Pricing Access to Essential Facilities

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THE pricing and other terms of interconnection to natural monopoly facilities in the utilities sector has become an important issue both in Australia, with the new 'right of access' policy under the recent reforms to competition policy (King, 1995), and in New Zealand, under 'light-handed' regulation. The recent joint report by the New Zealand Ministry of Commerce and the Treasury represents the first published attempt by government officials to review experience with the distinctive New Zealand regulatory approach. The report discusses

... the issues arising from the New Zealand experience with telecommunications interconnection negotiations and the implications of the decision of the Privy Council in the case of *Telecom Corporation v Clear Communications* for the economic regulation of access in the telecommunications industry and other vertically-integrated natural monopolies in New Zealand ... (Ministry of Commerce, 1995:1)

On the critical issue of the pricing of interconnection with natural monopoly facilities, such as telephone and electricity networks, the report states that the Baumol-Willig (B-W) rule may or may not be appropriate to New Zealand's circumstances. However, it recognises that the landmark decision on *Telecom v Clear* by the Privy Council — that charging on such a basis does not constitute use of a dominant position under s.36 of the Commerce Act — sanctions the use of the rule by incumbent natural monopolists under the present law.¹

The Interconnection Problem

Vertically integrated natural monopolies occur where the incumbent both owns the natural monopoly facility and competes in a vertically related upstream or downstream market.² Since the natural monopoly facility (such as the telephone network) cannot economically be duplicated, an entrant in the vertically related market (such as a provider of telephone services) must be able to gain access to the incum-

¹ For a review of the litigation and its implications, see Blanchard (1995) and Ross (1995).

² In simple terms, a natural monopoly occurs where, because of economies of scale, an industry's output can be produced more efficiently by one firm than by two or more smaller firms.

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bent's facility in order to compete.³ Since most utilities historically have operated on a vertically integrated basis, providing a right of access amounts to creating new property rights for entrants (Ergas, 1995). The incumbent has an obvious incentive to deny access in order to preserve its monopoly power and profit, derived from the facilities ownership, in the related market (foreclosure). Where outright refusal to provide access may breach competition laws, the incumbent may instead set a high interconnection price so as to render entry uneconomic even for an efficient entrant.⁴ Recent attention in New Zealand has centred on telecommunications markets, but the same access issues arise in the electricity, gas, postal services, and other sectors.

Such access disputes are meant to be resolved in New Zealand through 'light-handed' regulation (Bollard & Pickford, 1995). Section 36 of the Commerce Act, under which a firm occupying a dominant position in a market must not use that position for the purpose of excluding competition, has the effect of restraining the price (in some undefined way) that can be charged by that firm for an essential input, such as access. Industry-specific regulations also require owners of certain natural monopoly facilities to disclose pricing and operating information, so as to facilitate transparency and benchmark comparisons, and to encourage entry. This approach avoids the costs of more 'heavy-handed' forms of regulation, such as the productive inefficiencies associated with state ownership, the losses of scale and scope economies linked with the break-up of monopoly firms, and the market distortions involved with price control.⁵

By mid-1995, five interconnection agreements had been successfully negotiated with Telecom, including those with Clear for toll calls, BellSouth for a cellular services, and Sprint for international calls. Moreover, broad terms for the interconnection of Clear's proposed local Central Business District telephone service to the Telecom network were agreed in September, after four years of negotiations and millions of dollars spent on negotiation and litigation.⁶ In addition, numerous other disputes have occurred between the two companies — most of which have been settled — over other terms and conditions, including the access dialling code,

³ The terms 'interconnection' and 'access' are used interchangeably here, although the former is more appropriate in telecommunications and the latter in other utilities.

⁴ Where a natural monopoly facility is owned by a non-vertically integrated firm (for example, Trans Power's ownership of the electricity transmission network), the exclusion of customers is not a problem, but the issue of monopoly power remains. In both cases the upstream monopolist can exploit its market power to extract excess profits from the sale of the final good. This shows that the interconnection issue of foreclosure is part of a broader class of problems involving natural monopoly at the intermediate goods stage. I acknowledge my debt to a referee for emphasising this point.

