

Opening Remarks

ALAN WALTERS

During the last 7 years, there has occurred one of the most momentous changes in the history of the world, the consequences of which will shape the future of our planet: the privatization of Chinese agriculture that began in 1979. This change was little noted and even less understood in the early years. Certainly there was no full-scale transfer of all property rights to the private farmer, but it was privatization nevertheless. The farmer was given the right, *inter alia*, to sell his output and keep a substantial fraction of the proceeds. In only 5 years output approximately doubled. China, who had been in fear of famine, has become a net exporter of food. Penniless peasants have become wealthy farmers. This revolution—and for once the term is justified—has occurred in the biggest industry in the largest country in the world. Never has so much been achieved in so short a time.

In addition to the inherent importance of the Chinese reform, it is interesting because it was widely thought that it could not be done and, were it to be done, the result would be chaos. But China managed to use privatization to solve problems older than history.

After Chinese agriculture, the next largest privatization was that of British Telecom. Apart from the sheer difference in size, these two privatizations differ sharply in technological sophistication, capital intensity, organizational form, and countless other ways. Yet British Telecom was just as ripe a candidate for privatization.

The essence of private provision lies in the twin principles of providing incentives to create, rather than destroy, wealth and of allowing the cooperation and coordination of people in this process through the anonymity of the free-market price system. The incentive of private reward assures that there is ceaseless exploration of new ways of doing things, and products of new technologies are enlisted in these efforts. No tier of coordinating committees is needed. No echelons of bureaucrats are required. No regulations, controls, or quotas are applied. The free-enterprise arrangement harmonizes and directs all efforts to the production of wealth.

Privatization, compared with public-sector provision, is particularly advantageous when there is very rapid technical progress in an industry. Private incentives and profit and loss statements, more quickly and effectively than any committee of scientists and technocrats, will sort out the good technologies from the bad. In both agriculture and telecommunications there have been rapid technological advances—from the “green revolution” to optical fibers and digital switching.

Private provision clearly scores high marks when there is great heterogeneity in the conditions of production or in the product. Again agriculture demonstrates this nicely. Each plot

of land is somehow unique and needs different treatment. Similarly the weather cannot be ordered to conform to any plan, and no central planner can tell which are the best crops to grow. All these decisions are best left to the individual—with the right incentives of course. In the case of British Telecom, the hallmark should be the enormous variety of information services. Just as we do not all want a black Ford motor car, so we will not rest content with the restricted telephone wire services of yesteryear. What we do want can only be revealed by the free market.

It has been shown that private provision and freedom from restrictive regulation relieve industry of the stranglehold of various interest groups, such as a trade union or political party. There is no need to labor this point to this audience.

Finally, privatization will be most efficacious in those industries or firms which, under public ownership and management, waste resources either by plain inefficiency or by misallocation. Of course waste also occurs in the private sector, but the wastrel, not the taxpayer, pays the penalty. Privatization polices the profligate.

How does all of this apply to highways? The first and superficial answer, at least for the first three points, must be “tenuously.” Let us go through the points in turn. First, it is not at all obvious that the technology of road provision is changing rapidly, and even if it is argued that there has been a revolution in methods of road construction, public provision by contracting through the private sector has effectively absorbed and capitalized on such technical change. The public road authorities usually specify the sort of road required and the private competitive contractors have a considerable incentive to find the most efficient ways of supplying the highways to specification.

Second, variations in the nature of production processes and in the quality and form of output are hardly the obvious characteristics one thinks about first in the highway industry. To the untutored eye a road is a road is a road. No doubt it is conceivable that a private road authority will be able to design different forms of highway “output” with different signaling systems and more efficient traffic-sorting arrangements, but I suspect that such improvements are probably not be a breakthrough. Third, despite the Davis Bacon Act or its analogue in other countries, trade unions or other monopolistic powers do not contribute to making the road business abysmally inefficient with bloated payrolls and low-quality output. (Note, however, that this will be unlikely to be true in those countries in which much of the maintenance or construction is done through force account. There the strictures are likely to apply.)

