Privatization in Developing Countries
An analysis of the performance of newly privatized firms

Privatization of state-owned enterprises has become an important phenomenon in both industrial and developing countries. Privatizations have been occurring at an increasing rate over the past decade, particularly in developing countries, whose share in global privatization revenues rose from 17 percent in 1990 to 22 percent in 1996 (The Economist 1997).

Developing and industrial countries are not equally endowed with the factors likely to ensure the success of a privatization program, however. The privatization efforts of most developing countries are inhibited by embryonic financial markets, weak regulatory capacity, and a public sector that accounts for a large share of GDP. Many, particularly those with low per capita income, lack some of the main ingredients for a successful privatization, such as capital, entrepreneurs, and competent managers. But some of these countries have large markets and fast economic growth rates, features that make the success of government divestiture more likely. This Note describes the results of a study that set out to determine whether privatization is beneficial in the economic environments and institutional settings of these countries by examining how privatization affects firms’ financial and operating performance in a broad set of developing countries.

Most empirical studies of privatization have focused on the industrial countries, with the notable exceptions of Galal and others (1994) and Megginson, Nash, and van Randenborgh (1994; henceforth MNR). In a World Bank study Galal and others (1994) assessed the welfare gains or losses resulting from the privatization of twelve companies, operating mostly in non-competitive markets, in four countries: Chile, Malaysia, Mexico, and the United Kingdom. The authors reported net welfare gains in eleven of the twelve cases and found no cases in which workers showed an overall loss from privatization. But as the authors pointed out, their sample was small and unrepresentative of the universe of privatized firms in developing countries, and their findings should not be generalized.

The MNR study covered a much larger sample, comparing the pre- and postprivatization financial and operating performance of sixty-one firms in eighteen countries (twelve industrial and six developing) and thirty-two industries in 1961–90. The authors presented strong evidence that after privatization the sample firms became more profitable, increased their real sales and investment spending, and improved their operating efficiency. The companies also significantly reduced their debt levels and increased dividend payments. Perhaps more surprising, they increased employment. These results were generally unchanged when the authors partitioned the data into smaller

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>POSTPRIVATIZATION PERFORMANCE: KEY RESULTS FOR 79 COMPANIES PRIVATIZED IN 21 DEVELOPING COUNTRIES, 1980–92</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators</td>
<td>Average change (percent)</td>
</tr>
<tr>
<td>Profitability</td>
<td>+124</td>
</tr>
<tr>
<td>Efficiency</td>
<td>+25</td>
</tr>
<tr>
<td>Investment</td>
<td>+126</td>
</tr>
<tr>
<td>Output</td>
<td>+25</td>
</tr>
<tr>
<td>Employment</td>
<td>+139 (+1.3)</td>
</tr>
<tr>
<td>Leverage</td>
<td>−5</td>
</tr>
<tr>
<td>Dividend payout</td>
<td>+44</td>
</tr>
</tbody>
</table>
Compañía de Teléfonos de Chile (telecoms)
Empresa Eléctrica de Melipilla S.A. (electricity)
Empresa Nacional de Telecomunicaciones (telecoms)
Greece
Hellenic Bottling Co.
Heracles General Cement
India
Bharat Petroleum (petroleum, petrochemicals)
Hindustan Petroleum (petroleum, petrochemicals)
Industrial Credit and Investment Corp. (finance)
Indian Petrochemicals Corp. (petroleum, petrochemicals)
Steel Authority of India
Jamaica
National Commercial Bank
Radio Jamaica Ltd.
Republic of Korea
Korea Electric Power
Malaysia
Cement industries of Malaysia Berhad (cement)
Manufacturer
Sarawak berhad
Edoran Otomobil
Nasional Berhad (automobiles)
Malaysia Airlines
System Berhad
Malaysia International
Shipping Corp.
Perusahaan Otomobil Nasional Berhad (automobiles)
Syaricat Telekoms
Malaysia Bhd (telecoms)
Tenaga Nasional Berhad (electricity)
Mexico
Banamex (banking)
Bancomer (banking)
Compañía Mexicana de Aviación (airline)
Teléfonos de Mexico (telecoms)
Nigeria
AIICO (insurance)
Crusader Insurance

Subsamples. But as impressive as MNR’s sample of privatized firms was, it included only a small number of firms headquartered in developing countries (from three to twelve, depending on the financial and operating performance measure)—a sample too small for the results to be considered indicative of privatization experience in developing countries.

