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# hapter 7

# Selling State Assets and the Stock Market

#### 7.1 Introduction

One of the most controversial aspects of the privatization program has been the pricing of the shares of the companies offered for sale. In a number of cases, including British Telecom (BT), the Trustee Savings Bank (TSB), and British Airways, large and immediate profits have gone to the individuals and institutions fortunate enough to be allocated shares. The proceeds to the Government have been correspondingly lower than they might have been, to the tune of hundreds of millions of pounds, a loss which ultimately falls upon individuals generally who have to pay higher taxes or who receive poorer public services and benefits than they otherwise would. This has occurred despite the fact that the Government has spent large sums of taxpayers' money on underwriting fees and on advertising new share issues.

Need this have happened? Immediately it must be said that the Government and its financial advisers have to strike a difficult balance when they price a new issue. Underpricing leads to revenue loss, windfall profits, and arbitrary redistributions of wealth, but overpricing means that the Government (or its underwriters) are left with shares on their hands, applicants for shares face losses, and there is general embarrassment for the Government. It is also true that new issues of the shares of private companies often go to a premium on their first day of trading. Similarly, governments privatizing companies in other countries have tended to underprice their share issues. Premiums immediately arose when trading in the shares of St Gobain and Paribas began in France, and there were prodigious rises in the share price of NTT, the Japanese telephone company, despite the fact that its offer price was already astronomical by world standards. Finally, selling the shares of privatized companies at a discount to their true value is a way of promoting the objective of wider share ownership, though it is arguable whether it is the best way.

Nonetheless we believe that there have been serious and very expensive flaws in U.K. Government policy for selling state assets. In particular, the

extent of underpricing, especially in the larger privatizations, has been much greater than in typical private issues. One of many criticisms of its techniques of sale is that it was quite unnecessary to sell off such large chunks of the equity of firms such as BT, British Gas, or British Airways. If a company's equity is sold in several tranches there is still the difficulty of pricing the first tranche of shares-especially if there are few comparable companies already quoted on the market—but the pricing of subsequent tranches is made easier by the fact that the market has already been able to determine the value of the shares. Government policy on the underwriting of new issues has also been strange, especially in view of its generous pricing strategies and its ability to bear risk better than underwriters. Above all the pricing of new issues has erred very much on the low side, as we will detail below. Perhaps this is not so surprising in view of the costs and benefits to politicians and their financial advisers of overpricing and underpricing.

The plan of the chapter is as follows. In section 7.2 we set out the evidence on the pricing of shares in privatized companies, in particular the size of the discounts or premiums at which they were sold. This is seen to depend on the method of sale (tender offer or offer for sale) and on whether shares in the company were already traded on the stock market. We describe the implications for wealth distribution of the windfall profits that have typically arisen in large share issues. We then look at the costs of sale. including underwriting and advertising costs, which have been quite high. and we ask what alternative methods of sale might have been employed by the Government.

Section 7.3 is concerned with the net effect of privatization on the Government's financial position. Along with the huge proceeds from the sale of shares, account must also be taken of the loss to Government of the profits of the firms, the removal of the need to pay for their capital expenditure programs, and tax considerations. Section 7.4 contains evidence on the role of privatization in encouraging the objective of wider share ownership in the U.K., and we ask whether privatization is a sensible way of promoting that objective. In section 7.5 we conclude by offering our assessment of the Government's record in selling state assets, and we consider the political and financial motives that may have influenced policy.

The chapter relies heavily on the work of Mayer and Meadowcroft (1985), Yarrow (1986, sections 7-10), and Jenkinson and Mayer (1987). The interested reader is also referred to the entertaining and informative account of the selling of BT in the book by Newman (1986).

# 7.2 The Sale of State Assets

# 7.2.1 The Pricing of Shares

Table 7.1 summarizes information regarding the pricing of shares in the main companies in the U.K. Government's privatization program up to mid-1987. We also include the TSB, the sale of which was essentially equivalent to privatization, although the proceeds of the sale were retained by the bank itself and not the Government (see section 6.3 for further details). The companies are listed alphabetically in two groups. First come the companies that were sold to the public by an "offer for sale." That is to say, the Government invited applications for shares at a set price. For example, in November 1984 the Government issued a prospectus offering shares in BT for sale at 130 pence (payable in three instalments), and individuals and institutions duly applied for shares. The issue was oversubscribed-five times as many shares were applied for as were available, and they were allocated according to a rationing scheme of the Government's choosing. The second group of companies were sold by "tender offer." The Government invited bids for shares above a given minimum tender price. With the exception of the British Airports Authority (BAA) (see below), in the event of oversubscription shares were allocated to those who entered the highest bids, and the share price became the "striking price" at which demand equals supply. Thus excess demand is rationed by the price mechanism. If a tender offer is undersubscribed, bidders' demands are satisfied at the minimum tender price previously set by the Government. The underwriters-financial institutions which in return for a fee agree to accept shares if demand from the public is inadequate—then have to take up the remaining shares at the minimum tender price. The Government has also used underwriters when selling shares by an offer for sale, but there is no necessary reason why it has to do so (see section 7.2.4 below).

