Bureaucrats in Business

The Economics and Politics of Government Ownership

SUMMARY
A Note to the Reader

This summary of *Bureaucrats in Business* is an expanded version of the overview that opens the report itself. Like the overview, it discusses the main findings of the report. It also summarizes our data and analytical approach and presents key figures and tables from the main text. Readers wishing more detailed information should consult the full report.
FOREWORD

Publication of this report comes at a propitious time. Throughout the developing world and in the transition countries, governments are striving to reform their economies. Yet in many countries, particularly the poorest, some parts of the economy have remained stubbornly resistant to reform. This report deals with one of the more important of these: the inefficient, loss-making state-owned enterprises that are a significant burden on government budgets and scarce resources in many countries. These enterprises hinder growth, impede market liberalization, and thus both directly and indirectly limit efforts to reduce poverty.

Drawing on a unique data base and detailed case studies, the report analyzes which types of state enterprise reform measures have worked best. It describes the formidable obstacles governments face when attempting to divest state-owned enterprises or otherwise improve their performance, and how successful reformers have overcome these barriers. It looks at company experience in depth and creatively applies institutional analysis to determine how contracts between management and government can serve as tools to reform enterprises. Finally, it suggests policy courses to be pursued under different country and enterprise conditions.

One central finding of the report is encouraging: some governments have indeed overcome the obstacles. Following a comprehensive reform strategy, they have divested when possible and improved performance incentives for firms remaining in government hands. Trade and investment have usually followed, bringing more rapid growth and enhanced opportunities for society at large. But why haven't more governments privatized or otherwise reformed state-owned enterprises? Reform entails political costs. Because politics is integral to reform, a study of reforms in public ownership cannot exclude political analysis. A key finding of the report is that political obstacles are the main reason that state enterprise reform has made so little headway in the last decade. The report makes an innovative attempt to objectively disentangle and measure the elements that constitute the
political constraints on reform. While this is a significant contribution, we should also bear in mind that our analytical knowledge of political processes, though arguably older, is less complete than that of economic forces and motives. It is an area in which additional analytical work and more data will no doubt enhance our knowledge in the years to come. However, it is our belief that the thrust of the main findings of this study will hold true even with further scrutiny and more observations.

We hope that the research presented in this book will give political leaders, policymakers, and the broader development community a clearer picture of the substantial benefits that could result from state-owned enterprise reform and, just as important, a better understanding of how the obstacles to reform can be overcome.

Bureaucrats in Business is the fourth in a series of Policy Research Reports designed to bring to a wide audience the results of World Bank research on development policy issues. While accessible to nonspecialists, books in the series also seek to move forward the discussion among academics and policymakers of the appropriate public policy objectives and instruments for developing economies. Like previous Policy Research Reports, this report is a product of the staff of the World Bank; the judgments made herein do not necessarily reflect the views of its Board of Directors or the governments that they represent.

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SUMMARY

BUREAUCRATS ARE STILL IN BUSINESS. DESPITE A growing consensus that governments perform less well than the private sector in a host of activities, and despite more than a decade of divestiture efforts in developing countries supported by the World Bank and other development institutions, state-owned enterprises (SOEs) account for nearly as large a share of economic activity in the developing world today as they did twenty years ago. Indeed, data compiled for this study show that the size of the SOE sector has significantly diminished only in the former socialist economies and a few middle-income countries. In most developing countries, particularly the poorest, bureaucrats run as large a share of the economy as ever. Government employees operate a casino in Ghana; bake cookies in Egypt; assemble watches in India; mine salt in Mexico; make matches in Mali; and bottle cooking oil in Senegal. More important, in many developing countries that continue to support large SOE sectors, the inefficiency of the state-owned firms, combined with the attendant state enterprise sector deficits, are hindering economic growth, making it more difficult for people to lift themselves out of poverty.

Consider these facts:

- In many developing countries, SOEs absorb large amounts of funds that could be better spent on basic social services. In Tanzania, central government subsidies to SOEs equal 72 percent of central government spending on education and 150 percent of central government spending on health.
- SOEs often capture a disproportionate share of credit, squeezing out private sector borrowing. In Bangladesh, SOEs take about one-
fifth of domestic credit, although SOE output accounts for less than 3 percent of GDP.

- State-owned factories often pollute more than privately owned factories. In Indonesia, government factories discharge about five times as much water pollution per unit of output as private factories of the same size and age engaged in the same activity.
- A modest improvement in state-owned enterprise efficiency would substantially reduce and in some cases eliminate the fiscal deficit in most developing countries. In Egypt, Peru, Senegal, and Turkey, a mere 5 percent reduction in SOE operating costs would reduce the fiscal deficit by about a third.

Many governments have announced plans to sell state-owned enterprises and to improve the performance of firms that remain in government hands, but only a few developing countries have made measurable progress. Our study found that

- Developing countries, excluding the transition economies, are divesting an average of just three enterprises per year, although most governments own hundreds of firms.
- Although SOE deficits have declined, they continue to be a significant burden to government finances and developing-country banking systems.
- Notwithstanding the sale of some very large firms, the state-owned enterprise share of developing market economies has remained stubbornly high since 1980, at about 11 percent of GDP, even as it fell in the industrial countries from about 9 percent to less than 7 percent.
- The SOE sector is larger and the problems associated with it are more severe in the world's poorest countries, where SOEs account for 14 percent of GDP on average.

In sum, although the potential gains from privatization and other reforms are substantial, only a few countries have reformed their SOEs successfully. Why haven't more countries reformed their SOEs? What distinguishes the few that have from the many that have not? What are the political obstacles to reform, and how have these been overcome? How can leaders and policymakers in developing countries hasten reform and increase the likelihood of success? And finally, what is the role of foreign aid? These are the questions our report sets out to answer.
To do so, we examine the economic problems that arise when bureaucrats are in business—that is, when governments own and operate enterprises that could be run as private firms—and the political obstacles to change. We do not suggest that bureaucrats are to blame for these ills. To the contrary, we find that divestiture and other state-owned enterprise reforms cannot succeed without a sound bureaucracy. But requiring bureaucrats to oversee businesses better handled by private entrepreneurs places a heavy toll on developing-country bureaucracies, diverting attention from problems that only governments can address. Bureaucrats typically perform poorly in business not because they are incompetent (they aren't) but because they face contradictory goals and perverse incentives that can distract and discourage even very able and dedicated public servants. The problem is not the people but the system, not bureaucrats per se but the situations they find themselves in as bureaucrats in business.

We begin our study by measuring the size and economic impact of the SOE sector in developing countries. As noted above, we find that SOE sectors remain large in many developing countries and that large SOE sectors have a negative effect on growth (chapter 1). To understand the differences between the few countries that reformed successfully and the many that have not, we next investigate SOE reform efforts in twelve countries representing a broad cross-section of regions and experiences. Our sample includes nine developing market economies (Chile, Egypt, Ghana, India, Mexico, the Philippines, Republic of Korea, Senegal, and Turkey) and three transition economies (China, the Czech Republic, and Poland). We find that countries that improved the performance of their SOEs made the most of divestiture, competition, hard budgets, and financial sector reforms. In addition, all twelve countries tried to improve the incentive structure by changing the relationship between government and state-owned enterprises. The last measure rarely worked alone (chapter 2). To discover why, we go a level deeper and explore changes at the enterprise level. We find that improving the performance of SOEs or privatized monopolies requires a better incentive structure; that is, it requires rewriting the contract between government and SOE management, or between government and the owners of a privatized, regulated monopoly, so that both are motivated to improve performance (chapter 3).

Taken together, this analysis shows that divestiture and other reforms can indeed improve SOE performance but that only a few governments have adopted the policies necessary to reform successfully. Why haven't more governments attempted these policies? To answer this question, we
investigated the politics of SOE reform in our twelve-country sample, identifying political obstacles and the ways that successful reformers overcame them (chapter 4). What can policymakers and the development community do to speed the reform process? Our final chapter draws on the findings of the previous work to construct a decision tree that reform advocates can use in deciding whether or not a country is ready for reform and how to proceed in each instance. We conclude with a note that outlines ways foreign assistance can help encourage reform. This summary highlights the central arguments and findings of the book, explains the methodology, and presents key pieces of evidence beginning with chapter 1.

Bureaucrats Are Still in Business

ARE STATE-OWNED ENTERPRISES A PROBLEM? TOO OFTEN the answer depends on where a person sits on the ideological spectrum. To minimize such subjectivity, we set out to determine empirically whether and how SOEs influence the economies of developing countries. Our first step was to define SOEs (see box 1). We

Box 1 What Is a State-Owned Enterprise?
THERE ARE MANY POSSIBLE DEFINITIONS OF WHAT CONSTITUTES AN SOE. IN THIS report, we define SOEs as government owned or government controlled economic entities that generate the bulk of their revenues from selling goods and services.* This definition limits the enterprises we consider to commercial activities in which the government controls management by virtue of its ownership stake. It encompasses enterprises directly operated by a government department or those in which the government holds a majority of the shares directly or indirectly through other SOEs. It also encompasses enterprises in which the state holds a minority of the shares, if the distribution of the remaining shares leaves the government with effective control. It excludes much state-owned sector activity, such as education, health services, and road construction and maintenance, that are financed in other ways, usually from the government's general revenue. We have focused on nonfinancial SOEs, since to include financial SOEs we would need to consider many issues about the management of the financial system that would lengthen our already substantial report.

*This definition was first developed by Jones (1975) for the case of the Republic of Korea and has since been used to analyze SOEs as unique units of observation. See the appendix for more on definitional issues.
then assembled the best available evidence to estimate the size of the SOE sector in developing countries and to assess whether this has changed over time. We found that although governments are selling more and bigger enterprises, outside Eastern Europe, the former Soviet Union, and a handful of other countries, the SOE sector has remained stubbornly large. We also found that large SOE sectors can hinder growth for a variety of reasons, in part because individual SOEs are usually less efficient than private firms and in part because the resulting aggregate SOE deficits are typically financed in ways that undermine macroeconomic stability. In addition, subsidies to SOEs often divert scarce funds from growth-enhancing public spending, such as education and health. Finally we found that because SOE sectors tend to be larger in low-income countries, SOEs are likely to be most costly in the countries that can least afford them. Below we summarize the evidence for these findings.