Sample and methods

The study described in this Note considered seventy-nine newly privatized firms, headquartered in twenty-one developing countries, that experienced full or partial privatization during the period from 1980 to 1992. The sample was well diversified, with wide geographical dispersion and different levels of country development. The sample included low-income economies (Bangladesh, India, Pakistan), lower-middle-income economies (Chile, Jamaica, Nigeria, the Philippines, Thailand, Tunisia, Turkey), and upper-middle-income economies (Argentina, Brazil, Greece, the Republic of Korea, Malaysia, Mexico, Portugal, Singapore, Taiwan [China], Trinidad and Tobago, Venezuela). The sample firms were in different industries and market structures (competitive and noncompetitive) and varied in size.

The study sought to determine whether privatization is truly desirable in developing countries and whether the performance of newly privatized firms lived up to the expectations of governments and development agencies. In particular, it tried to determine whether privatized firms increased their profitability, their operating efficiency, their capital expenditures, and their output. It also examined the effect of privatization on employment, capital structure, and dividend policies. To this end, the study compared the performance indicators of the sample firms for the three years before divestiture and the three years after divestiture.

The study examined the change in the financial and operating performance of the newly privatized firms for the full sample and for several subsamples: firms in competitive and noncompetitive industries, firms headquartered in upper-middle-income countries and in low-income and lower-middle-income countries, full and partial privatizations, and “control” and “revenue” privatizations. Control privatizations are those in which governments surrender voting control; revenue privatizations are those in which governments sell a minority ownership stake and do not surrender voting control.

Higher profits

As firms move from public to private ownership, their profitability should increase. In response to shareholders’ wish to maximize profits, the managers of newly privatized firms can be expected to place greater emphasis on profit goals. And privatization typically transfers both control rights and cash flow rights to the managers, who then show a greater interest in profits and efficiency than in pleasing the government with higher output or employment. The study’s results showed significant improvements in profitability after divestiture. As measured by the return on sales, profitability rose on average from 4.9 percent before privatization to 11 percent after privatization, up 124 percent. Among the sample firms, 65 percent saw an increase. The subsamples showed similar results, except for firms from low-income and lower-middle-income countries, which showed an insignificant increase in profitability.

Greater efficiency

The greater emphasis on profit and the cuts in government subsidies following privatization can be expected to lead firms to use their human, financial, and technological resources more efficiently. The study measured operating efficiency on the basis of the sales efficiency ratio (real sales per employee) and net income efficiency ratio (net income per employee). Both ratios showed a significant increase following privatization (with the sales efficiency ratio up 25 percent on average and the net income efficiency ratio up 63 percent), rising for 80 percent and 70 percent of the sample firms. Thus, overall, divested firms improved their operating efficiency, achieving the
most common objective of governments launching privatization programs.

The increase in sales efficiency was significant for all the subsamples. This result for privatized firms in developing countries is similar to that of MNR for privatized firms in industrial countries.

The changes in both profitability and efficiency were significantly larger for firms in upper-middle-income countries than for those in low-income and lower-middle-income countries. This evidence lends support to Kikeri, Nellis, and Shirley’s (1992) argument that high-income or upper-middle-income countries should be in a better position to privatize successfully.

More investment

Governments expect that greater emphasis on efficiency will lead newly privatized firms to increase their capital investment spending. Privatized firms can also be expected to increase their capital expenditures because they have greater access to private debt and equity markets (especially in fairly developed capital markets) and more incentives to invest. To estimate capital investment, the study used the ratio of capital expenditures to sales, which increased on average from 10.5 percent to 23.7 percent after privatization (up 126 percent). Among the sample firms, 62 percent achieved an increase. MNR also documented an increase in this ratio. These results confirm the importance of privatization as an incentive to improve efficiency and increase investment.