The privatization of BAA (formerly the British Airports Authority) needs separate comment, since it was a novel combination of an offer for sale and a tender offer. Three-quarters of its 500 million shares were offered for sale to the general public and placed with institutions in the normal way. but the remaining 25 percent were sold by tender. Most tender offers are operated as described in the previous paragraph—successful bidders pay the striking price at which supply equals demand—but the BAA tender was different. Tenderers were committed to pay the price that they offered, and some therefore acquired their shares more cheaply than others. Because of the two elements in the share offer, BAA appears twice in table 7.1. The

	(2) Gross			(5) Price at	(6) Percentage rise (fall) in		(8) Under
	proceeds	(3) Offer/	(4) First	end of first	price relative		(over)
	of salc	tender	trading	trading day	to offer/tender	(7) Application	valuation
(1) Company	(£ million)	price (p)	day	(b)	price	multiple	(£ million)
Offers for sale							
Amersham International	63	142	25 Feb 82	188	32	25.6	20
Associated British Ports (1983)	22	112	16 Feb 83	138	23	35	2
British Aerospace (1981)	149	150	20 Fcb 81	171	4	3.5	21
British Aerospace (1985)	550	375	14 May 85	420	12	5.4	99
BAA (British Airports) <sup>a</sup>	616	245	28 Jul 87	291	16	œ	173
British Airways	006	125	11 Feb 87	169	35	32	315
British Gas	5603	135	8 Dec 86	147.5	6	4	819
British Petroleum (1979)	290	363	12 Nov 79	367	_	1.5	3
British Telecom	3916	130	3 Dec 84	173	33	5	1295
Britoil (1985)	450	185	12 Aug 85	207	12	10	54
Cable and Wireless (1981)	224	891	6 Nov 81	197	17	5.6	36
Cable and Wireless (1985)	602	587	13 Dec 85	280	0.5	7	ĸ
Jaguar	294	165	10 Aug 84	179	∞	8.3	25
Rolls-Royce	1360	170	20 May 87	232	36	9.4	496
TSB	1360	100	10 Oct 86	135.5	35.5	∞	483
Tender offers							
Associated British Ports (1984)	52	270	19 Apr 84	272	0.7	n/a	0.3
BAA"	362	290	29 Jul 87	291	0.3	9	
British Petroleum (1983)	565	435	26 Sep 83	441		2.7	∞
Britoil (1982)	548	215	23 Nov 82	196	6	0.3	. 49
Cable and Wireless (1983)	275	275	5 Dec 83	273		0.7	7
Enterprise Oil	393	185	2 Jul 84	185	0	0.7	0

and Meadowcroft (1985), The F sale and a tender offer (see text). Sources: National Audit Office (1985, 1987a, 1987b), Mayer a. Shares in BAA were sold by a combination of an offer for entry in the first part of the table concerns the 75 percent of shares offered for sale. The second entry concerns the 25 percent of shares offered by tender, and the calculation of the premium is based on the average tender price accepted (290 pence).

The shares of some of the companies in the table were sold in two or more tranches. In those cases the years in which the tranches were sold are indicated in parentheses. For example, there was a tender offer for a portion of Britoil's equity in 1982, and an offer for sale of the remainder of its shares in 1985. The absence of a year after the name of a company does not necessarily imply that all its shares were sold at once. For example, approximately half of BT's equity has so far been sold to private hands.

The gross proceeds of the sale of shares are indicated in column 2 of the table. We have not deducted costs such as advisory fees, promotion costs, underwriters' fees, and the cost of the discounts on shares sold to employees of the companies in question. In column 3 we state the offer price of each issue in the case of offers for sale, and the equilibrium tender price in the case of tender offers. We state full offer prices, although their payment often occurs in two or more stages. For example, payment of the 130 pence price for BT shares occurred in three instalments—of 50, 40, and 40 pence—spread over a period of approximately 18 months.

Column 4 states the first day on which the newly issued shares were traded. We use the price at the close of trading on that day (see column 5) as the basis for calculating the percentage appreciation or depreciation of the shares relative to their offer price. This is not the only date that could be used for measuring undervaluation or overvaluation, and the profits or losses accruing to successful subscribers for shares. There is often considerable volatility in the share price as soon as trading opens, and this tends to settle down after a few days. However, the price at the end of the first day of trading is rarely very different from the price several days later, and it has the merits of simplicity and immediacy as a basis for comparison. A case in point is the TSB, whose shares opened at 100 pence for the 50 pence partly paid shares, but closed on the first day of trading at around 85 pence, which is roughly where they stayed for some days afterwards. The high volatility was in the first few hours.

Another reason for using a price soon after trading began is that there is less time for news to affect the price. Since that news could not have been taken into account at the time when the shares were originally priced, the use of a later price might introduce some distortions into the comparison. One way of allowing for part of such distortions is to adjust the price of the shares by the percentage movement in the share index for the U.K. market

as a whole, or for the relevant sector of the market, for the period in question (see Mayer and Meadowcroft, 1985). Indeed, there is a case for making an adjustment of this kind even when the price at the end of the first day of trading is used for the comparison, because some time (perhaps as much as a fortnight) will have elapsed between the pricing of the issue and the commencement of trading. However, we have not made any adjustments, preferring instead to base our comparisons on the raw data. We do not believe that this is unjustified. First, for the cases shown. movements in the market were on average close to zero in a period as short as a couple of weeks. Secondly, relative movements of even several percentage points would not have had a large influence on the

Some authors have measured the relative performance of shares in privatized companies over several years (see Mayer and Meadowcroft, 1985; Yarrow, 1986). We do not do so here, because our present concern is with the degree to which shares were undervalued or overvalued. The level of a share price two years after privatization, even relative to the market, is influenced by so many factors unknown at the time of sale that we would not wish to attach too much weight to longer-term comparisons in judging the pricing of the offers. They are perhaps more useful for appraising company performance over time, but even here there are shortcomings. The price of BT shares in 1986 was affected by many other things, such as politics.

proportionate disparities between offer prices and trading prices of shares

in these privatizations.

Column 6 gives the percentage appreciation or depreciation of the share price when trading opened relative to its offer price, i.e. the percentage difference between the numbers in columns 5 and 3. Note that we are using the full offer price rather than the first instalment of payments. (Strictly speaking, we should revise downward the full offer price to reflect the interest that accrues on later instalments, but since we do not do this, we underestimate the true gains somewhat.) It is the increase relative to the first instalment that represents the percentage profit (or loss) to the successful applicants for shares. Table 7.2 shows that these profits have been enormous in major privatizations.