⁵ For a brief review of the massive distortions, mainly regulation-induced, currently faced by United States utilities, see Kahn (1995:2-5).

⁶ Although the agreement became operational in September, the final technical details took longer to work out. The signing of the contract was postponed from end-September to end-October, and then to mid-December. See Frances Martin, 'Phone deal delayed yet again', *The Dominion*, 8 November 1995.

the allocation of toll-free '0800' numbers, and Clear's contribution to the 'Kiwi Share' social service obligation imposed on Telecom at the time of privatisation.

Similar access problems are starting to emerge in the electricity sector, where the local distribution networks are natural monopolies and the power company owners also compete in the local retailing markets. Some access agreements with new retailers have been reached in the relatively short time since deregulation, but some intending entrants have complained to the Commerce Commission and in public forums about access difficulties, including pricing issues. In natural gas, where deregulation is not yet complete, the replacement of pre-deregulation supply contracts between the natural monopoly wholesaler and local network retailers have yet to be resolved. In postal services the statutory monopolist has standard charges for bulk mailers, of which there are several in the market (see below).

Although competition from new entry has begun to appear in parts of these utility sectors, the Ministry of Commerce (1995:3) argues that the Privy Council decision raises three concerns about interconnection issues:

1. The appropriateness of the B-W rule for pricing access to the natural monopoly facility of a vertically integrated incumbent. The rule is designed to ensure that only efficient firms are able to enter the market. It does not eliminate monopoly pricing (if any) by the incumbent.
2. The appropriate treatment of the costs incurred by the incumbent monopolist in meeting its social obligations, such as Telecom's Kiwi Share obligations or New Zealand Post's universal service obligation.
3. The delays involved in relying on the courts and the Commerce Act to resolve interconnection disputes. While the pricing issue has been settled for the time being by the Privy Council decision, in local telephony (and other areas) various terms and conditions remain ill-defined and could therefore become the subject of future litigation. Under light-handed regulation, the incumbent has an incentive to delay entry by testing the legal limits, where the legal costs of so doing are less than the profits that would be lost by conceding entry. Disgruntled would-be entrants then lobby the government for help rather than continuing with negotiations. Neither leads to a resolution of disputes.

The Baumol-Willig Rule

The interconnection problem arises when a vertically integrated incumbent firm is the only supplier of an input or component (such as access to a natural monopoly network), which is used both by itself and by intending non-integrated competitors in the market for the final product. The central issue is the price the incumbent may charge for access. According to the 'efficient component pricing' or 'Baumol-Willig' rule (Baumol & Sidak, 1994a,b),⁷ price setting should be guided by effi-

⁷ The rule was devised independently by Kahn, who called it the 'competitive parity principle' (Kahn & Taylor, 1994). It has been suggested that the antecedent of the rule is to be found in Judge Hand's

ciency considerations, as it would in a hypothetical competitive market. This involves setting a price that is neither so low as to allow an inefficient rival to enter profitably nor so high as to render entry unattractive to a more efficient competitor.

The relevant price is that which the incumbent would charge itself for the use of the input in the hypothetical competitive market, including any monopoly profit forgone. Thus, when a Clear customer makes a call that previously would have been a Telecom call, Telecom should charge Clear the revenue it forgoes on the call (including monopoly profit, if any, plus the cost of providing interconnecting switches), minus the saving it makes on its average incremental cost by Clear carrying the call for part of the way through the Clear network. The price thus equals the sum of the direct or incremental production costs incurred by the owner in supplying the access, plus the opportunity cost associated with that supply (the contribution toward common costs and profit that it would have earned had it continued to supply those units of final product). At any lower price the firm in a competitive market would be unwilling to supply, since the price would not recoup its costs (including opportunity costs); at any higher price, the equally efficient rival would be unwilling to buy since it would be placed at a competitive disadvantage in relation to the incumbent.

