP creates increased awareness of organizational goals, performance setting, linking of individual and organizational goals, and increased commitment towards goals. The PRP system helped to reduce the strength of union. Overall the system helped public sector to reduce cost of remuneration bill. It also increased the job satisfaction of the employee through recognition of their contribution to organization.

The Organization for Economic Cooperation and Development (OECD) reports states that PRP scheme is already implemented or is in the process of implementation in almost two-third member countries. This reflects of the growing popularity of the scheme. In most of the cases it is being implemented only to the senior management but in some cases it is also applied to non managerial employees. (OECD, 2005). Hasnain et al (2012) in their paper have mentioned that one of the most common reason for introduction for PRP is for improving the productivity as well as accountability of public sector. PRP in the form of bonuses or merit increases to basic pay has been used more frequently in the OECD in recent years. According to one estimate, approximately two-thirds of OECD countries have introduced PRP in some form or the other (OECD 2005). PRP has been used in more comprehensive way in UK, Czech Republic, and Switzerland than in comparison with countries like the Netherlands, New Zealand, and Austria. In countries like Finland the proportionate of PRP to the total compensation is equivalent to 40%.

**Performance Related Pay Implementation in Indian CPSE**

The 2nd pay revision committee for CPSEs had recommended for the implementation of PRP for the first time in CPSEs based on a transparent and effective PMS. The PRP plan was to be
implemented with effect from 2007. With the implementation of 2\textsuperscript{nd} pay revision, Performance Related Pay has become an integral part of the compensation system. This was introduced with the purpose of creating a performance oriented culture as well as bringing the compensation of CPSEs at par with private sector. The reason for bringing the compensation at par with its competitors in private sector is to attract fresh talent and retain existing talent, and also to motivate and enhance the productivity of its employees.

According to 2nd Pay revision committee recommendation for central Public Sector Enterprises in India, “Performance Related pay is defined as the variable component of pay that is linked to Individual and organizational performance.” PRP may be introduced because of a fundamental belief in the virtues of rewarding people according to their contribution. Whether or not an organization introduces PRP will depend on its culture and the extent to which it believes that a scheme can be developed and maintained, which will meet the objectives of PRP.

**Reasons for Implementation of Performance Pay in Indian Public Sector**

What gets measured gets managed and what gets managed is done? Abiding by this principle, the mantra for establishing a performance oriented culture is to implement a PRP system based on a transparent and robust performance management system. As per IIMA report on introduction of performance measurement and performance incentives in government organizations, there are 8 broad reasons for implementation of performance measurement and performance incentives. The reasons are:

1. *Enhance employee productivity/performance:* Performance measurement and incentives will be linked to achievement of targets and not length of service. This will motivate employees to work towards their targets, thus enhancing their productivity/performance. This can be one of the earliest achievements.

2. *Better internal business processes:* One of the key effects of implementing performance related incentives (PRI) will be that inefficient or redundant business processes will have to be reviewed to improve organizational, group and/or individual performance.

3. *Improved public/stakeholder service delivery:* PRI will have an overall strong positive impact on service delivery to public/stakeholders. Most of the outputs/outcomes in government
departments/ organizations deal with service delivery to citizens or other stake holders and PRI will sharpen the focus on outputs/ outcomes. Citizen/Stakeholder orientation of employees will be furthered if performance targets/ measures are suitably directed.

4. **Develop result/business orientation**: Targets and measures related to result/business orientation will help in developing employees focus in this direction. Result orientation focuses on efficient and effective governance and business orientation focuses on promoting market value of products/services.

5. **Strengthen team spirit**: Group rewards help in fostering teamwork. They also assist in clarifying organizational/group objectives and engage employees with the organization’s goal.

6. **Perception of procedural justice**: PRI has a two-way link with perceived procedural justice. On one hand, proper goal setting, regular feedback and transparent assessment of performance will lead to perception of procedural justice. On the other hand, perceived procedural justice is very critical for long term success of PRI.

7. **Attract talent**: Steep rise in salary and job conditions like autonomy are making private sector jobs seem much more attractive to the younger generation. If government wants to attract good talent in future then PRI with delegation and transparency holds the key.

8. **Accountability**: Metrics developed to measure employees’ work output, competencies and stakeholder orientation will bring the much-needed shift in their focus from political bosses to ordinary citizens. Transparent system will be a deterrent to corruption among employees.

**Determinants of PRP in Indian CPSEs (as per the 2\textsuperscript{nd} pay revision committee)**

The determinants of PRP in CPSEs are based on the following parameters.

i) Profit of CPSE

ii) Grade of Executives (E0 – 40% to CMD (A) 200%)

iii) MoU rating of CPSE (Excellent – 100% to poor – 0%)

iv) PAR rating of Executive (Excellent – 100% to poor - 0% in a system based on PMS)

v) Remuneration Committee
i) Profit of CPSEs
PRP is calculated from the profits of the organization, 60% of PRP should be calculated from within the limit of 3% of Profit before Tax (PBT) and remaining 40% of the PRP should come from 10% of incremental profit.

ii) Grade of Executives (E0 – 40% to CMD (A) 200% of basic pay)
PRP is calculated as percentage of the basic pay of executives, ranging from 40% for E0 to 200% of basic pay for CMD (A).

Table 2: PRP as percentage of Basic Pay

<table>
<thead>
<tr>
<th>Grade</th>
<th>PRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>E0 to E3</td>
<td>40% of basic pay</td>
</tr>
<tr>
<td>E4 to E5</td>
<td>50% of basic pay</td>
</tr>
<tr>
<td>E6 to E7</td>
<td>60% of basic pay</td>
</tr>
<tr>
<td>E8 to E9</td>
<td>70% of basic pay</td>
</tr>
<tr>
<td>Dir (C&amp;D)</td>
<td>100% of basic pay</td>
</tr>
<tr>
<td>Dir (A &amp; B)</td>
<td>150% of basic pay</td>
</tr>
<tr>
<td>CMD (C&amp;D)</td>
<td>150% of basic pay</td>
</tr>
<tr>
<td>CMD (A&amp;B)</td>
<td>200% of basic pay</td>
</tr>
</tbody>
</table>

Source DPE: 2\textsuperscript{nd} pay revision committee recommendation report

iii) MoU rating of CPSE (Excellent – 100% to poor – 0%)
The PRP would be payable at 100% eligibility levels in case the Company achieves its Memorandum of Understanding (MoU) rating as “Excellent”. If the Company’s MoU is rated “Very Good” the eligibility of PRP would be 80%. In respect of “Good” and “Fair” ratings, the eligibility levels would be 60% and 40% respectively. However, there will be no PRP irrespective of the profitability of the CPSE, in case it is rated as “Poor”/Below Par.
iv) PAR rating of Executive (Excellent – 100% to poor - 0% in a system based on PMS)

The next important pre-requisite as already mentioned is the development of a transparent and robust Performance management system to pay PRP. CPSEs would adopt “Bell Curve Approach” in grading executives so that not more than 10% to 15% executives are graded as “outstanding / excellent”. Similarly, 10 % of the executive should also be graded as “Below Par”. Maximum PRP payable to the eligible officials at different levels based on the PAR rating for the year.

Table 3: Performance Payout percentage based on Individual’s Performance Appraisal Rating

<table>
<thead>
<tr>
<th>Percentage of PRP as per an Individual’s Performance Appraisal Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outstanding</strong></td>
</tr>
<tr>
<td>100% of PRP Eligibility as per Grade</td>
</tr>
</tbody>
</table>

v) Remuneration Committee

One of the pre-requisite for PRP is establishment of a remuneration committee. The remuneration committee should be headed by an Independent Director. CPSE with no Independent Director on Board will not be entitled for PRP. The remuneration committee is responsible for deciding the PRP policy and PRP pool.

Calculations for Individual Payout of PRP

The individual payout will be determined by the following formula:

\[
\text{PRP payable} = \{(60\% \text{ of } (P \times Q \times R \times S \times T_c) + 40\% \text{ of } (P \times Q \times R \times S \times T_p)\}
\]

where, \( P \) = Individual’s revised Annual Basic Pay; \( Q \) = MoU Rating of the company awarded by task force constituted by DPE; \( R \) = Grade Factor; \( S \) = Factor of Individual performance rating; \( T_c \) = Payout factor \{i.e. fraction of amount available (3 % PBT) to amount required, max 1\} for component of current year PBT; \( T_p \) = Payout factor \{i.e. fraction of amount available (2% of
incremental profit) to amount required, max 1} for the component of increase in profit over the previous year.

**Effectiveness of PRP as an Incentive Mechanism**

The Central Public Sector Enterprises in India, while have been mandated to administer the Performance Related Pay (PRP) as a measure to incentivize performance of executives, have also been found experiencing uneasiness amidst and within enterprises with implementation challenges in executing the PRP mandate. Pay for Performance as a concept and as a tool for incentivizing performance has continued to be a popular method for performance appraisals, specifically in the private sector.

When the CPSEs in India have attempted to implement this tool, the consequential effects of normalization that in turn affects the PRP component has become a matter of serious concern and restlessness. Since this is a forced distribution method to rank employees during performance appraisals, 10% of executives in any enterprise will have to be categorized as ‘below par’ in terms of their performance, there is a direct implication on the PRP component for executives in this category, where they are not eligible for any PRP.

The appraisal system based on normal distribution curve, informally known as a bell curve, has been a matter of much discussion since it forces a ranking system on the employees. HR practitioners observe that the bell curve, the way it is understood and implemented, is wrong sometimes, making it a forced normalisation and forces rating. This cannot be a rigid curve and could be a steep or flat curve depending on the business performance. KPMG, which has recently shifted away from the bell curve approach, now will have a rating system that each business can determine based on its requirements and individual performance. It is reported that, for instance, if a business believes that it has 35 per cent of people in the team in the upper bracket instead of the prescribed 20 per cent, then the unit can go ahead with it, and the shift away from bell curve will allow this flexibility.

Organizations can also contemplate to employ a mix of compensation elements in terms of having long term and short term incentives. The right blend of compensation elements is
essential to drawing a relationship with key outcomes that most growing companies are seeking to achieve - increased productivity, meeting the ‘satisfaction quotient’, in terms of fulfilling both company and employee needs and achieving retention goals.

There are four major observations against variable pay-for-performance (Frey and Osterloh, 2011)

- In a modern economy, it is practically impossible to determine tasks that are to be fulfilled in the future precisely enough so that variable pay-for-performance can be applied. In a society continually faced with new challenges, superiors oftentimes find it impossible to fix ex ante what an employee will have to do in the future.
- It would be naïve to assume that the persons subjected to variable pay-for-performance would accept the respective criteria in a passive way and fulfil their work accordingly. Rather, they spend much energy and time trying to manipulate these criteria in their favour. This is facilitated by the fact that employees often know the specific features of their work better than their superiors.
- Variable pay-for-performance results in employees restricting their work to those areas covered by the performance criteria. They therefore neglect their tasks insofar as they are not contractually fixed by the performance criteria.
- Variable pay-for-performance tends to crowd out intrinsic work motivation and therewith the pleasure of fulfilling a particular task. However, such motivation is of great importance in a modern economy because it supports innovation and helps to fulfil tasks going beyond the ordinary.

The attempt to place decisions on pay into a predetermined pattern arises from the belief that employee performance, when charted, always produces a particular shape. This is the ‘normal’ distribution or ‘bell curve’, with equal numbers of lower and higher-performing employees at both ends, and the bulk of staff somewhere in the middle. But this doesn’t always reflect the reality. As a result, such approaches can end up undermining the principles that are used to promote performance-related pay in the first place.
Forced distribution is a major factor behind the morale and employee relations issues that can sometimes arise with merit pay. A main conclusion of the PRP literature is that PRP can serve as a sorting mechanism that tends to attract higher productivity workers. Research finds that workers receiving contemporaneous PRP in the form of piece rates, commissions, and tips are no more likely to experience turnover than wage workers. Moreover, those receiving deferred PRP in the form of bonuses, stock options, and profit sharing experience longer tenures and less job turnover in comparison to wage workers (O’Halloran, 2009).

It is found that PRP exerts a positive effect on the mean job satisfaction of (very) high-paid workers only. A potential explanation for this pattern could be that for lower-paid employees PRP is perceived to be controlling, whereas higher-paid workers derive a utility benefit from what they regard as supportive reward schemes. Using PRP as an incentive device in the UK could therefore be counterproductive in the long run for certain low-paid occupations (Mc Causland et al. 2011).

Scientific research has also studied the behavioral aspects linked to this approach. Overall, there has been a marked change of opinion in academia with reference to the discussion on PRP as an incentive (Bryson and Freeman 2008). Empirical research, in particular experimental research, has shown that under suitable conditions human beings care for the wellbeing of other persons and they are not solely interested in material gains (Frey and Osterloh 2002). Many workers are intrinsically motivated, i.e. they perform work for its own sake because it is found challenging and worth undertaking. This applies not only to qualified employees but also to persons fulfilling simple tasks. They often are proud of their work and performance. Recognition by co-workers is also found to be an important factor impacting behaviour in organizations. Unfortunately, with PRP as an incentive tool does not take into account these behavioural parameters in an organization.

Straberg (2010) highlighted the problem of perceived unfairness following the introduction of performance pay in an OECD country, although there was no empirical linkage between pay justice perceptions and workplace behaviours. Managers found little positive changes resulting from the introduction of performance pay. Cardona (2007) has reviewed incentive programs in
the US, particularly the Performance Management and Recognition System, he is also studied the UK's Inland Revenue Service performance scheme and similar attempts in Australia. In the study documents several common issues in the implementation of performance pay have been discussed such as employees have hardly ever scored less than satisfactory in their evaluations, bonus systems were designed so that only very few employees actually received any payments and the majority of staff found the system de-motivating and inciting jealousies. Maheshwari and Singh (2010), in their paper have talked about PRP implementation in the perspective of government employees. They have stated that the pre-requisite for successful PRP are employee involvement and top management support to create the right culture and right employee mindset. The paper has mentioned a PRP implementation framework at managerial and operative level. The framework mentions the factors that an organization needs to be careful at the time of PRP implementation, which includes: transparency, accountability, individual performance measurement, involvement, trust and culture. The paper has re-emphasized the importance of employee readiness for the successful implementation of PRP.

Piekkola (2005) conducted a study in Finland on PRP and Firms performance. The study found that PRP improved productivity by 6%. Profitability of the firm also improved by around 6 %. PRP resulted in increase in firm’s profitability only when the compensation was significant. Employees are motivated by PRP amount exceeding on average 3.6 per cent of salaries. The study concluded that firm’s performance can be enhanced by implementation of PRP system without much increasing wage bill. Managers found little positive changes resulting from the introduction of performance pay. (World Bank 1999; Kiragu and Mukandala 2003) have confirmed in their report that there are a number of political challenges and operation constrains in successful implementation of pay reforms in Public Sector.

**Executive’s Perception on Performance Management System and Performance Related Pay in Indian CPSEs**
The concept of PRP has been introduced for the first in Indian CPSEs by the latest Pay revision committee, to be implemented in retrospective from Jan 2007. The CPSEs were encouraged to implement a PRP based on a transparent and robust PMS. The CPSEs were supposed to implement a Bell Curve and a Balanced Scorecard Approach. In the given context, an attempt
has been made to study the perception of the employees of CPSEs across all grades using a 12 item structured Questionnaire to understand the opinion of employees towards PRP and PMS, so as to suggest the readiness of CPSEs and the effectiveness of their process to successfully implement PRP.

Methodology of the study
In order to study the perception of executives of CPSEs in India, a survey was conducted in select CPSEs in India namely, NMDC Ltd., Power Grid Corporation of India Ltd, NTPC (National Thermal Power Corporation), ECIL (Electronic Corporation of India Limited), Rastriya Ispat Nigam Limited (RINL) and BDL (Bharat Dynamics Limited). The study covered all cadre of officers (lower, middle and senior level). Although no sector specific limits have been identified for the study. 155 executives across all grades were surveyed to know about their perception towards PRP based using a structured questionnaire. The sampling technique was convenience sampling and the data was collected from the period of July 2012 to December 2012. There were 12 statements that were poised to the executives of CPSEs below board level and the responses are summarized below in a five point rating scale where SD: strongly disagree, D: Disagree, N: Neutral, A: Agree and, SA: Strongly agree. Table 4 represents the perception of executives towards PRP and PMS in select CPSEs in India.

Table 4: Perception of executives towards PRP and PMS in select CPSEs in India (percentage basis)

<table>
<thead>
<tr>
<th>Items</th>
<th>SD (%)</th>
<th>D (%)</th>
<th>N (%)</th>
<th>A (%)</th>
<th>SA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance is adequately rewarded in my organization</td>
<td>7.2</td>
<td>15.8</td>
<td>25</td>
<td>40.1</td>
<td>11.8</td>
</tr>
<tr>
<td>My organization has a transparent (Performance Management System( PMS)</td>
<td>7.3</td>
<td>14</td>
<td>29.3</td>
<td>40.7</td>
<td>8.7</td>
</tr>
<tr>
<td>My organization has a robust PMS</td>
<td>9.4</td>
<td>61.1</td>
<td>34.9</td>
<td>33.6</td>
<td>6</td>
</tr>
<tr>
<td>The PMS is developmental in nature</td>
<td>3.4</td>
<td>14.2</td>
<td>29.1</td>
<td>48.6</td>
<td>4.7</td>
</tr>
<tr>
<td>KPAs ( key Performance Areas) / KRAs ( key result areas) are set by mutual consent of me and my reporting officer</td>
<td>4.9</td>
<td>12.6</td>
<td>25.9</td>
<td>43.4</td>
<td>13.3</td>
</tr>
<tr>
<td>Performance measures are reasonable</td>
<td>4.7</td>
<td>13.4</td>
<td>23.5</td>
<td>50.3</td>
<td>8.1</td>
</tr>
<tr>
<td>Performance measures are objective</td>
<td>3.4</td>
<td>11</td>
<td>28.8</td>
<td>49.3</td>
<td>7.5</td>
</tr>
<tr>
<td>KRAs/KPAs are challenging</td>
<td>3.4</td>
<td>10.3</td>
<td>36.3</td>
<td>38.4</td>
<td>11.6</td>
</tr>
<tr>
<td>Grading System differentiates performers to non-performers</td>
<td>5.4</td>
<td>12.1</td>
<td>33.6</td>
<td>39.6</td>
<td>9.4</td>
</tr>
<tr>
<td>Introduction of PRP has motivated me to perform better</td>
<td>5.3</td>
<td>15.2</td>
<td>28.5</td>
<td>38.4</td>
<td>12.6</td>
</tr>
<tr>
<td>I am satisfied the way PRP is implemented in my organization</td>
<td>9.3</td>
<td>15.2</td>
<td>25.2</td>
<td>41.1</td>
<td>9.3</td>
</tr>
</tbody>
</table>

It is clearly evident from the above study that a good percentage of executive agreed to have a transparent and robust PMS along with an agreement on KRA/KPAs being set mutually and being challenging while performance measures being objective. A large percentage of employees are satisfied with the way PMS and PRP is implemented in their organization.