Moreover, individuals applying for shares are often entitled to substantial additional benefits if they hold the shares for long enough. Customer shareholders of BT and British Gas could apply for free vouchers to set against their telephone or gas bills. In the case of British Gas a customer could in time receive a voucher worth £40 (tax free) for every 400 shares held. This and the dividend would have made the post-tax annual rate of return on the shares more than 20 percent in the first six months or

Table 7.2 Immediate profits

Company	First instalment (p)	Opening price (p)	Percentage gain
BT	50	93	86
TSB	50	85.5	71
British Gas	50	62.5	25
British Airways	65	109	68
Rolls-Royce	85	147	73
BAA	100	146	46

so even if the share price had not appreciated at all. Another form of benefit for small shareholders has been the issue of free bonus shares, typically 10 percent after three years. As well as BT and British Gas, other companies such as the TSB and British Airways offered this benefit. In section 7.2.3 we will consider the effective cost of these benefits to shareholders, which further inflate the gains reaped by successful applicants for shares. In section 7.4 we will discuss the role of these shareholder "loyalty bonuses" in inducing investors not to sell their shares, and the resulting effect on the distribution of share ownership.

Column 7 gives the application multiple, i.e. the number of shares subscribed for divided by the number available. (An application multiple of less than unity indicates undersubscription.) Broadly speaking there are three classes of applicant for shares-individual investors, U.K. institutions, and overseas institutions. A proportion of the shares is usually placed with institutional investors in advance, who are typically clients of the stockbrokers and merchant bankers handling the issue for the Government. When British Gas was privatized, 40 percent of the shares were placed with U.K. institutions and 20 percent with overseas institutions, leaving 40 percent for the general public. Applications from the latter group were so numerous that "clawback" provisions were triggered, and 64 percent were eventually allocated to the public. Institutional holdings were scaled down correspondingly. Overall the issue was four times oversubscribed. This application multiple happens to lie between some of the extremes that have occurred in the privatization program. For example, British Airways was oversubscribed 32 times, whereas 70 percent of the Britoil shares offered for tender in 1982 were left with the underwriters.

What are the main lessons to be drawn from table 7.1? First, and most obvious, is the underpricing of shares in most privatizations, and especially the major ones. The figures in column 8 state the difference between the value ascribed to the shares when they were offered for sale and their value

on the first day of trading, i.e. the sum in column 2 multiplied by the percentage in column 6. The figures in column 8 sum to about £3 billion (even excluding TSB). It could not be expected that the Government would fine tune the pricing of each issue so that the average premium would be zero, but the windfall profits to lucky applicants for shares have been far greater in both relative and absolute terms than the average profits to those who "stag" private issues. The weighted average of the immediate price changes in column 6 is 18.4 percent of gross proceeds (i.e. in relation to fully paid share prices), and well over 30 percent in relation to partly paid share prices. That is far greater than the degree of underpricing typical in private issues. Buckland et al. (1981) estimated that, in times of rising equity markets, premiums on private offers for sale averaged 12 percent. In a more recent study of new equity issues on the London stock market between 1983 and 1986, Jackson (1986) found that the average degree of underpricing of larger issues was 5.3 percent in offers for sale and 7.3 percent in tender offers. In addition private issues rarely have the additional shareholder benefits of vouchers and bonuses that have been a feature of the major privatizations. Moreover, there is good reason to believe that the Government could and should have sold the shares in a way that led to smaller initial price rises than those that occur in private issues.

The second point to note is that the size of undervaluation varies according to how the issue is sold. The average price change for offers for sale is 21.1 percent of gross proceeds (and over 40 percent in relation to partly paid prices), but for tender offers it is -1.9 percent (cf. Jackson's (1986) findings reported above). This difference is not altogether surprising. We would expect tender offers to lead to reasonably accurate pricing, because price is set by the forces of supply and demand, and circumstances make it impossible for bidders for shares to collude. In contrast, with offers for sale there are numerous reasons why members of Government and their financial advisers have an incentive to set prices lower than their equilibrium values. Underpricing is a way of encouraging wider share ownership, it avoids political embarrassment, and it minimizes the chances that individual investors (who have votes) will sustain capital losses. Underpricing is also greatly to the benefit of City institutions. Some degree of underpricing on average is probably inevitable once the Government has decided to sell such large portions of equity at a time (e.g. 100 percent of British Gas) by offers for sale. But there was nothing inevitable about its extent in the major privatizations, and nor did the Government have to sell shares in that fashion.

This leads on to a third point that emerges from table 7.1. The most

glaring examples of underpricing occurred where a company was entirely new to the market, as were BT, British Gas, and British Airways. Moreover, there were no companies already quoted on the U.K. Stock Exchange that were comparable with these firms—a fact which makes pricing especially difficult because, apart from the limited availability of international comparisons, price has to be set somewhat in the dark. Essentially the same problem can be faced in the private sector. For example when shares in Wellcome, the pharmaceutical company, were offered for sale early in 1986, comparisons were made with Glaxo, but there are important differences between the two companies and Wellcome shares opened with a large premium of around 30 percent. But the crucial difference between the offer of Wellcome's shares and the offer of shares in (say) British Airways is that Wellcome offered only 25 percent of its equity and not 100 percent. If and when more of Wellcome's equity is offered for sale, there will exist a well-established market in Wellcome's shares, and the market will provide an accurate guide to the appropriate price.

This point is reflected in the smaller than average premiums in the offers for sale of the tranches of shares in British Aerospace (1985), BP (1979), Britoil (1985), and Cable and Wireless (1985). When the Government offers for sale all or part of its remaining holding in BT, it will again have the benefit of an existing market in the shares as a guide to relative pricing.