Some Governments Are Selling More—and More Important—Enterprises

The number of countries selling state-owned enterprises increased in the 1980s, as divestiture spread from the industrial countries, notably the United Kingdom, to developing countries throughout the world. In the 1990s, many governments intensified their efforts, selling more enterprises and shifting their attention from small firms operating in competitive markets to large monopolies. Mass privatization efforts were begun in Eastern Europe and the republics of the former Soviet Union.

The growing number of countries undertaking divestitures and the shifting regional focus are shown in table 1. There were more than four times as many transactions in the six years from 1988-93 as in the previous eight years (1980-87). Although most of the increase was due to the explosion of privatization activity in the transition economies of Eastern Europe and Central Asia, the number of divestitures increased more than fourfold in Latin America and more than threefold in the rest of Asia. Even Sub-Saharan Africa experienced an increase in divestitures, albeit a much more modest one that left the continent with fewer privatizations than any other developing region. As a result of these increases, developing countries accounted for 86 percent of transactions in the second period, up from 66 percent during the first.

The available information on the size and nature of divested enterprises supports the view that divestiture was not only more common,
but also more significant during the second period. While data on the value of firms sold during the first period are not available, country evidence and a sectoral breakdown indicate that early sales involved relatively small state-owned enterprises, primarily in agribusiness, services, and light manufacturing. In 1988-93, by contrast, divestiture included the sale of large state-owned enterprises in such important sectors as electric and water utilities, transportation, and telecommunications, as well as major firms in the financial and industrial sectors (table 2). Of the $96 billion in public revenue generated by divestiture in developing countries during this period, the largest share ($32 billion) came from infrastructure. Even the $12.1 billion in sales revenue from the primary sector during this period is largely attributable to the sale of petroleum-related activities, which tend to be large scale; mines and agribusinesses account for most of the remainder.

Further analysis of the data on the number and value of transactions in table 1 reveals wide regional divergence in the average size of firms. Latin America, with just one-fourth of the transactions, accounts for almost 60 percent of the value, while Central and Eastern Europe, with almost half of the transactions, accounts for only 19 percent of the value. This may reflect the greater experience with divestiture in Latin American countries, enabling them to sell larger enterprises; Central and Eastern European governments, new to the process, were selling smaller

Table 1 Divestiture in Developing Countries, 1980-93

<table>
<thead>
<tr>
<th>Region</th>
<th>1980-87</th>
<th>1988-93</th>
<th>1988-93</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of transactions</td>
<td>Percentage of worldwide transactions</td>
<td>Number of transactions</td>
</tr>
<tr>
<td>Africa</td>
<td>210</td>
<td>46</td>
<td>254</td>
</tr>
<tr>
<td>Asia</td>
<td>108</td>
<td>24</td>
<td>367</td>
</tr>
<tr>
<td>Latin America</td>
<td>136</td>
<td>30</td>
<td>561</td>
</tr>
<tr>
<td>Eastern Europe and Central Asia</td>
<td>2</td>
<td>0 b</td>
<td>1,097</td>
</tr>
<tr>
<td>Sub-total</td>
<td>456</td>
<td>100</td>
<td>2,279</td>
</tr>
<tr>
<td>Developed countries</td>
<td>240</td>
<td>376</td>
<td>174.9</td>
</tr>
<tr>
<td>Total</td>
<td>696</td>
<td>2,655</td>
<td>270.9</td>
</tr>
</tbody>
</table>

a. Figures are from Sader (1994) who excludes privatizations with a sales value less than U.S.$50,000, any divestitures where state-owned enterprises were simply shut down and the assets mothballed, and all mass voucher divestitures. The latter comprise an especially significant form of divestiture in some Eastern European and Central Asian economies such as Russia and Czech Republic.

b. Less than one percent.

enterprises, as well as giving away shares through mass privatization schemes. Asia, with 16 percent of the transactions and 21 percent of the value, is second only to Latin America in average revenue per sale. By contrast, Africa, with a slim 11 percent of transactions, accounts for an even slimmer 3 percent enterprise of value. This may reflect a smaller average size of African enterprises as well as a greater reluctance by governments in the region to sell off large state monopolies.

**Governments Are also Investing Less in SOEs**

Consistent with the perception that governments have reduced the role of SOEs in the economy is the decline in their share in investment over the period 1978-91 (figure 1). Although they still absorb a larger percentage of investment in developing countries than in industrial countries, the share of SOEs in investment in developing countries has fallen from 22 percent in the early 1980s to 19 percent in the early 1990s. Again we see significant regional variation.

**But the Importance of the SOE Sector Worldwide Has Not Declined**

Sales of more, and more important, enterprises as well as the declining share of SOE investment would tend to suggest that the importance of SOEs has diminished in recent years. Neither trend, however, appears to have made a significant dent. First, although divestiture has grown, it

<table>
<thead>
<tr>
<th>Country</th>
<th>Primary</th>
<th>Industrial</th>
<th>Finance</th>
<th>Infrastructure</th>
<th>Others</th>
<th>Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>0.7</td>
<td>0.5</td>
<td>0.3</td>
<td>0.1</td>
<td>1.6</td>
<td>3.2</td>
</tr>
<tr>
<td>Asia</td>
<td>1.8</td>
<td>6.4</td>
<td>2.6</td>
<td>7.4</td>
<td>1.5</td>
<td>19.7</td>
</tr>
<tr>
<td>Latin America</td>
<td>8.2</td>
<td>9.9</td>
<td>13.3</td>
<td>22.5</td>
<td>1.2</td>
<td>55.1</td>
</tr>
<tr>
<td>Eastern Europe and Central Asia</td>
<td>1.4</td>
<td>8.9</td>
<td>3.7</td>
<td>2.0</td>
<td>1.9</td>
<td>17.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12.1</td>
<td>25.7</td>
<td>19.9</td>
<td>32.0</td>
<td>6.2</td>
<td>95.9</td>
</tr>
</tbody>
</table>

*Note:* Figures exclude privatization with a sales value less than U.S.$50,000, and divestitures where state-owned enterprises were simply shut down and assets mothballed, and all mass voucher divestitures.

The state-owned enterprise share of gross domestic investment has been slowly declining everywhere.

Figure 1 Share of State-Owned Enterprise Investment in Gross Domestic Investment, by Region.

Source: Statistical appendix.

is still small relative to the stock of SOEs. Dividing total transactions worldwide (3,351) by the number of divesting countries (ninety-five) over thirteen years (1980-93) yields an annual average of less than three divestitures per country per year against hundreds of enterprises that could have been divested in almost all countries.\(^2\) In fact most countries fell well short of the average, because transactions have been concentrated in only a few countries. The small number of divestitures relative to the total number of SOEs, the concentration of sales in only a few countries, and the fact that the decline in the SOE share of investment will only gradually reduce the size of SOE capital stock relative to the rest of the economy all suggest that the importance of the SOE sector on average has remained substantially unchanged in developing countries.

The share of state-owned enterprises in developing-country GDP supports this view. Excluding the transition economies, SOE value added as a percentage of developing-country GDP has not decreased over time (figure 2). In the late 1980s it was about 11 percent, little
changed from the beginning of the decade and higher than in the late 1970s. In contrast, SOEs' share of GDP in industrial countries fell from about 9 percent in 1982 to less than 7 percent by 1988. During the 1986-91 period as a whole, setting aside the transition economies, SOEs played the biggest role in Africa, where they accounted for an average of 14 percent of GDP, followed by Latin America with 10 percent and Asia with 9 percent.

The premise that state-owned enterprises continue to play an important role in developing economies is also supported by the lack of change in the SOE share of total employment (figure 3). As with other measures, however, important variations exist at the regional level. SOEs in Africa accounted for 23 percent of employment in 1991, up from 19 percent in the early 1980s (figure 3). In contrast, SOEs accounted for only about 2 percent of employment in Latin America in 1990-91, a share that has declined slightly. The SOE share of employment has remained steady in Asia, at a modest 3 percent.
SOEs Are Most Important in the Poorest Countries

Generally, the evidence suggests that the poorer the country the larger the relative size of its SOE sector. During the 1980s, SOEs accounted for a substantially larger share of the economy in low-income countries than in middle-income countries; while the SOE share of the economy in high-income countries was the lowest of all. Moreover, in contrast to the high- and middle-income countries, where the average share of SOEs in the economy has declined, the share of SOEs in the less developed economies--higher to begin with--has held nearly constant. The charts in figure 4 show the share of SOEs in GDP, gross domestic investment, and total employment for low-income and middle-income countries. In middle-income countries, the importance of SOEs in GDP, gross domestic investment, and employment peaked in the mid-1980s and has fallen since. In the low-income countries, only one measure, the

Figure 3 Share of State-Owned Enterprise Employment in Total Employment, by Region

The state-owned enterprise share in total employment has shown little change over time.

Source: Statistical appendix.
These figures show that, despite divestiture efforts, SOEs continue to play an important role in developing economies, especially the poorest.

Source: Statistical appendix.
state-owned enterprise share of investment, has fallen since the mid-1980s; even that began to climb again in 1990.

These measures clearly indicate that, despite divestiture efforts, state-owned enterprises continue to play an important role in developing economies, especially in the poorest countries. Whether or not this is a problem depends upon the impact of SOEs on the economy. If that impact is negative, then reform is vital, especially in least developed economies.

### How SOEs Affect Economic Performance

**WHAT IS THE IMPACT OF STATE-OWNED ENTERPRISES ON the economy?** Although a handful of SOEs undoubtedly perform very well, there is a wealth of anecdotal evidence suggesting that many more do not. Consider the following examples:

- In Turkey, Turkiye Taskorumu Kuru, a state-owned coal mining company, lost the equivalent of about $6.4 billion between 1986 and 1990. Losses in 1992 worked out to about $12,000 per worker, six times the average national income. Yet health and safety conditions in the mine were so poor that a miners' life expectancy was forty-six years, eleven years below the national average. In short, the miners and the government would have been better off if the government had imported coal and paid the miners to stay home.

- In the Philippines, the performance of the National Power Corporation steadily deteriorated from 1985 until the early 1990s. In 1990 the capital region alone lost an estimated $2.4 billion in economic output due to power outages. By 1992-93 electricity was shut off about seven hours a day in many parts of the country.