Satisfaction towards PMS being objective, transparent and robust is a good indicator as without a transparent and robust PMS in place, organizations cannot successfully implement PRP practices in their organizations, and it is the most important prerequisite.

The analysis of the above statements shows that nearly 29% of employees have a neutral opinion, since the concept is in its nascent stage and the topic of performance linked pay being one of the most controversial areas, people are quite apprehensive of expressing their view on this topic, we can assume that employees having a neutral opinion are employees with not so favourable opinion on this issue. The study if concluded from the perspective of the sensitivity of the subject, we assume and the data supports that there is a 50 -50 case for PRP in CPSEs.

The other important evidence from the above data which calls for some serious action from the management is regarding spreading more information towards the newly implemented system in terms of PMS and PRP. There is a considerable 29% of executives who have expressed a neutral response is a cause of concern to the organization. The organization needs to communicate as
well as educate the advantage and benefits of the new system as well as take initiatives towards institutionalization of these newly implemented systems by the employees. The above study was carried in the period between July 2012 to Dec 2012 which was exactly the point when many CPSEs had just introduced the PRP process in their organization. In the present scenario, it is realised that there is widespread dissatisfaction among executives in CPSEs and many of the organizations have either stopped or are thinking of revisiting their PRP system.

**PRP Implementation Challenges**

**i. The Challenge of Design:** The challenges of effective designing of performance related pay are enormous. Organizations often fail to foresee or underrate the difficulties related with effective designing of a PRP system. The various challenges associated includes: setting of performance criteria, difficulties in performance measurement, setting performance payout levels, inconsistent rating and insufficient funds. Another perspective from the scientific literature on Performance Related Pay is that PRP as a tool works to improve efficiency for high paid employees only. Such executives are in a better position to appreciate the concept and carry the intrinsic drive to propel the organization’s goals forward through better strategy formulations and performance. Consequently, they also derive the benefit through PRP.

Thus, it could be a viable proposition to consider PRP only for executives above the rank of E5 or E6. For those executives who have just begun their career or have relatively less experience, that too where the work pattern is process oriented and more of routine type, their performance can be incentivized through deferred compensations such as Bonus or stock options or any other performance linked incentive plan.

**ii. The Challenge of Implementation:** One of the most important challenges has to do with communication. Communicating objectives of the programme, the process, purpose and line managers’ role in effective implementation is very important. It is also necessary to communicate to the employees about the link between performance and pay and how does the PRP system works. One of the problems mentioned by employee regarding PRP is that they do not have clarity about the connection between their performance and rewards. Another problem
that often receives insufficient attention is the match between the existing management skills and the skills necessary to effective implement the PRP program.

PRP program often require that managers rate employees and deliver critical feedback. They lack the skills necessary to carry the role effectively. Organizations often fail to assess what new skills will be needed and to provide appropriate training prior to implementing pay for performance programs. Reporting managers are asked to give critical feedback and they are neither trained nor are mentally prepared to critically evaluate and grade their subordinates.

iii. The Challenge of adopting a Strategic Perspective: The purpose of PRP is to motivate employees’ for more desired behaviour at workplace. It has been observed that the existing PRP policy and process of few organisations are not designed in line with the organization’s purpose, strategy, and HR policy. The managers do not have understanding of the required fit of PRP initiatives with their organization’s culture and management style.

Conclusion
Implementation of PRP in Public sector is a great challenge. But the task of implementation can be made effective if Performance -related pay is based on well designed, holistic, transparent and robust Performance management system. It should be kept in mind that while the system needs to be comprehensive it should also be balanced in such a way that the design is simple and not too complex for employees to understand and implement. Transparency being integral, it is essential to communicate the link between performance and pay and explain how does the PRP system works in the organisation. There is need for developing the existing management skills necessary for effective implementation of the PRP program. Training programs focused on essential skills for critically evaluating and grading their subordinates also delivering critical feedback should be designed for trouble-free implementation of pay for performance programs. PRP policy and process should be designed in line with the organization’s purpose, strategy, and HR policy. Managers should also consider the fit of PRP initiatives with their organization’s culture and management style. The use of PRP program continues to grow both within the traditional arena as well as in new areas of application, PRP programs will be most effective
when they successfully address the challenges associated with learning from experience and identifying the best practices, design, implementation, and adopting a strategic perspective.

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SOE Governance and
Realistic Performance Target Setting:
Issues and Challenges

By Arun K Rath

Introduction

The state-owned enterprises have to fulfil the twin objectives of commercial efficiency and social responsibility. The challenge for the enterprises arises out of the need for them to ensure a reasonable return on investment, while discharging their constitutional and social obligations. As wings of the welfare state, the enterprises have the mandate to act as model employers, and conduct their business in an ethical manner. Further, they have to protect the interests of all stakeholders e.g., the employees, customers, suppliers, creditors and community and the society at large. The environment of competition and globalisation being faced by the public enterprises makes the tasks all the more challenging.

The state-owned enterprises have made significant contributions to economic development and hold great potential for future growth of national economies. It is true that the processes of liberalisation, privatisation and globalisation have brought about significant reduction in state control over the commercial enterprises across the world. Nevertheless, the state-owned public enterprises (SOEs) represent a substantial part of GDP, employment and market capitalization in many countries. In India, public enterprises continue to remain a dominant feature of the economy.

The challenges of public enterprises all over the world were highlighted by the OECD in 2005, “Corporate governance of state-owned enterprises is a major challenge in many economies. But, until now, there has not been any international benchmark to help governments assess and improve the way they exercise ownership of these enterprises which often constitute a significant share of the economy.” The code of corporate governance for SOEs issued by OECD in 2005 is the first international document listing guidelines for better governance of public enterprises around the world.

Public Enterprise Management: A Paradigm Shift

Liberalization of the Indian economy in 1991 resulted in a paradigm shift in the policy of the Govt. of India towards the public sector enterprises. The enterprises lost the monopoly assured by the government. The regime of commanding heights for the public sector gave way to the open economy controlled by market forces. The public sector has to face competition instead of protection by the government. Public enterprises are subjected to disinvestment to reduce state ownership. The non-performing and sick public enterprises face the prospect of closure due to withdrawal
of budgetary grants. Manpower rationalization in the enterprises replaced the earlier objective of employment generation as a goal of public sector.

**Governance Challenges of SOEs**

The main criticisms in the governance of SOEs have been political interference and bureaucratic apathy. Political interference has been in the selection, appointment, and incentivising Board of Directors and senior management as well as in decision-making. The public enterprises in India continue to make significant contributions in almost all sectors of the national economy and earn sizeable revenues for the state. Nevertheless, public enterprises face distinct governance challenges. Corporate governance problems arise from the fact that the accountability for the performance of SOEs involves a complex chain of agents like the management, board, government Directors, the ministries and the government. The principals (owners) on behalf of the state are not clearly or easily identifiable. In such a situation, there is a clear dilution of accountability. To comply with such complex web of accountabilities in efficient decision making and good corporate governance is a challenge for public enterprises.

**Constituents of the External Environment**

**Empowerment of Public Enterprises: The Emerging Strategy**

There is need for a separate framework to be developed in respect of public enterprises for two reasons. Firstly, despite all attempts to privatize the public enterprises, most countries find it difficult to wipe out State control and ownership in companies. Secondly, wherever public assets are involved, the governance framework includes accountability to the
Parliament and various statutory bodies which are not part of the framework for corporate governance.

The Organisation of Economic Co-operation & Development (OECD), issued guidelines (2005) for good governance of state-owned enterprises (SOEs) with the stipulations that:

- The government should not be involved in the day-to-day management of SOEs.
- The state should respect the independence of SOE Boards.
- Empower and improve the quality of SOE board
- SOEs boards should monitor management without undue political interference.
- SOE boards should have the same responsibilities and liabilities as per company law.

The Ad hoc Group of Experts (AGE) set up by GOI under the chairmanship of Shri Arjun Sen Gupta 2005 recommended inter alia that,

(a) The Ministry in charge of the company should recognize the fact that they are not the owners of the company but are only custodians on behalf of the Government and the public at large.

(b) Not more than two officers should be nominated to the Board by Government.

(c) The Ministry should give instructions to the Company only through Government Directors

(d) There should be a negative list of areas which must be kept away from the intervention of the Government. The list includes activities which are commercial or operational in nature.

(e) The current restrictions regarding capital expenditures, joint ventures, etc. need to be done away with and left entirely to the Board of Directors.

(f) C&AG may consider issuance of revised guidelines to statutory auditors and rely mainly on their report to minimize the need for supplementary audit.

(h) In order to improve the commercial functioning of CPSEs in the competitive environment in the wake of liberalization/globalization, CVC may consider making specific exemptions in the case of select Navratnas, which have in place internal systems, controls, and procedures that would demonstrably meet the preset standards evolved by the CVC.

Towards better Governance of Public Enterprises

Effective corporate governance in the public enterprises requires proper balance among the power tripod of the government, the board and the management. The government as the owner, the board as the decision-making authority and the managers as the agents of the owners have to play their mutually supportive roles.
They have to observe the rules of distribution of authority and responsibility among them. The following role models for the three entities are suggested:

**Role of the Government**

(1) The government as the majority owner must establish a clear and consistent ownership policy with ownership functions defined. Power and responsibility on behalf of the government should be spelt out at appropriate levels in clear terms with concomitant accountability.

(2) Government must allow full functional autonomy to the public enterprises.

(3) Government must not interfere in the day-to-day management of the enterprises and allow the Boards to exercise their authority in an independent manner.

(4) The government should establish transparent nomination processes for Board of Directors of the enterprise. The boards should be appropriately composed to ensure their objective and independent judgement.

(5) The enterprises should not be asked to perform duties not mandated by laws or regulations.

(6) The government should dilute its shareholding to a level of at least 75% by offering the shares to general public, mutual funds and financial institutions. This will unleash the vast potential locked up in the public enterprises.

(7) The government should decide and declare a negative list of items and activities over which there will be full authority of the Board without any interference from government.

**Role of the Board of Directors**

(1) The Boards of the public enterprises should consist of competent, capable and experienced professionals who can take independent and informed decisions in the best interest of the public enterprises.

(2) The Board should be independent of both the owners and the management. In particular, the Board of public enterprises should maintain arms-length distance from the government.

(3) Directors should act with integrity and be held accountable for their actions. The Board should assess its own performance.

(4) The independent directors as conscience keepers of the corporations should be selected by the Board and appointed by the shareholders with clear duties and responsibilities. The independent directors should be more proactive in
initiating board agendas aimed at ethics, social responsibility and sustainability of the enterprise. The performance of the independent Directors should be evaluated by the Board based upon their self-assessment.

(5) The Directors should ask questions to elicit full information from the management. Passive acceptance of the views of the management by the Board may not be in the interests of the company.

(6) The Board should strive towards continued value addition to the public enterprise and ensure its long-term sustainability. The Board should have a risk management plan in place.

(7) The Board should rationalise the internal audit system and strengthen the internal vigilance mechanism to build up effective processes and procedures in the corporation.

**Role of the Managers**

(1) The managers, as the agents of the shareholders and the officers of the Board, should be professionally competent, responsible and trustworthy.

(2) The managers should devote their fulltime attention for value addition to the enterprise. They should be loyal and diligent in discharge of their duties.

(3) The managers will have to ensure observance of code of ethics in their work in relation with the customers, vendors and business partners.

(4) Managers must help the Board reduce agency costs of management.

(5) Every manager must strive to observe utmost economy, cut down cost of production and eliminate wasteful expenditure in order to make the enterprise competitive.

(6) Every manager should contribute to prevention of malpractices, corruption and abuse of authority in the enterprises and should act as whistle blower to unearth malpractices and cases of breach of ethical values in the enterprise.

(7) The advantage of professional competence possessed by the managers in public enterprises must translate into higher productivity and creativity in the interest of long-term sustainability of the public enterprises.

**MoU System**

The Industrial Policy of GOI as part of the Economic Liberalization announced in 1991 mandated that autonomy be granted to Public Sector Enterprises, their boards be professionalized and Annual MOU between Enterprise and Ministry be drawn. The Policy of GOI was further reformed in 2004 to build a strong & effective public sector whose social objectives are to be met by commercial functioning, and that full managerial and commercial
autonomy be given to profit making PSUs. Memorandum of Understanding (MoU) is a negotiated agreement and contract between the Government and the management of the Central Public Sector Enterprises (CPSE). MOU system is regarded as an instrument to grant further autonomy to the public enterprises. It is intended to fix targets of the CPSE at the beginning of the year and evaluate their performance at the end of the year vis-à-vis the targets fixed. Draft MOU is submitted by company to DPE, the nodal Dept. after approval by Board and the administrative Ministry. Autonomy and empowerment of the public enterprise are necessary conditions for effective MOU between the government and the public enterprise. In order to make the MOU system more effective the following recommendations are suggested.

**Recommendations**

1. Government as the owner must take the initiative to empower the SOEs with full managerial and commercial autonomy. Board of Directors should be given full powers in commercial and administrative matters.

2. The complex web of ownership structures must be simplified fixing clear responsibility and authority.

3. Ownership Policy of the government must be spelt out without any ambiguity in respect of the functionaries who would exercise the ownership functions.

4. Board of Directors should govern and decide. Interface between SOEs and government ministries and agencies in respect of decision making process must be minimized if not eliminated. Ownership role be given to one ministry, say the DPE or Economic Affairs, instead of to numerous authorities as at present.

5. One year MOU suffers from limitations regarding outcomes in a year’s time. Generally projects take more than one year to be completed. The non-financial parameters having projects need 3-5 year time frame for implementation. As such there should a flexibility of 3/5 year parallel MOU (to be chosen by particular public enterprises). The targets may be divided on yearly basis for annual targets setting and performance measurement in the annual MOU document.

6. Commitments / assistance from government as per MOU document should be reviewed and complied with. RFD of the Department should reflect such commitments for review and assessment of the Department’s achievement.

7. Role of government Director who represents the Ministry/Government need to be assessed to ascertain his contribution in achieving the targets and assistance provided by him through his Ministry.
8. There should be midterm review of the MOU targets.

9. Annual MOU review by Task Force should be more realistic and must adjust targets due to slippages based upon recorded realistic factors.

10. Board of the SoE must exercise the powers delegated to the enterprise particularly in respect of joint ventures/merger acquisitions/globalization, otherwise the SOE’s performance will not be significant.


12. Some of the targets (on CSR & Sustainability, R/D, projects) need to be assessed by third party external agencies by selecting high value projects.

13. Expert agencies may be engaged as Resource Groups to assist Task Force. Such agencies should be able to present better forecasts and provide global benchmarks for comparison and better target fixing.

14. BoD of SoE should have more power in the MOU. An empowered Committee of Directors and Independent Directors constituted by the Board should draft and monitor the MOU document and place it for review by the Board before it is sent to the Ministry/DPE.

15. Commitments/assistance expected from the Government should be relevant and related to the fulfilment of the agreed performance targets. These obligations should have a direct bearing on the performance of the enterprise, and their effect on the performance should be quantified.

16. Regarding commitment/assistance from the government/administrative ministry, it is suggested that the government nominee Director in the Board of the CPSE should be designated as the Nodal Officer of the ministry and be entrusted with the responsibility of facilitating the required support and assistance from the ministry/government in implementation of the MoU. The contribution of the Nodal Officer (Government Nominee Director) should be recognized by making entry in his annual confidential remark by his reporting authority with a report from the Chairman of the enterprise.

17. The rating of CPSEs from Excellent to Poor has to be done on a realistic basis. It is common experience that disproportionately large number of CPSEs acquire Excellent or Very Good MoU rating. Ideally the distribution from Poor to Excellent should follow the bell curve. However, in reality the distribution ends up as a skewed curve. It is recommended that a Moderation Committee (MC) under the chairmanship of Secretary, DPE with representatives from Task Force (at the level of chairman of Task Force), Ministry of Finance, Ministry of Corporate affairs etc. may be constituted to go into this critical issue and recommend final moderated ratings for CPSEs on a
realistic basis. As a guiding principle about 30% should be allowed in the Excellent category and 30% in the Very Good category, keeping Excellent and Very Good levels within limit of 60% of total number of the CPSEs.

Summary and Conclusion

Realistic performance target setting depends on autonomy and empowerment of the enterprise to avoid one sided exercise in the MOU process. The Central Public Sector Enterprises of India continue to play significant role in the economy even after economic liberalisation of 1991. It is being realised that many public enterprises have vast unexploited potential, which need to be fully developed for higher return on investment.

The state-owned enterprises suffer from district governance challenges. There is limitation on autonomy of the Boards of public enterprises. The Boards do not enjoy powers in many matters. The financial powers are restricted. The Independent Directors are not always selected on grounds of professional experience and expertise. Many Director vacancies are not filled up in time. Interference from sources of power outside the Board restricts exercise of authority by the Board. In such an environment, corporate governance cannot be meaningful in developing the full potential of the public enterprises to participate effectively in the MOU process. The MOU document and the MOU process need to be reviewed regularly to make it more relevant.

The MOU system can be a tool of empowerment of the SOEs in India and can provide the autonomy for their growth. The public enterprises face the challenges of competition and globalisation in the twenty first century. The Board of Directors should be empowered to play their strategic role to fulfil the twin objectives of commercial viability and social responsibility of the enterprises. The strength of the public enterprises lies in their social relevance for the country, which justifies their continued presence in the economy. As trustees of public wealth, the public enterprises are committed to the ideal of the welfare State. With renewed stress on improved profit, sound management principles and good corporate governance practices, the public enterprises are capable of becoming world-class companies.

