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#### Article

Size and Impact of Privatisation – A Survey of Empirical Studies

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# **PRIVATISATION**

## SIZE AND IMPACT OF PRIVATISATION – A SURVEY OF EMPIRICAL STUDIES

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During the past quarter-century, privatisation has emerged as a very effective tool for improving the performance of state-owned enterprises (SOEs), and has been embraced by governments around the world. Global privatisation proceeds rose from US\$40 billion in 1988 to a peak of US\$180 billion in 2000, before sliding back to less than US\$50 billion during 2003. Last year saw a sharp rebound, however, and global privatisation proceeds reached US\$95 billion in 2004. Looking forward, it seems likely that privatisation programs will continue growing and will expand to regions and industrial sectors that have thus far lagged - particularly the large Asian economies of China and India as well as the electricity supply and distribution and petroleum exploration and production sectors.

In general, governments launching privatisation programs tend to have similar goals. These include: (i) raising revenue for the state; (ii) promoting economic efficiency; (iii) reducing government interference in the economy; (iv) promoting wider share ownership; (v) providing the opportunity to introduce competition; (vi) developing the national capital market; and (vii) exposing former SOEs to market discipline. These objectives were first articulated by the first Thatcher government in the United Kingdom, which launched the first large-scale privatisation program during the early 1980s,

and all subsequent governments that have embraced privatisation assert similar goals.

Given its economic and political importance, it is unsurprising that privatisation has been examined intensely by academic researchers over the past decade. Megginson, Nash and Van Randenborgh (1994) document economically and statistically significant increases in output (real sales), operating efficiency, profitability, capital investment spending, and dividend payments, as well as significant decreases in leverage, for their sample of companies divested by OECD countries between 1961 and 1990. Boubakri and Cosset (1998), using a sample of 79 companies privatised by developing country governments between 1980 and 1992, confirm these results. Most subsequent empirical analyses have also shown that privatisation tends to improve the performance of divested companies.

#### The size of privatisation in different countries

After the successful initial public offering (IPO) of British Telecom in November 1984, privatisation became a core economic policy of all British governments. The UK privatisation program raised over US\$120 billion between 1981 and 1995, and involved completely selling off some two-dozen large enterprises, including British Aerospace, British Airways, British Gas, British Steel and British Petroleum. The success of the UK privatisation program prompted other Western European countries to start their own privatisation programs. The French government started divesting their SOEs during Jacques Chirac's first administration, and his government privatised 22 SOEs, accounting for US\$12 billion, between 1986 and 1988. Over the next five years, the French privatisation program was inactive, but it became active again during the early 1990s. France executed a series of large offerings, beginning with Total in 1992 and including Rhone-Poulenc, BNP, UAP, Usinor Sacilor and Pechiney during 1993-95 and France Telecom in 1997. Since then the French privatisation program has covered finance, telecommunication, manufacturing, petroleum and transportation industries.







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Italy has been actively divesting its SOEs since 1994 and has raised over US\$110 billion during this past decade alone. Major sales included the public offering of ENEL in 1999, which remains the largest IPO in history, as well as massive sales of ENI, Telecom Italia and all the major state-owned banks. There has been a relatively small number of large privatisations in Germany, but these still include Deutsche Telecom, Lufthansa, Deutsche Post, and Deutsche Bahn. Perhaps the most spectacular and concentrated privatisation programs have been implemented by the Iberian countries Spain and Portugal, which transformed both economies from highly interventionist to truly market based during a few years of the 1990s. Large Spanish sales included Telefonica, ENDESA, Argentaria, and Empresa Nacional de Autopistas. Portuguese companies were smaller, but the privatisation program was even larger as a fraction of total economic output.