As an illustration, suppose that the unit incremental costs of network use and of downstream processing are \$3 and \$4 respectively, and that the incumbent's final product price is \$14. Each sale thus yields \$7 (\$14 minus (\$3+\$4)) as contribution toward the incumbent's common or overhead costs, which cannot be allocated between different products (between local and toll calls, for example) except on an arbitrary basis. Here the optimal input price, the one which would leave the incumbent indifferent as to whether it or the rival supplies the unit of final product, is \$10 (\$3 in compensation for the costs of access plus \$7 to cover contribution forgone). At this price only an equally or more efficient rival (one whose downstream unit costs are \$4 or less) will be able to enter the market for the final product. The absolute sizes of the charges to cover access and contribution forgone do not matter in terms of ensuring efficient competition, or 'competitive parity', between the two in the supply of the product in question, unless the height of the price so reduces the size of the market that entry is impaired because of the inability of an entrant to spread its overheads sufficiently in its downstream processing operation.

There are difficulties in measuring the opportunity cost element in the access price. For example, when a tolls customer transfers from Telecom to Clear, Tele-

opinion in the 1945 ALCOA case in the United States. The basic assumption is that the usual economic welfare-maximising access price, set at the short-run marginal cost of the facility (Ng, 1987), is not appropriate because it would result in the owner making a financial loss through an inability to cover common costs, which the government is not prepared to subsidise. The usual theoretical solution to this problem — the use of Ramsey prices, where different markups are added to the marginal costs of different products and different customer groups in inverse proportion to their price elasticities of demand — is rejected by Baumol and Sidak (1994a:38-9) because it is virtually impossible to obtain the data required to implement such a scheme. A further assumption is that the facility is not congested, in which case peak-load pricing becomes appropriate.

com loses not only the profits earned on the calls the person would have made, but also the profits on other complementary telephone services (like international calls) likely to be earned by the tolls provider. However, the B-W rule specifies that those other profits are to be ignored in computing the access price (Arnold, 1995:133-4), which should increase the attractiveness of entry. Further, as Albon (1994) points out, the access price would be too high if the contribution forgone component was based on the output gained by the entrant, rather than that lost by the incumbent. The former is likely to be higher to the extent that the entrant taps into new demand, whereas the price should be based on the latter.

An Evaluation of the Rule

The B-W rule has been criticised on a number of grounds, not all of which are well founded. These range from claims that other pricing rules might produce superior outcomes in terms of economic welfare, to flat rejections by Clear on the grounds that its entry would be rendered non-viable. Here we evaluate the rule in terms of its ability to promote economic welfare, as judged by allocative, productive, and dynamic efficiency. We also consider the implications for access pricing when the government imposes a social-service obligation on the incumbent.

Allocative efficiency. One criticism of the rule that featured prominently in *Telecom v Clear* is that it serves to preserve any monopoly profit earned by the incumbent. The presence of such profit implies a socially undesirable restriction of output by the incumbent, which leads to a loss of allocative efficiency. Using the illustration above, suppose that of the \$7 of contribution, the unit common costs are actually only \$5, leaving \$2 of monopoly profit per unit of output.⁸ The access price of \$10 allows the incumbent to recoup the monopoly profit forgone through conceding sales to the entrant, thereby preserving those profits. This seems to defy logic, since in the assumed competitive market, an input supplier would not be able to earn monopoly profit. The paradox arises because the rule was developed for regulated markets in the United States, where price or other controls restrict monopoly profits. When the rule is applied to markets subject to light-handed regulation where there are no such controls, its effect is blunted. As Baumol and Sidak (1994a:177) note, 'Final product prices must be constrained by market forces or regulation so as to preclude monopoly profits . . . the one rule without the other, does not guarantee results that serve the public interest'. Since price controls are unlikely to be introduced in New Zealand because they would add undesirable regulatory distortions to the access regime, the B-W rule clearly fails on allocative efficiency grounds.

