

Rejoinder

John Quiggin

IN his response to my article in *Agenda*, Rodney Maddock makes a number of points with which I agree. However, since his presentation of these points is phrased in such a way as to suggest that we disagree, I will seek to make my position on them clearer.

First, as Maddock observes in relation to his Indian experience, there are a number of different technologies for the delivery of local telecommunications services, and it is desirable that policy should not prematurely foreclose technological options. One of the themes of my article was that the policy of network duplication foreclosed technological options in order to promote the entry of new firms, and that a policy which I referred to as 'competition between technologies' would have achieved a superior outcome. In suggesting how we might respond to our current situation, I raised the possibility of requiring Telstra to maintain an analog mobile service and divest its digital service, to promote a choice of technologies.

Second, I agree with the Industry Commission's assessment, quoted by Maddock, that 'no conclusive empirical evidence exists which proves or disproves that the local network has cost characteristics conducive to natural monopoly'. However, I find Maddock's paraphrase 'econometric studies have yielded little evidence of natural monopoly in telecommunications' (p. 40) potentially misleading, since it implies a clear negative finding whereas in reality the literature has produced inconsistent and ambiguous results.

In the absence of conclusive econometric evidence, it is necessary, as I observed, to look at actual market outcomes. The evidence I surveyed suggested that 'Despite deregulation in a great many countries with many different policy regimes, incumbent firms have remained dominant in most markets, and in nearly all local telephony markets' (Quiggin, 1998:429). Maddock offers a slightly different assessment of the evidence on local telephony, saying in a footnote 'A large number of countries have allowed competition at the local level. Entry has been slow but not insignificant'. However, readers may be misled by the main text which refers to 'rapid and widespread entry ... hardly an indicator of pervasive natural monopoly of the sort Quiggin is concerned about' (p. 39). Since Maddock agrees with me that entry into local telephony has been slow, I assume that he is referring to rapid entry into markets such as long-distance and international telephony, where my article states that an assumption of natural monopoly would be inappropriate.

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The race between Telstra and Optus to roll out hybrid fibre-cable networks in 1996 and 1997 provides the closest thing possible to a natural experiment. At the time, advocates of the natural monopoly hypothesis (such as Quiggin, 1996) argued that the cable race represented unnecessary duplication and would divert resources from the provision of a high-standard service for all Australians. This claim was rejected by advocates of the view that the concept of natural monopoly was obsolete, such as former Communications Minister Michael Lee (1996), whose analogies with supermarkets are repeated by Maddock. The same view was presented, in less strident terms, by the Industry Commission (1997). I believe that the outcome of the cable race speaks for itself. After an expenditure that could have provided a first-class fibre-optic service for most of the country, both contenders abandoned their rollouts, leaving two half-finished and largely overlapping networks.

However, I agree with Maddock that natural monopoly is a complex concept and that it is necessary to distinguish between cost savings that arise from the existence of a single supplier in a given area and those that arise when a given firm serves multiple local markets. In my consideration of alternatives to the policy of network duplication, I considered the option of 'a breakup of Telstra into a set of local monopolies and a long-distance enterprise competing with new entrants' (Quiggin, 1998:435), and argued that this would have been preferable to the policy actually adopted.

Finally, I agree with Maddock that the process of corporatisation of government business enterprises has generally been regarded as successful, and that, at least when managed well, corporatisation provides the potential for an appropriate balance between adequate public accountability and incentives for efficiency and profitability. It should be noted, however, that prior to corporatisation Australia Post and Telstra were not government departments (as claimed by Maddock) but statutory authorities. As argued in Quiggin (1996, 1998), the conversion from government department to statutory authority in the 1970s produced greater efficiency gains than the corporatisation of the late 1980s. More important, Telstra's current partially privatised status is generally recognised as unsatisfactory, even by many who supported partial privatisation at the time.