The Government's final 31.6 percent holding in BP was offered for sale in October 1987. (The event occurred too late to be included in table 7.1.) The offering was valued at £7.2 billion, making it the largest ever share offering in Britain. The shares were priced at 330 pence, which was about 6 percent below the then prevailing price of existing BP shares. In fact the discount relative to the price of the existing shares was greater, by perhaps another 6 percent, because the new shares were payable in three instalments and account should be taken of the interest on the second and third instalments. The prospectus for the new BP shares was issued on 15 October and the closing date for the offer for sale was 28 October. The crash in world equity markets began on 19 October, and by the close of the BP offer, the London market had lost 28 percent of its value two weeks previously. BP shares fell headlong with the market, and it soon became clear that the overwhelming majority of new shares would be left with the underwriters. They urged the Chancellor of the Exchequer to withdraw the issue in order to help the ailing equity market, but he turned down their rather surprising request. After all, underwriters are underwriters. Instead the Government put a floor under the price of the new shares by the Bank of England offering to buy them back at 70 pence per partly-paid share, which was 50 pence below the

offer price. This scheme was a reasonable compromise in the circumstances. though ironically it involved giving private investors the option to renationalize the BP shares. At the end of this chapter we offer some thoughts on the possible consequences of the equity market slump for privatization policies generally.

#### 7.2.2 Consequences for Wealth Distribution

The extent of underpricing shown in column 8 of table 7.1 shows that the sale of state assets has resulted in substantial shifts in the distribution of wealth. The gainers have been the successful applicants for shares, and the losers have been those who would have enjoyed lower (direct or indirect) taxes and/or better public services if the extent of underpricing had not been so large. Privatization also affects the distribution of income and wealth in other ways—by changing the pricing, output, and employment decisions of firms, and by enhancing the income of the financial services industry—but its most obvious impact on distribution has occurred in the capital market.

An important feature of the process is that the gainers know that they have gained, but the losers are less aware that they have lost. A windfall profit of £200 on BT shares is much more obvious than the effective loss of £20 to each of ten who failed to apply. John Kenneth Galbraith once remarked that few things enhance the overall feeling of wealth better than undiscovered theft. Without wishing to push the analogy too far, we would suggest that there is a common element in the two cases.

Why is the redistribution of wealth undesirable? We believe that there are several reasons. First, it is arbitrary in the sense that the gainers have performed no socially useful function other than the bearing of (negligible) risk. Secondly, the prospective transfer of wealth to successful applicants encourages a great deal of directly unproductive wealth-seeking activitythe transactions costs incurred by potential buyers are far from negligible. Thirdly, many of the windfall profits have gone overseas, because a substantial fraction of the shares have been allocated to foreign investors. From the point of view of national welfare, the profits on those shares are a direct loss. Fourthly, the cost to the economy of raising an amount of tax revenue equal to the extent of underpricing is far greater than that extent. That is because it costs the economy more than £1 to raise £1 of tax revenue. There are costs of tax collection, and, more importantly, there is an additional distortion to efficient resource allocation caused by the extra taxation. In a nutshell, higher proceeds from a given share sale have all the advantages of lump-sum taxation plus the virtue of being fairer.

Finally we must consider the effect on wealth distribution if the process of privatization were put into reverse. If investors were given "fair" compensation (whatever that may be) when a company was renationalized. then there would be no further redistributive impact. But if shares were taken back at (say) the original offer price, then existing shareholders would sustain a capital loss or gain equal to the difference between that price and the previously prevailing market price. Of course the latter price might itself be influenced by the prospect of renationalization. Politically it would be very difficult for a government to cause shareholders to incur large capital losses, especially because many current shareholders would not have been the shareholders that reaped the initial windfall profits. Moreover, renationalization on less than fair terms would be a process in which the losers would know that they had lost but the gainers would not know that they had gained in relative terms. The Chairman of the Conservative Party, Mr Norman Tebbit, probably had these considerations in mind when writing to BT shareholders in 1986 asking them to think how much a Labour Government could cost them. This suggests that a side effect of the privatization program has been to make more visible some consequences of various electoral outcomes for the distribution of wealth in the U.K.

#### 7.2.3 Costs of Sale

We have already discussed the largest component of the cost of selling state assets—the revenue foregone due to underpricing. The other main items of expenditure are costs of promotion, professional and advisory fees, and underwriting fees. Table 7.3 gives the costs associated with the sale of the major privatized companies. The figures exclude costs borne by the

Table 7.3 Cost of major asset sales

Company	Date of sale	Expenses (£ million)	Expenses as percentage of proceeds
Cable and Wireless	1981	7	3.1
British Aerospace Amersham	1981	6	3.8
Britoil	1982	3	4.6
	1982	17	3.2
Associated British Ports Enterprise Oil	1983	2	11.2
BT Oil	1984	11	2.8
British Gas	1984	263	6.8
BA	1986	360	6.4
-	1987	42	4.7

Source: National Audit Office (1987b).

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Table 7.4 Receipts and costs of BT and British Gas privatizations (in £ million)

	BT	British Gas
Value of shares at offer price	3,916	5,603
Less: Employee discounts and free shares	(56)	(37)
Premium from sale of retained shares	3	4
Estimated premium from further bonus share sale		21
Sales proceeds	3,863	5,591
Direct U.K. sale costs		
Underwriting and commissions	87	69
Bank and registration costs	20 14	45 40
Marketing Advisers' fees	6	40 5
Adviscrs rees	U	,
Less: Interest on application money	(4)	(7)
Contribution from BT sale	(1)	=
Total U.K. sale costs	122	152
Overseas sale costs	30	23
Small-shareholder incentives		
Bill vouchers	23	63
Bonus shares	88	122
	<del></del>	
Net costs	263	360
Net proceeds	3,600	5,231

Source: National Audit Office (1985, 1987a).

In addition to the sale of its shares, another £2,500 million was raised from the sale of British Gas debt.

companies themselves, which include the value of managerial time and effort, and other advisory and promotion expenses. For example, BT is estimated to have paid more than £8 million to its own advisers, and to have spent some £25 million on its own preflotation advertising campaign.

The most expensive asset sales have been those of BT and British Gas. Table 7.4 gives a breakdown of the expenses involved. The two largest components of the expenses on selling BT were small-shareholder incentives (£111 million) and fees and commissions associated with underwriting and placing shares (£87 million). In addition, many millions of pounds were spent on professional and advisory fees.