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Brazilian Federal State Owned Enterprises’ (SOEs) Governance Structure and the Use of Participation in Profits and Results (PLR) to Increase Performance

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1. Introduction

This paper was written to be presented at the International Workshop on Performance Evaluation and Monitoring of State Owned Enterprises (SOEs), held in New Delhi, India, in January 14th and 15th, 2015.

Its main objective is to describe the governance structure of the Brazilian Federal State Owned Enterprises - SOEs, focusing in its tripartite model; SOEs’ autonomy and independence, given by the Federal Constitution, from its supervisor (parent) ministry; the usage of Participation in Profit and Results (PLR) as an instrument to increase these companies’ performance; as well as propose some measures that can improve the whole process.

The second chapter of this paper brings a brief summary of SOEs origins in Brazil since its colonial time, through the Post War and Military Regime, passing by the privatization process until nowadays. The third chapter describes Brazilian SOEs’ governance structure by explaining its tripartite model of control by the Federal Government.

In the fourth chapter, the paper addresses the functioning of the tripartite model, detailing each player’s role in the governance structure. Besides, it explains the use of Participation in Profit and Results (PLR) as an instrument to increase these companies’ performance. Continuing, the fifth chapter consider some issues about this model and proposes some measures to improve the process and, finally, it draws some conclusion about it.

1 The views expressed in this work are those of the author and do not necessarily reflect institutional positions of the National Treasury Secretariat.
2. Brazilian SOEs: a Brief Summary of its Origen

2.1. History of the Creation of SOEs in Brazil

The creation of SOEs in Brazil dates back to the colonial period when the Portuguese Crown sponsored the establishment of a financial institution (Banco do Brasil) with the proposal of financing the king’s court, that had just moved to Brazil, fleeing from the Napoleon’s invasion. Later, after the Brazilian independence in 1822, the Emperor D. Pedro I, created another financial institution called “Caixa Economia Federal” in order to stimulate the habit of saving money by the less affluent classes.

The first impulse to create state enterprises was the need for rapid industrialization of Brazil in the early 40's, due to the difficulty of importing goods and raw materials caused by the Second World War (between the years 1938 and 1945). Faced with the rigid bureaucracy of the direct administration and the fledgling domestic private sector, state enterprises emerged as a solution, especially for 3 features: administrative agility, financial autonomy and flexibility in personnel management².

The government had to step in partly because it wanted to promote import substitution industrialization (ISI), but also because private stock and debt markets were in crisis and private investors were not willing to take the risks associated with the creation of new industrial companies in an environment of two-digit inflation (Musacchio 2009³). Consistent with the social view of SOEs, the Brazilian government also had a tendency to use SOEs to directly control prices⁴.

During this period the Brazilian government associated with the United States government and the private sector, financed and built the first integrated steel mill in Brazil, Companhia Siderúrgica Nacional (CSN). Additionally, in 1942, with financing from the American Eximbank, took place the creation of the Companhia Vale do Rio

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³ Citation in: STATE-OWNED ENTERPRISES IN BRAZIL: HISTORY AND LESSONS by Aldo Musacchio and Sergio G. Lazzarini
Doce (CVRD), an iron ore mining firm that consolidated a variety of small and medium firms, and a railway (from the mining areas in the center of Brazil to the port of Victoria a few hours north of Rio de Janeiro)

In the following years, Brazil adopted a strong development policy, which had as decisive impulses the closer ties with the US after the war and the holding of the football World Cup in Brazil in 1950. Soon after, the government led a development project known as "ultra-nationalist". At that time, occurred the creation of National Development Bank (BNDES), Sectorial Development Bank (BNB), both in 1952, and, in order to ensure an internal source of oil supplies, a Petroleum Company (Petrobras in 1953).

These state owned enterprises were created, primarily, with the objective of solving issues such as:

a) necessity to complement the development process with the establishment of heavy industry in the country, ensuring that local industry would not be limited to consumer goods, mainly because of the inability and / or disinterest of the private sector to invest in projects of long maturity and high costs;

b) adoption of import substitution policy;

c) national security, because some areas of the economy should be managed by the government to ensure the country’s security;

d) nationalization of private enterprises in sectors that government control of its property were needed to enable the establishment of a regulatory legislation;

e) nationalization of badly administered private enterprises, in which the state had a social or strategic interest.

During the sixties and seventies, the number of state owned enterprises reached its greatest quantitative, this growth occurred mainly in the military regime. During the Brazilian dictatorship (1964-1985), 302 state enterprises were created, while in Vargas, 5
Kubitschek and Goulart governments the country witnessed the creation of 15, 23, and 33 companies, respectively.

The oil crises in 1974 and 1979, the high interest rates in the international financial market and the appreciation of the dollar led to global changes in the relative price system, greatly affecting the Brazilian economy, which was very dependent on the international financial system.

At first, the government considered that this situation was temporary and maintained the policy of attracting external and internal financing, aggravating the financial situation of the state and its companies. In addition, the government not only adopted policies to flatten public prices, which lead to a worsening of SOE’s performance, but also used its revenues to help adjust the national accounts. Meanwhile salaries and other SOE’s costs skyrocketed due to domestic inflation, which led to losses and a rapid decline in capital expenditures.

As stated by Musacchio and Lazarinni (2014), the rapid rise in global interest rates and the rationing of credit dramatically hurt the finances of some of the largest SOEs, which had been financing their current expenditures with foreign debt denominated in dollars or yen. Between 1980 and 1983, the financial expenditures of SOEs went, on average, from 7% of total expenditures to 16.6%.

In this scenario, there was the implementation of a national program to reduce the bureaucracy, in 1979, along with the State Enterprises Secretariat and the Privatization Special Committee (CND) that initiated the privatization process in 1981.

2.2. The Federal Privatization Program (PND)

The PND focused on the rationalization of public resources and modernization of the state. Without resources to invest in public services and its demands by a growing population in terms of both quantity and quality, the Brazilian Government decided that
it should concentrate its activities in priority areas such as health and education, allowing the private sector to take care of the others. Meanwhile it will act as regulator and supervisor of those services provided by the private sectors, like telecommunications and energy.

PND’s main objective is the sale of state-owned enterprises and the granting of public service concessions, and also the company’s closure when they have already fulfilled their role and do not interest to private sectors. As a result, many public enterprises was discontinued and some services provided by them were transferred to the Federal Public Administration, while others were simply abolished.

Primarily, the government conducted the reprivatization of companies that had been absorbed by the State, mainly because of their financial situation. At this stage, the main objective was to prevent the expansion of the State presence in the economy, which lead to the privatization of 38 small companies that cashed in revenue of only US$ 780 million6.

The general result of privatizations in Brazil in the period 1990/2003 reaches US$ 105.5 billion, distributed at the federal and state areas, as may be seen in the chart that follows. The federal privatizations comprised cases under the Law 9,491 that governs PND and cases of the telecommunication sector, carried out Under the General Law of Telecommunications – Law 9,472, therefore, out of the ambit of PND. Total result includes the revenue from sales and the debt transferred to the buyer.

Table 1 – Privatizations in Brazil from 1990 to 2003

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In the same period, the Brazilian Privatization Program (PND), alone, obtained revenue equivalent to US$ 30.5 billion with the sale of companies and disposal of minority shares and concessions. Such amount, plus the debt transferred to the private sector, of approximately US$ 9.2 billion, represents a total result for PND of around US$ 39.7 billion.

Altogether, 69 privatizations were performed, related to steel, chemical and petrochemical, fertilizers, electricity, rail transport, mining, ports, financial, oil and other sectors, as the following charts:

**Table 2 – Privatizations in Brazil from 1990 to 2003 by Sectors**

The pick revenue of the privatization program was in the year 2000 with the amount of US$ 7.7 billion due to the first global tender offer of Petroleo Brasileiro
S.A(Petrobras) preferred shares. The shares sold exceeded in number the quantity needed for the federal government to maintain stockholding control of company. The offering was innovative in the sense that it allowed employees to use part of their funds called Workers’ Time of Service Guarantee Fund (FGTS) to pay for these shares.

The currency volume mobilized through FGTS was significant, reaching US$ 898 million, corresponding to 312,194 employee’s accounts. The total operation represented US$ 4.0 billion. Another operation that took place in the year 2000 was the auction of the Banco do Estado de São Paulo (BANESPA) that the Spanish Bank Santander won, paying US$ 3.6 billion for the stockholding control.

2.3. Actual Number of SOEs

After the privatization and liquidation of a considerable number of companies, the Brazilian Government began to focus its activities in strategic sectors due to social and economic issues. In December 2014, the Federal Government portfolio had itself composed of 145 companies: 49 direct federal government control, 50 indirect control and in 46 minority Federal Government Participation. The Government has also participation in Alcântra Cyclone Space, a bi-national company.

3. Brazilian SOE’s Governance Structure

The governance structure of Brazilian SOEs consists of a tripartite model composed by the Ministry of Finance, through the National Treasury Secretariat and the Federal Revenue Attorney General’s Office (PGFN); the Ministry of Planning, Budgeting and Management – MP, by the Department of Coordination and Governance of the State Owned Enterprises (DEST) and the Federal Budget Secretariat (SOF); as well as each company’s Supervisor (Parental) Ministry.

As defined in Decree nº 93.872 of 1986, it is the National Treasury Secretariat’s responsibility to manage the Federal Government’s shares of stateowned
enterprises, including shares of companies that the Federal Government is a minority shareholder.

As a shareholder, the National Treasury Secretariat has the task to:

I. manage the shares of the Federal Government, and their incomes and rights;

II. undertake the indication of the National Treasury representatives in the supervisory boards (fiscal council) of companies;

III. assist the Federal Revenue Attorney General’s Office in preparing the vote as the representative of Brazil Government in SOEs’ general assembly and meetings in which the National Treasury participates;

IV. evaluate the net profit distribution proposal of direct and indirectly controlled enterprises by the Federal Government;

V. decide about exchange transactions, subscription and purchase and public trade offers, especially about the opportunity and convenience of these operations, as well as the price and form of payment;

VI. analyze about shareholders agreement and right waiver by companies directly or indirectly controlled by the Federal Government and in respect of any acts for which the National Treasury needs to be heard;

VII. analyze the financial statements of companies controlled directly by the Federal Government and propose, when appropriate, measures that influence positively its outcome or remedies that can even result in their privatization.

Besides the Ministry of Finance, the Ministry of Planning also has responsibilities related to stateowned enterprises. DEST has the task of improving the State functions as shareholder of state owned enterprises, being responsible for elaborating the Global Expenditure Program (PDG) and the Budget Investment (OI) in companies that the Federal Government holds, directly or indirectly, the majority of voting shares.

The Department also monitors and provides economic and financial information
about state owned enterprises, and is involved in wage policy, approval and possible changes in pension schemes of these companies, council indication and its number of employees.

Those companies in which the spending budget and the investment budget are integrated into the Federal Fiscal Budget are defined by the Law of Fiscal Responsibility as "Dependent Corporations" and are monitored by the Federal Budget Secretariat (SOF).

Regarding the legal representation of the Federal Government, the Procedure Rules of the Federal Revenue Attorney General’s Office (PGFN) states in article 1 that they have the authority of representing and defending the Federal Government interests in the companies’ general meeting of shareholders, as well as in acts of subscription, purchase, sale or transfer of shares or right to subscribe. The rules also provide the articulation with the National Treasury Secretariat and DEST on matters to be discussed in a shareholder’s meeting in order to issue a judgment that will support the decision of the Finance Minister.

In addition to the agencies described above, there are regulatory bodies such as the Central Bank that oversees and regulates the financial institutions and the Securities and Exchange Commission of Brazil (CVM) that has the function of disciplining, standardizing and supervising the activities of members of the securities and stock markets.

3.1. The Shareholder’s Role

In respect to state-owned enterprises, the shareholder’s role is conducted directly by the government, first by nomination of members to the Board of Directors and Fiscal Council of the SOEs, secondly by voting at the general meeting of shareholders.

In accordance with article 132 of Law nº 6.404 of 1976, the annual general
meeting of shareholders shall be held every year during the first four months after the closing of the fiscal year in order:

I - to receive the accounts rendered by the corporation officers and to examine, discuss and vote on the financial statements;

II - to decide on the uses to which the net profits of the fiscal year should be put and on the distribution of dividends; and

III - to elect the officers and the members of the statutory audit committee, if any.

By the time of a shareholder’s meeting, the National Treasury and DEST receives the material for analysis and opinion. After this stage, the subject is sent to PGFN, that legally represents the Finance Minister in the meeting of shareholders and that will analyze its legal aspects and elaborate the vote of the Finance Minister.

In addition to the matters treated by the annual general meeting, the shareholder also votes on other issues, such as:

1) creating preferred shares or increasing an existing class of preferred shares without maintaining the existing ratio with the remaining class of preferred shares, unless when already set forth in or authorized by the bylaws;

2) altering a preference, a privilege or a condition of redemption or amortization conferred upon one or more classes of preferred shares, or creating a new, more favored, class;

3) reducing the compulsory dividend;

4) merging the corporation with another corporation or consolidating it;

5) participating in a group of corporations;

6) changing the corporate purpose;

7) terminating a state of liquidation of the corporation;

8) creating founders’ shares;

9) dividing the corporation;
10) dissolving the corporation.

In respect to the minority companies in which the Federal Government has no representation on the fiscal council, although the value in these businesses is not representative, the high number of companies often results in different requirements for analysis by the Government. Differently from the direct and indirect controlled SOEs, in these companies the main topics on which the Government as a minority shareholder always point out their position is: subscription bonus exercise and its participation on public tender offers.

3.2. The Federal Budget

In accordance with article 165 of the Federal Constitution, the companies in which the Federal Government has, directly or indirectly, the majority of its assets need to have their investment budget subject to approval of the National Congress. Moreover, these investments need to comply with the provisions and priorities established by the budget guidelines law - LDO.

For budget monitoring, the state owned enterprises are divided into two major groups: a) companies that afford its activities with their own or market resources and b) companies that depend on resources from the fiscal budget to meet part or all of its current expenditure, known as "Dependent Corporations".

The first group of enterprises has its budget process directly supervised by DEST and has its budget for each year registered in the Global Expenditures Program – PDG, that is based on the proposals submitted by SOEs. It must use the macroeconomic parameters developed by the Federal Government in order to enable the statistics to be compatible with the fiscal surplus goals.

The table below has the historic investment amount of the companies that are in the PDG. The Petrobras group has the biggest amount of investments and it has been
increasing each year. The source most used for financing has been its own resources followed by long-term loan resources.

<table>
<thead>
<tr>
<th>GROUPS</th>
<th>2002</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - State Productive Sector</td>
<td>17.620</td>
<td>69.1</td>
<td>815.13</td>
<td>80.259</td>
<td>94.839</td>
</tr>
<tr>
<td>PETROBRÁS Group</td>
<td>3.349</td>
<td>62.530</td>
<td>74.552</td>
<td>71.285</td>
<td>85.984</td>
</tr>
<tr>
<td>ELETROBRÁS Group</td>
<td>3.401</td>
<td>5.50</td>
<td>5.279</td>
<td>6.775</td>
<td>5.924</td>
</tr>
<tr>
<td>Others</td>
<td>869</td>
<td>141</td>
<td>168</td>
<td>2.59</td>
<td>2.931</td>
</tr>
<tr>
<td>II - Financial Institutions</td>
<td>1.249</td>
<td>2.015</td>
<td>2.463</td>
<td>2.209</td>
<td>3.125</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18.869</td>
<td>71.146</td>
<td>83.976</td>
<td>82.468</td>
<td>97.968</td>
</tr>
</tbody>
</table>

Source: DEST

The second group has their expenditure budget, including investments, integrated into the Fiscal and Social Security Budget.

4. The governance structure functioning and its multi-players

Basically, most of the remaining Brazilian’s SOEs are incorporated according to the ordinary company law and, thus, need to comply with regular corporate requirements, being also subject to financial disclosure, transparency, accounting and auditing standards, especially those that are listed in the stock market. Besides having to comply with the same norms and regulations applied to the private sector, the SOEs are also object of external oversight by the Brazilian Federal Court of Accounts.

As SOEs have financial and administrative autonomy, given by the Federal Constitution, there is not a single governmental institution upholding formal rights to guide, control and oversee these companies’ activities. Therefore, the functioning of the governance structure is somewhat complex, since the federal government cannot undo an action taken by a company, but only guide their nominated executives or board of director’s members to cancel or reverse the effects or results of a previous action or measure.

Financial and administrative autonomy of the SOEs are some of the reasons
performance contracts disassociated from remuneratory incentives did not succeed when the National Treasury tried to apply it onto some selected companies. The government had little to offer in exchange of a higher commitment from the executives and board of directors.

4.1. The Issue of Priorities Settings

The governance structure functioning has a multi-player scenario, composed by the SOEs, Supervisory Ministry7, Ministry of Finance - MF and Ministry of Planning, Budgeting and Management - MP.

First, the establishment of SOEs main objectives must be solved through the Brazilian budget process, which is conducted by the MP. In this stage SOEs elaborates its investment budget following the guidance of the Supervisor Ministry, as this is the Ministry responsible to nominee most of the board of director’s members and executives.

Afterwards, this investment budget is presented to the MP that may approve it or make changes to adapt it to the federal government needs, as all SOEs investments must be consolidated into the federal government investment budget, which together with the fiscal and social security budgets will compose the federal government budget for a fiscal year.

Considering that the investments budget must contain all investments predicted by the SOEs to be carried out in a singular fiscal year and that this list of priorities is the result of negotiations involving SOEs, its supervisory ministry and the MP, therefore, it clears up the setting priorities issue. In addition, as the consolidated investment budget have to be submitted to approval by the National Congress, it turns the whole process democratic and transparent.

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7In Brazil, SOE’s Supervisor Ministry depends on the company’s bylaw objectives, which is written up in its bill of creation, therefore, SOEs supervisor is not unified in a single federal department or secretariat.
4.2. Monitoring Overall Progress of the Investments

Once the investments priorities are set in the investments budget, SOEs must report to the MP monthly with its progress. This task is accomplished by updating a MP’s system called SIEST.

This system enable the MP to monitor the SOEs’ investment execution performance, calling the attention of its executives when delays are not justified or the justification is not adequate. Delayed investment projects may be object of monetary contingency by the National Treasury in order to replace these resources to other projects or programs, as usually, tax collection is always shorter than what is budgeted.