Productive efficiency. The rule serves the purpose of excluding inefficient entry. Suppose in our example that the access price was set at \$9 rather than \$10. This

⁸ A normal profit on capital funds, which a firm in a competitive market would expect to earn in the long run, is included as an element of cost in the common and/or incremental costs as appropriate.

would allow less efficient firms — ones whose downstream processing costs exceed \$4, and which could be as high as \$5 — to enter the market. Clearly this would be undesirable from an economic welfare viewpoint, since industry production would absorb more scarce inputs than the minimum necessary. Society is interested in having its demand for the product met at the lowest cost. Therefore, it is socially not desirable for a new entrant to replace some of the incumbent's production with its own unless it can do so at a lower cost. Otherwise, static efficiency requires that the incumbent produce all of the industry's output. The rule thus promotes productive efficiency, in the limited sense of excluding inefficient entrants.

However, a problem in the B-W rule is the implicit assumption that the owner of the essential facility is fully efficient — as it would be in the hypothetical competitive market — so that the unit incremental cost of the essential input is at a minimum. That minimum cost is then built into the optimum access price, as a means of ensuring production efficiency. But the incumbent lacks any competitive pressure to be fully efficient in its production of the essential input, for even should entry occur, the higher cost can simply be passed on in the access price quoted to the entrant.⁹ Since the cost of the component is then a cost to both parties, competition between them will not necessarily eliminate the inefficiency. If the incumbent moves to reduce the cost in order to improve profits, the saving will be passed on to the entrant in a lower access price at the next review. Consequently, any advantage to the incumbent will be temporary, and hence any incentive to improve efficiency will be muted. However, the scope for productive inefficiency in monopoly (see, for example, Siegfried & Wheeler, 1981) raises problems for all forms of monopoly regulation, not just for the B-W rule.

Dynamic efficiency. An entrant with lower downstream processing costs will be able to price below the incumbent; assuming a standardised product, this will force the incumbent to respond with a lower price, thereby eroding its monopoly profit. Using the numerical illustration, if the rival's processing cost is not \$4 but \$3, it could undercut the incumbent's price by as much as a \$1 and still earn a normal profit on capital. Some price cutting may be necessary for an entrant to gain market share by overcoming incumbency advantages, as seems to have happened when Clear entered the tolls market in competition with Telecom. However, it is unlikely that price will be pared down to the full extent of the entrant's superior efficiency.

If the entrant's efficiency (as judged by levels of average incremental cost) is only equal to that of the incumbent, the revenue it earns from a call matches the average incremental cost incurred in taking the call (assuming that it charges the same price for the entire call as Telecom), leaving no contribution toward its own

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A possible example is the connection by Telecom of consumers living in remote rural areas to the network using traditional wire-based technology, with the associated high maintenance costs, when cellular telephony today probably provides a cheaper alternative. More generally, in the years following privatisation in 1987, it is evident that Telecom's costs were inflated both by X-inefficiency and by a history of inadequate levels of investment. See: Farmer (1993:7, 21); de Boers and Evans (1995).

overhead costs.¹⁰ Hence the entrant has to be more efficient than the incumbent to be able to enter at all, and even then entry may be possible only if the entrant can gain sufficient market share to spread its overheads thinly. Moreover, where entry requires a substantial investment in sunk costs — such as expenditure on promotion and on other specialised assets with low resale value, which cannot be recouped if the firm subsequently decides to exit the industry — the entry of an efficient competitor may be deterred. The potential losses should exit be forced may discourage the firm from entering in the first place.

These considerations may help explain the length of time Telecom and Clear needed to resolve their long-running local interconnection dispute, despite continued pressure from the government (which is committed to competition) to do so. It may be that the efficient interconnection price would not have allowed Clear to earn a profit, even though it may otherwise be an efficient producer, and can bring to the market other sources of competitive advantage, such as lower overheads or more modern technology (Farmer, 1993:21-2).

