

PUBLIC POLICY FOR THE

Private sector

The World Bank

March 1995

Note No. 40

Franchising and Privatization

Antony W. Dnes

Increasing private sector participation to improve the efficiency of infrastructure services is a growing trend around the world. This trend reflects dissatisfaction with state solutions, ever-tightening government budgets, technical change, and policy innovation. One approach to increasing private participation that is attracting much interest is franchise bidding schemes. Improved understanding of franchise contracting techniques could foster the successful revival and development of Sir Edwin Chadwick's idea of competition for the field.

Competition for the field

Some elements of most infrastructure activities exhibit "natural monopoly" characteristics, meaning that one or more services or products can be produced most cheaply by a single firm. Examples include electricity transmission and distribution and gas and water pipelines. This raises the issue of organizing an infrastructure industry so as to gain the advantages of production by a single firm, without encouraging monopolistic conduct. Happily, not all elements of infrastructure exhibit natural monopoly characteristics. Market competition is both possible and highly desirable in many activities, such as electricity generation and long-distance and cellular telephony.

Sir Edwin Chadwick, a Victorian social reformer, proposed a franchise solution to problems of natural monopoly, an approach later promoted by Harold Demsetz in the United States.¹ Chadwick distinguished between competition "within the field" and "competition for the field." Where competition is not possible within an industry, Chadwick surmised, competition for the right to be the natural monopolist may be an adequate substitute. The essential idea is that monopoly franchises could be auctioned off to the bidder offering

the most attractive terms—for example, the lowest price to consumers. Competition through bidding ensures minimum selling prices because the winning franchisee will lower prices until revenues just cover costs. Franchising schemes also may avoid pitfalls associated with traditional regulation of such industries or with their nationalization.

Letting monopoly franchises has a long history: France and Spain, for example, have been letting water concessions for over one hundred years. With the recently increasing interest in private participation in infrastructure, franchising has taken root in power, solid waste, telecommunications, and water enterprises in developing countries as diverse as China, Guinea, Hungary, and Mexico. In a recent case closely resembling the Chadwick/Demsetz proposal, Buenos Aires awarded a water concession to the company offering the lowest evaluated price, which was notably 20 percent or more below the price previously charged by the state-owned water company.

Natural monopoly

To examine natural monopoly at its most unadorned, consider an industry in which decreasing cost gives rise to natural monopoly.





In this case, larger output means lower average costs per unit, and only one firm can survive. If there were two firms, one could expand to reduce costs and thereby eliminate the other. Traditionally, this kind of situation precipitates a pricing problem because the surviving producer may be able to set prices well above the prices that would rule under competitive conditions. This is often the argument for regulating or nationalizing a natural monopoly.

Chadwick distinguished between competition “within the field” and “competition for the field.” Where competition is not possible within an industry, Chadwick surmised, competition for the right to be the natural monopolist may be an adequate substitute.

Demsetz recognized that the threat of entry into an industry gives rise to potential competition that can stop a firm from adopting monopoly pricing. If inputs such as labor could be bought in competitive markets and if the costs to firms of colluding were prohibitively high, there would be many rivals ready to enter into sales contracts with buyers—with the firm offering the best terms winning the contracts. In a natural monopoly, this would lead to production by a single firm; but to beat off rivals, the natural monopolist would be driven to price at average cost, enabling the firm to just cover costs. This is a much better result than the higher monopoly prices that traditional theory predicts.

Franchising schemes

Demsetz also argued that a deliberately designed franchising scheme is useful where

potential competition cannot be relied on to exert discipline on a natural monopolist's pricing. This situation is likely to arise when there are large barriers that impede new firms from entering an industry, such as a need for large, irrecoverable investments that could be lost if the incumbent firm responds by lowering prices. National grids for distributing electricity are a good illustration of this problem.

In franchising schemes, competition for the market can occur “on paper” without the need for anyone to incur irrecoverable (specific) investments. A franchise authority simply awards a franchise to the producer offering the lowest price for a given quality and quantity of product. The auction may be systematically repeated to ensure that consumers continue to obtain the best price.

But to test whether franchising is useful, it must be compared with other approaches to natural monopoly. One traditional solution is for the state to nationalize the natural monopoly, which is how gas, water, electricity, and telecommunications were supplied in the United Kingdom before the 1980s. But disenchantment with nationalization has become widespread. In many countries, nationalized industries developed a reputation for inefficiency and control problems that offset any possible pricing advantage of a public enterprise operating under conditions of decreasing cost.

Another traditional solution to natural monopoly leaves such industries in private hands but regulates against monopoly abuses. In the United States, rate-of-return regulation has been applied to utilities to discourage monopolists from reducing output to increase profits. But rate-of-return regulation can reduce the incentives for cost efficiency. To boost profits, some firms may try to increase the capital base on which a rate of return is calculated. To provide better incentives for cost control, regulation of recently privatized utilities, such as telecoms and gas, has imposed caps on prices.²

Contract design

In theory, franchising avoids problems associated with nationalization or regulation. It also avoids the need to calculate and revise price caps or to incur many of the costs of more active regulatory schemes. These benefits must be weighed against the costs of organizing bidding for franchises and of controlling cheating within franchise contracts.