If the investments that must be carried out by SOEs figures in the Growth Acceleration Program (PAC), then, another way of monitoring is added to the process. In this case, the Presidential Officer holds meetings called “situational room” with the presence of SOEs’ executives, members of the supervisory ministry, the National Treasury and the MP.

In all of the cases described above, the mechanism to improve SOE’s performance attached to it is fragile. Those ways of monitoring investments can identify most of the delayed projects and its reasons, but are unable to force or stimulate a higher executive engagement in order to achieve better results.

This model sometimes results in executives being called attention by the supervisory ministry or directly by the Brazilian President, although this is not a usual scenario.

4.3. Enhancing SOEs’ Performance with Employee and Management Participation in Profit and Results (PLR)

Apart from the traditional method of giving employees fixed annual increments,
companies also award merit increments and incentives to employees who excel in their jobs. This is usually done with the use of Performance Appraisal Forms. Besides the traditional salary incremental system and the merit system, companies sometimes utilize different methods to reward certain categories of employees’ (*Lsom, Remuneration Systems - rewards employees seek, CreateSpace, 2013*).

One of these methods consists in granting an additional payment to employees as a percentage of their earnings, or a fixed amount, if the company is able to exceed a certain level of profits. This financial participation is intended to give employees access to the enterprise's profits and/or results, thus making it clear to the work force that they have an important role in achieving their company’s goals or, in other words, to make them feel more committed.

One of the main advantages of employee participation in profits and results is that they can develop a deeper identification with the enterprise and, consequently, create a sense of belonging, which will increase their motivation and probably promote the alignment of their interests with those of the shareholders. Besides, it can be a very useful instrument for the company’s human resources department to recruit and to keep staff.

Participation in profits and results goes hand in hand with a great number of advantages for enterprises, employees and the economy as a whole. If handled properly, it will allow not only the increase in the companies' productivity, competitiveness and profitability, but also stimulate employee participation, thus far, enhancing the quality of employment and concur to greater social cohesion.

In Brazil, participation of employees in profits and results of a company is regulated by Law nº 10.101(2000), which conceptualizes it as an instrument of integration between capital and labor and as an incentive to productivity. It shall be negotiated between the company and its employees through:
i. a commission chosen by the parties, with participation of a class representative trade union; and
ii. collective convention or collective bargaining agreement.

Still, according to the law, the implementation of profit sharing requires the establishment of goals by the company, which shall be achieved in a certain period, in order to the employees be eligible for the distribution of profits.

The terms of the collective agreement shall contain clear and objective rules establishing the substantive rights of participation and procedural rules, including mechanisms for measuring relevant information in compliance with the schedule for the distribution, duration period of the program and terms for circumstance of review of the agreement. The following criteria and conditions may be considered among others:

(i) rates of productivity, quality and profitability of the company; and
(ii) goals program, results and deadlines previously agreed.

The PLR performed in accordance with the mentioned law has the legal disclaimer that it does not constitute labor charges, thus, in this case, the principle of habituality does not apply.

SOEs financial and administrative autonomy is not unlimited. Concerning wage negotiations and performance bonuses, they must negotiate with DEST that has the final word for the approval of raises in payroll and offering of bonuses.

That is how PLR comes in as an instrument to increase SOEs performance. Considering that the work force and executives wish to get a larger paycheck, government can introduce goals designed to improve the company’s quality or quantity of services, diminish its inefficiency, raise its profit and turn its numbers and results more transparent to the public.
In the beginning, PLR was used solely as a remuneratory contract that allowed the work force and the management executives to have a financial award if their company were able to achieve certain goals established by the government. Basically, those were financial and operational goals, such as: increase in return of share capital, in revenue etc.

As time passed, the experienced acquired permitted the evolution of this process, enabling the offering of a dynamic and performance oriented set of goals, adherent to the principles of the balanced scored card model. These goals were multifaceted including not only quantitative but qualitative goals that if achieved would help to improve the work force environment and the services delivered to the public.

Nowadays, DEST suggests the establishment of a set of goals distributed as follows:

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<thead>
<tr>
<th>Level</th>
<th>Goal</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Corporate</td>
<td>1. Return (yield) of share capital</td>
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<tr>
<td>(strategical)</td>
<td>2. Market Share (for banks) or Investment Execution (OI)</td>
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<td></td>
<td>3. Operational Efficiency Indicator</td>
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<td></td>
<td>4. Credit Quality (for banks)</td>
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<td></td>
<td>5. Public Policy Implementation</td>
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<td></td>
<td>6. Others (SOE’s choice)</td>
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<tr>
<td>High Administration</td>
<td>7. Evaluation of the Management Team by the Board of Directors</td>
<td></td>
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<tr>
<td>Business Unit</td>
<td>8. Objective Indicators</td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>9. Performance Evaluation of the Management Members by the CEO (President of the company) and of the CEO by the Board of Directors.</td>
<td></td>
</tr>
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</table>

1. **Return (yield) of share capital**: Used to measure SOEs’ profitability. As workers and the management team benefits from an increasing level of profits, setting a higher goal for the return of share capital enables a dual positive result: a bigger paycheck and more dividends distributed.

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8 In Brazil the management executives forms a collegiate and this collegiate has responsibilities established in the by-law of the companies.
to the National Treasury;

2. **Market Share or Investment Execution**: Challenges the banks to compete with the private sector; as for the non-financial SOEs this goal has the capacity of deepening the engagement of the management team to raise the investment execution rate;

3. **Operational Efficiency Indicator**: Used to reduce expenditure inefficiency by setting a smaller ratio between administrative costs and operational costs or revenue for a specific period;

4. **Credit Quality (for banks)**: Has the objective of improving the quality of public banks’ loan portfolio by establishing the achievement of smaller rates of non-performing loans;

5. **Public Policy Implementation**: Aims to make SOEs give priority to the public policy project’s that they are responsible for implementing;

6. **Others (SOE’s choice)**: SOEs are free to propose specific goals that can better reflect their strategic objectives or operations;

7. **Evaluation of the Management Team by the Board of Directors**: Its main objective is to encourage monitoring by the Board and grant the management team feedback and direction;

8. **Objective Indicators for Business Units**: At the business unit level, efforts must be made in order to choose indicators that have a clear objective for the company; and

9. **Performance Evaluation of the Management Members by the CEO (President of the company) and of the CEO by the Board of Directors**: Helps the executives understand the board’s perspective on his or her individual performance, underlining his/her strengths and limitations.

For many Brazilian SOEs this instrument has been in use for a long time and has been improved year by year, since practical results has enabled the staff involved in the negotiations to identify its weakness and strong points.

Practical observation indicates that many companies that have a history of loss in their balance sheets are implementing measures and changing corporate practices, in order to reduce the inefficiency of its expenditure and increase revenue, enabling the obtainment of positive financial results in the future, which will permit them to enroll for PLR.

Through occasional meetings with executives, the Federal Government has learned that the simple fact of knowing that peer SOEs are engaged in PLR forces companies to rethink their managerial planning and adopt more efficient methods for their businesses, aiming the maintenance of its results at the same level of their peer
5. Issues concerning the Use of Participation in Profits and Results

First, although the positive effects that Participation in Profits and Results can bring to a SOE, this model does not have the capability to reach all kinds of public companies. The main reason is that, in order to be eligible to contract this type of pact with the government, it needs to be not only in a state of profitable results, but its profits must reach a certain amount that turns the distribution of a percentage of it stimulating to the work force and management.

Therefore, for SOEs that are not profit making, especially those that do not even generate enough revenue to afford its operational costs, there is still the need of developing a model to include these types of companies.

The second issue concerns the governance structure, since it is tripartite there is always the possibility of some corporative matter be conducted by one of the three ministries, not involving DEST, although, it might affect the performance of PLR. For example, there may be the scenario in which a financial institution requires an increase in its share capital to meet Basel Accord Requirements and, at the same time, proposes a raise in the amount of its profits to be distributed as PLR.

Aiming to improve the coordination of the players involved with corporate matters the Federal Government created in 2007 the Interministerial Commission on Corporate Governance and Management of Federal Government’s Corporate Participations (CGPAR).

The main purpose of this committee is to establish clear policies and strategies for the state owned enterprises, ensuring the adoption of governance practices that result in an increase in efficiency, transparency, and respect the rights of other companies.
6. Conclusion

State Owned Enterprise’s origins in Brazil dates back to the colonial period, but it was only during the post war and military regime that the creation of public companies intensified and assumed an important role in development and economic growth of the country.

Nevertheless, this process was interrupted due to the oil crises of the 70s and the Brazilian economic crises that took place in the following decade, which led to a massive privatization process during the 90s. Besides all that, Brazil still have a great number of SOEs and the need of improving its performance emerges as a result of budget constraint, transparency, governance, and pressure by the taxpayers.

In this scenario, the National Treasury attempted to implement performance contracts disassociated from remuneratory incentives onto some selected companies. The attempt had an unsuccessful outcome due to financial and administrative autonomy of the SOEs, but helped to realize that benefits should be offered in order to get the work force and management engaged.

In this sense, the Participation in Profits and Results has allowed SOEs to have a better performance of its operations and financial results, due to goal setting’s that benefits both workers and the Federal Government as a shareholder.

Practical observation indicates that many companies that have a history of loss in their balance sheets are implementing measures and changing corporate practices, in order to reduce the inefficiency of its expenditure and increase revenue, enabling the obtainment of positive financial results in the future, which will permit them to enroll for PLR.

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Nonetheless, it is factual that this instrument cannot be implemented to all types of SOEs, as to be eligible they need to be not only in a state of profitable results, but its profits must reach a certain amount that turns the distribution of a percentage of it stimulating to the work force and management.

Besides, the governance structure of a tripartite model can generate the case of some corporative matter being conducted by one ministry, that is not responsible for PLR approval, and, thus, do not take the impacts of this matter on the performance of PLR into account.

On the above, it is clear that a fine coordination and straight flow of information and communication between the Ministries involved with corporate matters are imperative to ensure positive performances by SOEs.
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CORPORATE GOVERNANCE AND PERFORMANCE MANAGEMENT SYSTEMS IN STATE OWNED ENTERPRISES: EXPERIENCES FROM BHUTAN

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ABSTRACT

The Druk Holding and Investments (DHI), a government holding company that owns and manages majority of the state owned enterprises and holds government shares in many of the publically listed companies in Bhutan, has been initiating corporate governance and performance management reforms over the last seven years since its establishment in November 2007. Introduction of corporate governance practices more in line with international norms and performance management system in all the state owned companies transferred to DHI called for managing change. This paper, after a general introduction of the concept of change management, shares the experience of the holding company in introducing changes in its companies. The paper highlights some of the initiatives and underscores that success is more certain and the resistance to change is minimal when changes are introduced through a consultative process.

Keywords: Ownership Policy, Corporate Governance Code, Annual Compacts, Performance Management System, Change Management, Chairmen’s Forum, CEO Round Table Meeting, CXO Forum

INTRODUCTION

Change is a concept rather than a solution. But it is not a concept that can be packaged like a commodity and made available in the market for sale. The process of change takes an organization from an ‘as-is state’ to a ‘desired state’ through a set of intermediate states. Some questions pondered upon while introducing a new product in a market are: “What does a customer need?” “What is his ability to pay?” and “Who all are the competitors?” Organisational vision, its current state of business and the future (or desired) state of business, which takes the organization towards its vision, are important factors in determining what changes are required in the organisation. However, the difference between introducing a product and a change lies in the fact that manufacturer who supplies a commodity can provide a certain guarantee on the performance of the newly introduced product. Whereas, a consultant who recommends a particular change in an organization and those who initiate the change are not in a position to guarantee success of change implementation.

Introducing change in any organization is difficult, costly, time consuming, risky and normally lacks support of many employees, mainly due to challenges to adapt to new systems and fear of losing jobs. However, change is important to reshape and reposition organizations to be in line with the company’s vision and meeting market challenges. As Nickols (2008) states managing change is a challenge as it is not without resistance from different corners. Firstly, even to
commence a study to see if changes are required does not sell smoothly from employees. Secondly, reluctance prevails when the change process starts even at the level of involvement and participation for identification of areas and processes of change. Third, when finally the changes are identified the introduction of the changes will face poor acceptance as it calls for extra effort, extra knowledge and skills, extra costs and risks as there is no guarantee for success in achieving the intended result.

Any introduction of change in the companies that are already functioning with certain norms and values become difficult for reasons outlined. However, for commercially oriented State Owned Enterprises (SOEs), it is very important to follow internationally accepted norms of corporate governance practices for achieving corporate performance. Druk Holding and Investments (DHI), as it was set up for managing SOEs, needed to bring about governance changes to improve corporate performances that included improvement in learning and growth of the companies, internal business systems and processes, higher levels of customer satisfaction and ultimately the improvement in financial performances.

ABOUT DHI

DHI was established through a Royal Charter issued by His Majesty on November 11, 2007. The primary purposes of DHI are to hold and manage commercial companies of the Government, to make new investments, to raise funds and to promote private sector development.

Currently, DHI fully owns seven companies and holds shares ranging from 14-80% in ten other companies. These companies operate in the energy, telecommunication, aviation, natural resources, and financial and manufacturing sectors. The following chart provides the pattern in companies’ net worth growth after DHI took over the ownership in 2008.

DHI Subsidiaries Net Worth and Total Assets

Note: Net worth of DHI Subsidiaries grew from Nu. 22,254 million in 2008 to Nu. 67,263 in 2013 registering a compounded annual growth rate of 25%
CHANGES INTRODUCED AT DHI AND ITS COMPANIES

In the last seven years, a series of changes in areas of corporate governance in line with OECD Corporate Governance Principles were introduced for improving corporate performance at the Druk Holding and Investments (DHI) and its portfolio companies. Corporate performance systems and procedures were developed and put in place. Some companies had already practiced some of the modern systems and procedures that ensured proper planning, monitoring and evaluation of corporate performance while others had not introduced such practices.

Upon formation of DHI in November 2007, a series of new management systems for some companies and modification of existing systems in some others were introduced. New systems for which ideas were initially conceptualized at the company level or changes that were finalized after detail discussion with the companies were found to have very little resistance, if any. Companies that had modern management practices in place became sources of encouragement for others for acceptance of changes in their existing systems.

Some of the changes that DHI introduced in areas of corporate governance and performance management systems since its establishment are:

I Corporate Governance

DHI developed an Ownership Policy (OP) and Corporate Governance Code (CG code) and released them for implementation by all DHI companies. These documents provide principles and procedures for Corporate Governance.

Among others they provide guidelines on:

- Interface between the companies, shareholders and the government
- Board composition, appointment, responsibilities, authority, fiduciary duties and liabilities and board evaluation
- CEO selection and appointment, roles and responsibilities and performance evaluation

Although the Companies Act of Bhutan 2000 provides corporate governance guidelines, the Ownership Policy (OP) and CG Code developed by DHI are Company Act Plus in many areas. The OP development process was highly consultative and has undergone several discussions among the DHI Board Members led by the Chairperson himself, the Board Directors and CEOs of the companies. The DHI Board approved the document after about a year of discussions. In the initial phase of the discussions there were areas on which companies and their directors had reservations. However, things became clearer after several rounds of discussions as most comments and suggestions got clarified or incorporated. The acceptance level was unanimous among CEOs and directors of DHI companies when the final draft was tabled for discussions in the form of a workshop.

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1 Corporate governance principles suggested by the Organization for Economic Co-operation and Development (OECD) focuses on transparency and disclosure, rule of law, right of shareholders, equity and fairness etc.
leadership role of the DHI Chairman was crucial in driving the process to consensus. The fact that many of the international best practices from the “OECD Guidelines on Corporate Governance of State Owned Enterprises” were included also helped the companies gain confidence on the draft. It was the process of engaging the relevant stakeholders while developing the policy that mattered in the acceptance of this important policy document. The ownership policy and CG code documents were revised at a later stage using the services of an international expert and the revised version was approved which is currently being practiced.

In order to provide proper structure and increased capability for the implementation of standard corporate governance system aimed at enhancing corporate performance, the following initiatives were undertaken.

• Introduction of Chairmen’s Forum: Chairpersons of the DHI companies meet at least twice a year. They share common issues related to board processes and other corporate governance areas. The corporate performance department of DHI takes advantage of this forum in making presentation and updating chairpersons on important aspects of corporate governance.

• Introduction of CEO Roundtable Meeting: CEOs of DHI companies meet at least four times a year to discuss cross cutting issues and share company wise business experiences. Besides this, the forum provides feedback on any corporate governance related issues.

• Introduction of CXO Forums: CXO are the second level officials in the companies representing different departments/divisions. They meet three to four times a year and discuss issues related to their own functional areas. This forum has enabled better understanding among the professional groups and helped build relationships.

• Institutionalisation of Board Directors Orientation Program on Corporate Governance and Performance Management: DHI conducts a two-day program every year to orient new directors on corporate governance and performance management systems.

• Professional Directors Training Program: The aim of DHI is to have all those sitting in the boards in each DHI company trained as professional directors. Some countries even in our region have made professional directorship training a mandatory requirement to qualify as a board director. In some countries (Sweden, Philippines, Malaysia, Singapore etc.) it has been made mandatory for the directors to attend professional directors’ program.

• Leadership Development Program for senior managers: This program is institutionalised by DHI and organises quite often every year with a view to create a pool of leaders who will be in a position to fill the leadership vacuum
within the DHI companies. At the senior level, probably this system should work well for succession planning for leadership position.

One of the major intent of institutionalising different forums is to create ownership of the companies in areas of common processes, policies and guidelines that are developed and circulated for implementation in all companies. Initially the experience was not very good when new processes and guidelines were introduced. However, resistance to change has really eased up as CEOs, Chairpersons and senior managers have become more involved in different forums for discussion of different issues. Given the past experience, DHI also realised that introducing too many reforms within a short span of time proves to be counterproductive and hence went on with gradual changes.

DHI initiated several guidelines involving different forums and are commonly used in all the DHI owned companies. These are:

(i) Compact formulation guideline  
(ii) Investment guideline  
(iii) Dividend guideline  
(iv) Risk Management guideline  
(v) Board recruitment guideline  
(vi) Board evaluation guideline  
(vii) CEO recruitment guideline  
(viii) CEO performance evaluation guideline  
(ix) Common HR guideline

All these guidelines are developed using lessons from best practices as provided in the OECD and International Financial Corporation (IFC) resources. It is obvious that putting good corporate governance in place promotes transparency, fairness, and equity and ultimately helps better corporate governance. However, performance management tools should also be put in place so that one can keep track of improvement, if any. As it is popularly said that something that is not measured is difficult to be managed, DHI introduced measurement systems for performance management of companies as explained in the rest of the sections.