If the B-W rule serves to exclude even efficient entrants from the market, productive efficiency — in a more dynamic sense — might decline as the incumbent lacks the competitive pressure to maintain a tightly run ship. Under competition, efficient firms expand, while inefficient firms contract and exit the market. A greater number of firms in the industry allows benchmarking of performance, with superior performers gaining the lion's share of the market, and increases the number of independent centres for innovation. But, perhaps of most concern, in an industry experiencing rapid technological advance such as telecommunications, the incumbent monopolist might lag in developing and adopting new products and processes. This handicapping of dynamic efficiency is likely to be more damaging to economic welfare over the long term than impairments to static productive and allocative efficiency.

Although an entrant may ultimately be as efficient as the incumbent, it is likely to incur high start-up costs that may render entry unattractive. The question then arises as to whether some sort of aid ought to be given to help it over the difficult entry period. But the same criticisms apply to this 'infant company' argument as to the 'infant industry' argument. If entry is viable in the long term, then banks or other investors should be willing to provide finance. If private funds are not forthcoming, and the government supports the venture instead, the protected company may never grow up. Vested interests will lobby for continued subsidy long after private investors would have withdrawn support (see Kahn's arguments quoted by Farmer, 1993:31-3).

The argument can be taken a step further. Suppose the potential entrant may never become as efficient as the incumbent. A case could still be made in favour of watering down the B-W rule so as to allow the firm into the market, provided that the benefits of the superior dynamic efficiency induced by competition exceed the losses in terms of reduced productive and allocative efficiency. But this argument is

¹⁰ For a formal demonstration with variations, see Albon (1994:417-18).

even more difficult to sustain, because the entrant will (by assumption) never grow up. In addition, pricing rules designed deliberately to disadvantage one firm and favour another might be considered inappropriate in the deregulated economy.

Social service obligations. The imposition of a social service obligation on the incumbent by the government, and its associated cost, gives rise to a potential problem for access pricing. 'Cream-skimming' firms have an incentive to enter only the more profitable market segments, which provide the incumbent with the monopoly profit it needs to cross-subsidise other, unprofitable, segments that the obligation requires it to supply. Right of access may thus undermine the government's social objectives. The B-W rule has the advantage of being the only uniform pricing rule which overcomes the problem of cream skimming by inefficient firms (Ministry of Commerce, 1995:28-9). In our example, if the introduction of the social obligation has the effect of raising the incumbent's costs by \$1 per unit, the final product price becomes \$15, and the optimum access price becomes \$11 ($\$3 + \$7 + \1). By requiring an entrant to compensate the incumbent for any lost contribution to the social obligation, entry will be discouraged unless the entrant is at least as efficient as the incumbent. Since the cost of the social obligation is built into the incumbent's prices, it will automatically be included in the access charge. However, the precise cost of the obligation was a major bone of contention in *Telecom v Clear*.

Summary. The B-W rule is designed for the limited purpose of promoting productive efficiency in a market by deterring the entry of inefficient firms. If the industry in question is a natural monopoly, then *all* entrants are likely to be excluded unless the incumbent suffers from substantial productive inefficiency which offsets the natural monopoly cost advantages. The rule does little (and is not intended) to undermine monopoly profit, and so does not cure any allocative inefficiencies. Indeed, any such profit earned by the incumbent is, through the opportunity cost principle, built into the interconnection price. Other forms of regulation are needed to deal with excessive prices. Finally, the rule does not directly promote dynamic efficiency. In fact, where it serves to restrict entry and thereby lower competition, the rule may harm dynamic efficiency.

Application of the Rule to Other Utilities

The application of the B-W rule is not limited to telecommunications, but is intended to apply generally to any industry where there is a vertically integrated natural monopoly. Access pricing issues have arisen recently in New Zealand in at least two other utilities — electricity and postal services — although so far no cases have come before the courts. These disputes are now briefly reviewed.

