

THE PARADOX OF COMPETITION POLICY AND THE AUSTRALIAN WATER INDUSTRY

Chris Adam; cadams@skm.com.au
Management Consultant, SKM Economics, Queensland

Abstract

The Competition Reform agenda is largely driven by the ideal of economic efficiency. However, given the fundamental importance of the water industry in maintaining our standards of living, is this focus on economic efficiency appropriate?

The objective of this paper is to explore the development of the competition policy reforms, the rationale behind the economic theory, contrast the economic theory with business strategy objectives and explore the implications of the policy to the Australian Water industry.

The central finding of this paper is that the essential nature of the Australian Water industry in the attainment of the broader social and environmental policy objectives may mean that measurement of cost should not be the single or even best measure of "efficiency" (EPAC).

Key Words: competition policy, efficiency, water industry, economics, and business strategy

Introduction

Since the completion of the Hilmer report in 1993, National Competition Policy (NCP) has been a significant force changing the face of Australian industry. The NCP reform agenda has been driven by ideals of economic efficiency (i.e. \$). However, given the fundamental importance of the water industry in maintaining a range of social, environmental (as well as economic) objectives, does the commercial benefit of reform offset the true cost of its impact? What role will the private sector play in the development of the reformed industry? And what can we learn from the overseas experience (e.g. UK and France)?

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Background - Development of the Reform Agenda:

The infrastructure industries (i.e. water, energy, and transportation services) play a vital role in the Australian Economy. The products of these markets can be a major cost in a range of industries (NCC, 1998). During the mid to late 1980's, the increasing trend toward globalisation brought with it the realisation that, in order for Australian firms to compete on a world scale, these factor inputs needed to be kept at competitive levels. As the global market became more competitive, pressure began to be applied to the government bureaucracies who controlled these industries, to improve the efficiency and productivity of the infrastructure industries to match worlds "best practice" (Barton).

In 1992, the Australian Federal Government commissioned a review of National Competition Policy (Hilmer Report). The terms of reference of this inquiry were to

summarize the challenges facing the Australian Economy and outline measures by which the economy could be reformed to enhance national living standards and opportunities. The main strategies to come from this review of were aimed at reforming public monopolies to facilitate competition and restraining monopoly-pricing behavior (Longmire).

The outcomes of this review were subject to an economic evaluation by the Industry Commission (1994). Despite extensive qualifications on the accuracy of the assessment, the conclusion reached by the Industry Commission was that implementation of the Hilmer and related reforms would generate an annual gain of around \$23 billion. Reform of the Water industry would contribute \$465 million of this sum. However, there is substantial disagreement on the magnitude of the benefits and, in some cases, disagreement on how or why the benefits may or may not be realised (Inquiry into NCP Reform Package, 1997).

On the strength of the arguments presented to it (including the Industry Commission Review), the Committee of Australian Governments (COAG) signed the Competition Reform Agreement in 1995. The COAG agreement represents bipartisan support for the policy of Competition Policy Reform.

Establishing the Need for Reform: A Macro Economic perspective

As indicated above, the rationale behind the development of competition policy stems from economic theories of efficiency. As the extent of available factor inputs (labour, capital, and raw materials) is in finite supply, the objective of economic policy is to ensure that all industries are efficient in their use of these inputs in the production of goods and services. Efficient industries maximise the wealth of the community through exploiting comparative advantages at the national/international level and providing value for consumers (including employment) at the local level.

However, whilst the objective of “economic efficiency” is universally accepted within contemporary economic doctrines, there are distinct differences in what constitutes “efficiency” and how this may be achieved. The contemporary (neo classical) view is that competition within an industry gives rise to more competitive pricing structures, which improve resource utilisation and capital allocation. The assumption is that markets are perfectly competitive and hence naturally efficient and, in such an environment, factor inputs will flow to their most economically efficient use.

However, the nature and structure of some industries may mean that market competition is neither practical nor attainable. This may arise through a range of possible causes of market failure including monopoly power, scale economies, externality effects or information asymmetry. The Keynesian theory of economics, whilst supporting the theory of economic efficiency, recognises that markets may not be perfectly efficient and such failure may prevent efficient allocation of resources. The theory recognises the fact that there may be a range of outcomes that may be socially optimal. Indeed, price outcomes may not be the single or even best measure of performance (Tasman Economic Research).

Importantly, recognition of the limitations of the neo classical economic theory is clearly identified in the Hilmer Report and features in the NCCs deliberations.

Business Strategy: the Micro Perspective

“In the economists “perfectly competitive” industry, jockeying for position is unbridled and entry into an industry is very easy, This kind of industry structure, of course, offers the worst prospect for long run profitability” (Porter, 1979)

Hence, the rationale behind competition policy is to maximise competition within an industry as a means of ensuring efficient use of limited resources. However, a competitive industry is comprised of a number of contestants, each trying to maximise their own profit potential. Given their central

importance in the development of a competitive market, how will such businesses react in the new environment? What insight can be gained from contemporary business strategy to indicate how individual (profit maximising) businesses may behave?