Asian privatisation programs have been led by Japan since it began divesting Japan Air Lines in 1985 and Nippon Telegraph and Telephone in 1987. In fact, the three Nippon Telegraph and Telephone share offerings between February 1987 and October 1988 raised almost US\$80 billion, and one of those three offerings remains the largest single security offering in history at US\$40 billion. Elsewhere in Asia, governments tried to exploit opportunities to privatise their SOEs when market conditions were attractive, or when there was a need to raise cash to reduce budget deficits. As noted earlier, however, the two Asian countries that loom the largest in terms of privatisation potential are China and India. There have been numerous small partial divestments by the Chinese government, but there have been relatively few outright sales of SOEs. Furthermore, Chinese SOEs are typically burdened with many social welfare responsibilities that make it far more difficult to implement a true privatisation program. There is an interesting phenomenon in China where the non-privatising reform measures, such as price deregulation, market liberalisation and increased use of incentives, can improve the efficiency of SOEs, but it is likely that these reforms would be even more effective if coupled with privatisation. Since 2000, the Chinese privatisation program has picked up considerable momentum, and the list of large partial divestments includes Unicom, Bank of China, China Telecom, Petro China, China Unicom and Sinopec. India adopted a major economic reform and liberalisation program after a major economic crisis in 1991. The reform program first tried to improve the poor performance of India's SOEs, then attempted to privatise several of the larger companies. The government's attempt to divest the SOEs was resisted fiercely by labour groups and politicians, who were afraid of losing control. India finally privatised Bharat Aluminum Co (BALCO) in 2001, and many other sales are scheduled to take place in the future.

Elsewhere in Asia, Singapore has also been divesting SOEs. Interestingly, privatisation does not appear to significantly improve the performance of Singaporean firms because Singaporean SOEs were unusually well managed before divestment. There was only one large privatisation implemented in Singapore which is the privatisation of Singapore Telecom. Taiwan has been trying, with signal lack of success, to privatise Hunghwa Telecom for several years, but has been stymied by the government's reluctance to offer any pricing discounts on the sales. On the other hand, Korea was forced into nationalising numerous private companies following the 1997-98 economic crisis, and has since been busily - and successfully - selling most of these and its remaining SOEs to private buyers.

Latin America truly embraced privatisation during the 1990s, though its ardour has cooled significantly during the past five years. Chile's program was particularly important, both because it was Latin America's first and because the 1990 Telefonos de Chile privatisation, which used a large American Depository Receipt (ADR) share tranche that was targeted towards US investors, opened the first important pathway for developing countries to directly tap Western capital markets. Mexico's program was both vast in scope and remarkably successful at reducing the state's role in what had been a highly interventionist economy. La Porta and Lopez-de-Silanes (1999) report that, in 1988, Mexican SOEs contributed 14 percent of GDP, received net transfers and subsidies equal to 12.7 percent of GDP and accounted for 38 percent of fixed capital investment. By June 1992, the government had privatised 361 of its roughly 1,200 SOEs and the need for subsidies had been virtually eliminated. Several other countries in Latin America have also executed large divestment programs. For example, Bolivia's innovative "capitalisation" scheme has been widely acclaimed. However, the most important program in the region is Brazil's. Given the

size of Brazil's economy and its privatisation program, and the fact that the government has been able to sell several very large SOEs (CVRD in 1997 and Telebras in 1998) in spite of significant political opposition, this country's program has been very influential.

Privatisation in sub-Saharan Africa has been something of a stealth economic policy. Few governments claim to be actively privatising, but more sales have occurred than most people think. Nigeria has been one of the most frequent sellers of SOEs, using public share offerings, although they were very small. The experience of the African National Congress after it came to power in South Africa also shows the policy realities that governments with interventionist instincts face in this new era. Though nationalisation and redistribution of wealth have been central planks of ANC ideology for decades, the Mandela and Mbeki governments have almost totally refrained from nationalisations, and have even sold off several SOEs (though use of the word "privatisation" remains taboo).

The last major region to adopt privatisation programs comprises the former Soviet-bloc countries of Central and Eastern Europe. These countries began privatising SOEs as part of a broader effort to transform themselves from command into market economies. Therefore, they faced the most difficult challenges and had the most restricted set of policy choices. After the collapse of communism in 1989-91, all of the newly elected governments of the region were under pressure to create something resembling a market economy as quickly as possible. However, political considerations essentially required these governments to significantly limit foreign purchases of divested assets. Since the region had little financial savings, these twin imperatives compelled many - though not all governments throughout the region to launch "mass privatisation" programs. These programs generally involved distributing vouchers to the population, which citizens could then use to bid for shares in companies being privatised. Although these programs resulted in a massive reduction of state ownership and were initially popular politically, they became unpopular in many countries (especially Russia) because of the largely correct perception that they were robbery by the old elite and the new oligarchs. The net effect of voucher privatisation programs has varied, ranging from disappointing to disastrous.

