

lands through monitoring activities, eliminating waste, and innovating. Smith concluded:

The attention of the sovereign can be at best a very general and vague consideration of what is likely to contribute to the better cultivation of the greater part of his dominions. The attention of the landlord is a particular and minute consideration of what is most likely to be the most advantageous application of every inch of ground upon his estate (p. 785).

In consequence, he proposed that 'In every great monarchy of Europe the sale of crown lands would produce a very large sum of money, which, if applied to the payment of public debts, would deliver from mortgage much greater revenues than any which those lands have ever afforded to the crown (p. 776).

Smith understood the essence of something that contemporary economists have explored in great detail: property-rights arrangements are not neutral. They provide the key to understanding the behaviour of private and public enterprises and the performance of private and public enterprises.

Private enterprises (assets) are owned by individuals who are free to use and transfer, within the confines of the law, their private property (assets). Consequently, those who own private property have residual claims on private enterprises' assets. When private enterprises produce goods and services that consumers demand, at costs that are lower than market prices, profits are generated. As a result, property owners' wealth is increased. Alternatively, if the costs of privately supplied goods and services exceed their market prices, losses are incurred. Private property owners must face the fact that their behaviour can increase or decrease the value of their residual claims on assets, and that their behaviour can ultimately result in bankruptcy.

The incentives created by private property rights - through the linkage between the consequences of the use of private assets and their owners' wealth - have profound consequences. Private owners face significant incentives that make it desirable to monitor the behaviour of private enterprise managers and employees, so that they will tend to supply what consumers demand and do so in a cost-effective manner. Consequently, private managers and employees find it difficult to engage in shirking behaviour or behaviour that is inconsistent with the enhancement of the present value of the private enterprise (the owner's wealth).

The market for shares acts as a court of last resort to reinforce the incentives created by private property. The anticipated effects of current actions are capitalized into the present value of shares. If incumbent managements' actions are inappropriate, share prices will fall and the returns from the purchase of shares for the purpose of a corporate takeover, which is designed to replace the current management, will increase. In consequence, the threat of corporate takeovers is a disciplining force on incumbent managements. The combination of owners monitoring managers and the market for corporate control acts to generate efficient performances by private firms.

By way of contrast, public enterprises are not 'owned' by individuals who have a residual claim on the assets of these organizations. The nominal owners of public enterprises, the 'taxpayer-owners', cannot buy and sell public enterprise assets. Consequently, 'taxpayer-owners' do not have strong incentives to monitor the behaviour of public managers and employees.

'Taxpayer-owners' could capture some benefits from increased efficiency of public enterprises through tax reductions. However, if realized, incremental benefits from improved

efficiency would be spread over many taxpayers, so that individuals' benefits would be rather small. In addition, individuals' cost of obtaining these benefits - acquiring information, monitoring bureaucrats, and organizing an effective political force to modify the behaviour of public managers and employees - would be very high. Add to this the lack of threats from potential corporate takeover specialists and the near impossibility of bankruptcy for public enterprises and we have significant differences in incentives between public and private enterprises.

The consequences of public ownership are predictable. The cost of shirking to a public bureaucrat is low. Consequently, public managers and employees tend to engage in shirking activity and the acquisition of various perquisites that increase production costs.

From a theoretical point of view, private and public managers and employees can be expected to behave in different ways. In consequence, private firms should tend to be more efficient than public firms.

EMPIRICAL EVIDENCE. Comparative cost analyses of private versus public provision of goods and services give support to the conclusion that private firms are more cost-effective than public firms. Considerable evidence suggest that the public cost incurred in providing a given quantity and quality of output is about twice as great as private provision. This result occurs with such frequency that it has given rise to a rule-of-thumb: the 'bureaucratic rule of two'.

Broader measures also confirm the conclusions reached through economic analysis. When compared to their private counterparts, sales per employee are lower for nationalized enterprises. Adjusted profits per employee are lower. Physical production per employee is lower. Taxes paid per employee are lower. Per dollar of sales, operating expenses plus wages are higher. Sales per dollar investment are lower. Profits per dollar of total assets are lower. Sales per employee grow at a slower rate. And, with the exception of nationalized oil companies, nationalized enterprises typically generate accounting losses.