- In Bangladesh in 1992, the state sugar milling monopoly had twice as many office workers as it needed, or about 8,000 extra employees. Farmers near the outmoded state mills were required to sell their sugar cane to the government at below market prices, with the result that many planted other crops, causing a shortage of cane. Meanwhile sugar cost twice as much in Bangladesh as it did internationally.

- In Tanzania, the state-owned Morogoro shoe factory, built in the 1970s with a World Bank loan, never manufactured more than
about 4 percent of its supposed annual capacity. Designed to turn out four million pairs of shoes a year, four times the international norm, the factory planned to export three-quarters of its production to Europe, even though Tanzania lacked high quality leather, experienced designers, and shoe assembly-line workers. Ill-suited to Tanzania's tropical heat, with steel pillars, aluminum walls, and no ventilation system, the plant deteriorated quickly after it was commissioned. Production ceased in 1990.

Of course such anecdotal evidence, no matter how disturbing, does not constitute a convincing argument for or against state ownership, nor does it enable us to quantify the impact on the economy and welfare of large SOE sectors. Chapter 1 of the full report presents a detailed assessment of this crucial issue. It begins by presenting arguments and empirical evidence at the microeconomic level. It finds that, on balance, private firms are more efficient than SOEs in markets that are competitive or potentially competitive and that, under certain circumstances, the same is true in monopoly markets as well. Included in this analysis is an assessment of the welfare consequences of privatizing SOEs and recent findings about the negative impact of SOEs on the environment. It then turns to the way that SOE sectors in the aggregate finance their operation and expansion, given that their finances may undermine fiscal stability and fuel inflation. Finally, the analysis draws on the microeconomic and finance discussions to consider the impact of large SOE sectors on growth. Here we summarize the evidence on the financing of aggregate SOE sector deficits and the overall impact of SOEs on growth.

The Impact of Financing Aggregate SOE Deficits

State-owned enterprise sectors are often unable to generate the resources to finance their operation and expansion and service their debt. The resulting shortfall is the state-owned enterprise saving-investment deficit (or SOE S-I deficit), defined as the difference between the SOE sector's current surplus and investment. This deficit is filled by government transfers, private savings, foreign borrowing, or a mix of all three. Evidence presented in the report suggests that large and continuous S-I deficits typically indicate poor enterprise performance and can hurt economic growth in a variety of ways.
Our data suggest that the SOE S-I deficit has narrowed somewhat in developing countries overall; however, improvements are concentrated in middle-income countries while in the poorer countries the problem remains acute. Figure 5 shows trends in SOE savings minus investment as a percentage of GDP for the forty-six developing countries for which data were available. For the entire group, the annual average S-I deficit went from 2.2 percent of GDP during 1978-85 to 0.8 percent during 1986-91. However, the figure also reveals a worrying divergence of trends in the SOE S-I deficit in middle-income countries, on one hand, and the low-income countries, on the other. From 1978 until the mid-1980s, the average ratio of the S-I deficit to GDP narrowed for both groups. After 1985, the SOE S-I deficit in the twenty-nine middle-income countries in the sample to narrow, to the point where SOEs in these countries showed a surplus in 1990. But the seventeen poor countries in the overall sample lost ground, so that their SOE S-I deficit fell back to an average of 1.7 percent of GDP during 1986-91.

**Figure 5 State-Owned Enterprise Savings Minus Investment**

The SOE savings-investment deficit improved in most countries until the mid-1980s. Since then it has deteriorated in the poorest countries.

*Source: Statistical appendix.*
Assessing the Impact of State Ownership on Growth

The generally poor performance of SOEs at the microeconomic level described in the report and the SOE S-I deficit at the aggregate level summarized here suggest that a large SOE sector is likely to have a negative impact on growth in a variety of ways. At the microeconomic level, the inefficiency of individual SOEs would be expected, in the aggregate, to exert a drag on growth, so that, other things being equal, the larger a country's SOE sector, the lower its growth rates. Moreover, the more extensive government ownership in an economy, the greater the likelihood that bureaucrats, facing perverse incentives and contradictory demands, are running businesses in which private entrepreneurs, facing clear-cut incentives for profit maximization in competitive markets, would be more efficient. Furthermore, at the aggregate level, the financial burden of SOE deficits can crowd out expenditure on growth-enhancing social services, such as basic health and education. Figure 6 shows the percentage that governments could increase spending on education and health if they eliminated direct SOE subsidies. Diverting SOE operating subsidies to basic education, for example, would increase education expenditures by 50 percent in Mexico, 74 percent in Tanzania, 160 percent in Tunisia, and 550 percent in India.

The other cost to growth of SOE deficits, the impact on fiscal stability and inflation, is harder to quantify but perhaps ultimately more important, given the abundant evidence of the importance of macroeconomic stability to long-term growth. A large SOE S-I deficit can be financed in a variety of ways, all of which have a potentially negative impact on growth. For example, a government may resort to central bank financing, effectively printing money to pay SOE bills, with the attendant inflationary pressures. Alternatively, the government may direct the banking system to loan money to financially strapped SOEs, diverting credit that would otherwise have gone to the private sector. Finally, governments may borrow abroad to finance SOE deficits, contributing to a balance of payments deficit and hence the current account deficit, and exerting downward pressure on the real exchange rate.

Our data strongly support the premise that the larger the SOE sector's overall deficit, the larger the fiscal and current account deficits. The average annual SOE S-I deficit for thirty-eight developing countries from 1978 to 1991 moves closely in tandem with their fiscal and current account deficits (figure 7), and the SOE deficit is also correlated with both deficits. That the
Subsidies to SOEs consume scarce government funds that could better be spent on education and health.

*Source:* IMF; statistical appendix.
SOE S-I deficit is important for fiscal stability is further evidenced by the fact that it averaged 35 percent of the fiscal deficit in the same thirty-eight countries (measured by the ratio of the means of both variables).

In sum, then, the evidence supports the premise that large SOE sectors can hinder growth. Moreover, because SOE sectors tend to be larger in low-income countries, state-owned enterprises are likely to be most costly in the countries that can least afford them.

What Makes for Success in State-Owned Enterprise Reform?

Most developing countries face the state-owned enterprise problems described above, and many have announced their intention to reform. Yet few have made measurable
progress. What differences in policy distinguish the few successful countries from the many that have failed? To find out we first assessed the impact of SOE reform in twelve countries, then analyzed the differences in policy. Table 3 shows the key characteristics of the countries in our sample, which includes nine developing market economies and three former socialist economies in transition. Although the sample is small and nonrandom, it covers a mix of regions, income levels, and reform strategies. Neither our sample nor any of our indicators are perfect. Even so, they reveal patterns that help us to understand the main components of successful SOE reform.

To measure success objectively, we selected five quantifiable indicators: two measures of state-owned enterprise financial returns, two of state-owned enterprise productivity, and the state-owned enterprise savings-investment deficit. Using these indicators, we find that Chile, Korea, and Mexico achieved the best results; their SOE sectors performed better than the other countries and they were able to improve on their

<table>
<thead>
<tr>
<th>Country</th>
<th>Average per capita GNP a (US dollars, 1978-91)</th>
<th>Rank b</th>
<th>Average size of SOE s to GDP c (percent, 1978-91)</th>
<th>Beginning of SOE reform (year, approximately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>1,784</td>
<td>85</td>
<td>13.8</td>
<td>1974, 1985</td>
</tr>
<tr>
<td>China</td>
<td>315</td>
<td>28</td>
<td>53.0 c</td>
<td>1984</td>
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<td>2,254</td>
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<td>1983</td>
</tr>
<tr>
<td>Mexico</td>
<td>2,324</td>
<td>99</td>
<td>11.6</td>
<td>1983, 1988</td>
</tr>
<tr>
<td>Philippines</td>
<td>639</td>
<td>27</td>
<td>1.9</td>
<td>1986</td>
</tr>
<tr>
<td>Poland</td>
<td>1,967</td>
<td>76</td>
<td>71.4</td>
<td>1990</td>
</tr>
<tr>
<td>Senegal</td>
<td>519</td>
<td>48</td>
<td>7.7</td>
<td>1986</td>
</tr>
<tr>
<td>Turkey</td>
<td>1,324</td>
<td>80</td>
<td>7.5</td>
<td>1983</td>
</tr>
</tbody>
</table>

a. For the transition economies, average per capita GNP is for year 1991; average size of SOEs to GDP is for 1989 except for China, which is for industrial state enterprises in 1990. For definition of SOEs in China, see box 2.1.

b. Rank is relative to 132 countries.

c. Share of industrial GDP.

already good performance. Egypt, Ghana, and the Philippines had mixed results; and India, Senegal, and Turkey had the poorest results. Although we lacked comparable data for ranking the three transition economies, partial indicators suggest that China, the Czech Republic, and Poland show mixed to good results.

What explains these differences? To find out, we considered the extent to which each country in our sample used five components of reform that economic theorists and reform practitioners widely recommend—divestiture, competition, hard budgets, financial sector reform, and changes in the institutional relationship between SOEs and government. We found that the more successful reformers made the most of all five components. Indeed, they used them not as separate options but as mutually supportive components of an overall strategy. Other countries in our sample achieved less in individual reform elements and followed a less comprehensive strategy overall.

The successful reformers both divested more (especially where the state-owned enterprise sector of the economy was more than 10 percent of GDP, table 4) and reformed remaining SOEs the most, and they pursued reform more comprehensively. Thus they introduced more competition by liberalizing trade, easing restrictions on entry, and unbundling large enterprises. Then they divested many of their SOEs in competitive sectors, reducing the risk that government, under political pressure, subsidizes SOEs to help them cope with private competition. Competitive pressures only improve performance if SOEs face hard budgets. So successful reformers also hardened budgets by reducing or eliminating direct subsidies, putting access to credit on a more commercial basis, strengthening regulation of SOE monopoly prices, and reducing or eliminating hidden subsidies (see box 2).

To ensure that SOEs could not get easy access to credit, successful SOE reformers also reformed the financial sector. They strengthened supervision and regulation, relaxed controls over interest rates, and reduced directed credit. They also relaxed entry restrictions and privatized banks once SOE reform and supervisory and regulatory reform were well under way. Although the less successful reformers have introduced some financial reforms, they have not yet been able to overcome a history of underdeveloped financial systems, subservient to state direction.