Although different regions have embraced privatisation at varying speeds, governments have found the lure of revenue from sales of SOEs to be attractive – which is one reason the policy has spread so rapidly. According to *Privatisation International* (Henry Gibbon 1998, 2000), the cumulative value of proceeds raised by privatising governments exceeded US\$1 trillion sometime during the second half of 1999. By the end of 2004, the cumulative amount raised had surpassed US\$1.25 trillion. Approximately two-thirds of this total has been raised by Western European governments. As an added benefit, this revenue has come to governments without raising taxes or cutting other public services.

The historical discussion above suggests that state ownership has been substantially reduced since 1979, and in many countries this has occurred. Sheshinski and Lopez-Calva (1999) report that the role of state-owned enterprises in the economies of high-income (industrialized) countries has declined significantly, from about 8.5 percent of GDP in 1984 to less than 6 percent in 1991. The lowincome countries show an even more dramatic reduction in state ownership. From a high point of almost 16 percent of GDP, the average SOE share of national output dropped to barely 7 percent in 1995 and has probably dropped to about 5 percent since then. The middle-income countries also experienced significant reductions in state ownership during the 1990s. Since the upper- and lower-middle-income groups include the transition economies of Central and Eastern Europe, this decline was expected given the extremely high beginning levels of state ownership.

#### The impact of privatisation on financial markets

Privatisation programs have always been adopted at least partly in order to develop national capital markets. The logic underlying this expectation is that privatisation through public share offerings will significantly increase both the amount of common equity outstanding and the volume of share trading. Empirical research now clearly documents that share issue privatisation (SIP) programs do indeed develop stock market trading and new share listings. Table 1 describes the growth in the total market capitalisation, and in the value of shares traded, on the world's stock exchanges from 1983 to 2003. Much of this period witnessed rapid growth in the capitalisation of markets in every country except Japan, which suf-

	1983	1986	1989	1992	1995	1998	1999	2000	2001	2002	2003
Market Capitalisation											
Developed countries	3,301.12	6,378.23	10,957.46	9,921.84	15,842.15	24,530.69	32,820.47	30,036.29	25,801.65	21,393.05	28,979.35
United States	1,898.06	2,636.60	3,505.69	4,485.04	6,857.62	12,926.18	16,642.46	15,214.42	13,826.48	11,055.46	14,266.02
Japan	565.16	1,841.79	4,392.60	2,399.00	3,667.29	2,495.76	4,554.89	3,157.22	2,264.53	2,069.30	2,953.10
United Kingdom	225.80	439.50	826.60	927.13	1,407.74	2,372.74	2,855.35	2,612.23	2,164.71	1,856.19	2,460.06
Developing countries	83.22	135.06	755.21	1,000.01	1,939.92	1,908.26	2,184.90	920.36	794.53	1,441.06	2,222.95
Total World	3,384.34	6,513.29	11,712.67	10,921.86	17,782.07	26,519.77	35,005.37	30,956.65	26,596.18	22,834.11	31,202.30
World ex US	1,486.28	3,876.69	8,206.99	6,436.82	10,924.45	13,593.60	18,362.91	15,742.23	12,769.70	11,778.65	16,936.28
US as % of world	56.10	40.50	29.90	41.10	38.60	48.70	47.50	49.10	52.00	48.40	45.70
Trading Volume											
Developed countries	1,202.55	3,495.71	6,297.07	4,151.57	9,169.76	20,917.46	35,187.63	48,527.53	36,096.94	31,813.64	31,777.67
United States	797.12	1,796.00	2,015.54	2,081.66	5,108.59	13,148.48	19,993.44	31,804.24	22,240.64	18,206.83	17,322.98
Japan	230.91	1,145.62	2,800.70	635.26	1,231.55	948.52	1,891.65	2,641.07	1,834.42	1,688.26	2,221.25
United Kingdom	42.54	132.91	320.27	383.00	510.13	1,167.38	3,399.38	4,558.66	4,520.18	4,001.34	3,609.72
Developing countries	25.22	77.97	1,170.93	631.28	1,046.55	1,956.86	2,320.89	805.95	1,521.19	1,303.55	1,552.03
Total World	1,227.76	3,573.68	7,468.00	4,782.85	10,216.31	22,874.32	37,508.52	49,333.48	37,618.13	33,117.19	33,329.70
World ex US	430.64	1,777.68	5,452.45	2,701.19	5,107.72	9,725.84	17,515.08	17,529.24	15,377.49	14,910.36	16,006.72
US as % of world	64.90	50.30	27.00	43.50	50.00	57.50	53.30	64.50	59.10	55.00	52.00