COMPETITIVENESS. Economic analysis and empirical evidence support the notion that economic performance will be improved through privatization. However, it should be stressed that privatization's potential to accomplish this objective is greatest when newly privatized entities encounter an environment in which (1) product markets are competitive, (2) the entities are subject to the takeover threat, and (3) the entities are allowed to go bankrupt.

In the context of competitiveness, so-called natural monopolies merit special mention because entities that are candidates for privatization often have natural monopoly characteristics. That competitive results can be obtained in the natural monopoly context was articulated by Edwin Chadwick in 1859. The essential point he made was that competition in the natural monopoly context should focus on the right to serve an entire service area, rather than to serve individual consumers. Chadwick argued that an exclusive franchise or concession to supply an entire service area should be established and that private firms should be required to compete for the right to serve the franchise.

The keys to Chadwick's system are the bidding procedure for the contract to serve the franchise and the monitoring of the contract. To obtain the desired result, the franchise must be awarded to the firm that agrees to serve the market with the lowest prices for the output specified in a contract. The public authority responsible for establishing the franchise would act as a bargaining agent for customers in the franchise area. The

public authority would seek to award the franchise to the private firm that agrees to supply a given quality and quantity of service over the franchise's life at the lowest price. The successful bidder would have a contract for all consumers in the franchise area. This contract would be monitored by the public authority.

Chadwick's franchise system solves the competitiveness problem associated with natural monopolies, and at the same time, puts in place the incentives that tend to generate a cost-effective provision of goods and services. This system of franchises is widely used in France, with desired economic results.

STEVE H. HANKE

See also NATIONALIZATION.

BIBLIOGRAPHY

- Butler, S.M. 1985. *Privatizing Federal Spending*. New York: Universe Books.
- Chadwick, E. 1859. Results of different principles of legislation and administration in Europe; of competition for the field, as compared with competition within the field of service. *Journal of the Royal Statistical Society of London* 22.
- De Alessi, L. 1982. On the nature and consequence of private and public enterprises. *Minnesota Law Review* 67, October, 179-286.
- Hanke, S.H. (ed.) 1987. *Prospects for Privatization*. New York: Academy of Political Science.
- Littlechild, S.C. 1986. *Economic Regulation of Privatized Water Authorities*. London: Her Majesty's Stationery Office.
- Monsen, J.R. and Walters, K.D. 1983. *Nationalized Companies*. New York: McGraw-Hill.
- Smith, A. 1776. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Ed. E. Cannan, New York: Random House, 1937.
- Wiseman, J. 1968. *Nationalization*. In *Encyclopedia of the Social Sciences*, Vol. 11, New York: Macmillan.

privatization. Privatization, i.e. the transfer of assets or service functions from public to private ownership or control, has been employed with increased frequency throughout most parts of the world since 1980. Its objectives vary. The most frequently cited include: (1) improvement of the economic performance of the assets or service functions concerned; (2) depoliticization of economic decisions; (3) generation of public budget revenues through sale receipts; (4) reduction in public outlays, taxes and borrowing requirements; (5) reduction in the power of public sector unions; and (6) promotion of popular capitalism through the wider ownership of assets. The discussion here is limited to the first objective, the improvement of economic performance.

ECONOMIC ANALYSIS. Attempts to justify privatization have often been anchored in economic analysis. Adam Smith concluded that 'No two characters seem more inconsistent than those of trader and sovereign' (Smith, 1776, p. 771), since people are more prodigal with the wealth of others than with their own. He thought public administration was negligent and wasteful because public employees do not have a direct interest in the commercial outcome of their actions.

Smith also used economic analysis to support the privatization of public lands. He observed that, in the monarchies of Europe, there were great tracts of crown lands, which he characterized as 'a mere waste and loss of country in respect both of produce and population' (Smith, 1776, p. 776). Smith estimated that the productivity of public lands was only about 25 per cent that of comparable private lands. This was a consequence of the fact that private owners had a greater incentive than did the sovereign to enhance the value of their