Aside from the sale of BT, in which expenses came to 6.8 percent of proceeds, costs have generally been in line with expenses on large private issues, which Dimson (1983) estimates to be approximately 4.5 percent in the U.K. However, there are several reasons why the Government could and should have privatized at a lower cost than a private issue of shares. Mayer and Meadowcroft (1985) point out several important differences between the position of a Government selling state assets and that of a private company raising funds on the equity market. First, the Government does not face the cash flow constraint of a private firm. The operations of a private firm raising funds often depend critically upon it selling all the shares being offered to investors. Failure to do so might mean that the firm became indebted to a perilous extent, or that it would have to shelve its real investment plans. In the face of these dangers, it makes good sense for private companies to underwrite their issues and to err on the side of generosity in pricing. The Government has no such cash flow constraint. Its borrowing powers mean that it could make up any shortfall in share proceeds with relative ease and without undue jeopardy to its real expenditure plans.

Secondly, the Government's capacity to bear risk is vastly greater than that of any private firm and, more to the point, that of any underwriter. The function of underwriters is to bear the risk of the issuer by agreeing in return for a fee to buy unsold shares at the offer price. The issuer is then guaranteed to receive the funds being sought. Underwriting makes sense only if the underwriting institutions are less risk-averse than the issuer. But no institution can be less risk-averse than the Government, because the economy as a whole bears the cost (in terms of debt or tax burden) that arises from incorrectly pricing the shares in privatized companies. Further risk-spreading is impossible, and it is therefore curious that the Government should have spent so much on underwriting fees. Mayer and Meadowcroft (1985) report that underwriting costs of £0.7 million, £0.4 million, £4.6 million, £22.4 million, £9.8 million, and £4.5 million were incurred in the privatizations of Amersham, Associated British Ports, BP, BT, Britoil, and Cable and Wireless respectively. Underwriting is all the more mysterious in view of the evident generosity with which the major privatized issues were priced.

# 7.2.4 Alternatives

Notwithstanding the delight of successful applicants for shares and of the

City, the techniques of sale used by the Government in the privatization program have been seriously flawed. Massive transfers of wealth have occurred both within and away from the U.K. economy, and huge transactions costs have been incurred. Yet superior alternatives were available.

First, market forces could have been used to a far greater extent in the setting of prices. Tender offers lead to much more accurate pricing than offers for sale, and an element of tendering can be employed even when an offer for sale is the chosen method. In the United States it is common for syndicates to be required to make firm bids stating prices and quantities in advance of the pricing of offers for sale. This enables the issuer to exploit the information of participants in the marketplace. In contrast, in the U.K. it is typical practice for soundings to be taken among a few institutions regarding an appropriate offer price. Such a system hardly creates incentives for accurate pricing, and in the words of the Financial Times Lex Column (16 February 1987) "Naturally the funds name the lowest price that does not beggar belief and frequently they get away with it."

Secondly, it is manifestly sensible to sell portions of equity over time rather than all at one go. Once the first tranche is sold, a well-established market exists and further tranches can be priced with some accuracy. This practice has been followed most notably in the case of BP, and several other privatized companies (including BT) were or will be sold in stages. But massive companies like British Gas and British Airways (and the TSB) were sold in one chunk, and it was not necessary to sell as much as half of BT at once. In contrast the Japanese Government began by selling just 10 percent of NTT. Selling in stages need not even affect the cash flows to the Government. For example, three tranches, each of one-sixth of BT's shares, could have been sold at the times when the three instalments of the half of BT's equity offered for sale in November 1984 were due for payment.

Thirdly, the expenses associated with sale could have been substantially reduced. As we argued above, the elementary logic of risk-bearing implies that it was inappropriate for the Government to underwrite many privatizations, especially in view of its pricing strategy.

Finally, a simple alternative would have been to give to each adult member of the population an equal number of shares in massive companies like BT and British Gas. Commentators such as Samuel Brittan in the Financial Times argued forcefully for this way of cutting out the financial middlemen. It has three major advantages. First, it is a manifestly fair method of asset disposal. Each member of the population would own

exactly as much of the company immediately after privatization as he or she did (in effect) under public ownership. Privatization would merely provide freedom to vary one's share of the company. There would be no arbitrary redistributions of wealth, and no windfall profits would accrue to overseas institutions. Secondly, there would be no need to worry about such matters as pricing and underwriting. Price would be set by the market when trading begins. Thirdly, there is no more direct method of promoting wider share ownership.

Shareholdings would not be unreasonably small if this method were adopted. BT was valued at well over £10 billion when trading in its shares began. The shareholding of each (adult) individual would have been worth more than £250, and multi-member households would have received two or more holdings of that size. Transactions costs would compare favorably with the method of sale actually chosen. Sending each member of (say) the electoral register the same documents is a simpler operation than promoting, underwriting, and dealing with varied applications for a new issue.

However, there is an objection to giving shares away free. Such a policy would increase the need to raise finance from other sources, and hence would tend to increase distortions throughout the economy caused by tax and debt burdens. In short, £1 in receipts from privatization costs the economic system less than £1 raised by extra debt or taxes. But perhaps this is not a decisive argument against the alternative of simply giving shares away, especially in view of the costs and unfairness of the methods that have been employed. Unless those methods are improved—as we believe they certainly can be—the option of cutting out the middlemen may appear to be rather attractive if and when the time comes to privatize all or part of the massive electricity supply industry.

# 7.3 Effect on Government Finances

In considering the effect of privatization upon the financial position of the Government it is important to distinguish between the short-term impact on the Government's accounts and the effect on its real economic position in the longer term. A major short-term attraction for the Government of selling state assets is that the sales proceeds are deducted from the "public sector borrowing requirement" (PSBR). Indeed, according to a curious accounting practice, the sales proceeds are treated as negative public expenditure! Mrs Thatcher's Government always attached great importance to reducing the PSBR, and, thanks to accounting definitions, privatization offered a very convenient way of doing so without further

cutting public expenditure or raising taxes. The 1982 White Paper that announced the intention to privatize BT is a clear illustration of the importance of the PSBR motive. But privatization is simply the sale by Government of equities in place of bonds. They are simply alternative methods of financing.