Surprisingly, successful and unsuccessful reformers alike tried to improve the incentive structure by changing the relationship between SOE
managers and the government. Countries at the top and bottom of our performance ratings introduced new oversight bodies, increased managerial autonomy, and signed explicit performance agreements.

Why did the apparently similar efforts to change institutions produce different results? Partly, such institutional reforms only work in conjunction with the other reforms just described. In addition, there may be differences in the ways that countries designed and implemented these changes that would show up only at the microeconomic level, in detailed company level analysis. To find out, we analyzed the ways that governments rewrote their contracts with managers of state-owned enterprises, with private managers contracted to run government firms, and with the owners of privatized, regulated monopolies.

<table>
<thead>
<tr>
<th>Country</th>
<th>SOE value added as percentage of GDP</th>
<th>Revenue from sale as percent of 1990 GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>before divestiture</td>
<td>after divestiture</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Size (percent)</td>
</tr>
<tr>
<td>Better performers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>1973</td>
<td>39.0</td>
</tr>
<tr>
<td>Korea</td>
<td>1980</td>
<td>10.4</td>
</tr>
<tr>
<td>Mexico</td>
<td>1983</td>
<td>17.2</td>
</tr>
<tr>
<td>Mixed performers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>1982</td>
<td>38.9</td>
</tr>
<tr>
<td>Ghana</td>
<td>1986</td>
<td>10.6</td>
</tr>
<tr>
<td>Philippines</td>
<td>1983</td>
<td>1.7</td>
</tr>
<tr>
<td>Poor performers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>1983</td>
<td>11.1</td>
</tr>
<tr>
<td>Senegal</td>
<td>1984</td>
<td>10.3</td>
</tr>
<tr>
<td>Turkey</td>
<td>1983</td>
<td>7.3</td>
</tr>
<tr>
<td>Transitional economiesa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>1978</td>
<td>80.0 b</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1989</td>
<td>95.9</td>
</tr>
<tr>
<td>Poland</td>
<td>1989</td>
<td>71.4</td>
</tr>
</tbody>
</table>

a. Estimated  
b. Share of industrial GDP  

Each relationship between a government and the manager of a state-owned enterprise, between the government and private managers of state assets, or between a government and the owner of a regulated, private monopoly, can be seen as a contract, that is, an agreement between the government and the other party based on shared expectations. Such written contracts have been established for only a small proportion of the state-owned enterprises worldwide, but their use is growing. Countries often use contracts for their most important and problematic activities, such as infrastructure monopolies (electricity, water, telecoms), and major exporters and revenue earners (tea in Sri Lanka, gold in Ghana, and hotels in Egypt). Yet little is known about whether such contracts work, what distinguishes the successful contracts, or which type of contract works best in which circumstances. Chapter 3 of our study focused on three types of contracts:
• *performance contracts*, which define the relationship between a government and *public employees* managing a state-owned enterprise

• *management contracts*, which define the relationship between a government and a *private firm* contracted to manage an SOE

• *regulatory contracts*, which define the relationship between a government and the owners of a private, regulated monopoly.

For each type of contract, we first examined a sample of firms to determine whether in each instance the contract improved performance as reflected in such indicators as return on assets, labor productivity, and total factor productivity. Comparing performance before and after implementation of the contract, we found that performance contracts worked least well. Management contracts worked better, but only in the specific circumstances described below. Regulatory contracts worked well for enterprises in monopoly markets, provided that they were properly designed and implemented. *Overall, then, greater the participation of private agents in ownership and management, the better enterprise performance.*

To better understand the differences between successful and unsuccessful contracts, we analyzed how each contract handled three types of problems: information asymmetry, rewards and penalties, and commitment. Information problems arise because contracting agents (government on the one hand and public or private managers or owners of a monopoly, on the other) have different sets of information; thus each side can use the information it holds exclusively to improve its position at the expense of the other. At the same time, because future events are unknown it is impossible to design a contract that will cover all eventualities. To alleviate the information problems and contract imperfections, contracts usually include promises of and penalties to induce the contracting parties to reveal information and comply with contract provisions. But promises of rewards and penalties alone are not enough. Each party needs to be convinced of the commitment of the other to actually deliver. Like a chain with three strong links, contracts that include mechanisms to handle problems of information, rewards and penalties, and commitment are best suited to attaining the desired outcome—improved enterprise performance. We summarize our findings about each type of contract below.
Performance contracts were used in twenty-eight developing countries in the mid-1990s, mostly in Asia and Africa. Our analysis of a sample of twelve companies in six countries (listed in table 5) gives little support to the premise that these contracts help improve SOE performance. As figure 8 shows, only three of the twelve case study companies showed a turnaround or acceleration in total factor productivity (TFP) after contracts were introduced (Ghana Water, Mexico Electricity, and Senegal Telecoms), six continued their past trends, while three performed

**Table 5 Case Study Enterprises**

<table>
<thead>
<tr>
<th>Country (contract type)</th>
<th>Enterprise name: (NAME USED IN TEXT)</th>
<th>Contract duration</th>
<th>First contract year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ghana Water and Sewerage Corporation (GWSC): GHANA WATER</td>
<td></td>
<td>1989</td>
</tr>
<tr>
<td></td>
<td>Ghana Posts and Telecommunications (GP&amp;T): GHANA TELECOM</td>
<td></td>
<td>1990</td>
</tr>
<tr>
<td>India (memorandum of understanding)</td>
<td>National Thermal Power Corporation (NTPC): INDIA ELECTRICITY</td>
<td>Yearly</td>
<td>1987</td>
</tr>
<tr>
<td></td>
<td>Oil and Natural Gas Commission (ONGC): INDIA OIL</td>
<td>(published)</td>
<td></td>
</tr>
<tr>
<td>Korea (performance evaluation and measurement system)</td>
<td>Korea Electric Power Corporation (KEPCO): KOREA ELECTRICITY</td>
<td>List of yearly targets</td>
<td>1984</td>
</tr>
<tr>
<td></td>
<td>Korea Telecommunications Authority (KTA): KOREA TELECOMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico (convenio de rehabilitacion financiera)</td>
<td>Comision Federal de Electricidad (CFE): MEXICO ELECTRICITY</td>
<td>3 years</td>
<td>1986</td>
</tr>
<tr>
<td>Philippines (performance monitoring and evaluation system)</td>
<td>Metropolitan Water and Sewerage System (MWSS): PHILIPPINES WATER</td>
<td>List of yearly targets</td>
<td>1989</td>
</tr>
<tr>
<td></td>
<td>National Power Corporation (NPC): PHILIPPINES ELECTRICITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senegal (contrat plan)</td>
<td>Societe Nationale d'Electricite (SENELEC): SENEGAL ELECTRICITY</td>
<td>3 years</td>
<td>1987</td>
</tr>
<tr>
<td></td>
<td>Societe Nationale des Telecommunications du Senegal (SONATEL): SENEGAL TELECOMS</td>
<td></td>
<td>1986</td>
</tr>
</tbody>
</table>

*Source: World Bank data.*
Performance contracts were followed by improved trends in total factor productivity (TFP) in three of the seven cases for which data were available. TFP trends in three cases deteriorated.
substantially worse under contracts than before. The trends in rates of return on assets deteriorated for three firms; the rest show little change. Only two firms show a kink in their trends in labor productivity.

Why did performance contracts have so little impact on performance? We found that these contracts did not improve, and in some cases exacerbated, the poor incentive structures facing government managers. Indeed, performance contracts failed to address all three contracting problems. They did not reduce the managers’ information advantage; instead managers were able to use their knowledge of the firm to negotiate multiple soft targets that were easy for them to reach. Similarly, performance contracts rarely included rewards and penalties that could motivate managers and staff to exert more effort: where cash bonuses were offered they had little effect because they were not linked to better performance; other promised incentives, such as greater managerial autonomy, were often not delivered; and penalties for poor performance, such as firing or demotion, were seldom applied. Finally, governments demonstrated little commitment to the terms of the contracts, frequently reneging on key promises. This increased managers’ incentive to use their information advantage to negotiate soft targets.

Each of these problems can be seen with the performance contract governing Senegal Electricity. The contract included twenty-two criteria for judging performance, but no rewards if managers attained them; moreover, government regulators lacked the power to enforce penalties reliably. Finally, although the government promised to take actions that would make it possible for the firm to meet its targets, such as forcing other SOEs to pay their electricity bills, these promises were often broken. The company has suffered declining productivity. Indeed, as with several other enterprises in our sample, it appears that the contract may have actually worsened incentives and performance.

Management Contracts Work but Only in Some Situations

Management contracts are not widely used but have generally been successful when they were attempted. Our worldwide search using a relatively broad definition found only about 200 management contracts: forty-four involved hotels managed by major international chains; the rest were concentrated in agriculture and water. Our analysis of management contracts governing twenty firms in eleven countries (see table 6) found that profitability and productivity improved in two-thirds of the
cases, and results were mixed for most of the remainder. Only two of the contracts were rated as failures on both counts.

What were the characteristics of the successful management contracts? And, since they are often successful, why aren't they used more often? Analysis of the ways that the successful contracts addressed the problems of information, rewards and penalties, and commitment answers both questions.