decline in total market capitalisation after reaching a value of US\$4.4 trillion in 1989. Total world market capitalisation increased over ten-fold (to US\$35.0 trillion) between 1983 and 1999, and the total capitalisation of the US market increased almost nine-fold (from US\$1.9 trillion to US\$16.6 trillion) over the same period. The growth in markets outside the United States was even greater. It is also in these markets where privatisation's impact has been greatest, since there have been only two significant SIPs in the United States in the modern era (Conrail in 1987 and US Enrichment Corporation in 1999). Between 1983 and 1999, the total capitalisation of non-US stock markets increased from US\$1.49 trillion to US\$18.36 trillion. This fell to US\$11.8 trillion in 2003, but has since rebounded back over US\$17 trillion. The total market capitalisation of developing country stock exchanges increased by 26 times between 1983 and 2003. Developing country market capitalisation fell by more than half between 1999 and 2001, but has since rebounded to record levels.

the World Federation of Exchange's website (www.world-

the statistics section of

to 2003 from

from1999

World Bank's Emerging Markets Fact Book (various issues); data

the

Sources: 1983-98,

exchanges.org)

end values, translated from local currencies into US dollars at the contemporaneous exchange rate, while trading volumes represent the total value of all trades executed during the year.

fered a four-year, 70 percent

The increase in market capitalisation since 1983 has been accompanied by an even larger increase in trading volumes. The total value of shares traded worldwide between 1983 and 2003 rose from US\$1.2 trillion to US\$33.3 trillion. As before, non-US markets experienced the greatest increases, where the value of shares traded on developing countries financial markets

increased from US\$25 billion

in 1983 to US\$1.5 trillion in 2003.

What role has privatisation played in this remarkable growth in market capitalisation and trading volume? At the end of 1983, the total market capitalisation of the handful of British, Chilean and Singaporean firms that had been privatised was less than US\$50 billion. By the middle of 2000, the 152 privatised firms listed in either the Business Week "Global 1000" ranking of the most valuable companies in developed-nation stock markets or the Business Week "Top 200 Emerging Market Companies" ranking had a total market capitalisation of US\$3.31 trillion. This equals approximately 13 percent of the combined market capitalisation of the firms on the two lists, and is more than 27 percent of the non-US total. Privatised firms accounted for an even higher percentage of total non-US stock valuation in the July 2004 Business Week Global 1000 ranking.

An examination of the historical evolution of non-US stock markets since 1980 suggests that large SIPs played a key role in the growth of capital markets almost everywhere, especially

because they are generally among the largest firms in national markets. Using the *Business Week* 2004 Global 1000 data, Table 2 details the total market value and relative size of the world's 25 most valuable privatised firms. Columns 1 and 2 give the company names and domicile countries. Column 3 shows each firm's ranking in the Global 1000 list. Column 4 gives the firm's ranking within its home market, and column 5 lists the firm's total market capitalisation. Column 6 expresses the single firm's market capitalisation as a percentage of the entire national market's year-end 2003 capitalisation.

Table 2 and a study by Boutchkova and Megginson (2000) disclose the relative importance of SIPs in most non-US financial markets. Privatised firms

Table 2

Market values of the largest publicly-traded privatised firms

Company Name	Country	Global 1000 rank	Country rank	Market value million US\$	Market value as % market
BP	UK	7	1	193,054	3.56
Total	France	23	1	122,945	8.26
NTT DoCoMo	Japan	32	2	92,165	1.59
ENI	Italy	37	1	82,072	10.37
NTT	Japan	40	3	79,016	1.37
Telefonica	Spain	45	1	72,078	7.65
Gazprom	Russia	47	1	70,784	42.06
Deutsche Telecom	Germany	48	1	70,535	5.89
Aventis	France	59	2	63,654	4.27
France Telecom	France	64	3	59,248	3.98
China Mobile	Hong Kong	70	1	56,664	6.58
BNP Paribas	France	71	4	55,724	3.74
Enel	Italy	86	2	49,606	6.27
EON	Germany	89	4	48,116	4.02
ING Groep	Netherlands	92	2	46,576	11.70
TIM	Italy	93	3	46,528	5.88
Banco Bilbao Vizcaya	Casia	102	3	44.044	4.76
Argentaria Telefonica Moviles	Spain	102	4	44,844	4.76
Telecom Italia	Spain Italy	105	4	44,580 43,987	5.56
Telecom Italia Telstra	Australia	103	2	43,987	5.49
Societe Generale	France	126	7	,	2.50
		131	8	37,198	
Axa	France		-	36,612	2.46
Credit Agricole	France	132	9	36,276	2.44
Assicurazioni Generali National Australia Bank	Australia	147 162	5	33,143 32,465	4.19 4.22

Notes: Stock market value, total sales and total profits – in millions of US dollars (translated at the contemporaneous exchange rate) – of the 25 most valuable publicly-traded privatised firms as of 31 May 2004.