I disagree with Maddock's claim that the CPI-minus-X cap ensured that consumers would receive some benefits from competition (p. 42). Maddock simply ignores my arguments on this point. As I observed, the X factor chosen for Telstra's domestic services was equal to the 4.5 per cent annual rate of price reduction achieved in the decade prior to the introduction of competition and equal to the exogenous rate of technological progress. Indeed, Butlin, Barnard and Pincus (1984) estimate that the telecommunications arm of the old Postmaster-General's Department reduced its unit costs at an average rate of 4 per cent a year.

That is to say, the price cap merely ensured that consumers, on average, would be no worse off under the new arrangements than they would have been had the old arrangements been maintained. Since some consumers have benefited, it follows that others (most obviously those in rural areas) are worse off than they would have been if no reform had taken place and the pre-existing technological trend had been

maintained. The X factor applicable to Telstra services as a whole has recently been increased to 7.5 per cent. However, there is now a sub-cap for services to residential users (excluding mobiles) and this is only 1 per cent.

The problem of an inappropriate choice of counterfactual reappears in Maddock's final paragraph discussing changes in telephony since 1990. Maddock appears to imply that telecommunications reform is responsible for the Internet, or at least for the fact that Australian households have access to it.¹ In fact, anyone with a 300-baud modem could connect to precursors of the Internet, such as Fidonet, well before the 1988 publication of the statement by Gareth Evans, the then Minister for Communications, which inaugurated telecommunications reform in Australia. Maddock offers no grounds for supposing that reforms in the telecommunications market are responsible for improvements in Internet access, or for any of the technological innovations he cites.

The weakest part of Maddock's argument is his defence of network duplication, which amounts to the claim that, in the absence of public ownership of Telstra, government would have no reason to care about such duplication. Maddock attributes to me a view, explicitly rejected in Quiggin (1998), that the duplication of cable networks was the result of mistaken commercial decisions by Telstra and Optus. Hence, he argues, in the absence of public ownership, government intervention would be unnecessary paternalism.

The critical point is not public ownership but the existence of a natural monopoly. Maddock ignores the standard result that unrestricted competition implies the dissipation the social surplus associated with the existence of the natural monopoly industry. He even ignores his earlier, correct, observation that the policy framework 'generated revenues that they [Telstra and Optus] were able to use to finance infrastructure that would make it difficult for subsequent entrants to compete' (p. 43). In other words, participation in the cable race and similar pre-emptive investments was, at least *ex ante*, rational for both Telstra and Optus, even though it was socially harmful.

Rather than respond to arguments about the efficiency losses associated with duplication of natural monopoly assets, Maddock relies on purely ideological arguments such as the rhetorical question 'Do we really want the government to stop petrol companies building stations close to one another?' (p. 43). If, as has been claimed, the proliferation of service stations in the 1960s was the result of a strategy of pre-emptive investment by oligopolistic firms, the standard economic answer to this question would be 'Yes'. As far as I know, neither I nor Maddock has any in-

¹ Far from being an example of market forces at work, the Internet was a product of the public sector and the old telecommunications monopolies. The US Department of Defence provided the initial funding, universities around the world developed the network, the CERN physics laboratory created the World Wide Web and the National Centre for Supercomputing Applications developed the first Web browsers. The Unix language, which ties the Internet together, was developed by the pure research sections of AT&T's Bell Labs, an early casualty of telecommunications reform. If the reforms of the 1990s had taken place in the 1960s, the Internet might never have existed.

formation on the question. His assumed answer 'No' relies on an *a priori* commitment to *laissez faire*. Even if governments choose, for ideological or practical reasons, not to intervene in the investment decisions of private firms, this principle could not reasonably be applied to the construction of telecommunications networks, which require both the general use of state powers of eminent domain and specific exemptions from local government planning policies.

The conclusion of Quiggin (1998:438) was that 'Much of the potential benefit to be derived from reform of the telecommunications industry has been dissipated in wasteful and technically unnecessary investment in duplicate networks. This is the natural result of policies based on a naive enthusiasm for competition and wishful thinking about the death of natural monopoly.' Although Maddock makes a number of valid points, he does not, in my view, refute this conclusion.

References

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