Where management contracts succeeded, governments used competition to reduce management's information advantage. Of the thirteen successful contracts, ten involved SOEs in competitive markets; the other three involved competitive bidding for monopoly enterprises (two water companies and a container port). Successful contracts also established meaningful rewards and penalties, usually by limiting (or eliminating)

---

**Table 6 Sample of Management Contracts**

<table>
<thead>
<tr>
<th>Enterprise</th>
<th>Country</th>
<th>Contractor</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Successful</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manila Terminal</td>
<td>Philippines</td>
<td>ISTSI (domestic)</td>
<td>Ports</td>
</tr>
<tr>
<td>Mumias Sugar</td>
<td>Kenya</td>
<td>Booker-Tate (UK)</td>
<td>Sugar</td>
</tr>
<tr>
<td>Hino-Pak</td>
<td>Pakistan</td>
<td>Consortium (UAE, Japan)</td>
<td>Auto/truck assembly</td>
</tr>
<tr>
<td>Domestic Appliances</td>
<td>Pakistan</td>
<td>AI-Futtain (UAS)</td>
<td>Electrical appliance assembly</td>
</tr>
<tr>
<td>Guyana Sugar Corp.</td>
<td>Guyana</td>
<td>Booker-Tate (UK)</td>
<td>Sugar</td>
</tr>
<tr>
<td>SONEG</td>
<td>Guyana</td>
<td>SEEG (Guinea &amp; France)</td>
<td>Water</td>
</tr>
<tr>
<td>SNE</td>
<td>Central African Republic</td>
<td>SAUR (France)</td>
<td>Hotel</td>
</tr>
<tr>
<td>Shepeard Hotel</td>
<td>Egypt</td>
<td>Helnan (Denmark)</td>
<td>Hotel</td>
</tr>
<tr>
<td>Cairo Sheraton</td>
<td>Egypt</td>
<td>Sheraton (USA)</td>
<td>Hotel</td>
</tr>
<tr>
<td>Nile Hilton</td>
<td>Egypt</td>
<td>Hilton (USA)</td>
<td>Hotel</td>
</tr>
<tr>
<td>Sofia Sheraton</td>
<td>Bulgaria</td>
<td>Sheraton (USA)</td>
<td>Hotel</td>
</tr>
<tr>
<td>Hotel Stadt</td>
<td>Germany (E.)</td>
<td>InterContinental (USA)</td>
<td>Hotel</td>
</tr>
<tr>
<td>Sri Lanka Plantations</td>
<td>Sri Lanka</td>
<td>Domestic contractors</td>
<td>Tea, rubber</td>
</tr>
<tr>
<td><strong>Borderline</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limmine Guyana</td>
<td>Guyana</td>
<td>Minprod (Australia)</td>
<td>Bauxite mining</td>
</tr>
<tr>
<td>Mount Kenya Textiles</td>
<td>Kenya</td>
<td>AMSCO (Netherlands)</td>
<td>Textiles</td>
</tr>
<tr>
<td>Naga Power Plant</td>
<td>Philippines</td>
<td>Ontario Hydro (Canada)</td>
<td>Electricity</td>
</tr>
<tr>
<td>State Gold Mining Co.</td>
<td>Ghana</td>
<td>Canada-Guyana Mining (Canada)</td>
<td>Gold mining</td>
</tr>
<tr>
<td>Light Rail (LRTA)</td>
<td>Philippines</td>
<td>Meralco (domestic)</td>
<td>Transport</td>
</tr>
<tr>
<td><strong>Failures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nzoia Sugar</td>
<td>Kenya</td>
<td>Arkel (USA)</td>
<td>Sugar</td>
</tr>
<tr>
<td>Sanata Textile Limited</td>
<td>Guyana</td>
<td>SOE (China)</td>
<td>Textiles</td>
</tr>
</tbody>
</table>

*Note: Ranked according to indicators in table 3.10 which are explained in text.*

*Source: Shaikh and Minovi (1994).*
fixed fees and linking the contractor's fee to the firm's performance. Finally, successful contracts were set up in ways that elicited a strong commitment from both parties. For example, they were for longer periods with the possibility of renewal and provisions for arbitration of disputes.

Why aren't they more widely used? We concluded that the costs to the government of obtaining the information needed to negotiate, monitor, and enforce a management contract are one reason that they are largely confined to hotels, agriculture, and water. Information is more easily available, and contract transaction costs thus lower, in such sectors as these. They tend to be sectors where technology is not changing rapidly, and output is a single, homogeneous product (as with water or sugar); or where the private contractor has an international reputation to protect, the market is competitive, and quality is easily compared (as with hotels). Moreover, under the conditions where management contracts can work, privatization will often provide governments with higher benefits (the selling price) and lower costs (no need to monitor, enforce, and renegotiate the contract).

**Regulatory Contracts Work but Require Careful Design**

Nearly all privatized firms providing infrastructure services operate in monopoly markets where government regulation is needed to prevent firms from abusing their market power. These regulations and other divestiture provisions constitute a regulatory contract, that is, an agreement--sometimes implicit--between the government and the company owners about how the firm would be rewarded and the conditions under which it should operate. Devising effective regulatory contracts has become increasingly important as developing countries privatize a growing number of former state monopolies in telecommunications, power, water, railroads, roads, ports, and gas. The value of government sales of firms in these sectors exploded from a mere $431 million in 1988 to nearly $6.5 billion in 1992.

To evaluate these contracts, we analyzed the experience in the seven developing countries where the basic telephone network is privately owned and government regulated (table 7). Although the sample is small and not random, its diversity in terms of economic development, rate of economic growth, initial telecoms development, the pace and timing of the regulatory reform, and the extent of divestiture enables us to analyze different aspects of regulatory design under a wide variety of circumstances.
Except in the Philippines, where the telecoms company has been privately owned for decades, and in Mexico, where privatization occurred earlier, regulatory reform coincided with privatization. We found that regulatory contracts usually improved performance, resulting in more rapid network expansion, increased labor productivity, and higher returns on net worth. Not all regulatory contracts are successful, however (figure 9). Chile, where the results were positive, and the Philippines, where the results were negative, represent the two extremes.

Countries with successful contracts addressed all three contracting issues--information, rewards and penalties, and commitment. In Chile the government reduced its information disadvantage by selling the franchise for local telephone service through competitive bidding and by injecting other elements of competition into the contract wherever possible. Price regulations were designed to reward improved performance and penalize failure to improve. Chile's benchmark pricing is based on a fair rate of return to a hypothetical efficient firm and is reviewed only once every five years. This encourages the company to improve efficiency, since it reaps the benefits until prices are adjusted, at which point the savings are passed on to the consumer. Finally, the Chilean government demonstrated its commitment to abide by the

<table>
<thead>
<tr>
<th>Country</th>
<th>Year of regulatory reform</th>
<th>Percent of sector private</th>
<th>Real dollar per capita GNP, 1981</th>
<th>GDP growth rate</th>
<th>Years of waiting time for phone</th>
<th>Teledensity in 1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>1990</td>
<td>100</td>
<td>3,442</td>
<td>1.4</td>
<td>4.1</td>
<td>7.7</td>
</tr>
<tr>
<td>Chile</td>
<td>1987</td>
<td>100</td>
<td>1,995</td>
<td>4.5</td>
<td>5.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Jamaica</td>
<td>1988</td>
<td>25</td>
<td>1,242</td>
<td>1.9</td>
<td>9.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1987</td>
<td>25</td>
<td>2,096</td>
<td>6.3</td>
<td>1.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Mexico</td>
<td>1990</td>
<td>100</td>
<td>2,510</td>
<td>1.4</td>
<td>4.9</td>
<td>4.4</td>
</tr>
<tr>
<td>Philippines</td>
<td>1986</td>
<td>100</td>
<td>669</td>
<td>1.2</td>
<td>14.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Venezuela</td>
<td>1991</td>
<td>40</td>
<td>3,647</td>
<td>2.5</td>
<td>2.5</td>
<td>5.6</td>
</tr>
</tbody>
</table>

a. Prior reforms were undertaken in Chile (1978, 1982) and Jamaica (1982); some additional reforms to facilitate partial privatization were undertaken in Malaysia in 1990. With the exception of Malaysia, and Philippines, where the telecom sector has been privately owned for decades, the year of reform is also the year of privatization.

b. As of 1993.

c. Average real GDP growth rates over the period 1981-92.

d. As of 1987 for Argentina, and 1986 for Jamaica; calculated as a ratio of the number of applications on the waiting list to the average number of main lines added over the last three years.

e. Phone lines per 100 people.

Figure 9 Telecommunications Reform: Impact on Network Expansion, Labor Productivity, and Returns

Network Expansion

<table>
<thead>
<tr>
<th>Country</th>
<th>Pre-reform</th>
<th>Post-reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>5.3</td>
<td>9.4</td>
</tr>
<tr>
<td>Chile</td>
<td>7.5</td>
<td>14.3</td>
</tr>
<tr>
<td>Jamaica</td>
<td>6.2</td>
<td>18.8</td>
</tr>
<tr>
<td>Malaysia</td>
<td>17.6</td>
<td>12.3</td>
</tr>
<tr>
<td>Mexico</td>
<td>7.0</td>
<td>12.8</td>
</tr>
<tr>
<td>Philippines</td>
<td>7.2</td>
<td>4.9</td>
</tr>
<tr>
<td>Venezuela</td>
<td>6.5</td>
<td>11.8</td>
</tr>
</tbody>
</table>

Labor Productivity

<table>
<thead>
<tr>
<th>Country</th>
<th>Lines per worker</th>
<th>Pre-reform</th>
<th>Post-reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>58</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>48</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>Jamaica</td>
<td>35</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>26</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>95</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>35</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Venezuela</td>
<td>68</td>
<td>83</td>
<td></td>
</tr>
</tbody>
</table>

Returns on Net Worth

<table>
<thead>
<tr>
<th>Country</th>
<th>Pre-reform</th>
<th>Post-reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>1983-86 1987-91</td>
<td>1983-86 1987-91</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1982-86 1987-92</td>
<td>not available</td>
</tr>
<tr>
<td>Mexico</td>
<td>1982-89 1990-93</td>
<td>1982-89 1990-93</td>
</tr>
</tbody>
</table>

Regulatory contracts usually resulted in more rapid network expansion, improved labor productivity, and higher returns on net worth.

a. Postreform profit before taxes over net worth for 1990 only.
b. Postreform data is an estimate based on World Bank projections of revenues and expenses for TELMEX.


Source: Hill and Abdala (1995); Galal (1994); Spiller and Sampson (1993); World Bank (1993, 1990); Wellenius and others (1994); Esfahani (1994); Clemente (1994); International Telecommunications Union (various years; 1994).
contract to investors in many ways; for example, the legislature passed laws defining procedures for arbitration and appeal of disputes. In contrast, the Philippine government did not use competition or other mechanisms to reduce its information disadvantage. Nor did the Philippine government use pricing structure to reward improved performance and penalize failure to improve; instead it left pricing at the regulator's discretion, merely putting a ceiling on the operator's returns. Finally, because the regulatory contract itself is unclear, the Philippine government has not been able to demonstrate its commitment. Although there is an explicit procedure for the firm to appeal regulatory and tariff decisions to the Supreme Court, because the rules themselves are unclear the basis for appeals, and their outcomes, are uncertain. The poor regulatory environment in the Philippines has been costly for consumers: although the Philippine telephone company scores poorly in terms of network expansion and labor productivity, it enjoys the highest rate of return on net worth in our sample.