Sources: Data are from Morgan Stanley Capital International, as reported in "The Business Week Global 1000", *Business Week* ( 9 July 2004). Global 1000 rank refers to the company's global ranking based on market valuation, while country rank refers to its relative position among those firms from their country on the Global 1000 List.

are the most valuable companies in Britain, France, Germany, Greece, Italy, Norway, Portugal, Spain, China, Russia, Brazil, Mexico, India, Singapore, Poland, the Czech Republic and Hungary. Privatised companies are the three most valuable companies in nine countries, including France, Italy, Norway, Portugal, China, Russia, Poland, Hungary and the Czech Republic.

Another way to measure the impact of privatised firms on capital market development is to see how important SIPs have been as security offerings, and here the impact is even greater. Table 3 shows that the 11 largest share offerings and 28 out of the 30 largest share offerings in history have been privatisations. Since 1984 there have been some 125 SIPs that raised

at least US\$1 billion, which is a size that rarely happens, even in the United States, and 28 SIPs have raised more than US\$7 billion.

The importance of knowing the impact of privatisation on the development of financial markets comes from knowing that new share listings can directly create some net new wealth and a handful of new (albeit well-paying) jobs. However, the principal economic payoff from increasingly efficient and liquid capital markets comes from the financing opportunities and monitoring possibilities they provide. Many empirical studies conclude that efficient capital markets promote economic growth and will allow individual firms to fund

investment opportunities they otherwise would have to forgo. Therefore, privatisation deserves credit for whatever direct role it has played in promoting stock market development (through new share offerings), and for the indirect role it has played in bond market development. This catalytic role can be assumed because several studies find development of one market also promotes development of related markets.

#### The impact of privatisation on corporate governance

Before we can answer the question of how privatisation impacts corporate governance, we need to under-

> stand several findings that affect the interpretation of the effects of privatisation. First, there is increasing interest in corporate governance and securities laws. This is caused by the large increase in the total value of security issues on global capital markets and the increase in mergers and acquisitions around the world. Second, poor corporate governance played a major role in the East Asian economic contraction beginning in July 1997. Finally, studies by La Porta, Lopez-de-Silanes, Shleifer and Vishny (1997, 1998, 1999 and 2000) and by La Porta, Lopez-de-Silanes and Shleifer (2000a and 2000b) provide us with evidence that corporate governance in general and corporate legal systems in particular, significantly influence capital market size, ownership structure and efficiency. The differences between legal protections to investors in different countries will affect the development and operation of external capital markets. Countries with common law systems, that provide better investor protection, unsurprisingly have more developed financial markets than do countries with civil law systems that provide weaker investor protection. While Rajan (2000) suggests there might be some other

Table 3

Details of the world's largest share offerings

			Amount	IPO/
Date	Company	Country	million	SEO
			US\$	
Nov 87	Nippon Telegraph & Telephone	Japan	40,260	SEO
Oct 88	Nippon Telegraph & Telephone	Japan	22,400	SEO
Nov 99	ENEL	Italy	18,900	IPO
Oct 98	NTT DoCoMo	Japan	18,000	IPO
Mar 03	France Telecom	France	15,800	SEO <sup>a)</sup>
Oct 97	Telecom Italia	Italy	15,500	SEO
Feb 87	Nippon Telegraph & Telephone	Japan	15,097	IPO
Nov 99	Nippon Telegraph & Telephone	Japan	15,000	SEO
Jun 00	Deutsche Telekom	Germany	14,760	SEO
Nov 96	Deutsche Telekom	Germany	13,300	IPO
Oct 87	British Petroleum	United Kingdom	12,430	SEO
Apr 00	ATT Wireless (tracking stock)	United States	10,600	IPO
Nov 98	France Telecom	France	10,500	SEO
Nov 97	Telstra	Australia	10,530	IPO
Oct 99	Telstra	Australia	10,400	SEO
Jun 99	Deutsche Telekom	Germany	10,200	SEO
Dec 90	Regional Electricity Companies <sup>b)</sup>	United Kingdom	9,995	IPO
Dec 91	British Telecom	United Kingdom	9,927	SEO
Oct 04	ENEL	Italy	9,600	SEO
Jun 00	Telia	Sweden	8,800	IPO
Dec 89	U.K. Water Authorities <sup>b)</sup>	United Kingdom	8,679	IPO
Feb 01	NTT DoCoMo	Japan	8,200	SEO
Dec 86	British Gas	United Kingdom	8,012	IPO
Jun 98	Endesa	Spain	8,000	SEO
Jul 97	ENI	Italy	7,800	SEO
Apr 00	Oracle Japan	Japan	7,500	IPO
Jul 93	British Telecom	U.K.	7,360	SEO
Oct 93	Japan Railroad East	Japan	7,312	IPO
Dec 98	Nippon Telegraph & Telephone	Japan	7,300	SEO
Oct 97	France Telecom	France	7,080	IPO