The postdivestiture increase in investment was equally significant for several subsamples—firms in competitive industries, firms operating in upper-middle-income countries and in low-income and lower-middle-income countries, fully privatized firms, and control privatizations. But it was insignificant for firms in noncompetitive markets. This evidence, combined with that of MNR, suggests that in both developing and industrial countries competitive environments spur newly privatized firms to increase capital investment spending.

Higher output

Correctly conceived and implemented, privatization can be expected to foster efficiency and investments and thus stimulate new growth and employment. The study’s results confirm these expectations. Real sales rose significantly (up 25 percent on average) with 76 percent of the sample firms experiencing an increase. Relative to the level in the year privatization occurred, real sales rose from an average of 96.9 percent before privatization to 122.2 percent after privatization.

All the subsamples also showed significant increases in real sales following privatization, with sales rising for a large majority of firms (at least 68 percent in each subsample). This increase in output reflects the increased productivity of the privatized firms.

Higher employment

Most state enterprises tend to be overstaffed. So newly privatized firms could be expected to cut employment following government divestiture and the reduction of subsidies in order to increase efficiency. But employment increased for 58 percent of the sample firms on average by 139 employees (1.3 percent). This evidence, combined with that of MNR, suggests that privatization does not necessarily mean a decline in employment. As Kikeri, Nellis, and Shirley (1992) predicted, the evidence suggests that higher investment and efficiency lead to more output and employment.

Among the subsamples, the increase in employees was significant for firms in noncompetitive industries, for partial privatizations, for firms headquartered in low-income and lower-middle-income countries, and for revenue privatizations. Employment increased for all the subsamples except firms operating in competitive industries, which, as expected, were more inclined to reduce employment.

Lower leverage and higher dividends

The switch from public to private ownership can be expected to lead to reduced leverage,
since the government’s removal of debt guarantees will increase firms’ cost of borrowing and the firms will gain increased access to public equity markets. As predicted, the study’s results show that leverage, as measured by the ratio of total debt to total assets, decreased significantly (down 5 percent on average). Among the subsamples, the decline was significant for firms in both competitive and noncompetitive industries, for firms operating in upper-middle-income countries, for partially privatized firms, and for revenue privatizations.

Dividend payments can be expected to increase, since private investors, unlike governments, generally demand dividends. As predicted, the dividend payout ratio (dividends divided by net income) and the ratio of dividends to sales showed significant increases (from 34 percent to 49 percent and from 2.8 percent to 5.3 percent). Among the sample firms, 85 percent distributed more dividends as a proportion of their net income, and 76 percent more as a proportion of their sales. The ratio of dividends to sales increased significantly for all the subsamples. This evidence, combined with that of MNR, suggests that whatever the level of national development, newly privatized companies increase their dividend payments markedly.

Conclusion

The study examined the financial and operating performance of a large sample of newly privatized firms drawn from a wide set of developing countries. For the full sample the study showed significant increases in profitability, operating efficiency, capital investment spending, output (adjusted for inflation) and employment, and a decline in leverage and an increase in dividends. The results were generally robust for the subsamples too: strong improvements in performance for companies operating in both competitive and noncompetitive environments, for firms in upper-middle-income countries, for full and partial privatizations, for control privatizations, and for revenue privatizations. The study also found evidence of weaker improvements in performance for firms in low-income and lower-middle-income countries.

Thus ownership seems to matter. Privatization brings with it private owners who place greater emphasis on profit goals and carry out new investments that increase output and employment. Efficiency improves as a result and profitability follows. These improvements cannot be attributed to the prevailing market structure or the terms of share issue privatizations. The study’s results, combined with those of MNR, suggest that in both developing and industrial countries, newly privatized firms improve their performance. And among developing countries privatization appears to yield the greatest benefits for companies headquartered in those with high per capita income.

This note is based on a longer article by the authors, “The Financial and Operating Performance of Newly Privatized Firms: Evidence from Developing Countries,” Journal of Finance 53(June 1998): 1081–1110.

To take account of the possibility that some of the differences between preprivatization and postprivatization performance are due to economywide factors, the study used both performance measures adjusted for market effects and unadjusted performance measures. The results obtained with market-adjusted performance measures confirmed the results obtained with unadjusted performance measures but were generally less significant.

References