

Viewpoint

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

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When privatization is not feasible or palatable, some developing country governments seek to improve the performance of state enterprises by negotiating performance contracts with their managers. Many of these contracts have been put in place with World Bank assistance. Research shows that they rarely work. This Note summarizes the rationale for performance contracts and explores the reasons why they haven't worked. It concludes that since a well-designed and -enforced performance contract can be as politically costly as a well-designed privatization, performance contracts are not likely to be successful in countries that lack the political will to privatize.

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

The case for performance contracts

Despite a global wave of privatizations, state enterprises still account for about 10 percent of gross domestic product (GDP) in developing countries. These enterprises are often the largest and most valuable or problematic firms, with monopolies in mining, petroleum, infrastructure, and heavy industry. For these firms performance contracts have often seemed to make good sense. Before the contracts were

put in place most governments were trying to run their state enterprises without any form of performance evaluation. As one architect of performance contracts noted, this was like playing football without rules, scoreboards, or referees. Performance contracts seemed a logical solution to this problem, since similar contracts had been successful in the private sector.

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



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

The contrary evidence

The logic of performance contracts is persuasive, but the reality has been disappointing. Two empirical studies—one analyzing the effect of such contracts on profitability and productivity in twelve companies in six countries and the other examining statistically the correlation between performance contracts and productivity

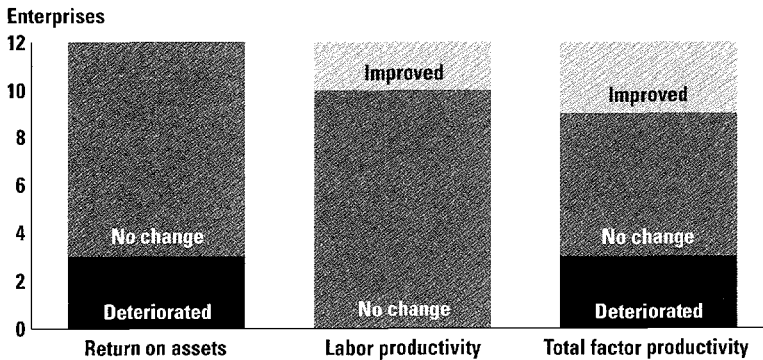
in hundreds of state enterprises in China—found no evidence that performance contracts had improved efficiency. The first study analyzed the effects of contracts in monopoly enterprises (in water, electricity, telecommunications, and oil and gas) in Ghana, India, the Republic of Korea, Mexico, the Philippines, and Senegal. It found no pattern of improvement associated with the performance contracts in productivity or profitability trends (figure 1).

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

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

Why not simply judge performance contracts on whether the firms met the targets specified in the contract? All the firms in the first study did achieve at least satisfactory ratings where some sort of score was assigned, and all the contracts assign a high weight to economic goals. The problem is that many of the targets are soft or flawed measures of economic performance. For example, 30 percent of the score for one of the electricity companies (India's National Thermal Power Cor-

FIGURE 1 PERFORMANCE CHANGES IN STATE ENTERPRISES AFTER SIGNING PERFORMANCE CONTRACTS



Note: The data cover twelve state enterprises in Ghana, India, the Republic of Korea, Mexico, the Philippines, and Senegal. Source: Company data and World Bank estimates.

poration) depended on the volume of electricity it generated. The company achieved its target and received a score of excellent, yet its total factor productivity actually fell below precontract levels. Output went up, but inputs rose three times faster. The target was flawed because it could be met by increasing inputs, even if efficiency declined. The contracts have many such flaws, for reasons explored below.

What is the problem?

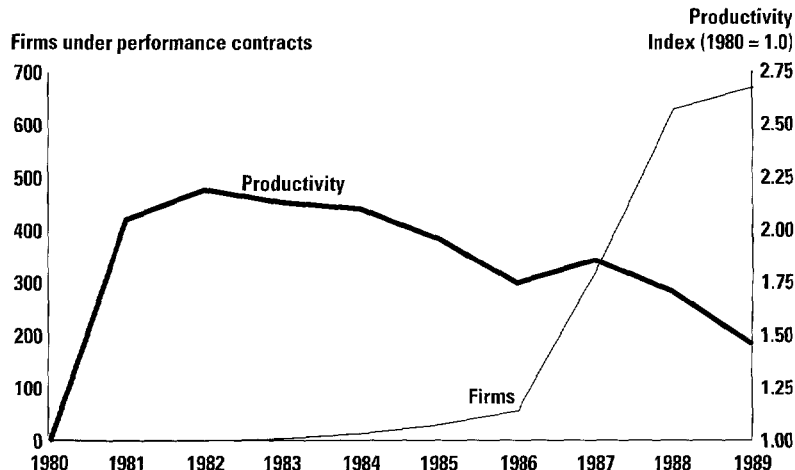
The theory of contracting suggests that to improve performance, performance contracts must:

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

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

Second, the incentives provided under the contracts failed to motivate managers. The first study found that only two of the twelve contracts paid a bonus or punished underachievement. And

FIGURE 2 CHINESE STATE ENTERPRISES UNDER PERFORMANCE CONTRACTS AND THEIR PRODUCTIVITY, 1980-89



Note: The data for productivity refer to the state enterprises with performance contracts each year. Source: Shirley and Xu 1997a.

the second study, in China, found that the incentive (wage increases linked to profits) was set too low to motivate improvements in most of the firms and was aimed only at workers.

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

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

Why did so few performance contracts contain the provisions necessary for success? Performance contracting assumes that government



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

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

Improving enterprise performance

Chile's successful experience in reforming its state enterprises points to actions that are key to improving efficiency: Chile increased competition by ending any legally mandated state monopolies and barriers to entry, reducing import tariffs to 10 percent across the board, breaking up monopolies in such sectors as electricity, and pushing state enterprises to contract out competitive activities under strict rules of competitive bidding. It placed state enterprises under private commercial law, and members of the boards of directors became liable for their decisions. Private parties were named to boards, and boards were kept small (five people) to reduce the political value of keeping companies public. The government eliminated all subsidies, transfers, and government

guarantees for debts of state enterprises and instructed banks to lend to them under the same criteria as for private enterprises. State enterprises were required to pay a 10 percent return on assets as a dividend, and money losers were required to sell assets to pay their dividend. The government privatized almost all commercial and financial firms and most utilities, allowing it to concentrate its supervision on relatively few firms (such as the water and sewerage companies).

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

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