It is on the fourth blessing of privatization that our hopes principally must rest. Even the most casual observer of highways and their use must be struck by the enormous disparities. In the United States we see wonderful Interstate highways in

rural areas, particularly in the West and parts of the South, that are hardly used and certainly never come anywhere near capacity use. On the other hand, urban highways—particularly the urban parts of the Interstate highways such as I-66 in Washington, D.C., or I-95 in Baltimore—are highly congested. It is difficult to avoid the conclusion that the rural Interstates were much overdone and that the urban Interstates (and for that matter urban highways generally) are much underdone. Scholarly analysis has confirmed this common-sense view (1).

It is important to note that the waste is not merely on the negative side—the overbuilding of rural highways—but also on the positive side in the failure to build more urban road capacity. Jammed urban highways on which vehicles travel at snail-paced speeds are testimony to highway users' willingness to pay for additional road space.

Of course economists have long professed to be able to measure, to an acceptable degree of accuracy, the willingness to pay for highways. And such is the sophistry of my profession that it has been acclaimed that “rubber pays for the roads” in the United States. Expenditure on highways (or at least federal roads) came from the highway trust fund that was financed mainly by taxes on gasoline and tires. This is no test of willingness to pay for a particular road, any more than payment of taxes means willingness to pay for a B-1 bomber. An individual can decide whether to travel the road, but he can hardly decide whether to contract out or in to the defense umbrella. In the language of economics, road services are private goods, whereas defense is a public good.

It would have been sensible for governments to base decisions to build or not build roads on calculations, however fallible, of willingness to pay. But manifestly they have not. This is a classic case of “the prisoners dilemma.” The waste of resources is not the only loss. As is so often the case in economic policy, the more serious effects are indirect—on incentives and behavior. Instead of seeking more efficient methods of production, people engage in political maneuvering. Instead of making a better mousetrap, one seeks a pliant politician. Instead of producing goods and services, the system produces rules and regulations. Economic life becomes politicized.

In other countries similar phenomena can be observed. India, the second largest country in the world, has a most inadequate road system. For many years road transport has been throttled by mixtures of high tariffs, high taxes, and regulatory red tape. Neither consumers nor producers have been free to express their preferences. With a privatized road system, it is highly likely that the Indian road system would have been considerably more extensive than the present one, and with the restrictions and discrimination against road transport eliminated, it is plausible to infer that India would have had a road system comparable to that of Brazil in the 1970s. Similarly, China, after many decades of socialism, suffers from a road system that is a major bottleneck on growth of trade and income. Such are the changes of attitude, however, that China has been exploring the possibilities of private toll roads as one way of easing this serious constraint.

Privatization offers a better way. It is very likely that, were the roads to be constructed by private capital and owned by private enterprise, there would be little waste of resources. When it is one's own money, rather than the resources of the

taxpayer, wits are greatly sharpened. It is not possible, indeed it would be undesirable, to have no waste. There is bound to be some, as people explore new and untried techniques and methods. But the private purse is as good a watchdog as man has ever found.

Would privatization have prevented the overbuilding of the Interstate system? It is clear that, were they not subsidized, a large fraction of the Interstates in rural areas could never raise enough in (primarily toll) revenue to give a modest rate of return on capital. It is conjecture that even if the rural Interstates were given a dollar-for-dollar matching revenue grant, more than half the rural Interstates would still not be attractive to a private investor. This does not mean that no new road capacity would have been forthcoming. Undoubtedly there would have been some sort of road that would pass the acid test, but few of the dual carriageway or divided four-lane highways would have been built.

What about the positive side—would additional highways in the great congested urban areas have been developed? Here one is much less certain. Notwithstanding the high profitability of such urban roads, the political problems of eminent domain, environmental objections, and the distribution of the indirect benefits and costs are matters over which the political authorities would hardly concede any substantial freedom to the private road corporation. The most formidable objections to privatization are those that arise in the context of urban highways. Alas I have no solution, but the agenda of this conference suggests that many ideas are in the air, and I wish them well.

In many respects, however, technological conditions have changed so dramatically during the past two or three decades that hitherto impossible ideas have become not merely practical but efficient. For example, more than 30 years ago when I wrote my first paper (2) on the efficient pricing of highway services, the administrative and practical problems of introducing a much more efficient pricing (or toll) system were obvious and severe. I was driven to suggest special “stickers” or, in its most sophisticated form, some sort of taxi meter. By the end of the 1970s it was clear that electronics and information technology generally had largely solved the administrative and technical problems of road pricing. The political problems remain.