II Performance Management Systems

a. Annual Compact

DHI introduced a system of signing annual compacts with its Board and the companies\(^2\). The compact contains activities with clearly measurable targets to be accomplished during the year. It is a corporate level performance management system that covers target setting and monitoring & evaluating in areas of (i) financial performance, (ii) customers services, (iii) corporate governance of the corporation and (iv) Policy directed targets. It was introduced since the 2008 financial year in the DHI owned companies and the Bank of

\(^2\) Annual compact that is in line with the principles of performance dashboard proposed by Norton and Kaplan (1996) was developed and put in practice.
Bhutan (a controlled company). Presently, the four areas of performance measurements are being aligned to the Balanced Scorecard System, where performance indicators are set in areas of (a) Learning and Growth, (b) Internal Systems and Processes, (c) Customer Satisfaction and (d) Financial achievements. In order to assess customer satisfaction, in addition to hard data obtained from the companies, an independent annual customer survey is also conducted for each service-oriented company to arrive at the customer perception index. Depending on the nature of each company, the weightages on each performance area are assigned at the time of compact finalization following the principles of the established compact management system.

In the next section of the Compact, a detailed write-up on each of the targets is provided. The write-up contains the background of the target, associated risk, data source, and measurement and evaluation methodology. This section sets the ground rules for implementing the Compacts.

The performance management system has been well received and is very successfully implemented over the last few years. The success probably could be attributed to the fact that the compact targets are negotiated based on the past trends and based on the expectation of changes in the economic variables.

Annual compact is a mutual agreement rather than a one-sided demand placed by the shareholder. There is a series of discussion that takes place initially at the company management level followed by the discussion at the company board level. After the targets are discussed at the company board level, it is again discussed with the DHI secretariat before finally placed for negotiation between DHI board and the Company board. It is only after the finalisation by the two boards, the compact is signed. DHI has a developed process and approved time line for compact management system.

<table>
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<tr>
<th>Annual Compact Management Timeline</th>
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<tr>
<td>November</td>
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<td>August</td>
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<td>October</td>
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</table>
Target Setting Philosophy and performance evaluation Process

- Generally target setting on variables should be on the basis of previous period actual plus reasonable growth rate.
- If the previous year happens to be outlier (not normal year) then an average of immediate past three years or periods are considered giving due consideration to likely market changes.
- Targets for variables that are non-quantifiable in terms of measurable units then targets are set in terms of percentage of completion by certain timeline.
- For each target, details on what it means, how it be measured and assumptions that may deter are clearly spelled out in the compact so as to avoid ambiguity at the time of evaluation.
- Board audit committee or performance evaluation committee of each company will evaluate the compact at the end of the year and present the report to the Board for finalization.
- DHI’s corporate performance department reviews and validate data from original source
- Based on the target achievement, weightages assigned and the agreed process of evaluation each target under each performance area of the compact is evaluated at the year-end by the evaluation committee. The total achievable point from four areas of performance measurement is set at 100%. Based on the compact achievement the PBVA is approved for a company, which gets distributed to each employee in accordance to their basic pay as per the following table.

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<th>Corporate level PBVA Payout guideline based on Corporate level Performance</th>
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DHI has also introduced position specific allowance (PSA) to compensate for scarce skills and use the fund judiciously for retention and enhancement of performance of employees in critical positions. Under this fund a total amount not exceeding 3% of the total basic pay of all employees is provided as a pool fund and the CEO has the full authority to use it for the purpose.

b. Employee Level Performance Assessment

Performance Management Systems (PMS) and Performance based Incentive Systems (PBIS) are practiced in all the companies in order to encourage division and individual
level performance enhancement. This system allows division and individual level target setting (in line with the corporate level compact) and performance monitoring. Achievement is tied to the annual bonus and other incentives like annual increments. This system was well functioning in some of the companies when DHI was formed and the same was quite easily replicated in other DHI companies. Companies that were encouraged to develop and implement PMS had almost no resistance, as there were success stories to be shared by those who were already practicing.

CONCLUSION

To conclude, managing change with respect to introducing several corporate governance practices and performance management systems at the DHI companies were not without resistance at least during the initial stage. Even to commence a study to see if changes were required was not accepted smoothly by employees of the companies and even to the company board members. Reluctance prevailed when the change process started even at the level of involvement and participation for identification of areas and processes for change. All were initially concerned about extra effort, need for extra knowledge and skills, extra costs and risks including personal risks such as probability of being retrenched. There was also no guarantee of success in terms of achieving the intended results by introducing changes. However, many of the changes that were introduced had been finally accepted quite successfully and the results have started showing in terms of better business processes leading to higher customer satisfaction and finally producing improved financial achievement in most companies. To reflect on the processes of change management that led to success, the following lessons are shared.

- Learning from the well functioning companies themselves on the best practices and sharing experiences with other companies in the informal forums such as CEO round tables meeting held every quarter has played an important role in introducing changes successfully.
- CEOs and the senior management team playing roles as champions of change management have been crucial in the successful identification of areas of change.
- Involvement of key members during the process of change identification and implementation proved useful.
- Realization of parent company to deal with change management as facilitator and allowing change areas conceptualized among leaders of companies through cross fertilization of ideas in informal discussion forums resulted in ownership of the idea.
- Leadership role in discussion forums in explaining desired change, involving people in the process and the art of arriving at consensus played a role in generating a “feel good factor” and confidence about the outcome of the proposed change.
- CEOs and CXOs (Department heads) in companies directly influence the uptake of new system by their people as they direct them on a day to day work, so any change that is not perceived important by these people is bound to bounce back as it is forcefully introduced.
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Changing Patterns of State Owned Enterprises Governance Arrangements in East Africa:

by

Prof. GelaseMutahaba ¹

With Research Assistance of Pastory Parestico²

1. Introduction

Since their independence in early 1960s East Africa Governments³ tended to take leading roles in economic management culminating into a significant expansion of the state owned enterprises (SOEs) sector. This has been so until the past two decades when governments began to embrace private sector-led growth. Notwithstanding emphasizes on private sector, SOEs continue to occupy a significant portion in the economic and service sectors of East Africa countries. However, proper governance of SOEs has been a challenge. Based on desk review of various studies this paper shows that generally policy, the legal and regulatory frameworks of SOEs constrain good practices in governance of SOEs. Kenya has, in recent past, taken demonstrable steps towards reforming SOEs while is yet the case in Tanzania and Uganda.

The paper is organized into seven sections including the introduction and conclusion. The next section focuses on the meanings of the term “SOEs” as it is understood in literature and East African settings. Section three gives highlights on theoretical perspectives on governance of SOEs. The next two sections provide a brief historical review of SOEs in Africa and East Africa. Section six examines the changing patterns and the current state of governance of SOEs in the region.

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³The East Africa region borders with the Indian Ocean in the East and is composed of three countries which are Tanzania, Kenya and Uganda
2. SOEs in Conceptual Meanings

In East Africa region SOEs are commonly described as parastatals or public corporations. The United Nations (2008) describes a public corporation as an organization established by the government under public law or private law, as a legal personality which is autonomous or semi-autonomous, produces/Provides goods and services on a full or partial self-financing basis, and in which the government or a public body/agency participates by way of having shares or representation in its decision-making organs. This definition is comprehensive and when unpacked gives a clear understanding about various forms of public corporations. Mwaura, Kiarié’s (2007: 46) disaggregation of public parastatals would serve us a better understanding. He identifies four categories based on their roles:

1. Utilities: These are monopolies, which have little or no competition from the private sector;
2. Regulatory: These are semi-monopolies with specific roles to play. Such roles may involve the development of a sub-sector, regulation of production and prices, and marketing by the private sector;
3. Commercial or industrial: These engage in active competition with the private sector in production of goods and services and;
4. Development/finance: These facilitate industrial development and the participation of citizens in the economy through providing funds to industrial and commercial concerns.

OECD (2005) takes a more reductionist approach in defining “SOEs” by referring them as enterprises where the state has significant control, through full, majority, or significant minority ownership. Based on this definition SOEs are business in nature and their primary purpose is to generate profit for the government although in practice public sector enterprises serve beyond this purpose. Because the term “public corporation” is full of ambiguities, “SOEs” is a more useful term. Other alternative terms would be “public/government enterprises” or “government business enterprises”. This paper adopts the OECD’s definition.
3. Theoretical Perspectives on Governance of SOEs

One of the most discussed topics in the literature on SOEs is performance. Most works on the topic attempt to explain the reasons why SOEs perform or fail to perform and how to make the enterprises efficient and effective in realizing the goals they are created for. Almost all the questions find their answers in the governance structures and processes of SOEs.

Theoretically a good practice in governance of SOEs requires the government to create a facilitating environment that enables SOEs to operate with a considerable degree of autonomy. In this regard the government retains the role of issuing broad policy guidelines while avoiding undue interference in the activities of the enterprises. As Katorobo (1994) has put it “autonomy” of the enterprise is the fundamental principle of governance of SOEs. This principle requires that:

- Boards of directors retains power to set operational policies and guidelines;
- The Government pursue its objectives through the board of directors;
- Managerial appointments remains the prerogative of the board of directors
- The parliamentary role is limited to providing clear legal framework, review of SOE’s audited accounts and reports through parliamentary finance committee.

Similarly OECD (2005) guidelines provide a detailed framework of what would constitute a proper governance of SOEs. According to the OECD document an effective governance of SOEs requires:

- An effective legal and regulatory framework which ensures clear separation of state’s ownership function and other functions. This involves:
  - Protecting SOEs from shouldering government responsibilities that are beyond the enterprise’s legal mandate and obtaining compensation in case such situation arises;
  - Subjecting SOEs to general laws and rules of the game that governs private enterprises
  - Flexibility in adjustments of capital structure of SOE’s

For more elaborate explanation see OECD Guidelines on Corporate Governance of SOEs
The state acting as an informed and active owner and establishing a clear and consistent ownership policy ensuring that the governance of state-owned enterprises is carried out in a transparent and accountable manner, with the necessary degree of professionalism and effectiveness. This requires, among others:

- Defining clearly State ownership rights, separating ownership rights from SOE’s functions by exercising such rights through a coordinating entity;
- Full operational autonomy of SOE’s;
- Independence of the boards and
- Accountability of coordinating/ownership entity to the representative bodies.

Equitable treatment of shareholders (where the entity is not fully owned by the state) and respect of their rights

SOEs observance of high degree of transparency and

The boards that have the necessary authority, competencies and objectivity to carry out their function of strategic guidance and monitoring of management

From the above annotations it can summarised that an effective governance of SOEs have to adhere to general principles of good governance. This entails that SOEs are run in a transparent and accountable manner, where necessary stakeholders (shareholders, oversight organs) have the opportunity to participate in monitoring of the affairs of the enterprise and the SOEs’ legal and regulatory framework guarantees the independence of the enterprise and equitable treatment with other firms. However, the flourishing of these principles requires a favourable macro-economic and political contexts.

4. SOEs in Post-colonial Africa: An historical Brief

The post-colonial African states experienced unprecedented growth in SOEs sector mainly due to historical, economic, social, political and ideological factors. Historically colonial governance and economic systems were centralized and inclined in favour of the foreign companies and individuals. This legacy left most independent indigenous governments without any othersuitable option than the state assuming control of social, political and economic spheres. Among states, this move was considered a logical approach for promoting servings and investments,
substituting weak indigenous private sector, countervailing imperialism and therefore stimulating fast economic growth (Nellis, 1994). In social and political lens SOEs were the tools of safeguarding national security, enhancing political control, national integration and social equity through redistribution of income, wealth and opportunities.

It was therefore not surprising to find that between 1960s-mid 1990s SOEs dominated Africa national economic sectors including mining, manufacturing, infrastructure development, agricultural marketing and banking as well as social service sectors including transport, water and electricity. Despite the confidence governments had on SOEs in achieving national social and development objectives, a review of their performance indicated that SOEs in sub-Saharan Africa were generally not achieving the objectives they were created for (Nellis, 1994). Nellis further shows that in most cases SOEs were yielding low rate or no return on investment. In Kenya, for instance, over US $ 1.4 billion had been invested in all Kenyan SOEs by the early 1980s yielding annual average rate of return of 0.2% (ibid:12). The situation was not dissimilar in Tanzania (Kiragu, 2002) and or even worse in many other sub-Saharan countries. The performance failure of post-colonial SOEs can partly be attributed by the nature of public enterprises’ governance systems that prevailed during that period.

5. Governance of SOEs in East Africa (1960s- Early 1990s)

This period between 1960s- early 1990s was characterised by states’ centralization of political and economic sectors with little private sector in Kenya, very little in Uganda and almost none in Tanzania. The economy was dominated by SOEs whose governance was at peril partly due to nature of politics and economics of the time.

The literature examining the 1960s-early 1990s parastatal sector in Africa reveal a number of shortcomings concerning the governance of SOEs. The shortcomings range from a restraining macro-economic context to serious institutional and managerial constraints including lack of autonomy, undue political interference, patronage, corruption and mismanagement of finances and capacity deficits to mention but a few (Mukandala, 1994; Katorobo, 1994; Nellis, 1994). These shortfalls resulted into unbearable effects on the performance of SOEs. Illustrations from country case studies revealed below shed more lights on this.
Uganda

Katorobo (1994) unveils gross abuse of principles of management of SOEs especially during the Amin’s and second Obote’s regime. He proceeds to show that governance of SOEs in Uganda was characterised by neglect of basic administrative procedures and politicization of appointments. The boards operated without autonomy, nominations to the boards were done without regard of integrity, experience and expertise of the nominees but they mostly aimed at rewarding political allies. The Uganda Development Cooperation (UDC), which was the major SOE, experienced ups and downs but bad governance reached a climax during Amin’s fascist regime when UDC operated without a board of directors for nine years (ibid.)

Tanzania

Tanzania is one of African countries that were following socialist approach to development. Following adoption of The Arusha Declaration in 1967 the SOEs expanded rapidly, partly due to nationalization. The governance of SOEs was however in confusion such that a prominent authority on SOEs in Tanzania concludes that “an organizational chart of parastatal control agencies (looked) like a bold of spaghetti” (Mukandala, 1994:141). This was due to proliferation of SOEs control agencies (extending from the Presidency, Ministries, Holding corporations and Committees, to the ruling party) with uncoordinated, overlapping and conflicting roles.

In terms of autonomy of SOEs neither the boards nor the management could be regarded as autonomous as the government determined decisions on investments, credit (capital structure), human resources and sometimes operational procedures. For instance, the 1964 the National Development Cooperation Act, and the Public Corporations Act of 1969 vested enormous power over the control of the SOEs to the President. Mukandala (1964) reveals that before 1984 the President was responsible for appointing almost all chief operating officers of public enterprises as well as the chairpersons of the boards of some and he could give directions of general and specific character. Similarly the Presidential Standing Committee on Parastatal Organizations (SCOPO) was created specifically for regulating human resource management function. Albeit

5Emphasize to the original
much resistance from other supervisory agencies the committee tended to exercise extended control.

The board of directors drew members from representative of political executive (cabinet ministers and regional commissioners), populist members of parliament, leaders of the ruling party, leaders of party affiliates, principle secretaries/ministry directors and commissioners and the management of the enterprise (ibid.). The appointment of board members aimed at achieving representation of various sections of the government. Unlike in Uganda appointments on bases of patronage rarely featured in Tanzania.

**Kenya**

Post-independence Kenyan experience (Kenyatta regime) represents a relatively better performing case of SOEs compared to Tanzania and Uganda, especially in fostering growth and accomplishing distributional goals (Grosh, 1994). This was partly because the policy environment surrounding SOEs was more favourable compared to the situation in the other of East Africa countries. However, the governance of SOEs sector suffered many shortfalls ranging from lack of autonomy and excessive state intervention to mismanagement and corruption. Moreover, the performance of SOEs in terms of return on investment was generally unsatisfactory, (Mwaura, 2007).

6. **Post Centralization and the Changing Patterns in Governance of SOEs**

Beginning from the last quarter of the 20th century East African countries began to experience a shift in economic and political context that supported centralized governance systems towards liberalized political and economic ones. The adoption of World Bank and IMF inspired structural adjustment programmes (SAPs) in the late 1980s resulted into a significant realignment of macro-economic policy in a neo-liberal framework. Similarly the opening up of political space and adoption of multiparty politics resulted into increased players in governance arena which in turn increased pressure for accountability of government agencies including SOEs.
Responding to the new changes East Africa countries took various interventions to reform the SOEs sector. In most cases commercial enterprises were sold out and SOEs that for whatever reasons remained under the control of the state were restructured to ensure that they perform better. Reforms involved expanding the role of markets by subjecting SOEs to competition, increasing managerial autonomy and reforming the relationship between the state and SOEs. The current governance of SOEs is examined in turn paying attention to the extent SOEs governance systems are in line with the principles outlined previously in this paper.

6.1. The state of governance of SOEs in Tanzania

Strenuous measures to reform the SOEs sector in Tanzania began in 1992 with the establishment of the Presidential Parastatals Sector Reform Commission (PSRC) to oversee the reform process. The parastatal sector reform focused on three major areas: declassifying previous parastatal service organizations and incorporating them into government departments; subjecting parastatal in public utilities to performance contracts; and subjecting commercial parastatals to divestment and privatization (Kiragu, 2002).

The reforming of SOEs took various strategies including lease, liquidation, sale of shares, closure of projects, assert sale, trade sale, receivership, management/employee buy-outs, performance contract, rationalization of roles and functions (restructuring), outright sale, share transfer (to cooperatives, unions). The Controller and Auditor General’s report shows that by the end of December 2008 a total of 336 SOEs had been privatized through any of the forms above and out of those 129 enterprises are owned jointly by the government and the private sector. (United Republic of Tanzania, 2012: 103).

The privatization strategy has significantly reduced the scope of state ownership in the business/production sector but the state is still dominant actor in service and utility sectors. Moreover, state ownership has not been totally eliminated in the service-cum-business sector especially in banking, transportation, housing and insurance. Fully SOEs in this regard include the Tanzania Railway Limited (TRL), Marine Services Company Limited (MSCL) Tanzania Investment Bank Group (TIB), National Housing Corporation (NHC), Air Tanzania Corporation
(ATC) and National Insurance Corporation (NIC). In turn we provide general findings with regard to the state of governance of these enterprises.