Notes: Offers are reported in nominal amounts (not inflation-adjusted) and are translated into millions of US dollars (million US\$) using the contemporaneous exchange rate. *Private-sector offerings* are presented in bold face, italicized type, while share issue privatizations (SIPs) are presented in normal typeface.

Source: Table 12 of William L. Megginson and Jeffry M. Netter. 2001. "From State to Market: A Survey of Empirical Studies on Privatization", *Journal of Economic Literature* 39, 321–89. Updated by author.

Source of the data: Amounts reported for SIP offers are as described in the *Financial Times* at the time of the issue. Private-sector offering amounts are from the *Securities Data Corporation* file or *Financial Times*.

a) Rights offering, in which the French government participated proportionately, so not a SIP in the traditional sense. Though a share offering by a state-owned firm, government ownership did not decline. – b) Indicates a group offering of multiple companies that trade separately after the IPO.

factors correlated with the legal system of a country that might explain the above findings, the legal system clearly impacts the operation of financial markets and corporate governance in a country.

Likewise, the structure and operation of a country's legal system will affect the impact of privatisation. Privatisation is often the catalyst for major change in the governance structure of a firm. The success of privatisation is partially determined by how well the legal system protects investors (Sachs, Zinnes and Eilat 2000). This assumption is supported by the evidence in the transition economies case (Djankov and Murrell 2000a, 2000b). Furthermore, privatisation usually accompanies changes in a country's legal system. Privatisation also changes the legal system in many countries. There is a tendency for governments to sell shares to a large number of citizens (often one million or more). Therefore democratic governments are usually acutely aware of the political fall-out that could result if small investors suffer losses on their SIP investments because of the inadequate shareholder protection or insider dealings. Thus, when the governments initiate the privatisation program, they want to make sure that they establish a properly functioning regulatory body and adequate legal protection for investors.

At the beginning of large privatisation programs, national stock exchanges are often illiquid and non-transparent. This forces governments to establish listing and other regulations that will assure potential investors that the market is a reputable place to invest and trade. Jones, Megginson, Nash and Netter (1999) find that sometimes governments like to retain some kind of decisive voting rights in privatised firms, even after a majority of the income rights have been sold. For example, 90 percent of British SIPs have allowed government to retain a golden share. Government can use this special share to veto mergers, liquidations, asset sales and other major corporate events. An alternative method of retaining ultimate control is for the government to insert some control restrictions directly into the SIP's charter.

Boutchkova and Megginson (2000) evaluate the development of share ownership in large SIPs. They examine how many individual stockholders are created in a sample of large SIPs, as well as how the ownership structures change over time. They find that privatised companies emerge with larger

numbers of shareholders than do matching privatesector companies with similar capitalisation. This result holds even though in most cases governments retain sizable stakes in these firms, thus reducing their effective total capitalisation since these stakes have not yet been sold to private investors. They conclude that the number of shareholders in the privatised companies is significantly higher than the number of shareholders in the matching private-sector (non-privatised) sample companies. Examining how the total number of shareholders in a company evolves during the years following the SIP, they demonstrate that the extremely large numbers of shareholders created by many SIPs are not a stable pattern of corporate ownership. For SIPs with less than 100,000 initial investors, the number of shareholders increases steadily from one year to four years after the privatisation. However, for the 39 SIPs that initially have more than 100,000 shareholders, the total number of shareholders declines steadily. The total number of shareholders in the largest privatisations (those with 500,000 or more initial investors) declines by 33 percent within five years of the share offering.