The overall evidence from our sample suggests that divestiture of state-owned enterprises in noncompetitive markets, accompanied by appropriate regulation, usually does result in greater efficiency, expanded service, and overall improved welfare. But only a small proportion of the countries with large government monopolies in noncompetitive sectors have attempted regulatory contracts. Indeed, as we have seen, despite the potentially large economic benefits of divestiture and other types of SOE reform, relatively few countries have made a systematic, determined attempt to reform their SOEs. To find out why, we studied the politics of state-owned enterprise reform.

The Politics of Reforming SOEs

The reform of SOEs almost invariably involves eliminating jobs and cutting long established subsidies—actions that can cost a government its support base. Consequently, politicians who rely on SOE carefully weigh any change in SOE policies, preferring policies that benefit their constituencies and help them remain in office over policies that undermine support and may cause them to be turned out of office. While some exceptional leaders may be able to change their support base and mobilize new constituents in favor
of reform, most are inherently responsive to the supporters who put them in office. How have the countries that reformed successfully overcome the political obstacles to SOE reform? What can other countries learn from their example to hasten the reform process? In considering these questions, we found that there are three necessary conditions for successful reform:

- Reform must be politically desirable to the leadership and its constituencies; the political benefits outweigh the political costs. Reform usually becomes desirable with a change in regime or a coalition shift in which those opposing reform lose power. It may also happen when an economic crisis makes SOE subsidies so costly that reform becomes preferable to the status quo.
- Reform must be politically feasible. Leaders must have the means to enact reforms and overcome opposition, either by compensating the losers, thus winning their support, or by compelling them to comply despite their losses.
- Promises central to state-owned enterprise reform must be credible. Investors must believe that the government will not renationalize privatized firms; SOE employees and others who fear that they may lose out in reform must believe that the government will deliver on any promises of future compensation.

Chapter 4 investigates these conditions in detail, drawing on the findings from the twelve country case studies of successful and unsuccessful reform presented in chapter 2. In this summary, we will illustrate each condition with brief examples.

Our analysis is not a judgment about the countries or their governments. Rather, it assesses obstacles that may prevent even the most effective and selfless leaders from undertaking SOE reform. In conducting this assessment, we use a consistent methodology with three important characteristics: first, our measures of desirability, feasibility, and credibility and the conclusions that we reach are transparent and easily checked for accuracy and consistency; second, we use measures that could be observed independent from and prior to SOE reform attempts; this makes these measures useful for prediction; finally, we look at every indicator in every country. This marks a break with much previous analysis, in which different criteria have been applied to different countries, making generalization difficult.

Nevertheless, our analysis still has significant limitations. Like all behavioral sciences, the study of political decisionmaking is complex. Variables,
such as the intensity of supporters' opinions, can change outcomes but are difficult to measure and to use in a consistent, generalizable fashion. Political analyses that depend on such variables cannot therefore be easily tested to see if they are true or false or if they have predictive power. Compared to such analyses, the approach pursued here focuses on variables that can be measured consistently and ex ante. Despite these advantages, however, the analysis, given its present state of development, will not always lead to unambiguous conclusions and predictions.

Our data and analysis provide no support for the frequently voiced opinion that SOE reform is more likely in authoritarian regimes than in democratic ones. In our sample, authoritarian governments exhibit both good and bad performance in the SOE sector. Chile under General Augusto Pinochet pursued SOE reforms that helped to lay the foundation for future rapid growth; the Philippines under President Ferdinand Marcos went in the opposite direction, nationalizing private firms and putting up barriers to competition that contributed to economic stagnation and deeper poverty. Nor is there any clear link between democracy and SOE reform. During the period we examine, reform was slow in India but rapid in Poland and the Czech Republic. These mixed results are to be expected. While reforms may be more feasible in authoritarian regimes, where the leadership need not establish a consensus before acting, the institutions that require consensus-building in democracies increase the credibility of the resulting policies, as we discuss below.

**Condition I: Political Desirability**

Reforms can become desirable to the leadership and its supporters in two complementary ways. The first involves changes in the leadership's constituencies such that those who oppose SOE reform are no longer a significant part of the leadership's support base. These changes may be the result of an outright regime shift (as in Chile in 1973 or the velvet revolution in Czechoslovakia in 1989) or a shift within the governing coalition (as in Mexico in 1988). The second involves an economic crisis (for example, a drop in GDP or a sharp fall in net foreign assistance) that makes it increasingly difficult for the government to continue subsidizing SOEs (as, for example, in Ghana and Mexico). The size of the economic crisis needed to make reform desirable depends on how much the leadership relies on the support of those who benefit from the SOE status quo.
The more successful reformers in our sample met the political desirability conditions, but most of the six countries with mixed or poor SOE reform records did not. Most of the mixed and poor performers experienced either a significant regime shift or economic problems that could have created an opening for reform. Yet the continued importance of the SOE sector in the government's support base meant reform did not become politically desirable. In Turkey, for example, a regime change in 1980 resulted in numerous economic reforms. However, these efforts stopped short of privatizing or otherwise reforming state-owned enterprises because SOE employees were crucial to the new government's support base.

**Condition II: Political Feasibility**

Reform is politically feasible when the leadership can secure the approval and support of other government entities whose cooperation is critical to success—legislatures, bureaucracies, and the state or provincial governments that are responsible for formulating policy or carrying out the reform. In addition, the leadership must be able to withstand opposition to reform from those who stand to lose, such as SOE employees, especially when these groups are organized, numerous, and ready to engage in demonstrations, work stoppages in strategic industries, and other actions that might be costly to the government. The likelihood of opposition is greatest when the enterprise has many extra employees—in some SOEs up to 90 percent of employees may not be needed. In such instances, workers, rightly worried that reform may lead to layoffs, have a strong incentive to resist.

In all the successful reformers in our sample, the leadership controlled the policymaking and implementation apparatus when reform began; moreover, in each country the leadership offered compensation and sometimes used compulsion sufficient to overcome resistance outside normal political channels. Compulsion can have high social costs, and the reforms enacted through coercion are often not sustainable. No government relied solely upon compulsion to overcome opposition. In Chile, for example, the military government employed often harsh measures to curb union powers but also offered handsome severance pay to port employees who might otherwise have engaged in job actions that could have disrupted the economy. In the 1980s the government distributed SOE shares to the general public and SOE employees under various
generous financing alternatives. Neither Poland nor the Czech Republic used compulsion but instead satisfied reform opponents with different distributions of enterprise shares.

Ghana, which we rank as partially meeting Condition II, illustrates the difficulties that less successful reformers faced in overcoming opposition to reform. Throughout most of the 1980s and into the 1990s, the executive controlled policymaking. In 1985, to overcome substantial resistance to SOE reform, the government tried a mix of compulsion and compensation. On the one hand, it reduced the power of the state-owned enterprise union, detaining labor leaders critical of the reform; on the other, it began to give fired state-owned enterprise workers more generous severance payments. With the approach of district elections in 1988, however, the government became increasingly reluctant to compel compliance with decisions about layoffs. Severance payments became so expensive that the government had to abandon efforts to cut SOE employment.

**Condition III: Credibility**

The third and final condition for successful state-owned enterprise reform is government credibility. We identified three ways to judge a government's credibility. First, credible governments have a reputation for keeping promises; for example, because they announced and implemented overall economic reforms or have not previously expropriated private firms. Second, they face domestic restraints on policy reversal, such as constitutional restrictions that make it hard to overturn legislation or widely distributed shares in privatized SOEs that can create a large, proreform constituency. Third, they submit to international restraints, such as trade treaties or loan covenants, which make it costly to reverse reforms. Some mechanisms are more powerful than others. A government with a solid reputation, or strong domestic restraints, may enjoy sufficient credibility whether or not it accedes to international treaties. The reverse is not true, however: international restraints are usually too weak to confer credibility where other conditions are absent.

The range of abilities that countries exhibit to credibly commit to reform can be seen by looking at two less successful reformers, India and Egypt, and two more successful reformers, the Czech Republic and Poland. Although India did not meet the first two conditions of reform, any reforms that it might have undertaken would have enjoyed substantial
credibility. India had significant domestic restraints on policy reversal and was regarded by investor risk services as a relatively safe place to commit resources. In contrast, Egypt in the 1980s had a low confidence score with foreign investors and few restraints to protect reforms from being overturned. The experience of the Czech Republic and Poland illustrates how decisive moves to implement macroeconomic reform while at the same time putting in place domestic restraints that make policy reversal difficult can enable a country to build credibility in remarkably little time.

**Predicting Reform Readiness**

Would knowing whether or not a country satisfies these three necessary conditions for successful reform—desirability, feasibility, and credibility—help us to predict reform outcomes? Political behavior is inherently complex and dynamic, making prediction difficult. Nevertheless, the methodology developed in the report enables us to set forth objective and transparent indicators that can be known prior to reform, tested for accuracy and consistency, and applied systematically to our entire sample. Table 8 shows which countries in our sample failed to meet one or more of the three necessary conditions according to these measures. Countries that did not meet any one of the three conditions were less successful reformers. Thus, unready countries privatized less and failed to implement nondivestiture reforms effectively. This illustrates a key finding of our analysis: reform cannot succeed until countries fulfill each and every one of the three readiness conditions.

**What Can Be Done to Spur Reforms and Improve Outcomes?**

The evidence makes it abundantly clear that reducing the role of bureaucrats in business and improving the performance of the remaining SOEs can bring a country substantial economic gains. Yet reform has been slow and seldom successful. We conclude our study by suggesting ways that leaders and policymakers in developing countries can foster more rapid and successful state-owned enterprise reform and ways foreign aid can assist them more effectively.
A Decision Tree for Reform of SOEs

State-owned enterprise reform involves a multitude of choices, each with its own set of problems and opportunities. The choices made will inevitably vary from country to country; but to lead to successful outcomes, they must be made in a logical order. It might seem obvious, for example, that countries will not reform successfully until the leadership perceives reform as desirable. Yet, perhaps precisely because the economic gains of reform are substantial, well-intentioned outsiders, including the World Bank, have sometimes attempted to prod developing countries that are not ready for reform into acting. Similarly, developing-country leaders and policymakers, persuaded of the benefits of reforming SOEs, have sometimes attempted to do so, only to choose an option that meets with failure. How can those who rightly favor reform organize the multitude of choices they face in a way that will increase the likelihood of success?
In thinking about the prerequisites of reform, and the conditions that are necessary for the success of various reform options, we have found it useful to draw a decision tree (figure 10). At each juncture we ask a question, the answer to which sends us in one of two directions, where we encounter another juncture and another question or a suggested policy approach. Chapter 5 describes that decision tree, offering checklists that reform advocates can use in deciding how to proceed in a particular country or with a particular enterprise in order to avoid the potential pitfalls along the way. We conclude with a summary of the main decision points.