**The Policy Framework**

Recent assessments on SOEs sector in Tanzania reveal that Tanzania lacks clear ownership policy of SOEs (Sultan, 2014; Killian and Kahyarara, 2013). Sultan’s analysis indicates that ownership function and regulatory function are mixed and classification of commercial and non-commercial entities is not clear. SOEs and Parastatal ownership is dispersed across line ministries and departments and accountability is ensured through multiple institutions. The overall national macro-policy framework relatively provides an enabling environment for operations of SOEs.

**Legal and institutional framework**

SOEs in Tanzania are governed through a number of legal and institutional frameworks. Key legislations include Public Corporations Act No. 2 of 1992 (as amended: 1993, 2010), an enabling Act of Parliament (for corporations established under the Act of Parliament), the Treasury Registrar Ordinance (Cap 418) and the Treasury Registrar (Powers and Functions) Act, Cap 370 (2002). Other important legislations are geared to foster accountability of the enterprises including Public Finance Act (2001) and the Public Audit Act (2008).

The Public Corporations Act is the principal Act guiding the establishment and operations of SOEs. Every corporation (business enterprises) is supposed to operate according to sounding commercial principles defined by the Act as “the attainment of a real rate of return on capital employed, of at least 5% or such figure as the government may from time to time approve and includes the achievement of such standards of service as may be agreed upon between the government and the public corporation”6. The Act specifies the powers and roles of key actors in governance of the enterprises. These are the President, the Minister responsible for finance, the minister of the parent ministry and the Treasury Registrar. Also the Act establishes Boards of Directors and provides their mandate.

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6Section 7(2) of the amendment Act
Section 7 through 13 of the Act provides procedures for administration of the corporations including operational principles, establishment and the Board of Directors and appointments of board members and the Chief Executive of the corporation. The President has the power to establish a corporation, reorganize both public and statutory corporations including transfer of assets, liabilities or personnel to another corporation and, make orders to the corporation. The President is also responsible for appointing the Chairperson of the Boards of Directors.

The Board is responsible for the corporation’s policy and all the affairs patterned to the commercial results of management of the corporation. Where the corporation is fully owned by the government the minister responsible for the parent ministry may give directions of general and specific character to the board concerning the performance of its functions. Other powers of the board include: establishing an efficient scheme of service, appointing officers other than the chief executive, establishing a system designed to ensure the proper distribution of dividends to shareholders, grant gratuities, benefits and allowances to the officers and employees and exercising supervision over the management team. Appointments to the Board membership have to be done taking into account person’s qualification, experience in relation to the business of a public corporation in question and integrity. The Act empowers the Minister responsible to appoint members of the board other than the board chairperson. The Board appoints the Chief Executive under the consent of the Minister responsible. The size of the board depends on the instruments establishing the corporation.

In its operation, the Board is accountable to the Minister for finances, Minister responsible and the Treasury Registrar by submitting a report of the operation of the corporation that includes annual audited financial statements, auditors’ report on financial statement, dividends payable to the government by the corporation. The Minister responsible is empowered by the law to supervise the business and affairs of all public corporations under his/her jurisdiction by rendering advice to the government relating to the restructuring of the corporation, review financial and operational performance, approve corporate or annual plans and strategy, approve or adjust financial targets and other performance criteria, evaluate the performance and effectiveness of the Chief Executive Officer, Board or Management Committee of the

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7Section 6. This rule does not apply where the government is not a sole owner of the cooperation. Similarly rules governing appointments and operations of the corporation depends on agreed regulations and the Memorandum and Articles of Association in case the corporation is not fully owned by the government.
corporation, approve whether or not the corporation may purchase or acquire shares from another public corporation, cause a special examination to be made of the expenditure of the funds of the corporation, cause or facilitate the conduct of enquiries into the conduct and performance of function by officers in the corporation (section 20(1-2)) . Also it is the role of the minister responsible to submit the report before the National Assembly.

The Office of Treasury Registrar (TR) is another institution in the governance framework of SOEs. Section 20A of the Public Corporations Act No. 16 of 1993 (as amended 2010) provides for the powers of the Treasury Registrar in closely monitoring the supervision and control of the financial affairs of all public and statutory corporations and may cause a special examination to be made of the expenditure of the funds of any public or statutory corporation, require any corporation to make specific adjustments of expenditure, cause or facilitate the conduct of inquiries into conduct and performance of functions by officers, approve the adoption, application or amendment of financial regulations so as to ensure the proper accounting of incomes and expenditure of corporation

Moreover, for accountability purposes, oversight institutions are also directly involved into governance affairs of SOEs. where the government is the sole or majority shareholder the Public Corporations Act and the Public Audit Act No. 11 of 2008 requires the accounts of a corporation to be audited by the Controller and Auditor General (CAG). The Parliament monitors the performance of corporations through its standing committees mainly the Public Accounts Committe (PAC)⁸. This committee is directly charged with the responsibility of scrutinizing in every manner possible the accounts, projects and other ventures of the parastatal corporations, and to make a follow-up of the formation and management of the parastatals(Killian and Kahyarara 2013).

SOEs established under the Companies Act (2002) are supposed to be more autonomous although in practice this has not been the case. Examining the case of TANESCO (established under the companies Act) Killian and Kahyarara (2013) found that it is almost treated as all other public corporations which operate under the Public Corporation Act. The companies Act requires directors to act in good faith and in the best interests of the company. It also provides for

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⁸Formerly Parastatal Organizations Accounts Committee (POAC)
the protection of the minority shareholders and for the investigation of the company’s affairs by a court of law upon the request by its members, the company itself or the minister.

The above observations reveal a positive development in SOEs governance compared to the pre-liberalization period. However, the autonomy of SOEs is still constrained by the legal and regulatory framework. The political executive has much power and can therefore use it to exert undue influence to corporations. Dual-ministry reporting requirement (Ministry responsible and Ministry of Finance (Treasurer) as well multiple control actors is likely to create confusion and sometimes coordination difficulties. To a considerable extent the practice of appointments of the board members to some corporations continues to be influenced by political motives therefore the competences of the boards is still questionable. The study by Killian and Kahyarara (ibid.) observed notable improvements concerning transparency especially in using organization mechanisms as well as internet in sharing of information.

6.2. The state of governance of SOEs in Kenya

Initial reforms of SOEs in Kenya began with the enactment of State Corporations Act in 1986 as a response to the World Bank and IMF-led SAPs. The reforms focused on strengthening supervisory organs of SOEs namely the Inspector General (parastatals) and the State Corporations Advisory Committee (SCAC). Also the reforms increased human resource management autonomy of the enterprises especially on hiring staff and the Chief Executives and determining wages. From 1991 the reform of SOEs began to focus on privatization of commercial enterprises, closure of non-performing entities and restructuring of utility and strategic parastatals (Mwaura,2007).

Like Tanzania, SOEs sector in Kenya is regulated through various legal and institutional frameworks. The legal frameworks include the State Corporations Act, the Companies Act, enabling Act of the Parliament and the Exchequer and Audit Act. Public corporations can be established as a statutory corporation or a company. Statutory parastatal are regulated through enabling legislations and are therefore not registered under the State Corporations Act while public enterprises (in which the government owns majority share) registered as companies (under
The Companies Act) are subjected to it unless exempted by the President. Until in the recent past when the process of realigning the SOEs sector with the changes brought in by the new (2010) Constitution begun, there has been no clear definition of SOEs in Kenya.

In terms of autonomy state corporations (business enterprises) are given necessary powers in their operations except they require government approval on matters related to borrowing, staff size, establishing pension, gratuity and superannuation. Boards also have autonomy over the appointment of the management team. Membership to the Board is clearly specified in the Act and includes the chairperson (appointed by the President), the Chief Executive, The Permanent Secretary of the parent ministry, the Permanent Secretary to the Treasury and not more than 11 members appointed by the minister of whom not more than three shall be public officers. However, like Tanzania the President can issue directions of general or specific character concerning better exercise and performance of functions. The President may also revoke the appointment of the Board member(s).

The Act establishes number of institutions to which the state corporations are accountable. They include the President, the Parent Ministry, Treasurer, Public Investment Committee, Inspector General (Corporations) and SCAC). The Investment Committee can summon the Chief Executive of the enterprise to respond to any question arising from audit or inspection report.

The Inspector-General (Corporations) is positioned as a major supervisory institution of SOEs. His duties include advising government on all matters affecting the effective running of corporations, reporting periodically to the minister on management practices of the corporation and reporting to the Controller and Auditor General regarding appropriation of money. In discharge of his duties the Inspector General is legally empowered to call for and inspect all books, records, returns and documents of a state corporation, enter and inspect the premises of corporation, attend meeting of any state corporation, its Board or any committee of the corporation where he deems necessary and also has power to exercise surcharge over the corporation, any member of the board or the management team. The Act establishes State Corporations Appeal Tribunal as a check on the power of the Inspector General.

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9The President can exempt a state corporation from any or all provisions of State Corporations Act
10SOEs meant commercial enterprises, regulatory bodies, and other institutions of a parastatal character
The SCAC is another institution in the governance framework of SOEs. This committee is composed of the Permanent Secretary in the Office of the President, The PS Treasure, The Director of Personnel Management, the Inspector general (corporations) and eight other members appointed by the President. The committee’s main role is to advise the President affairs of a state corporation including on establishment, reorganization or dissolution of State Corporation. It also advises on matters pertaining to appointment, renewal, transfer and secondment of staff to state corporations. The Committee has power to review and investigate the affairs of any state corporation as well as examining and advising on corporation’s investment decisions. This enables it to exercise power over corporations beyond its advisory role.

According to the report by Presidential Task Force on Parastatal Reforms, serious reforms on the governance of SOEs began in 2003 when the government introduced good corporate governance strategies to enable State corporations deliver their mandate (Republic of Kenya, 2013). The period before had been characterized by gross mismanagement of funds. Among notable strategies was introduction and enforcement of performance contracts as a tool to enhance accountability of SOEs. Effective implementation of performance contract began in 2005 and since then all Boards of state corporations are required to sign performance contracts with the government and the Chief Executive Officers to sign performance contracts with their respective Boards (Njiru, 2008).

Despite dedicated efforts by the government to ensure performance of SOEs, the governance of SOEs continues to suffer serious limitations stemming from legal and regulatory framework. In the recent assessment, the Presidential Task Force on Parastatal Reforms has concluded that rigid control and regulatory regime of SOEs prescribed by the State Corporations Act and other laws tends to defeat the principle of operational autonomy, flexibility, result orientation and accountability (Republic of Kenya, 2013:21). Some years before Ester Njiru has recorded a number of weaknesses on the governance of SOEs in Kenya including poor corporate governance, politicization of appointment, non-sanctioning of fraudulent and mismanagement behaviours

11For instance, citing the Public Investment Committee reports of 2002, reveals that the, out of 130 SOEs examined by the Auditor General –Corporations, only 23 managed a clean bill of health
In 2010 Kenya adopted a new Constitution which resulted into a major reorganization of overall governance system in the country. Consequently there arose a need for further reform of SOEs sector by realigning it with the demands of the new Constitution. As a result in July 2013, President Uhuru Kenyatta appointed a task force, the Presidential Task Force on Parastatal Reforms, to undertake a policy review of parastatal sector with the aim of addressing the sectoral challenges while achieving Government policy (Republic of Kenya, 2013:3-5). The process of implementing the recommendations of the task force started in 2014 with the formulation of the Government Owned Entities Bill. The information available in the website of the Commission for Implementation of the Constitution shows the Bill is undergoing internal review and stakeholder consultations.\(^{12}\)

The proposed legislation seeks to provide a unified and comprehensive framework for the establishment of government owned entities; their classification, management and governance.\(^{13}\) To a large extent sets a legal and regulatory framework of SOEs that is consistent with the principles of a proper governance of SOEs. In adoption and implementation of this new law Kenya will be a leading model on governance of SOEs in the region and mostly elsewhere in Africa.

### 6.3. The state of governance of SOEs in Uganda

Uganda started its move to reforming the SEOs sector in early 1990s with the adoption of government Policy on Public Enterprise Reform and Divestiture in 1991. Two years later The Public Enterprises reform and Divestiture Act, Cap 98, 0f 1993 was enacted to give effect to the policy and its action plan. It is this Act together with the Companies Act that provides a legal and regulatory framework for governance of SOEs. In Uganda the definition of public enterprise mixes both commercial and non-commercial (utility and regulatory) bodies.

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\(^{13}\) See Footnote 9.
The Public Enterprises Reform and Divestiture Act aims at determining institutional arrangements, policies and procedures for:

(i) Ensuring the efficient and successful management, financial accounting and budgetary discipline of public enterprises;
(ii) Ensuring the separation of ownership and management functions;
(iii) Enabling the Government to play its proper role more effectively as owner of public enterprises; and
(iv) Enforcing accountability.

However, these objectives are more focused at enhancing government control than promoting autonomy of the enterprises. This is because the whole regulatory regime subjects the enterprises under strict control of ministries assigned with monitoring and supervisory roles. The Ministry of finance and the parent ministry of the public enterprise are accorded direct responsibility in monitoring performance and supervising public enterprises. They have power to determine policies, operational issues and plans for the enterprises. In exercising that role the two ministries are required to work in consultation.

The Act requires the managers and directors of a public enterprise to be persons who are qualified by training and experience to assist the enterprise in achieving its objectives. This requirement however is too general and thus open to abuse because it does not specify the level of training or experience that is required. Something notable is that boards have authority to hire the chief executive of the enterprise and are required to do so through a competitive recruitment process.

From the analysis of the legal and regulatory framework of SOEs in Uganda, it can be concluded that like its East Africa counterparts the governance of SOEs in Uganda is still short of required standards. This view is consistent with Kyepa’s (2013) analysis of corporate governance of State Owned Extractive Companies in Uganda which reveals the limitations of the regulatory regime in addressing governance challenges that affect SOEs.

\(^{14}\)Section 2 (b) of the Act
7. Conclusion

In conclusion it is fair to say that the governance of SOEs in all the East African countries continue to face considerable challenges. These includes the absence of a well articulated overall ownership policy, poor quality of most boards, inadequate autonomy of the boards, multiple accountability and reporting requirements. Other challenges include not having competent and skilled Chief Executives. Nevertheless, during the last decade, Kenya has taken positive steps by introducing new SOE governance and accountability arrangements, including the adoption of Performance Contract Management system.
References


Performance Target Setting System and MoU Experiences in India

R K Mishra*

Introduction

Performance contracts have been adopted by Governments globally as tools to enhance performance of their state owned enterprises. A study conducted by the World Bank shows that more than thirty two developing countries adopted the system of performance contracts and they have been termed differently by different countries like contrat-plan in France, Memorandum of understanding in India, signaling system in Pakistan and so on1. All these contracts are negotiated and written agreements between governments and their enterprises with mutually agreed targets which the enterprises achieve within a given time frame. The system also defines the mechanisms for evaluating the performance within the specified period within a pre-determined institutional framework.

Performance contracts have been broadly classified under two systems- the French based systems and the Signaling system. The French system was followed by France, Africa (Senegal, Benin & Morocco) and Latin America. Under this system weights were not allocated to the targets which added a high degree of subjectivity to the evaluation process, while in the signaling system signals were sent to the managers in order to monitor the results of the contacts. This system originated in Pakistan and Korea and was adopted by many Asian countries (Pakistan, South Korea & Bangladesh), Africa (Ghana, Nigeria & Gambia) & Latin America. Initially the MOU system adopted in India was based on the line of French System; during its evolution many features from the Signaling system were adopted. Currently, the MoU signed between the public enterprises and the ministries consists of mission of the enterprise, its objectives, performance criteria, weightages assigned to each criteria and the period of contract and the mode of evaluation. The MoU system is based on the balanced score card approach, wherein all key factors in financial, financial are adequately represented.

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The role and importance of these enterprises in a national economic growth changed considerably from being mere tools of fulfilling social objectives to being growth engines and contributing to economic prosperity of a nation. With the onset of the global financial crisis in 2008, for some countries, especially among the resource-rich emerging economies, the state-owned enterprises represented their main source of international capital as they accounted for one fifth of international mergers and acquisitions\(^2\). The state-owned enterprises have emerged as an important source of international investment globally.

While there are some inherent problems that go along with these enterprises— they are usually very large in size with multiple control and accountability points which make them very difficult to govern. Therefore the system of performance contracts was introduced at a time when many governments were facing troubles to manage performance of their enterprises. In this paper we will focus on target setting process which is a key component of performance contracting system.

**Target Setting Process**

As a part of the process of performance contracts targets are set for both financial and non-financial parameters which are based on what the enterprise can reasonably achieve, given the expected policy environment, market situation, capital expenditures, and the level of delegation of financial powers to the enterprise. For each indicator a range of values is set so that performance can be graded, e.g. as (excellent, good, fair, poor or bad). There are some established methods for setting enterprise targets\(^3\).

1. Inter-firm comparison: comparison of different firms in terms of their performance and profitability. Such a type of comparison is possible only when uniform costing is applied by all the firms which forms a basis for comparison. The accumulated data regarding costs, prices, profits etc. of different concerns are put in the form of consolidated statements and are made available to all the member-units so that
they can make a comparative assessment of their achievements and weaknesses with those of others. This type of comparison helps in improvement in efficiency wherein each member-unit can try to improve its efficiency when on comparison with other member-firms it comes to know about its weak points. However one of the key requirements of this method is the need for complete information.

2. International comparisons of firms are not easy, because differences in market conditions, regulatory environment vary for each country. It is also not possible to comparison firms with other firms for monopoly enterprise, except where they are broken up regionally and the regional bodies can be compared. A combination of methods may be used for assessing public enterprises in each period.

   a. Trend analysis could be a basis for assessing performance improvement. If performance contracting is conceived as an instrument for progressive improvement of performance, then past performance adjusted for exogenous change is a sufficient standard. The Korean performance contracts make extensive use of regression analyses of past data. Seven-year time series analysis is made for most of the quantitative indicators. Form these it is possible to project the expected targets for the following years, and also the standard deviation. This method is said to simplify target setting and reduce controversy. However it rests on the assumption that the future will be a simple projection of the past.

   b. Yardstick competition is applied by a target-setter knowing the unit costs in similar enterprises. In Bangladesh, for example, a detailed system of comparing cotton textile mills is used by the Bangladesh Textile Mills Corporation. The target is set by reference to the average enterprise, or the most efficient enterprise, taking the best performance on each activity. The United Kingdom Audit Commission has a tradition of “inter-firm” comparisons of local authority performance, which indicates that such
comparisons may be valid and useful, despite disputes on their interpretation.

c. Work study and management audit is also used to set up targets, which represent reasonably efficient performance, though this method is slow and costly. The United Kingdom Monopolies and Mergers Commission carries out in-depth review of efficiency as required by the Department of Trade and Industry. The MMC examines the trend of performance indicators, such as unit costs and quality, and management processes for want of valid international or intra-national comparisons of performance indicators, it tends to conform to widely accepted standards of management practices.