Local electricity distribution and retailing. Under the recent reforms in the electricity industry, the locally owned and vertically integrated line distribution and retailing activities were corporatised, and their monopoly franchises were removed. While each power company retains a (natural) monopoly over its local line services,

new firms are able to enter the retailing market by signing up customers, and so compete with the incumbent's retailing arm, provided they can negotiate access to the local lines in order to deliver the electricity. Some entry by new energy traders has already occurred. For example, Netco, a subsidiary of the Wellington power company, has won a contract to supply BP service stations nationwide.

The Commerce Commission has received complaints from some would-be entrants that some power companies have acted to protect their retailing businesses against competition. A common complaint is that an incumbent sets up a cross-subsidy from its line to its distribution businesses, thereby artificially raising the costs of the distribution activity and lowering the costs of its retailing. Arlidge (1995), general manager of Netco, alleges that, despite the Ministry of Commerce guidelines for separating line and retailing costs, which state that billing (one of the key costs in energy trading) falls into the latter, some power companies allocate the cost to their line business, and others split it evenly between the two.¹¹ As a result, an equally efficient entrant attempting access under the B-W rule, where the lines charge is based on the costs furnished by the incumbent, would pay an inflated access price and thus be unable to compete against the subsidised incumbent retailer.

Postal services. The Ministry of Commerce report covers interconnection issues in the telecommunications and energy sectors, but not in relation to postal services. New Zealand Post, a state-owned enterprise, has statutory protection in the basic letter market in return for a social service obligation. Section 3 of the Postal Services Act 1987 imposes a price floor of 80 cents on the carriage of letters of 200 grams or less by rival firms, which are not then able to compete with Post's lower price (currently 40 cents). This statutory protection may reinforce what appears to be a natural monopoly universal delivery network.¹²

However, the reference to *carriage* of letters in the Act is believed not to extend to the sorting function (although this has not been tested in court). In any case, several firms offer a bulk sorting service. They collect mail from individual customers, do a limited part of the sorting, and then pass it on to Post for the remaining sorting and final delivery. It is understood that Post has a set of standard charges (depending upon the amount of sorting done) for delivering letters sorted by bulk mailers. This is an instance where entrants have gained access to the incumbent's network without obvious difficulties or recourse to the courts. Post also has long-standing arrangements with certain local authorities and utilities to accept from them mail sorted by street for final sorting and delivery. But a dispute has existed

¹¹ In other instances entry has been impeded by allegations of refusal to negotiate access, unreasonable insistence on using the local network's metering and datalogging equipment in contravention of the industry-wide MARIA power-use reconciliation agreement, and the imposition of various unreasonable access, metering, and customer site charges.

¹² The protection is given to compensate for the universal service obligation that requires New Zealand Post (among other things) to continue to supply loss-making services to rural communities.

since 1993 over the price for access to Post's mail delivery network by an intending entrant, who plans to collect mail from large customers and do all of the sorting.

General observations. Interconnection issues are likely to be easier to resolve in the electricity, gas and postal services sectors than in telecommunications because their economic and technological structures are simpler. In the former group, the product flows in one direction and tends to be less differentiated; the successive markets are more clearly defined, and vertical integration is not universal; and entry does not usually involve the partial duplication of, and interconnection with, the incumbent's network as in telecommunications. In contrast, the telecommunications network is characterised by rapid technological advance, with an expanding array of differentiated products; complex interactions between system components; and an openness which allows messages to enter and terminate in many places. Here, incremental costing is very difficult, with costs tending to change with time of day and configuration of the system (Ministry of Commerce, 1995:39-40; Maddock, 1995). The focus to date on telecommunications may thus tend to overstate the difficulties associated with interconnection pricing.

A Role for Arbitration?

The discussion so far indicates that the application of the B-W rule is likely to be far from straightforward. As Ross (1995:369) remarks, the rule establishes only a methodology for determining a price. Even if the rule were to be applied without modification, there would seem to be plenty of scope for haggling about costs, and regular reviews would be required to update the access charge. Detailed analyses would have to be undertaken of the average incremental cost incurred by the incumbent in supplying the access service, together with the contribution to common costs and to profit. The latter might include the costs of social service obligations, and contributions forgone on sales of complementary products. The need to rely upon cost information supplied by the incumbent — as owner of the unique network — would provide scope for opportunistic behaviour by both parties.