Looking back some two or three decades, it is remarkable how ideas have changed. In the 1960s we saw the start of the rapid growth of government that went on unchecked for a quarter of a century. In those days it was unfashionable, even jejune, to promote privatization. Statism, subsidies, and new federal agencies blossomed (if that is the right word) to deal with the old problem of poverty and the new problems of environment, civil rights, equality, and the like. In the late 1970s and 1980s opinion changed, not only because of disappointment with the performance of state programs, but at least in part because of the astonishing performance of the private sector.

There is good reason to believe that the new ideas about the appropriate role of the state are here to stay—perhaps for a decade or two. Experience shows that opinions change slowly and that they tend to hang around long after the rationalization for them has disappeared. Yet ideas dominate policy. As Keynes concluded in the *General Theory*: “But, soon or late, it is ideas, not vested interests, which are dangerous for good or evil.”

In the United Kingdom we have observed the potency of these ideas of privatization sweep policy along at a pace that few would have thought possible. And I suspect that, were Keynes to have lived until his 100th birthday, his judgment would have been good.

Private-Sector Involvement in Virginia's Nineteenth-Century Transportation Improvement Program

HOWARD NEWLON, JR.

This paper is a discussion of the financing of roads, and to a lesser extent other modes of transportation, in Virginia between 1816 and 1860, a period of major expansion during which a mixed system of private- and public-sector financing was used. The intent was to maximize the benefits and minimize the disadvantages of both systems. The perceived and real costs and benefits of this system are described, and parallels with the present situation are pointed out.

The history of transportation in Virginia during the 19th century is yet to be written. Although published works on transportation per se are few, a number of dissertations and theses, fortunately, have addressed elements of the major issues during limited time periods. Three of the dissertations are most important and have provided the information on which this paper is based. In 1948 Phillip Morrison Rice completed, at the University of North Carolina, a Ph.D. dissertation entitled *Internal Improvements in Virginia, 1775-1860*, which followed his M.A. thesis, *The Virginia Board of Public Works, 1816-1842*, completed the previous year. This dissertation is the best available overview of the policy and political issues involving canals, roads, and railroads before the Civil War. In 1950 Edward G. Roberts completed a Ph.D. dissertation, *The Roads of Virginia 1607-1840*, at the University of Virginia. This was a cartographic study, with supporting text, of the evolution of the roads from settlement through the early years of the 19th century. In 1957 Robert F. Hunter completed a Ph.D. dissertation, *The Turnpike Movement in Virginia, 1816-1860*, at Columbia University. This work was concerned with the turnpikes

REFERENCES

1. A. F. Friedlander. *The Interstate Highway System: A Study in Public Investment*. North-Holland, Amsterdam, 1965.
2. A. Walters. Track Costs and Motor Taxation. *Journal of Industrial Economics*, 1954.

constructed by stock companies under the General Turnpike Law of 1817. Other relevant works are Wayland Dunaway's *History of the James River and Kanawha Company*, published by Columbia University Press in 1922, that provides extensive treatment of Virginia's major canal effort and Carter Goodrich's "The Virginia System of Mixed Enterprise: A Study of State Planning of Internal Improvements," published in the *Political Science Quarterly* in September 1949, in which are discussed the funding, policy, and planning aspects of Virginia's internal improvement program. All of these works, as well as many others on specific improvements, draw heavily on the primary source, the records of the Virginia Board of Public Works, which include not only the records of the board but many of the records from the various canal, railroad, and road companies under its jurisdiction. These records, held by the Virginia State Library in Richmond, were made much more accessible than theretofore by the publication in 1978 of the *Board of Public Works Inventory* by John S. Salmon of the Virginia State Library.

No comprehensive thesis on Virginia's railroads has been published, but a number of histories of individual railroads have been, and there also is a Ph.D. dissertation entitled *The Virginia Railroads, 1828-1860* that was completed by Charles W. Turner at the University of Minnesota in 1946.

Further study of the issues would begin with these resources that are rich in detail and information.

INTRODUCTION

Since the first permanent English settlement in America nearly 380 years ago at Jamestown, the Commonwealth of Virginia