Issues and Challenges in Target Setting
Target setting process is one of the key activities of performance contracting system. A successful enterprise which is on the path of upward movement and aspires to be a leader in industry would adopt mechanisms for identifying realistic targets. Research has found out that state owned enterprises world over have been grappling with this issue of target setting. Broadly the issues faced by enterprises can be categorized into the following:

Determining Performance Levels
There is a constant pressure on the management of public enterprises to raise the bar of performance each year. There is a general feeling among the enterprise managers that if they achieve a target in a year, their performance bar is raised in the next year. Therefore there is a need to set realistic targets which can be achieved under given circumstances which have physical limits, such as capacity utilization, profitability etc. Due to this reason there is a tendency for the enterprises to set targets in such a way that it is very much within the reach of the enterprise. While setting targets the enterprises make sure that their targets are neither too low which are easily achievable without effort nor too high which makes them unachievable.
**Information Asymmetry**

Ideally performance contracts must reduce the information advantage that enterprises have over the government and motivate enterprise officials through rewards or penalties (such as to pay bonuses or impose penalties) to achieve the targets\(^5\). In reality the asymmetry of information between an enterprise and ministry allows the enterprise to get the targets it wants to set for itself. This asymmetry of information is taken advantage by the enterprise managers who use this information advantage to negotiate targets that were either hard for outsiders to evaluate or easy for them to achieve. In any case performance is hard to evaluate, for example, when there are many targets or when targets change frequently or when the negotiations dragged on so long that targets were set equal to ex post performance, targets can be set soft.

The information advantage of the enterprise coupled with governments’ failure to give the bureaucrats responsible for negotiating the contracts and evaluating results the power, resources, and status they needed to face enterprise managers on a level playing field leads to poor target setting. Enterprises are therefore able to negotiate targets that they could achieve without making additional efforts to improve productivity. Here is a good example the Government of Pakistan\(^6\) provides guidelines for setting targets as mentioned below:

1) Efficient target setting to carried out in a participatory process. Without this approach, targets tend to take the form of formal directives, which are often overtly accepted and covertly resisted.

2) Targets to be clear-cut.

3) Targets to be neither too low nor high. This would give wrong signals to the managers.

4) Each enterprise must be looked at in its own unique environment which must be taken into account.

5) The targets must ensure that generation of surplus is significantly more than distribution by way of bonus.
6) Targets must take into account the social tasks, which are taken up by the enterprises.

Ownership Model
The ownership model in the public sector, where politicians have many points of view and bureaucrats have many different agendas creates further problems in setting performance levels. Unlike the private companies, the public sector enterprises are susceptible to be used by political bosses for their personal benefits which may stand in contradiction to their progress to reach the declared performance targets.

Strengthening Target Setting Process
The success of the MoU exercise largely depends on the basic strength of target setting process. Such strength would largely depend on the initiatives outlined as under:

- **Generating Continuous Research Evidence**: Research evidence must be generated continuously for companies to set realistic as well as competitive targets as per their contracts. Empirical studies are carried out by countries to analyze the effect of such contracts on profitability and productivity and examine statistically the correlation between performance contracts and productivity so that evidence can be generated whether performance contracts actually improve efficiency. In a study conducted by the World Bank found no pattern of improvement associated with the performance contracts in productivity or profitability trends. The study found no robust, positive association between performance contracts and productivity. An important question needs to be raised here-Is it possible that performance contracts failed to improve productivity. A dedicated research group or an institution must continuously be involved in data collection from SOEs, conduct research and development for the benefit of SOEs, individually and collectively and disseminate results of study to all.
• **Strengthening Governance Mechanisms:** Improving Governance mechanisms go a long way in streamlining enterprise performance. Restructuring the Board, which is driving force behind the success of an enterprise, is very critical. Research has shown that professionalizing the Board improves the overall performance of enterprises especially in terms of achievement against the performance contracts. For example Chile took up a successful experience in reforming its state enterprises and improving its efficiency as indicated below:
  
  o Chile increased competition by ending state monopolies and barriers to entry, reducing import tariffs to 10 percent across the board, breaking up monopolies in sectors as electricity, and pushing state enterprises to contract out competitive activities under strict rules of competitive bidding.
  o It placed state enterprises under private commercial law, and members of the boards of directors became liable for their decisions.
  o Private parties were named to boards, and boards were kept small (five people) to reduce the political value of keeping companies public.
  o The government eliminated all subsidies, transfers, and government guarantees for debts of state enterprises and instructed banks to lend to them under the same criteria as for private enterprises.
  o State enterprises were required to pay a 10 percent return on assets as a dividend, and money losers were required to sell assets to pay their dividend.

• **Stakeholder Participation:** Stakeholder Participation is the key for efficient target setting. Targets should be negotiated between the government and management and should not be imposed. The benefits of participation are not confined to the government management interface. It is apparent that improvement of performance can arise only by changes in behavior at the operating level. Therefore, there should be an internal dialogue through all levels of the enterprise extending the corporate goal and incentives to divisions and sections of the enterprise.
**Period of Contract**

Period of Contract is equally critical for efficiency in target setting process. Planning encompasses a future period of time necessary to fulfill through a series of actions and commitments made and the availability of the capital.

In Gambia, for instance, performance contracts have been for four years. They spell out the goals of the enterprise, and autonomy for the management. The targets are separately negotiated each year and signed at the technical level. These are the basis on which annual performance is evaluated and rewarded or penalized. In India targets are made annually coinciding with the Annual Plans of the enterprises. While some production companies accepted the time span of one year the companies which are in the construction and exploration business express their views differently. They prefer the contracts to be for a longer period at least for 24-36 months, which is minimum time period for completion of a project.

**Strengthening Feedback Loop**

Performance contracting is a cyclical process in which results are fed back to the government and public enterprise. This is done in order to make correction for short-term variances form contract and this process is called monitoring. This could be represented by the feedback loop of control.

**Using Comprehensive Evaluation Tools**

*Economic Value Added*

EVA is a tool designed to give managers of SOEs better information to make decisions that create the greatest shareholder wealth. While EVA implementation has been mainly studied in Western companies from the perspective of improving economic efficiency, we look at the great possibility of introducing EVA as a part of Performance Management System. Studies reveal that some changes in managerial behaviour have also been seen with EVA implementation.9
An EVA based performance assessment policy was introduced by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC), for 129 Chinese SOEs under direct administration of central governments since 2010 as a part of the mission set out for SOEs under the 11th five-year plan (2006-2010) to “grow bigger and stronger”. The study shows that by the end of 2010, the net profit achieved by the 122 Central SOEs reached 848.89 billion yuan, sizeable given that total profit by all China’s SOEs was 21.37 billion yuan in 1998. The Central SOEs listed in the Fortune 500 have increased from 6 in 2003 to 38 in 2011.

However, there is a strong criticisms regarding adoption of this system. Firstly, the critics argued that the SOEs outperformed at the expense of the private sector. The state enterprises advanced while the private sector rolled back. Some researchers and analysts even warn that the 1980s and 1990s reforms that unleashed China’s private sector and dismantled the state-owned sector are being partly undone (Wines, 2010). Secondly, although it is hard to argue with success, the means by which China’s SOEs have achieved success have been criticised. It is argued that overall SOEs produce a relatively small share of gross output and value added, but consume a large proportion of capital, raw materials and intermediate inputs relative to the private sector. The advantages that SOEs obtained from preferential access to bank finance and business opportunities, and even protection against competition, have created a profound inequality with private competitors (the World Bank, 2012).

**Balanced Score Card Approach**

The use of BSC Methodology for SOEs, is said to improve enterprise profitability, provide required guidance to enterprise managers using modern management concepts, methods, and tools, stimulate identification, analysis, and resolution of problems interfering with improvement of enterprise performance and most importantly build consensus and improves communication among management, employees, and stakeholders. The BSC tool is being used not only in developed economies, but in transitional economies as well. Having
been successfully used to drive alignment and strategic results in the private sector, governments are increasingly using the BSC in government organizations and SOEs as part of an integrated strategy management process. Various types of SOEs use BSC tools to describe, measure, align, and manage their strategies.

Jinshan Telecom is a branch unit of China Telecom (an SOE) which has BSC as a tool for performance enhancement\textsuperscript{10}. Jinshan Telecom has four sections, 17 substations, and more than 20 retail service offices. In 2001, Jinshan’s performance measurement and appraisal system did not reflect the company’s strategic priorities. Jinshan Telecom’s Key Performance Indicators (KPIs)—another term used to describe the “measures” were not linked to the company’s strategy. Each employee at Jinshan had 30–50 KPIs for which the employee was responsible. The numerous KPIs deterred employees from focusing on what was most strategically important. Moreover, it was difficult for the company to analyze, consolidate, or discuss the KPIs in management’s efforts to execute their strategy more effectively. Further investigations found that Jinshan Telecom’s crossdepartmental teamwork and cooperation was weak. The existing performance appraisal system lacked focus and did not align the organization horizontally across sections. The company adopted BSC Methodology and the BSC for Jinshan Telecom was cascaded down to all departments and individuals. As a result, company employees had clearer objectives, measures, and performance “targets”. Also, a variable pay incentive system was established while deploying the BSC Methodology. This led to an increase in employee motivation for improving business results. The company achieved significant improvements in vertical and horizontal alignment, as well as significant improvements in cross-departmental teamwork and cooperation as a result of its BSC implementation.

Measurable improvements in quantitative performance, as reported by Mr. Xia Pei Yun, General Manager of Jinshan Telecom, included the following\textsuperscript{11}:
• Jinshan Telecom’s 2003 growth rate was more than three times the Group Company’s growth rate. Jinshan grew by 14%, compared to the Group Company’s 4% growth rate (Jinshan was the first branch unit in the group company to deploy the BSC).

• Jinshan’s superior growth rate was enabled by reaching or exceeding strategic performance targets in the Customer, Process, and Learning areas.

• Jinshan’s results on five performance measures met or exceeded targets: Key Account Satisfaction, Commercial Account Satisfaction, Repair Cycle Time, Connection to Internet Success, and Implementation of Planned Trainings.

**Total Factor Productivity**

Total Factor Productivity (TFP) is a composite measure of technological change and changes in the efficiency with which known technology is applied to production. The translog index of technology changes is based on a translog production function, characterization by constant returns to scale. In this method, two inputs Labour (L) and Capital (K) only, the TFPG can be estimated adequately. The studies show that growth in financial profitability is not necessarily always accompanied by an increase in TFP. Of the two, TFP is considered to be a superior method of evaluating performance. However, it is yet to gain acceptability in the SOEs as it does not support the managers’ to stake high performance claim, benefit from financial incentives and projecting brighter image. The complexity of the method and lack of capacity on the part of the regulators and managers to implement it has hindered TFP its popularity.

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PERFORMANCE CONTRACTING, MEASUREMENT AND IMPROVEMENT SYSTEMS IN SELECTED AFRICAN COUNTRIES.

Since the early 1960’s, many developing countries have been subjected to experimentation with all manner of reforms driven largely by the Brettonwoods institutions, key among them, the structural adjustment programs (SAPS) of the 1980s. For the public sector, the prescription of the SAPS focused on restructuring, divesture and privatization, and retrenchment and right-sizing of staff establishments in the public sector. All these reforms did not yield the promised results of improving the quality of the lives of citizens, eliminating of poverty, disease, hunger and ignorance and achieving social justice, human dignity and economic welfare for all.

The debacle of these externally driven reform initiatives left many of the affected countries with weakened economies and high vulnerability to external and internal social, economic and political pressures. For many of the countries, SAPS resulted in disposal of public investments at considerations that could not measure up to the initial public capital outlays. In Kenya for example, the bulk of the blue chip private and quoted companies in the manufacturing, vehicle assembly, hospitality and service industries had significant government interest that fell under the SAPS hammer, at relatively throw-away prices. The countries were left nursing challenges of revamping the aftermath of the reform fiasco that left in its trail, weakened strategic advantages, despite huge natural resource endowments, and poorly equipped public sector employees. The inevitable reaction by these countries was to seek ways to improve the performance of public services through implementation of performance management, measurement and improvement systems; systems that would reorientate public sector management by introducing new systems and adopting best international practices to help to reengineer operations to keep ahead of growing public demand for better services, reposition the countries on the growth trajectory and create national competitive advantage; systems that focus on appropriate leadership and development of “people” capacities.

In 2010, Mutahaba conducted a survey to establish the extent to which African countries have developed Performance Contracting, Measurement and Improvement Systems (PMMIS) tools and instruments to improve performance in public service institutions. The survey revealed that broadly, most countries claim to have taken steps to adopt variants of PMMIS. Of the countries for which information/data was available (43 countries out of 54), 30 of them had adopted some
variant of PMMIS tools with a view to improving the performance of their public services. The report was based on information that was assembled from a number of sources, including a survey of the available literature, reports of meetings of commonwealth countries on public service reforms, reports of the Conference of African Ministers of Public Service (CAMPS) workshops on the subject that were held in West, East, Southern and Northern Africa in 2010, and field visits to some of the countries. Majority of the purported PMMISs were no more than simple budget statements, rudimentary employee appraisal systems or at worst, statements of intention to measure performance.

In majority of countries in both the developed and developing world, Performance Contracting, Measurement and Improvement Systems are implemented in the context of broader public sector reforms. With the exception of a few cases, reform in the management of the public sector in the majority of African, Asian and Latin American countries over the past three decades has focused on improvement in operational and managerial performance with priority given to public enterprises. The priority given to public enterprises in these countries is in stark contrast to the situation in a number of developed countries that have had either a mixed focus, or may have recognized early that preliminary focus should be on ministries, because the latter largely define and inform the policies implemented by public enterprises. In the majority of the countries studied for this article, performance management systems are grounded in law and, with the exception of the USA, where the legislature plays a dominant role, the formulation of policy on performance management is initiated by the core executive. ‘Core executive’ in this context has reference to the central bodies of the state such as the presidency and associated bodies or prime ministers/cabinet offices, finance and other central ministries. On the issue of the setting of performance targets, with the exception of the United Kingdom, these are set by the respective agencies and evaluation of achievement thereof carried out with disparate topographies of independence. These are shown in the table below.

Variations in Performance Policies and Practices Explainable Largely by Institutional Contexts

<table>
<thead>
<tr>
<th>Issue</th>
<th>USA*3</th>
<th>Japan*3</th>
<th>UK*3</th>
<th>India</th>
<th>Kenya</th>
<th>Lesotho</th>
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<tr>
<td>Initiation of PMS Policy</td>
<td>Legislature</td>
<td>Core executive</td>
<td>Core executive</td>
<td>Core executive</td>
<td>Core executive</td>
<td>Core executive</td>
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<tr>
<td>Year PMS Introduced</td>
<td>1993/97*3</td>
<td>2001/02*3</td>
<td>1998</td>
<td>1984/87*3;2009 (RFD)</td>
<td>2003/04*3;2009</td>
<td>2005/14*3</td>
</tr>
<tr>
<td>Scope of Coverage</td>
<td>Departments and independent agencies</td>
<td>Ministries &amp; agencies</td>
<td>Ministries</td>
<td>Ministries and public enterprises</td>
<td>Ministries, public enterprises, local authorities, municipalities, public universities</td>
<td>Ministries</td>
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Many of the countries studied are practicing or practiced variations of the French or Signaling systems of performance contracting. Such countries as Pakistan, Bolivia, Senegal, Benin, Cote d’Voire, Gambia and Ghana that introduced variants of the performance contract more than two decades ago are no longer actively pursuing the conventional PMMIS - their places having been taken over by such other countries as Kenya, South Africa, Rwanda, Lesotho, Namibia, etc. - while the USA, UK, Japan, China, France, India and South Korea have been steadfast.

This article focuses on four African countries that are actively pursuing one form or another of PMMIS. These are Kenya, Botswana, Rwanda and Cameroon. With the exception of the Cameroon, the PMMIS in the listed examples are underpinned by a few key common denominators. These include variants of performance management accountability framework, performance measurement/evaluation and reporting methodologies and systems for appraising individual employees.

Performance measurement and evaluation are critical components of PMMIS and are employed primarily in attempts to improve organizational performance and service delivery. According to Nathan, (2009), the value of performance management practices will continue to be questionable unless they are rooted in a performance measurement system that continuously feeds decision making, as well as produces evidence and supports communication of value added. Brown, et al, 2001, states further that performance measurement is not only a way of determining what has already happened, which is like ‘driving by looking in the rear-view mirror’, but is also a way of getting people to act in ways that will bring about desired future outcomes”. Deliberate measurement of performance should therefore be the core attribute of public sector performance management systems. The purpose then of designing and implementing a performance measurement system is to ensure performance happens by design and not by chance.

A PMMIS should support both operations and the overall corporate strategy. At the operational level, performance measures should link processes to strategic objectives, and motivate both
workers and managers. They should balance financial measures with non-financial measures such as measurements of waste and of customer satisfaction. Over the long run, good performance measures will help support organizational transformation and organizational learning, and sustain competitiveness. When these measures are integrated into a framework, the purpose is to track selected performance measures at regular time intervals so as to assess performance and enhance programmatic or organization decision making, performance, and accountability, (Poister, 2003). All these support research findings that the utility of performance management practices is predicated on sound performance measurement systems and that the latter should be seen as a prerequisite for effective management. Moreover, there is a distinct linkage between organizational performance and excellence in public service delivery. One cannot for example, expect excellence in transport services if the transport infrastructure, roads and rail are not well developed, organized and maintained, just as much as health services cannot approach excellence if drugs procurement and administration, personnel recruitment and medical task assignment are not done right. Neither can security services be excellent if the security forces are not well trained and disciplined, all of which fall in the realm of operational efficiency.