The first question is whether the country is ready for reform. The answer will be determined by whether or not a country meets each of the three readiness conditions described above. In the borderline cases, of which there may be many, up-front actions, such as trimming an oversized SOE work force or selling or liquidating a large firm, can be a good

Figure 10 A Decision Tree for State-Owned Enterprise Reform

The decision tree helps to organize the multitude of choices involved in SOE reform. To use it, begin with the first question at left. Each answer leads to another question or a recommended policy course.

Source: See text in summary.
signal of readiness to proceed with a broader program of SOE reform. Depending on the answer, the course of action is radically different. We first describe the course of action to be pursued in countries that are not ready to reform, then turn to the policies that can help reform-ready countries to maximize the benefits. Because foreign aid can have an important influence on the timing of SOE reform and how it is pursued, we suggest ways to enhance its effectiveness in supporting SOE reform at the end of the book. They are summarized here in box 3.

**Box 3 How Foreign Aid Can Better Assist State-Owned Enterprise Reform**

THE FINDINGS OF THIS REPORT, PARTICULARLY THE THREE CONDITIONS OF reform readiness, have important implications for foreign assistance. External support for SOE reform is often highly beneficial, but the evidence suggests that it can sometimes do harm as well as good. This box summarizes the implications of the report's findings for such support; a more detailed discussion is presented in "Implications for Foreign Assistance" at the end of the report.

We found that aid intended to promote SOE reform can be counterproductive in several situations. First, financial assistance to unready countries may make it easier for interests that oppose reform to sustain the status quo. For example, in at least two of our case study countries, Egypt and Senegal, foreign assistance that ameliorated a fiscal crisis may have reduced pressure to reform. Second, going through the motions of reform without making real changes can cause a deterioration in SOE performance. For example, we found that signing a performance contract without changing incentives gives SOE managers an opportunity to negotiate multiple soft targets at odds with the goals of improved performance. Third, we found that that ended overt state enterprise subsidies to meet aid conditions sometimes then expanded covert subsidies and bank credits, which are harder to identify and curb and which spread SOE problems to the financial system. Fourth, some reluctant governments were slow to privatize, then rushed into bad bargains to meet deadlines set by external assistance agreements. And finally, although this is harder to document, support for reforms that are not implemented and therefore don't show results can tarnish the reputation of reform advocates in developing countries, and of foreign assistance, undermining the credibility of SOE and other types of reform. This suggests:

- Foreign assistance is more effective when it differentiates between countries that are ready to reform their state-owned enterprises successfully and those that are not.
- Countries that clearly meet the three conditions of reform readiness are most likely to benefit from foreign assistance for SOE reform. Much foreign assistance is already predicated on government commitment to recommended policy actions; our suggestion is to assess commitment more reliably by focusing systematically on the conditions of SOE reform readiness that underlie success.

For borderline cases (which may well be the majority), up-front government actions are the most reliable way to determine which countries meet the three conditions for successful reform. Actions that signal that reform has become politically desirable and politically feasible include,
**What to Do in Countries Not Ready to Reform SOEs**

Failed reform attempts can be very costly. Money spent to restructure state-owned enterprises and pay off their bad debts wasted if the enterprises fail to improve or, having been privatized, collapse back into the government's arms. More difficult to quantify, but no less important, are the costs in wasted human and political capital. Policymakers who spend months or years designing SOE reform programs when the

- for example, laying off unnecessary workers or selling a very large firm; actions that increase credibility include establishing restraints to prevent policy reversal (such as constitutional prohibitions on renationalization) or widely distributing shares in privatized firms (thus enlarging the constituency with a stake in reform success).
- The design of foreign assistance needs to take account of the possibility that reform readiness was overestimated or that circumstances have changed in such a way that a country no longer meets the readiness criteria. These include moves to protect SOEs from competition, writing off state-owned enterprise debt without addressing the underlying causes of overindebtedness, or failing to pay state-owned enterprises for goods or services delivered.
- Foreign aid can help governments of unready countries lay the groundwork for SOE reform by encouraging and assisting policy reform in other areas. As we discuss in the text, this leaves a large agenda including the reduction of fiscal deficits and trade restrictions and the removal of barriers to entry. Although similar tests of readiness may well apply to reforms in other areas, the constituencies for and against reform differ depending on the policy and sector involved; thus, some non-SOE reforms are possible in countries where the conditions for SOE reform do not yet exist. External assistance can also help prepare the way for SOE reform by providing information about the net costs of maintaining the status quo and the net benefits from reform and by informing political leaders, policymakers, opinion leaders, and others about SOE reform experiences in other countries.
- Foreign assistance can help reform-ready governments attract private investors. A government that is otherwise ready to reform but is just beginning to establish its credibility may find it hard to attract private buyers for large, asset-specific investments in regulated monopolies. In such instances, guarantees by international agencies could be investigated as a way to help attract initial private investment while the government is building up its credibility. Such guarantees are not without risk and should be approached cautiously, taking into account the pros and cons, which we discuss in box 4. Even without guarantees, foreign assistance can signal to investors which countries appear ready to reform their state-owned enterprises by clearly distinguishing those that are ready from those that are not.
prerequisites for success are lacking could devote their scarce skills to other issues where success is more likely. Similarly, developing-country leaders and donors who push SOE reforms with a very scant or nonexistent chance of success draw down their political capital without achieving any significant returns.

Are we suggesting that nothing be done in such situations? Certainly not. Rather, policymakers can pursue other reforms that are beneficial in their own right and also help to make reform of state-owned enterprises more desirable, feasible, and credible. Important reforms that do not target state-owned enterprises are often possible in environments where the three conditions for successful SOE reform do not yet exist, because different types of reform affect different constituencies. Many macroeconomic reforms, for example, do not directly threaten the interests of SOE supporters but nonetheless help to generate pressure and support for future SOE reform, thus making reform more desirable. To help make SOE reform more politically desirable policymakers could:

- **Reduce fiscal deficits.** Fiscal and monetary reforms that bring revenues and expenditures into line increase pressure for SOE reform by making the burden of SOE deficits explicit.
- **Ease trade restrictions.** Liberalizing trade restrictions gives exporters a stronger position in the economy, and exporters can become an important constituency for SOE reform, demanding more efficient provision of goods and services that SOEs supply.
- **Remove barriers to entry.** Removing barriers to entry increases the number of voices calling for SOE reform. New entrants who must rely on state-owned enterprise services or compete with subsidized SOE products help enlarge the constituency for reform.
- **Initiate financial sector reform.** Governments not ready to reform SOEs may still be prepared to develop their financial system by improving supervisory and regulatory capacity, reducing directed credit and direct government control over financial intermediaries, and easing some interest rate controls.

Similarly, governments can make SOE reform more feasible by reducing the opposition to reform by workers and others dependent on state-owned enterprises. Policymakers could do the following to help:

- **Eliminate obstacles to private job creation.** One reason state-owned enterprise workers typically oppose reform is that while overstaffing
makes layoffs likely, appealing alternative employment is often lacking. Policymakers can thus ease the way for SOE reform by improving private employment opportunities. Steps include eliminating interest rate subsidies (these encourage employers to substitute capital for labor) and complex employment regulations (which have been shown to inhibit private job growth).

- **Uncouple SOE jobs and social services.** State workers who receive many goods and social services through their jobs are especially fearful of being fired. In most transition economies, for example, state firms traditionally provided housing, health care, transport, educational assistance, and other benefits. Creating alternatives to enterprise benefits, such as a commercial housing market or public health care, enables SOEs to stop providing these services and offer offsetting higher pay instead. This gives workers greater mobility and reduces their resistance to reforms that may threaten their jobs.

Finally, to enhance their credibility governments can take actions:

- **Improve their reputation.** By announcing reform programs, such as the macroeconomic reforms mentioned above, in advance and adhering to the program scrupulously, governments can enhance their reputation with potential reform supporters.

- **Establish domestic and international constraints.** Enacting and adhering to constitutional provisions guaranteeing the right to property can help reassure investors that the government will honor its commitments. Trade treaties and multilateral agreements raise the cost of reversing future SOE reforms and help enhance credibility.

Policymakers who pursue this agenda will eventually find themselves on the opposite branch of the decision tree, among countries that are ready to reform state-owned enterprises.

**What to Do in Countries Ready to Reform SOEs**

A country that meets the three readiness conditions for successful SOE reform faces a multitude of choices about how to handle each enterprise, the answers to which will depend on the nature of the market, the firm, and the country's capacity to divest and, in the case of monopoly markets, to regulate. Returning to our decision tree, we see that it asks policymakers in countries ready to reform to classify SOEs into two types:
• Those operating in competitive or potentially competitive markets (all manufacturing and most services)
• Those operating in natural monopoly markets where regulation is necessary to protect consumers (some utilities and most infrastructure).

Enterprises in competitive or potentially competitive markets should be divested, provided that competition is enhanced and arrangements for the sale can be made transparent and competitive or at least open to the possibility of competitive bidding. Enterprises in natural monopoly markets can also be divested, provided that the sale is transparent and open to competitive bidding and that a credible regulatory structure can be put in place. These two outcomes correspond to the two outermost branches of our decision tree.

For both types of enterprises, policymakers undertaking divestiture face many questions that have different answers depending on country conditions and in some instances on the size and condition of the enterprise being sold. Questions that policymakers will want to consider when designing a divestiture strategy include:

• Is it better to begin with small enterprises or big enterprises? Selling big firms first produces bigger welfare gains: the bigger the firm, the bigger the potential benefits. It also signals that the government is serious about reform and, properly done, can create new proreform constituencies. On the other hand, starting with small firms and gaining experience before tackling the large firms makes sense if bureaucratic capacity is the limiting factor.