If a franchise system is to be successful, a great deal rides on contract design, capable procurement, and monitoring agencies. Some of the major problems concern adapting to changing circumstances, transferring long-lived assets between franchisees, and “underbidding.” Changes in conditions require that contracts have adjustment rules. This much is clear from early-twentieth-century municipal franchising of such services as transportation and gas distribution. To generate sufficient interest at the bidding stage, a franchise authority needs to devise a means for sharing the risks attached to changes in demand or to increases in the costs of inputs.

An even greater problem arises when specific assets are longer-lived than the franchise contract. An incumbent franchisee would tend to view the current cost of these locked-in investments as effectively zero and could easily outbid any rival building a plant from scratch. How can a franchise authority ensure the continuing interest of would-be bidders and create a competitive bidding environment for the renewal of the contract?³ The problem can be overcome by stipulating in the contract the terms under which assets must be transferred to a successor company. But further problems may arise in asset transfer:⁴ an incumbent could manipulate the original cost of assets to a would-be entrant’s disadvantage by, for example, arranging false costs with suppliers. Nonetheless, there are examples of smooth asset transfers, such as in the replacement of independent television broadcasting franchisees in the United Kingdom in 1967, 1980, and 1991.

“Underbidding” arises from the incentive for would-be franchisees to make adventurous bids. The temptation is to bid a high-service quality at a low price and then, once a contract is written, to try to renegotiate—or to chisel on quality. Such post-contract opportunism relies on the disruption costs faced by the franchise agency. To avoid these costs, the agency might renegotiate to improve the returns to the franchisee. It is not enough to argue that the contract is enforceable in courts



If a franchise system is to be successful, a great deal rides on contract design, capable procurement, and monitoring agencies.

of law. The commercial world is full of cases in which a bidder claims that costs have changed and, on that basis, tries to win price renegotiations, with the implied threat that otherwise it will fail. But there is evidence that underbidding is held in check by the desire of franchisees to maintain reputation, as in the case of U.S. cable television—the only case comprehensively studied.⁵

Fully developed franchising schemes are probably best seen as an alternative form of regulation for natural monopoly.⁶ They do not remove the need for a great deal of careful work in designing and administering contracts. Nonetheless, franchising has advantages where it would be difficult to privatize an industry outright, where limited private sector involvement is required, or where a government wishes to avoid the costs of traditional methods of regulation.

Franchise schemes have been applied by governments around the world in a number of situations. An interesting example is the scheme proposed in the United Kingdom for passen-



ger rail.⁷ The U.K. government is convinced that private enterprise can reduce costs. The catch is that many rail services run at a loss, and therefore it is unlikely that private investors would be interested in buying British Rail outright. The proposed franchising scheme would award rail routes to companies bidding for the lowest subsidy to operate the service for a specified period, and subject the winning companies to a requirement to not increase fares in order to maintain the existing level and quality of service. This scheme, which uses competitive bidding to minimize subsidies rather than prices, is a variant of the original Chadwick scheme.

- ¹ Edwin Chadwick, "Results of Different Principles of Legislation in Europe: Of Competition for the Field as Compared with Competition within the Field of Service," *Journal of the Royal Statistical Society*, series A22, pp. 381–420 (1859); and Harold Demsetz, "Why Regulate Utilities," *Journal of Law and Economics* 11: 55–65 (1968).
- ² See R.R. Braeutigam and J.C. Panzar, "Effects of the Change from Rate-of-Return Regulation to Price-Cap Regulation," *American Economic Review* 83(2): 191–98 (1993).
- ³ Alan T. Peacock and Charles K. Rowley, "Welfare Economics and the Public Regulation of Natural Monopoly," *Journal of Public Economics* 1: 227–44 (1972).
- ⁴ Oliver E. Williamson, "Franchise Bidding for Natural Monopolies: In General and with Respect to CATV," *Bell Journal of Economics* 7: 73–104 (1976).
- ⁵ Mark Zupan, "The Efficiency of Franchise Bidding Schemes in the Case of Cable Television: Some Systematic Evidence," *Journal of Law and Economics* 32: 401–56 (1989).
- ⁶ See Antony W. Dnes, "The Scope of Chadwick's Bidding Scheme," *Journal of Institutional and Theoretical Economics* 150: 524–36 (1994), for further comparative institutionalist analysis of bidding schemes. Also see Antony W. Dnes, "Franchising, Natural Monopoly and Privatization," in C. Veljanovski, ed., *Regulators and the Market* (London: Institute of Economic Affairs, 1991), for further analysis of the practical issues affecting the design of contracts for these schemes.
- ⁷ See Antony W. Dnes, "Franchising Passenger Rail," *Scottish Journal of Political Economy* 40: 104–15 (November 1993).

Antony W. Dnes is Professor in Economics, The Nottingham Trent University, England.

This series is published to share ideas and invite discussion. It covers financial and private sector development as well as industry and energy. The views expressed are those of the authors and are not intended to represent an official statement of Bank policy or strategy.

Comments are welcome. Please call the FPD Note line to leave a message (202-458-1111) or contact Suzanne Smith, editor, Room 68105, The World Bank, 1818 H Street, NW, Washington, D.C. 20433, or Internet address ssmith7@worldbank.org.

♻️ Printed on recycled paper.