In exploring deliverables as a concept, Langdon, (2000) described outputs as synonymous with deliverables of performance. Furthermore, he contended that an output is the reason for the existence of a business or organization. He further stated that all output has a consequence, the result of the output being that which is delivered. He explained that to produce output and consequence there is need for reason and resources, called inputs such as materials, ideas, knowledge and equipment. Both reason (and triggers) and resources are inputs because they are used to produce the output and achieve the consequence. First, a reason is needed for doing the performance, which comes in the form of a request of some kind. For example, the business unit identifies a customer need; an order initiates a core process to deliver what the customer wants or a work group receives its assignment to meet this need. A manager asks individuals to do their part to produce the output. These are all (internal or external) client requests or triggers to start the performance. A service delivered is an outcome resulting from actions directed at making available tangible products for disposal purposes.

**The Case and Kenya**

The government of Kenya introduced the Performance Contract, as the public sector performance management accountability framework in 2004. The contracts were introduced in a
As a key requirement under the performance contracting system, all service-oriented public agencies are required to develop and implement citizens’ service delivery charters, and to carry out independent annual customer satisfaction surveys. The introduction of Performance Contracts in the management of the public service was conceived in a 5-year national strategic plan, the Economic Recovery Strategy for Wealth and Employment Creation (2003 – 2007), commonly referred to as the ERS, as part of wider public sector reforms. The ERS recommended sweeping reforms in the management of the public service observing, at the outset, that the public sector “…is excessively large thereby absorbing inordinately large amounts of national resources. The sector is characterised by wastefulness and inefficiency”. The ERS recognised further that, “…the problems attributed to the many state corporations arise from the lack of clear performance contracts that facilitate the monitoring of the performance of the CEOs appointed to manage the corporations.” The Kenyan version of the Performance Contract incorporates an elaborate measurement methodology that denominates achievement into weighted and composite scores. This enables comparability between institutions and ranking. The PC focuses on 6 management perspectives which are assigned varying weights. These are Finance & Stewardship, Service Delivery, Non-Financial, Operations, Dynamic/Qualitative and Corruption Eradication. The system was buttressed by

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<th>PERFORMANCE CONTRACT MATRIX</th>
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<td><strong>ERIT</strong></td>
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<td>Financial</td>
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<td>Service Delivery</td>
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<td>Operations</td>
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<td>Dynamic Qualitative</td>
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strong rapid results initiatives whereby public institutions were required to select key visible indicator targets and implement them in 100 days.

The impact of the performance contracts over the years was remarkable. The performance of the economy improved to unprecedented levels while the aggregate performance of the public service assumed a concomitant pattern as the two figures below indicate:

Economic Growth (percent 2002 – 2010)
The Case of the Kingdom of Lesotho

The government of Lesotho has a long history in the struggle to introduce and implement performance management systems, dating back to the early 1970’s. These efforts did not bear fruit and were to be followed in succession by other abortive initiatives in 1978 and 1979, 1999 to 2003, and 2000/2001 to 2003 when Vision 2020, the Poverty Reduction Strategy and the Millennium Development Goals were promulgated, and attempts made at thereto aligning ministerial goals. Several unsuccessful attempts to assess the performance of different cadres of public employees have also been made in the past, culminating in the introduction of performance contracts for officers in Grade I and above in 2004/05, but which also did not effectively take off. The Cabinet, on 28th January 2014 directed that “...all Principal Secretaries must sign their Annual Work Plans with their respective Ministers”. This is a definite reference to follow – up Performance Agreements subsequent to the symbolic signing of agreements that was executed by honourable cabinet ministers in late 2013, undertaking to ensure achievement of core strategic objectives.

The country has adopted the system introduced in Kenya, but with considerable improvements in various strategy execution aspects, and simplification of the measurement/evaluation
methodology. In July 2014, the first batch of performance contracts was signed between Principal Secretaries and the Prime Minister.

**The Case of Rwanda**

The performance management and measurement system adopted by Rwanda is referred to as the **Imihigo**. These are essentially performance contracts signed between the immediate supervisor and the employee. District Mayors and Cabinet Ministers sign the performance contracts with the President of the Republic. With a culturally based background, the Imihigo/performance approach was initiated by Rwanda top leaders in 2006 out of concern about the rate and quality of execution of government programs and subsequent public service delivery.

Imihigo was a cultural practice in the ancient tradition of Rwanda where an individual would set himself/herself targets to be achieved within a specific period of time and do so by following some principles and having determination to overcome the possible challenges. The Imihigo/performance contract today ensures the commitment to delivery of institutional yearly set plans by a regular tracking of implementation and accountable feedback report at the period.

Imihigo/performance contract, which is also a rich blend of the Balanced Scorecard and the traditional performance contract, have revolutionized the way Rwanda Government Institutions used to do things. From routine work mentality, Government Institutions have now adopted a target-based planning and a results-oriented approach. The Imihigo has in addition, instilled a strong spirit of emulation and competition as a result of performance assessment, marks allocation and public recognition of best performers, resulting in enhancement of program/project implementation rate.

The country has also created a “One Stop Center” where Government institutions providing different services come together to offer the services under one roof. All these have contributed to improving Rwanda’s investment climate.

**The Case of Botswana**

Botswana is among the handful of African success stories in performance management. The performance management system pursued by Botswana and which has strong alignment to the balanced scorecard, is the Integrated Results Based Management (IRBM) framework. This is essentially outcome focused planning with emphases on outcomes to help achieve the National Development Planning goals under the seven pillars in the countries Vision 2016. The system has the following characteristics:

a. It provides for performance management and measurement focused on the individual, sections, departments and the organization, and is linked to substantive program performance;

b. Resources are allocated on the basis of outcomes;

c. There is regular performance reporting and monitoring;

d. Leveraging on IT to facilitate and improve decision making;
e. Availability of critical performance information which is used by decision makers to improve program implementation.

The system is organized under four thematic areas which revolve around the key outcomes of quality of life, safety and security, and equal opportunities and access. These thematic areas are:

1. Economic business and environment;
2. Governance, safety and security;
3. Social uplifting; and
4. Sustainable environment.

*The Case of Cameroon*

The system of managing performance in Cameroon is contained in the Growth and Employment Strategy Paper (GESP) of 2008. The GESP, which also defines the country’s Vision 2035, is the reference framework of government policy and actions as well as a vector of the search for growth and resource redistribution. It constitutes the first phase of implementation of the long-term development vision; is an overall and integrated strategy paper, a springboard of government action that will be taken until 2020.

The GESP was preceded by concerted initiatives aimed at streamlining government performance, which began with the so called “Self-reliance” and “Planned Liberalization” at independence; he Poverty Reduction Strategy of 2003; and the National Program on Governance, of 2006 to 2010. Self-reliance was about tailoring Cameroon’s needs and development in accordance with available resources, while planned liberalism was the blending of planned and free market economic ideologies. According to a report compiled in 2012, for the first time in the history of Cameroon, members of government appointed on 9 December 2011 would henceforth have to be assessed on a biannual basis on the level of their implementation of the roadmaps of their ministries.

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I. Introduction

The State Owned Enterprises (SOE) in every country have very important role for national economy. Especially during the economic take off period, SOE can invest on infrastructure including SOC where the private sector has difficulty in investing. The role of SOE in developing countries is enormous. But as the private economy grows, SOE can compete with private sector and the bureaucratic inefficiency can be the focal problem. Facing these situations, 3 kinds of answers can be implemented; restructuring governance, privatization and evaluation. This article was undertaken to develop the evaluation system on SOE in Vietnam.

In Korea, the evaluation system on management of Public Institution was implemented as a means of supervising the Public Institutions in 1984. This kind of management evaluation system fosters an institutional environment which enables executives in Public Institutions to develop their creativity and entrepreneurship. One of the crucial internal factors that determine the performance of Public Institutions is to establish a managerial system and environment that effectively promote creativity and entrepreneur spirit.

In this sense, the evaluation system on SOE can result in the following anticipated effects. First, the performance evaluation for Public Institutions can motivate their executives to strive to improve managerial efficiency and also make their employees more motivated and responsible for achieving the goals of each institution. Second, this management evaluation system helps chief executive officers of Public Institutions to set clear targets and at the same time, effectively control typical agent behavior problem occurring in Public Institutions by keeping the balance between their public and commercial objectives. In order to overcome agency problems caused by moral hazard factors, including pursuit of self-interest, risk avoidance, or loss of motivating factors, it is needed to assign relevant business goals to each public institution and provide incentives according to the result of evaluation. Third, one of the reasons for inefficiency in Public Institutions can be found in the lack of internal and external competitive pressure. The management evaluation system can bring in competition to renovate the Public Institutions. The payment of different incentives plays a role of artificially creating a competitive environment within Public Institutions as well as against other Public Institutions. Fourth, this evaluation system features a management cycle in which the evaluation results provide feedback to the Public
Institutions, which leads to improvement in management. Finally, this system can contribute to improve managerial transparency. The result is reported to the President and the National Assembly, so that it can be used as instrument to oversee the Public Institutions. And it is made public through publication of management performance or the mass media, consequently enhancing openness and transparency of business activities of Public Institutions.

In this article, I am going to introduce the performance evaluation on SOEs in Korea

II. Performance Evaluation System on Public Institutions in Korea

1. Process

A management evaluation manual for SOEs and Quasi-Governmental Institutions shall be prepared by the end of the preceding year of the year of assessment. And an autonomous management plan shall be formulated for performance evaluation early in the year when management evaluation is supposed to be conducted. As planned in these manual and plans, Public Institutions are managed in annual cycles and performance evaluation is carried out at the beginning of the following year.

Article 47 of the Act on the Management of Public Institutions prescribes that a management performance report and a management implementation report shall be submitted to the Minister of Strategy and Finance and the head of the agency concerned by no later than March 20th of each year; Article 48 (7) of the same Act stipulates that based on these reports prepared by Public Institutions, the evaluation shall be finished by no later than June 20th of each year and the results shall be reported to the President and the National Assembly. For the feedback, a performance evaluation is scheduled to be completed by late April.

2. Committee for coordinating the evaluation

1) Formation of the Committee

In accordance with the Act on the Management of Public Institutions, enacted on January 19, 2007, the Committee for Management of Public Institutions (hereinafter in this chapter referred to as the "committee") was established on

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1 The main contents are referred to the material: KIPF. 2011. Understanding Korean Public Institutions
April 1, 2007. It is stipulated in the Act that the committee shall be constituted under the control of the Ministry of Strategy and Finance for deliberation and resolution on managerial agendas of Public Institutions. The committee shall be comprised of government members and up to 11 private sector members. Government members include the Minister of Strategy and Finance, a Vice Minister level official from the Prime Minister's Office, a Vice Minister of Public Administration and Security, a Vice Minister level official from other ministries concerned. The Minister of Strategy and Finance shall be the chairperson.

Private sector members are commissioned by the President on the recommendation of the Minister of Strategy and Finance, who selects them from various fields such as law, economy, press, academia and labor with extensive knowledge and experience in the area of the management and business administration of Public Institutions as well as good reputation for impartiality.

There are currently nine private sector members in the committee. The term is three years.

2) Operation of the Committee

Under the Act on the Management of Public Institutions, a committee meeting shall be convened with 20 or less members including the chairperson. The number of private sector members shall constitute majority of the members of the committee.

To run the committee, the Department of Public Policy at the Ministry of Strategy and Finance shall function as an executive office of the committee and the head of the department shall serve as its executive secretary.

3). Roles and Responsibilities of the Committee

The committee shall deliberate and resolve matters regarding to the designation of Public Institutions, policies for the advancement of Public Institutions, general management of Public Institutions, appointment and removal of executives of Public Institutions and supervision over Public Institutions in accordance with the Act on the Management of Public Institutions.

Established in April 2007, the committee had held a total of 35 meetings up until January 2011 and, as a result, a total of 178 agenda items had been deliberated and resolved. Meanwhile, when a detailed explanation on agenda items is required apart from regular meetings, preliminary presentations are held for private sector members.
In conclusion, the committee plays an important role for managing Public Institutions in Korea.

4) Special team for evaluation

With the aim of ensuring expertise and fairness in the course of making the assessments, a special team for evaluation, which is comprised of experts from the private sector, including professors and accountants, shall be formed according to Article 48 (6) of the Act. Accountants have the role of quantitative evaluation, while professors and experts have the role of qualitative evaluation. Annually around 70 experts participate in the evaluation.

The special team for performance evaluation team is formed during the period of February or March in the succeeding year. And some educational training course including workshops is offered to team members. To improve the rationality and validity of evaluation, on-site interview with the staff at Public Institutions is held during the period between April to May.

3. Methodology for evaluation

1) Index

The evaluation for management performance among State Owned Enterprises and Quasi-Governmental Institutions is composed of 18 indicators in three categories: leadership & strategy, management system, business performance.

Table 1. Categories and indicators of the Evaluation System

<table>
<thead>
<tr>
<th>Category</th>
<th>Main Contents</th>
<th>Main Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership &amp; Strategies</td>
<td>Whether business drivers, including vision, goals, strategies, and leadership, are properly set up and implemented.</td>
<td>-Executive leadership - internal supervisory system including board of directors and auditors - Vision &amp; development of strategies, plans in pursuit of major business activities</td>
</tr>
<tr>
<td>Management System</td>
<td>Whether the institution has a system that</td>
<td>- Major business activities</td>
</tr>
</tbody>
</table>
improves efficiency of business activities and utilizes organizational resources effectively.

- Organization, personnel, remuneration, financial management, rational labor-management relations, performance management system, etc.

| Management Performance | Whether management performance, including major business performance, productivity, customer satisfaction, is properly produced. | - Major business performance  
- Customer satisfaction, labor & capital productivity, management of personnel and overhead expenses, result of financial budget, etc. |

2) Weight for index

The law of 2007 classifies the Public Institutions according to the characteristics of commerciality. Reflecting these characteristics, different evaluative methodology and index are adopted to different typology.

The ratio of qualitative and quantitative with Public Enterprises is 40:60, whereas the ratio of qualitative and quantitative with Quasi-Governmental Institution is 50:50. It reflects that the Public Enterprises is more related with commerciality, so that the quantitative weight is much more considered.

And the weight of each index is different from type to type.

So we can say the evaluation system is considered as customized to each Public Institutions.

Table 2. Weight of index by type

<table>
<thead>
<tr>
<th>category</th>
<th>unit of index</th>
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<tbody>
<tr>
<td>leadership</td>
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</tr>
<tr>
<td></td>
<td>2. responsible management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3. customer satisfaction</td>
<td></td>
</tr>
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<td></td>
<td>4. contribution to society</td>
<td></td>
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<tr>
<td></td>
<td>- social contribution</td>
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<tr>
<td></td>
<td>- compliance to government policy</td>
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<tr>
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### Management Efficiency

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<td>2. Organization, personnel management</td>
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<td>3. Financial management and performance</td>
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### Major Projects

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### Quasi-Market-Based Public Corporation

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<td>3. Customer satisfaction</td>
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</table>

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3) Technique for evaluation

For the qualitative evaluation, the grade is divided into 6 levels. It is up to the professors and experts.

Table 3. Qualitative grade for evaluation

<table>
<thead>
<tr>
<th>grade</th>
<th>points</th>
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<tr>
<td>S</td>
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<tr>
<td>A</td>
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</tr>
<tr>
<td>B</td>
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<td>D</td>
<td>45</td>
</tr>
<tr>
<td>E</td>
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</table>

But a detailed and dexterous methodology is adopted for the quantitative evaluation; trend analysis, \( \beta \) distribution, performance/target comparison, and so on. To do this, some statistical logic is adopted.

Recently, the survey of the customer satisfaction is adopted. To do this, independent social research organizations surveys the customer satisfaction every year. And then the evaluative committee adopts the results.

4. Feedback system

Calculated by combining evaluation points in each grade, comprehensive performance evaluation is categorized as six grades: excellent, outstanding, good, average, poor, and very poor. Grade ranges are determined through deliberation and resolution by the Committee for Management of Public Institutions based on
average scores and standard deviation obtained from actual performance evaluation of institutions.

The results of management evaluation are utilized mainly in four areas related to personnel measures, payment of incentives, budget feedback, and management improvement. First, for the personnel measures, the Minister of Strategy and Finance is allowed to recommend the dismissal of the heads concerned or standing directors of institutions rated "poor" in the performance evaluation, to the person responsible for their appointment. Second, the evaluation results have been used as a standard of determining the levels of incentives offered to executives and employees. Different incentive rates are applied according to the performance based decision of the Committee for Management of Public Institutions. The range is from 0% to 500% according to the result. Third, institutions rated "excellent" may increase their expenses budget for the following year within one percent while those rated "poor" are required to decrease the budget within one percent. Fourth, institutions evaluated "poor" can be provided a variety of support, including management consultation, assistance for improving management activities through oversight on their achievements while they should submit the management improvement plans.

III. Conclusion and Policy implications

Here some policy implications can be made.

First, new classification was adopted for all the Public Institutions, reflecting the share of government investment and the degree of commercialization. In line with this classification, different weight for different SOEs was implemented. We can say the evaluation is customized for each type of SOEs.

Second, ownership policy is important. The Ministry of Strategy and Finance has the role of controlling and coordinating the whole Public Institutions. Even though each line ministries have the role of economic and social policy making with regards to each Public Institution, the MoSF has the role of ownership policy so that the managerial perspective is important.

Third, participation of external experts is important. This can be a mechanism for maintaining the objectivity.

Fourth, index of evaluation needs to include more various aspects of public corporation; for example, making strategic planning by leadership, managerial
efficiency including staff, budget and organizational management. And the achievement for major important projects is needed to be evaluated. Through this kind of evaluation, competition between SOEs will be enforced.

Fifth, methodology of evaluation is needed to be developed. It needs both quantitative and qualitative index. And more detailed and delicate methodology is needed to be adopted.

Sixth, stronger incentive and penalty mechanism are needed for the development of performance evaluation. To prevent the moral hazard, feedback system is very important. Sometimes the responsibility for CEO may be asked after the evaluation.

Seventh, revelation of evaluation is important to keep the transparency and responsibility. In Korea all the information including the result of evaluation is open to the public by website (www.alio.go.kr).

Eighth, political attention is important to embed the evaluation system. In Korea, President has always kept attention to the evaluation and the result has been reflected into the appointment.