• Should the government financially restructure firms before selling them? While some financial restructuring may be necessary, new investments are seldom recovered in the sale price. Even so, government assumption of SOE debt is sometimes the only feasible way to unload a company whose debt exceeds the sales value of its assets.

• Should the government lay off workers before selling an enterprise? Countries as diverse as Argentina, Japan, Mexico, and Tunisia have sometimes had to fire SOE employees prior to privatization. This is sometimes necessary because investors will not buy a firm where acrimonious labor disputes seem likely. Moreover, governments are usually better able than private investors to alleviate
adverse social impacts of mass layoffs. Severance pay can reduce the risks facing SOE workers.

Selling monopolies is more complex than selling firms in competitive or potentially competitive markets. Even so, as long as the sale is competitive and transparent and a credible regulatory contract can be devised and implemented, divesting monopolies can produce major welfare gains. Policymakers who decide their country is ready to divest state-owned monopolies will want to incorporate the following findings in their divestiture plans:

- **Regulatory contracts work better when governments reduce the firm's information advantage through competition.** In addition to competitive bidding for the contract itself, competition can be increased by splitting competitive activities from natural monopolies and breaking national monopolies into regional monopolies. In markets that still remain monopolies, the government could require the winning bidder to meet specified targets or lose the concession.

- **Price regulation is more effective when it allows firms to retain some of the benefits of improved performance while passing part to consumers in the form of lower prices.** Basing prices on information from sources other than the firm or independent of the firm's cost can eliminate the firm's incentive to inflate costs. Revising prices infrequently gives firms an incentive to cut costs between adjustments.

- **Credible regulatory contracts lower costs to the consumer.** Governments that credibly commit to meeting their end of the regulatory contract can drive a harder bargain with investors. When the regulatory contract is based only on a presidential decree or lacks provisions for impartial adjudication of conflicts, investors demand higher returns or greater monopoly powers to compensate for higher risk. When such costs are very high, policymakers may wish to improve credibility before divesting. Alternatively, they may seek external guarantees (see box 4).

Even in countries where the leadership is committed to rapid and extensive privatization, some SOEs are likely to remain in government hands for a long time, for political if not for economic reasons. What to do with these enterprises is the final question on the decision tree; it asks: are contractual arrangements with the private sector possible?
Management contracts with the private sector are the preferred course; however, as we have shown above, these are useful only in a limited number of circumstances where the enterprise's technology changes slowly and output is primarily a single homogeneous product (such as water and sugar) or where quality is easily monitored (such as hotels).

**Box 4 Guarantees and Privatization**

SOME COUNTRIES THAT ARE READY TO PRIVATIZE THEIR INFRASTRUCTURE SOEs ARE unable to attract buyers at a reasonable rate of return. This happens if potential bidders have reason to worry that the government will renege on an agreed-upon regulatory contract in ways that will reduce their expected profit. This risk, termed "regulatory risk," is particularly high when investors question whether future governments will abide by the present administration's commitments. In such cases, a guarantee by an outsider (in practice, a donor government or multilateral institution) can reduce investors' regulatory risk, enabling privatization to proceed.

But outside guarantees may also have unintended side effects that undermine successful privatization. Multilateral guarantees of regulatory risk are a relatively recent phenomenon; an empirical assessment of their effect will not be possible for several years. Meanwhile, policymakers considering seeking an international guarantee—and the donor governments and multilateral institutions in a position to offer one—should carefully consider the following pros and cons.

**Pros:** The guarantees might

- Improve the government's credibility and boost investor confidence, leading to greater private capital flows. For example, the World Bank guaranteed $240 million of syndicated bank loans for the Hub Power Project in Pakistan, and the Export-Import Bank Japan guaranteed another $120 million. The project is being built and operated by a private company, and the guarantees are callable only if the government defaults on specific legal agreements between it and the company, causing the company to default on loans from the banks. Covered events include, for example, a failure of the government's water and power authority to purchase Hub-generated electricity in accordance with agreed terms. The guarantees seem to have given the project access to previously unavailable finance. (Total financing for the 1,292 mw project is about $1.9 billion—75 percent debt and 25 percent equity.) Ideally, once the government has performed in accordance with guaranteed contractual obligations in this and a few other projects, investors would no longer demand such guarantees (unless they are very inexpensive).

- Tie the hands of a future administration that might otherwise violate an agreement entered into by the existing administration. Successor governments may wish to violate a predecessor's commitment for several reasons. The new government may be less committed to privatization than the old, or it may face an unforeseen price shock that makes the agreement less attractive than before. Whatever the reasons, donor or multilateral guarantees raise the cost of reneging, since doing so would have numerous negative spillover effects—not the least of which may be a halt to further donor and/or multilateral assistance. By raising the cost of reneging, guarantees reduce the likelihood that successor governments will backslide.
Cons: The guarantees might

- **Become too broad.** One advantage of privatization is that it taps the efficiencies generated by incentives associated with private profitmaking. But if guarantees cover most or all of the risks, private investors will have little incentive to run the enterprise better than bureaucrats did before privatization.

- **Be difficult to price.** The guarantor will want to charge a fee for the guarantee to cover its costs (including some of the risk of holding a contingent liability) and to signal investors that their reduced risk is not without a price. The problem is that there is no clear market for such regulatory risk, and even if there were, guarantees, like other assets, can be mispriced. Also, a fee structure that did not vary according to different levels of coverage or risk or, more generally, a guarantee that did not precisely delimit the exposure for the guarantor, the authorities, and private participants might send incorrect signals to financiers. In particular, it might lead them to demand more coverage than was optimal for the country. Although guarantees can lower the rate of return investors demand, they are not free to the consumer, since companies usually pass on the cost of the guarantee in the form of higher prices.

- **Reduce, rather than enhance, credibility.** If other private investors mistakenly take the guarantee as a signal that the country is likely to renege, it could lead to credibility problems in international markets.

- **Delay, rather than speed, privatization.** Since governments cannot credibly commit to servicing a growing supply of guarantees and loans, then to some extent, taking a guarantee displaces a loan. (Indeed, it would be worrisome if this did not occur, as it would suggest that the authorities were taking on contingent liabilities without any restraint.) If the government believes that the country's ability to generate foreign exchange earnings is limited, and if demands for foreign loans in the country for other projects is high, then the government might be inclined to wait for those to whom guarantees are not necessary, thereby delaying the privatization effort.

In sum, guarantees appear to be useful when a government is committed to reform but the country's history makes it difficult for the government to commit credibly, thus raising the return that investors demand or making it difficult to attract investors at any price. However, guarantees are not without drawbacks and should not be used as a substitute for necessary reforms. Authorities should keep in mind that the first step in attracting domestic or foreign investment should be to improve the underlying economic environment. Perhaps the best general guidance concerning guarantees is that they should only be employed when there are clear advantages beyond merely enabling privatization to proceed. These might be additional investment or investors' acceptance of lower rates of return that result in tangible benefits to the public.

For firms that cannot be divested but are unsuitable for management contracts, policymakers have no choice but to attempt improvements within the existing ownership and management arrangements. Specific measures that must be implemented include introducing competition, cutting government subsidies, reforming financial arrangements to
eliminate soft credits, and holding managers responsible for results while giving
them the freedom to make necessary changes. The performance of SOEs which
are not divested can be improved through these actions, but getting the details
right is tough because each reform relies on the successful implementation of
others. Policymakers will want to keep in mind the following:

- **Foster competition wherever possible to create incentives for improved performance.** State-owned enterprise managers will only exert the effort needed to improve performance when they are pushed by competition.
- **End subsidies and transfers.** Fostering competition is fundamental to improving the performance of SOEs in potentially competitive markets. But competition can only be effective if government transfers and subsidies are eliminated.
- **Eliminate access to soft credit.** Cutting subsidies and transfers only results in hard budgets if access to soft credit is also eliminated.
- **Give managers the autonomy to respond to competition and hold them accountable for results.** Managers must have the power to lay off workers, seek lower-cost suppliers, end unprofitable activities, and pursue new markets. And they must be held accountable for results. Lacking autonomy and responsibility, managers may respond to the increasing number of constraints in ways that hurt the enterprise, such as cutting spending on maintenance, marketing, even supplies.
- **Only use performance contracts when they address underlying problems.** Performance contracts only work if they convey clear signals for reform, provide rewards for improved performance, and curb governments' tendency to renege. Writing a sound performance contract can seem simple; as we have seen, however, these contracts have usually failed address the problems of information, rewards and penalties, and commitment. In general, the effort that goes into such contracts could be better spent pursuing the measures for unready countries described above, in particular putting in place the conditions for divestiture.

In sum, we have shown in the report that large and inefficient state-owned enterprise sectors have high costs for developing economies, especially the poorest. Yet reform is possible and offers potentially large
benefits, including more goods and services of better quality at lower prices; increased availability of resources for health, education, and other social spending; and improved fiscal stability, all of which contribute to more rapid economic growth. Reforming SOEs isn't easy, however, and reforms often entail political costs. Indeed, we found that political obstacles are the main reason that state-owned enterprise reform has made so little headway in the last decade. Nevertheless, this study documents that countries in very different economic and political circumstances have overcome these barriers and successfully reformed.

Notes

1. The two periods come from different data sets and may not be strictly comparable. No data are available on value of transactions for the earlier period. Data for the later period exclude East Germany and the voucher sales and privatization of small-scale enterprises in Eastern Europe.

2. If we had included the recent voucher privatization in Eastern Europe and former Soviet Union, it would have increased our total number of privatizations severalfold, but it would also have added many thousands of SOEs to the stock of enterprises that could have been divested.

3. Several studies have shown that large fiscal deficits negatively correlate with growth (see, for example, Fischer 1993; Easterly, Rodriguez, and Schmidt-Hebbel 1995). It has also been shown that large fiscal deficits are a leading cause of high inflation, which in turn undermines economic growth (see, for example, Wijnbergen 1991; Bruno and others 1991; Edwards and Tabellini 1991). A negative relationship between inflation and growth has also been documented by de Gregorio (1993), Gylfason (1991), and Fischer (1993). More recently, Bruno and Easterly (1994) report a significant negative association between high inflation episodes and growth, more specifically where inflation exceeds 40 percent. Accordingly, to the extent that SOE savings-investment deficits are strongly correlated with fiscal imbalance, we can conclude that SOEs adversely affect economic growth.
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The Report Team

Acknowledgments

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