The short-term impact of privatization on the PSBR has several components (see Mayer and Meadowcroft, 1985, section III). The PSBR is reduced by the extent of the sales proceeds, the capital expenditure program of the company being privatized, and the company's payments of interest and dividends. However, the gross profits of the company move out of the public sector accounts and hence increase the PSBR. The net effect will depend primarily upon the relative sizes of the investment expenditures and the gross profits of the company, as well as the sales proceeds. Mayer and Meadowcroft (1985, table 4) show that the proceeds from the sale of BT in 1985-1986 were reduced somewhat by these other factors, largely because of the loss of BT's gross profit of approximately £3 billion, but the net effect was nevertheless to reduce the PSBR in that year substantially.

For BT 1985–1986 was the first full year after privatization—"year 1" so to speak. What will be the effect of its privatization upon the PSBR in years 2, 3, 4, and so on? Most importantly, what will be the effect on the Government's net worth overall, i.e. the discounted value of effects on all future PSBRs? That is the question of significance for the macroeconomic consequences of privatization (see Buiter, 1985). Let us begin by assuming that the privatization of a company does not alter its behavior. Then the Government simply sells the dividend stream of the company when privatization occurs. The net worth of the Government does not change at all provided that (i) the issue is correctly priced and (ii) there are no transactions costs. Unfortunately neither of these conditions is met in practice. We saw above that privatization issues have generally been seriously underpriced, and transactions costs—expenditures on promotion, professional fees, underwriting, etc.—have been large. Bond financing clearly has advantages over equity financing insofar as conditions (i) and (ii) are close to being fulfilled. The Government's privatization program therefore impoverishes its net worth by an amount equal to the extent of underpricing and transactions costs in these circumstances. Privatization actually worsens its long-term financial position.

Now let us relax the assumption made in the last paragraph by supposing that privatization increases the profitability of the company being sold to

the private sector. The Government is then able to sell a more valuable income stream than it would have received itself under continued public ownership. The overall effect on Government net worth becomes ambiguous. The cost of underpricing and transactions costs (relative to sales of government bonds) must be set against the increase in value of the income stream. As regards the latter, it is not the transfer of ownership but rather the associated change in the operation of these enterprises which has the potential to make substantial contributions to the public finances, the point so lucidly made in the quote from Adam Smith at the start of chapter 1. Here two cases have to be distinguished.

First, consider the case in which privatization induces an improvement in the internal efficiency of the enterprise and where there are no offsetting market failures. Since the assets are more productive under private than public operation, privatization will raise more revenue than the income stream which would have been earned had the assets remained under public ownership. Privatization improves both economic efficiency and the public finances.

However, a critical policy trade-off emerges if the superior financial performance of the private firm is the result only of greater exploitation of market power. Efficiency and financial objectives are now in conflict. Sale proceeds will be higher if the enterprise is privatized against a background of light regulation and a sheltered market environment, but economic efficiency is then likely to be damaged. Alternatively, stricter regulation, coupled with other measures to open up the firm to greater competitive pressures, promotes efficiency but reduces the revenue which is likely to be raised from the initial asset sale.

Finally, we turn to the financial effect of privatization on existing firms in the private sector. Other things being equal, the main result of the Government's selling equity instead of bonds is slightly to depress equity prices relative to bond prices. This in turn makes bond finance slightly more attractive to firms, relative to equity finance. However, there is no reason why the method of financing chosen by the Government should affect the overall cost of capital to firms. That depends, among other things, on the total financing requirement of the Government and not on whether that requirement is met by bond or equity issues. This is yet another illustration of why the accounting definition of the PSBR is misleading because it makes an artificial and irrelevant distinction between essentially similar methods of finance.

In sum, the merits of privatization from a financial viewpoint depend primarily upon three factors:

- (i) whether a short- or longer-term perspective is adopted;
- (ii) the costs (including underpricing) of selling equity as opposed to bonds;
- (iii) whether privatization increases the earnings stream of the firm.

In section 7.5 we will consider the role of these factors—especially the first of them—in shaping the events that took place.

#### 7.4 Wider Share Ownership

An important objective of Mrs Thatcher's Government has been to promote wider share ownership, and especially share ownership by employees of companies, as part of the desire to extend "property-owning democracy" in Britain. In this section we focus on two questions:

- (1) How far does privatization promote wider share ownership?
- (2) Is privatization one of the best ways of achieving this goal?

We do not consider the broader question of whether wider share ownership is a desirable objective in the first place. A discussion of this point would take us too far from the main concerns of this book (for an excellent assessment of profit sharing and employee share ownership, see Estrin et al. (1987)).

#### 7.4.1 The Ownership of Shares in Privatized Firms

In answer to question (1) above, the first point to note is that by itself privatization does little or nothing to promote wider share ownership. Individuals' investment decisions depend upon the information that they have and their incentives. Privatizations have often been accompanied by measures that have made the information about, and incentives to buy, the shares in privatized companies very different from information and incentives relating to other share issues, but it is those measures, rather than the privatizations, that stimulate wider share ownership. The main informative measures have been massive advertising campaigns, such as the very successful (albeit somewhat condescending) "Tell Sid" campaign to create wide awareness of the opportunity to buy shares in British Gas. The principal incentives have been the prospects of immediate capital gain due to generous pricing, and rewards in the form of vouchers and bonus shares for shareholders who keep their shares for some time.

