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REVIEWS

Not Filling the Gap

*Stephen King and Rodney Maddock, **Unlocking the Infrastructure: The Reform of Public Utilities in Australia**, Allen & Unwin, Sydney, 1996*

*Reviewed by **Robert Albon***

MY expectations of this book were substantial: two distinguished economists, one (King) a member of The Australian National University, the other (Maddock) of La Trobe University, with considerable experience in the infrastructure area tackling problems of great national importance in a very timely publication. Unfortunately, it appears I was overly sanguine.

The depth, breadth and quality of coverage of different topics are uneven, and discussions of particular topics are almost arbitrarily spread over the ten chapters (examples are considered below). One gains the impression that the authors may have been under some pressure to get the book out quickly, and may have devoted too little attention to the time-consuming and tedious aspects of good publishing practice. The book could have been so much better if more attention had been paid to structure and presentation, leading to tighter and more focused analyses of key topics.

The material on general public utility reform (principally in Chapter 2) is rather thin. There is only a cursory review of some of the major public utility industries: telecommunications, posts, water and sewerage, and electricity. While there is some discussion of the change in performance over time, there are no international comparisons of performance. International benchmarking has been very important in the debates about key Australian public utilities. The work of the Bureau of Industry Economics on international performance indicators (covering all important public utility industries) is overlooked completely. The accounts of events in New Zealand and Britain are too brief (about a page and a half each) to be of much use, especially as they are almost totally unsupported by references.

Chapter 3 on the origins and development of the national competition policy is a handy guide to the Hilmer reforms that emphasises the fundamental nature of the changes.

Public utility pricing theory and regulation are treated in Chapter 4. There are several problems with the approach adopted. First, the discussion does not really capture the essence of the public utility pricing problem, namely, the conflict between the efficiency benefits of pricing at marginal cost on the one hand, and of covering total variable and fixed costs on the other. Second, here and elsewhere, the authors do not completely come to grips with the different concepts of 'marginal cost' relevant to public utility pricing analyses. Third, the review of the public utility

pricing literature is far from complete, although two-part pricing and peak-load pricing are covered later (in Chapters 5 and 7 respectively). The authors move on quickly to regulation of prices, covering topics such as asymmetric information, rate-of-return regulation and price caps. The chapter concludes with discussions of contestability analysis and the role of competition by access in achieving efficient outcomes.

Chapter 5 deals with 'natural monopoly and essential facilities'. Natural monopoly is covered in a rather interesting way, although I have some difficulty with the statement that 'natural monopoly does not refer to an industry structure but rather to a form of cost-minimising technology' (p. 72). There is a good discussion of 'essentiality', and this idea is neatly related to the approach in Australia's competition policy reforms.

Chapter 6 is about access to essential facilities. This is an interesting chapter. Surprisingly, however, it does not contain a clear statement of Baumol and Willig's 'efficient component pricing rule' (ECPR), an idea which has excited much interest in a variety of access discussions. Indeed, while this rule is referred to in a number of places, nowhere in this book is the ECPR clearly defined or discussed in any detail. The ECPR is endorsed for the postal industry (pp. 150-1), but rejected for telecommunications in favour of 'directly attributable incremental cost' with an up-front charge (pp. 141-2). The lack of detail and indecision on this key issue is a major weakness of the book.

The issue of vertical separation arises in Chapter 6, specifically in relation to fears of double marginalisation and loss of economies of scope arising from separation. Vertical separation is also discussed in Chapter 8. The authors display strong scepticism about separation, especially as a general approach. The discussion would have been better if it had been more integrated and more closely related to concrete cases such as electricity and telecommunications.

Access and investment are covered in Chapter 7. This includes an account of peak-load pricing principles, including under uncertainty. However, Oliver Williamson's (1966) seminal paper (including his handy 'demand-for-capacity schedule') is not referred to; and there are the recurring problems with marginal cost concepts, including in relation to Figure 7.2 (discussed below). The theory is related to the approach taken in the national competition reforms. The conclusion is sobering: 'there are no simple solutions to investment issues' (p. 123).

Case studies of three industries — telecommunications, posts and gas — are presented in Chapter 9. The treatment of telecommunications is useful, although not all of the issues raised in previous chapters are canvassed. The inclusion of the postal industry, which is so often overlooked, is welcome in this book. The authors broadly favour a case-by-case approach rather than the national approach being adopted in Australia. Chapter 10 contains a rather pessimistic overall conclusion, suggesting that these reforms will not bring 'widespread benefits' (p. 175).

There are two further areas of broad concern with the book. First, there are some technical deficiencies. As mentioned, concepts of marginal cost are not always clearly defined or explained, and impossible relationships between short-run

and long-run marginal costs are proffered (in Figure 7.2, for example, where the two schedules are parallel). Where marginal revenue is drawn, it is in all but one case presented in a way that could not possibly be derived from the underlying demand curve. Further, where there are price and quantity numbers on axes these are all scale-defective, in many cases very clearly so. These latter two problems come together in Figure 6.1 (p. 89), where the marginal revenue curve is drawn far too steeply, leading to the scaling problem where 99 appears to be about one-third of 198 instead of one-half. Of the eleven diagrams, eight have at least one defect.

Second, there are substantial problems with the referencing. The reference list is not as comprehensive as it might be, reflecting gaps in the book's coverage of both theoretical and empirical materials. The poor editing is reflected in at least eight items referred to in the text — for example, Hackett (1993), Perry (1989) and Taparell (1995) — being completely absent from the reference list. Further, there are many mistakes — *not* typing errors — in the reference list.

Given all these concerns, the book may be a useful primer for a wider readership less interested in technical details, but will be of less value to more experienced practitioners and advanced students. Of course, there are some valuable discussions, but there are others that cannot be recommended without caveat. There are substantial gaps in both the theory and applications, and some of the technical analysis is untidy. The material is badly presented and particular discussions are difficult to find. This is not aided by a rather poor index. These defects are unfortunate given that a more advanced book of this kind would fill a clear gap in the market.

Reference

Williamson, O. (1966), 'Peak-Load Pricing and Optimality Capacity under Indivisibility Constraints', *American Economic Review* 56(4): 810-27.

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