Given these potential difficulties, as well as the incentives noted earlier for the incumbent to drag its feet, and for the entrant to complain in the hope of getting a better deal, it is not surprising that the Ministry of Commerce report considers various alternatives to the status quo as a means of bringing protracted disputes to a conclusion. These comprise six different combinations of access principles and regulatory institution, three of which involve compulsory arbitration. The favoured option appears to be 'broad legislative principles with compulsory arbitration'. But introducing a compulsory arbitration system to resolve interconnection disputes risks injecting arbitrariness into the outcome (Maddock, 1995). Two intriguing issues emerge. The first concerns the danger that the resulting price-setting process will be akin to price control, with its well known associated problems such as the danger of regulatory capture, the setting of prices that distort investment decisions, and the promotion of perverse efficiency incentives. Such problems provided the grounds for the lifting of all price controls in New Zealand.

The second issue concerns the pricing principles that the arbitrator will (or be required to) adopt. Will the principles be designed purely to further economic efficiency, or will the goal of introducing competition be paramount? Access pricing may raise again the debate as to the appropriate goal of competition and regulation policy. The long title of the Commerce Act emphasises competition, but the authorisation provisions it contains indicate that efficiency is favoured where serious conflict arises. The government's goal for telecommunications has undoubtedly been to promote competition, albeit as a means of enhancing efficiency, given its pressure on Clear and Telecom to reach a settlement that would allow Clear to enter the local market, and its threats to introduce further regulation if they did not. Yet our analysis of the B-W rule, sanctioned by the Privy Council, indicates that it is designed to place productive efficiency above competition.

Conclusions

The B-W rule is designed to promote productive efficiency, not competition. As a result, the other two components of economic efficiency — allocative and dynamic — tend to be neglected because they are enhanced by competition. Because the rule is designed to set the access charge in markets in which entry is frequently difficult, it seems likely that entrants faced with a B-W price will often be deterred, and so competition will remain absent. However, as the extensive cost analysis required to set the B-W price would presumably reveal the incumbent's monopoly profit (if any), the access charge could be set at a level net of monopoly profit. Productive inefficiency (if any) might also be eliminated in the same way. Although such an approach is usually rejected on the grounds that it would encourage inefficient entry, it would at least have the advantage of stimulating competition. The incumbent would then be forced to cut its price to match the entrant, thereby eroding monopoly profit and improving allocative efficiency. While inefficient entrants would be vulnerable to price-cutting by the incumbent, which would not need to be predatory to succeed in driving them from the market, efficient firms might provide continuing competitive constraint. In other words, it seems that the rule could be applied so as to offer some hope of promoting these other elements of economic efficiency.

The report on the regulation of interconnection provides an overview of current government thinking on the issues, but seems unlikely to result in any swift change to policy, for at least three reasons. First, the eleventh-hour settlement of the local interconnection dispute between Telecom and Clear seems to have removed the major impetus for further regulation. It is apparent that the agreed prices reflect a pragmatic, cost-based approach emerging from negotiations between monopoly seller and monopsony buyer rather than an application of the B-W rule (even along the lines just suggested). Second, the extensive consultation process has reportedly resulted in 58 submissions, ranging from two to several hundred pages in length. Finally, because its majority is so thin, and so dependent upon the support of minor parties, the present National government is unlikely to risk introducing contentious legislation that may undergo substantial (and, from its point of view, unwanted) revision in its passage through parliament. Given the likelihood of a mi-

nority government under the first mixed member proportional representation election in 1996, the consequences of the Privy Council judgement on *Telecom v Clear* could well be felt for a long time.

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The views expressed here do not necessarily represent those of the Commerce Commission. The author gratefully acknowledges the helpful comments of three referees. The usual disclaimers apply.