These measures have had a large impact on the pattern of shareholding in Britain. Before the privatization program began there were approximately two million individual shareholders—about 5 percent of the adult population. The tax system encouraged, and continues to encourage.

investment via large financial institutions such as pension funds and life assurance companies, and, above all else, investment in home ownership. The privatization of BT in 1984 gave the first major boost to individual share ownership and further impetus came from the sales of the TSB and British Gas in 1986.

Several surveys of the growth in share ownership have been commissioned by newspapers, the Treasury, and the Stock Exchange. A large NOP survey of 7,200 people in April 1986 suggested that as many as 14 percent of the adult population (i.e. almost six million individuals) owned shares directly, but other surveys produced lower figures more in the region of 10 percent. An interesting finding of these surveys was the broad spread of share ownership among socioeconomic groups. Early in 1987, after the TSB and British Gas had been privatized, a survey of 954 adults carried out for the Observer (16 January 1987) suggested that 23 percent of adults in Britain—some 9.2 million individuals—owned shares. It was estimated that 0.8 million people owned BT shares only, that 2.4 million owned shares in British Gas only, and that 1.6 million owned TSB shares only. The survey found that about 1.6 million individuals owned shares in the company for which they worked. Only 2.8 million adults were found to be in none of the above categories. Other surveys (see Grout, 1987) also suggest that around 20 percent of British adults own shares. They all show the overriding importance of privatization in promoting wider share ownership.

Further information is provided by figures on the ownership of shares in individual companies. The evidence is that the privatizations early on in the Government's program did relatively little to extend share ownership. A number of enterprises-including International Aeradio, British Rail Hotels, Wytch Farm, and Sealink-were sold to other companies and therefore made no direct contribution to spreading ownership. In other cases, while the flotations were designed to favor small investors, most of those subscribing to the share issues quickly sold their holdings. That is, individual investors typically regarded the flotations as an opportunity to make a quick killing, rather than as a chance to acquire a longer-term asset. Within one month of flotation, the number of shareholders in Amersham had fallen from 62,000 to 10,000; within one year of flotation, the number had fallen from 150,000 to 26,000 in Cable and Wireless (first tranche) and from 158,000 to 27,000 in British Aerospace. Britoil (first tranche) and Enterprise Oil showed less dramatic drops in the number of shareholders since the initial offers were pitched at levels that did not produce anticipation of large short-term capital gains. Hence fewer small investors applied for shares in the first place.

However, some subsequent privatizations did much to increase the number of shareholders, because the shares were sold cheaply and incentives to retain shares were significant. There were 2.3 million shareholders in BT immediately after it was privatized. This number fell by just over a quarter in the year after privatization, and at 31 March 1987 there remained 1.4 million shareholders. Thus the erosion of the number of shareholders has been much less than in the earlier privatizations. A similar picture emerges for the TSB and British Gas, although massive quantities of shares changed hands at the opening of trading in these issues. More than a million applicants received shares in British Airways, but the number of shareholders fell to 420,000 in May 1987, only three months after the sale. The common feature of these cases is the presence of incentives to retain shares, at least for a few years. It will be interesting to see what happens to share ownership in these companies after the vouchers and share bonuses for loyalty expire.

Finally, it must be noted that the pattern of wider share ownership associated with privatization in Britain is of a very specific form (see Grout, 1987). Although the number of shareholders has risen sharply, the new shareholders typically own very few shares. Most own shares in only one firm, and most have shareholdings worth less than £1,000. Thus the ownership of shares has become wider, but is spread very thinly. The proportion of shares owned by individuals has therefore not risen in line with the growth in the number of shareholders. Indeed, according to Grout (1987, p. 60), the proportion of the stock market owned by individuals in Britain is continuing its long-term decline. Although privatization has increased the number of shareholders, it will require other measures to deepen share ownership.

The simple lesson to be drawn from the evidence on privatization and share ownership is that large numbers of the British public know a bargain when they seen one, and make decisions on buying and holding shares according to monetary incentives. Privatization has provided a vehicle for extending share ownership by enabling price incentives to be attached to huge blocks of new shares. Such opportunities occur less frequently in private issues because private issuers have no incentive to underprice (except insofar as they rationally avoid the large risks to them that are often associated with new issues). We now turn to the question of whether sensible methods have been used to extend share ownership.

#### 7.4.2 How to Encourage Wider Share Ownership

There are two main arguments against encouraging wider share ownership

by the methods used in the privatization program. The first is that they have been an inordinately expensive way of promoting the objective. Many hundreds of millions of pounds have been lost to the Government because of the underpricing of shares in companies unnecessarily sold in large blocks. The second objection is that the methods have been distortionary in the sense that share ownership has been strongly encouraged only in relatively few privatized companies. More general incentives would have led to unbiased choice and more balanced portfolios.

What alternative methods could be used to encourage wider share ownership? The most obvious answer to this question is the removal of the incentives that exist for other forms of personal saving in the U.K. Tax relief on mortgage interest payments (up to a limit of £30,000) and the absence of taxation on imputed income from owner occupation together create strong incentives for individuals to invest heavily in home ownership. This tendency has been further strengthened by the sale at less than market prices of housing owned by local authorities, and perhaps by controls relating to rented accommodation. Tax incentives exist also for indirect investment via institutions—pension funds and (until the 1984 budget) life assurance companies. In view of all these encouragements to other forms of saving and investment, it is hardly surprising that a relatively small proportion of the population engaged in direct share ownership until recently.

The bias can be rectified either by removing privileges afforded to other forms of saving and investment or by extending them to direct share ownership. The political constituency against removing the tax privileges of home ownership is very powerful, and radical reform on that front is therefore unlikely. However, steps are being taken to extend tax advantages to investment in shares. Estrin et al. (1987, section 2) describe the encouragement that governments in the U.K. and elsewhere are extending to employee share ownership and profit-related pay. Measures are also being taken to promote personal pension plans and personal equity plans (PEPs). The former are intended to enhance labor mobility by increasing the "portability" of pensions, a feature lacked by many company pension schemes. PEPs allow individuals to invest up to £2,400 per annum in a personal pool of equities which escapes tax on dividends and capital gains. A difficulty is that the management and administration fees charged by financial intermediaries more or less outweigh the tax advantages of PEPs for basic rate taxpayers. The schemes are more advantageous for wealthy individuals, but they are more likely to be share owners in the first place. Moreover, it is a feature of all schemes giving tax-free allowances that they

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offer greater encouragement to the rich than the poor. Selling state assets too cheaply partly avoids this aspect of unfairness, although it does favor those with available liquidity.