The implications of this finding for government efforts to develop an effective corporate governance system or equity culture are unclear. Many new stockholders do not retain the shares they purchase. Other evidence suggests that retail investors in privatisations generally own only that one stock, hardly indicative of a class of well diversified stockholders. On the other hand, since the long-run returns to investors in SIPs are generally positive, the first experience of these new retail investors in stock market trading is a positive one. Furthermore, the fact that governments are able to entice large numbers of investors to return for subsequent share offerings suggests that these programs are indeed creating (at least minimally) effective governance systems and stock markets capable of absorbing large new stock issues.

#### "Lessons" from privatisation

The existing literature on privatisation suggests the following conclusions:

 Over the last twenty-five years, privatisation programs have significantly reduced the role of SOEs in most countries. The SOE share of "glo-

- bal GDP" has declined from more than ten percent in 1979 to less than six percent today.
- 2. Current research supports the proposition that privately owned firms are more efficient and more profitable than otherwise-comparable SOEs. There is limited empirical evidence, especially from China, that suggests that non-privatising reform measures, such as price deregulation, market liberalisation and increased use of incentives, can improve the efficiency of SOEs, but it seems likely that these reforms would be even more effective if coupled with privatisation.
- 3. There are three basic techniques that governments use to privatise their SOEs: share issue privatisations (SIPs), asset sales and voucher or mass privatisations. We are beginning to understand the determinants of the method selected in specific circumstances. However, there is great variation within all the techniques, because privatisation is a complex process involving a host of political and economic factors. For example, voucher privatisations are the least economically productive divestment technique, but those governments that use it generally have few other realistic options.
- 4. Governments attempt to craft the offering terms of SIPs to balance competing economic, political, and financial objectives. Most governments underprice share offerings (particularly initial offerings) and then use targeted share allocations to favour domestic over foreign investors. SOE employees are particularly favoured, receiving preferential allocations in 91 percent of offers. Governments frequently retain golden shares that give them veto power over certain control changes, and also insert various other control restrictions into the corporate charters of privatised firms.
- 5. Privatisation "works" in the sense that divested firms almost always become more efficient, more profitable, increase their capital investment spending and become financially healthier. These results hold for both transition and non-transition economies, though the results vary more in the transition economies. The question of whether privatisation generally costs at least some SOE workers their jobs are still unresolved. The answer is ultimately based on whether sales increase faster than productivity in privatised firms. Most studies find that employment in privatised firms usually does fall, though three large-sample studies document employment increases. What is clear is that whenever employ-

- ment is cut, there is almost invariably a large compensating performance improvement. Several studies also highlight the need to bring new entrepreneurial management into privatised firms to maximize performance improvements. However, there is little empirical evidence on how privatisation affects consumers.
- 6. Investors who purchase initial SIP shares at the offering price and then sell those shares at the first post-issue trading price earn significantly positive excess (market-adjusted) returns. Additionally, there is now convincing evidence that initial returns on privatisation IPOs are significantly higher than the initial returns earned on private-sector IPOs. Investors who purchase privatisation IPO shares at their first post-offer trading price and then retain those shares for one-, three-, or five-year holding periods also earn significantly positive net returns.
- 7. Though it is difficult to pinpoint causality, it appears that countries that have launched large-scale SIP programs have experienced rapid growth in their national stock market capitalisation and trading volume. Countries (other than the United States) that have either not launched major privatisation programs or have emphasised asset sales and vouchers over public share offerings appear to lag behind in market development. Privatised firms are one of the two or three most valuable companies in most non-US markets, and the 10 largest (and 30 of the 35 largest) share issues in financial history have all been privatisations.
- 8. Emerging (largely anecdotal) evidence suggests that adopting a large-scale SIP program is often a major spur to modernising a nation's corporate governance system. Transition economies that launch privatisation programs must create such systems largely from scratch, and the record of success here is decidedly mixed. Many governments try to develop an equity culture among their citizenry through SIP programs, also with mixed results. Share ownership has dramatically increased in most non-transition countries over the past 15 years, but the share ownership patterns that are created when SIPs are sold to large numbers of investors (often one million or more) are not stable. However, it seems clear that privatisation programs lead to significant improvements in securities market regulation, information disclosure rules and other required components of modern financial

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