Nonetheless the basic point remains. Promoting share ownership by underpricing the share issues of privatized companies, and by providing incentives to retain shares for a few years, is both expensive and selective in its impact. Cheaper and more neutral methods—including the reduction of privileges to other forms of investment—are available and desirable. For one thing, they would encourage longer-term ownership of shares generally, rather than the seizing of virtually sure prospects of quick profits in just a few companies.

#### 7.5 Assessment

The sale of state assets on the stock market has been widely acclaimed by Government and much of the media as a resounding "success." Massive offerings of shares have been taken up by willing investors, the Government has raised billions of pounds, and share ownership has been extended to millions of new households in the process. But success must be judged relative to given objectives and opportunities. The principal stated objectives of the Government have been to maximize sales proceeds and to widen share ownership. The underpricing of major share issues has meant that the first of these aims has not been achieved at all successfully, and the second has been met in a highly expensive and rather distorted way.

There can be little doubt that the extent of underpricing in privatizations has been unnecessarily large. It has been higher than the average degree of underpricing of new private share issues despite the fact that private firms have more reason than Government to be risk-averse.

A less hasty program of share sales would have enabled the Government to sell smaller tranches sequentially, and to have priced all but the first tranches more accurately in the light of information provided by the market. Moreover, the costs associated with selling shares in privatized companies have been great: the case for underwriting was particularly questionable.

A judgment of Government policy for selling state assets—especially pricing policy—depends critically upon three factors:

- (i) attitude towards the transfers of wealth from taxpayers generally to successful applicants for shares;
- (ii) attitude to the risk of share issues being undersubscribed:
- (iii) urgency of transferring ownership of state assets.

Our assessment of the public interest in relation to these factors will be apparent from what has gone before in this chapter. Briefly, the transfers of wealth are undesirable. In part they go abroad, and are therefore a real loss to the U.K. economy, and in general they entail higher taxation—and hence distortion of choice—than would be the case if pricing were more accurate. The Government has reason to be more tolerant of risk than any other participants in the economy, and the urgency of transferring ownership is not so great that firms the size of British Gas and British Airways have to be sold at one go.

However, the incentives of Government ministers and their financial advisers may be rather different. In political terms, the transfer of wealth to successful applicants for shares even has some advantages. First, the gainers know that they have gained but the (relative) losers do not feel their loss. Secondly, the larger is the extent of underpricing, the lower is the probability that share owners will suffer an unpleasant capital loss before the next election occurs. Thirdly, the prospect of a Labour Government renationalizing on the basis of "no speculative gain" becomes nastier the more that shares in privatized companies are underpriced, because the possible capital loss is greater. Thus privatizing by selling state assets to individuals cheaply creates a vested interest in the status quo—a point not lost on Mr Norman Tebbit, Chairman of the Conservative Party, when he wrote to shareholders in BT in 1986. Finally, the Government's City advisers have a clear financial incentive in low pricing, because they and their clients receive part of the resulting transfer of wealth.

Politicians and financial advisers are likely to be much more risk-averse than the state ought to be. The burden of embarrassment would fall largely upon them, and it is not surprising that they should seek to avoid it. They are also likely to be rather impatient to carry the program through. The electoral fortunes of politicians may suffer reversals, and it is hardly in the interests of merchant bankers to recommend partial sale when the Government is prepared to sell all of a company at once.

Whatever the underlying motives of policy makers may have been, it is hard to see how their methods of selling state assets can be judged other than a failure in terms of the general public interest and in view of the opportunities available. Their short-run success in political terms is another matter.

This chapter would not be complete without some comments on the possible consequences for privatization policies of the stock market crash of October 1987. (These remarks take the form of a postscript because publication deadlines required our text to be essentially complete some

weeks previously.) In Britain the most immediate impact concerned the massive BP share offer, which was described above. The underwriters were left with huge losses as a result of the market's fall, although they may have hedged some of the risk, and they obtained some respite through the Bank of England's offer to buy back shares at 50 pence below the offer price. From the Government's point of view, underwriting had the advantage of securing the full proceeds from the sale, but the disadvantage of adding to the downward pressure on the market when the authorities least wanted it.

Most privatization stocks remained well above their original offer prices even after the initial crash, but it seems likely that the fall will affect the attitude of individual investors towards privatization issues in the future. irrespective of whether the market recovers its earlier levels. In particular, the sharp fall in share prices made investors acutely aware of the downside risk of holding on to their shareholdings. This may encourage more stagging (i.e. immediately selling share allocations at a profit) at the expense of longer-term investment by individuals in privatization issues, which would be damaging to the Government's objective of promoting wider share ownership. To counteract this tendency, the Government may have to offer yet greater inducements to encourage individuals to hold future privatization issues.

Until the BP share offer in 1987, the Government was fortunate to be privatizing in a rising stock market. The privatizations of the electricity and water industries are set to go ahead in any event, but it is interesting to ask what would happen to the privatization program in the longer term if a bear market sets in. If the Government continued to aim at a given level of privatization proceeds, then lower share values would imply that the pace of privatization would have to increase. On the other hand, a downward move in share values relative to bond prices would tend to make bond finance (i.e. selling gilts) relatively more attractive than share sales as a way of raising Government revenue. Lastly, the fear of a continuing slide in share prices, and its possible political consequences for a party that is so much identified with promoting wider share ownership, might deter Mrs Thatcher's Government from privatizing as rapidly in the future as it has done in the recent past.