Market Power Paradox:

The objective of a profit maximising enterprise is to develop and sustain a competitive advantage over other market participants. The most prominent framework for assessing strategic advantages of individual firms or industries is the work carried out by Porter (1980, 1985). Porter catalogued, described and discussed a wide range of phenomena, which interfered with free competition, thus allowing abnormal returns. Porter reasoned that a firm could develop and sustain a competitive advantage by establishing a market position, which exploited strengths and weaknesses within the market.

However, the assumption of economic equilibrium which is the cornerstone of most economic models (Rumelt) is based on the premise that markets are perfectly efficient and that an individual firm would be unable to influence market dynamics to extract abnormal returns. Whilst this may be a useful simplifying assumption for a theoretical construct, the very presence of dominant market players within many industries implies that this simplistic abstraction of market behaviour is not supported by anecdotal evidence.

Regulation and information asymmetry:

Naturally, it is the role of the regulator to balance potentially conflicting economic (policy) objectives and business interests. However, the regulator typically does not have access to primary data. Most sources of information are provided by the participating firms or other key interest groups (each of whom may present their case in the best light possible). Whilst it may be argued that the regulator has the power to force disclosure of information, the cost of such requirements induces an additional burden on the industry which may partially offset any efficiency gains. For example, some studies have estimated that the cost of compliance with

the UK water regulator is as high as 2% of annual turnover (Barton).

The structure of the regulatory regime is also paramount. For example, a system of regulated rate of return on capital investment (originally favoured in the UK) has the potential to create an incentive for firms to over invest in new assets, and provides little incentive to implement demand management or similar resource conservation strategies. The higher the demand for water, the greater the need for future capital assets, hence the higher the regulated return to the business. Firms may also choose not to repair infrastructure in favour of providing capital intensive storage facilities to cope with system inefficiencies.

Comparison of Strategies:

It is important to recognise that both the economic and business strategy paradigms are relevant in any discussion on the attainment of economic efficiency. The objective of both parties is to maximise value for their own stakeholder group. In this sense, it would be incorrect to define either approach as "right" or "wrong". What you see depends largely on where you stand.

Clearly, both the economists and business strategist recognise the concept of market failure. However, where the economist looks for potential market failure and tries to address the problem, the business strategist either looks for or develops ways of creating market failure, which can be exploited.

In balancing the two approaches, some industry policy analysts have advocated the use of Public Benefit Tests (PBT's) for the assessment of the broader social, environmental and economic impact of the proposed changes. Such PBT's can be carried out to identify the qualitative (eg social, environmental) impact as well as the quantitative (i.e. efficiency) effects of the changes. This was an approach favoured by the Hilmer report (and the NCC) but one which has not received a great deal of representation in the press.

What does competition policy mean for the Australian Water Industry?

The objective of competition policy is to increase the efficiency of the industry through greater competitive contestability, clearly defined service responsibilities (particularly in relation to subsidies), and development of a commercial focus in the operation of industry (King & Maddock). The specific objectives for the Water industry were summarised in the Industry Commission Report of 1994 and include:

- Separation of Service Provision: i.e. separation of the regulatory functions and business roles of the entity. In theory, the later could be opened up to competition, although the specific expertise and asset knowledge creates the potential for exercise of monopoly power. Alternatively, the entities may choose to review the commercial objectives and structure of business units (commercialization)
- Identify and pay for community service obligations (CSO's): In practice, identification of the extent of the CSO's is sometimes difficult to quantify. In addition, there may be a concern that the identification of such payments may prompt other interest groups to lobby for favorable treatment.
- Adopting International Best Practice: Whilst the ideal is admirable, identification of "best practice" is at best tenuous. Differences in costs of service may result from regional variations in water quality, availability, environmental, technical, social, and even accounting variations. Given the extent of variation in appropriate models in the domestic sense, let alone on the world stage, establishing objective benchmarks may be difficult.
- Achieving Positive Economic rates of return on investment: The water industry has traditionally significantly under-recovered on costs (NCC 1998). It is probable that identification of the true costs of providing a range of services in

the water industry may lead to an increase in the charge for that service. In NSW, the prices for bulk water are forecast to rise by up to 26% over the period 1998-2000 (NCC).

What are the current trends?

The practical implication of these reforms is likely to see the Water industry develop into three broad categories:

1. Regulator
2. Monopoly Markets (Bulk Water Services)
3. Contestable Markets (Retail)

The role of the regulator will be central to the attainment of the efficiency gains and will influence the attractiveness of the industry for private sector participants. To date, most states have implemented a regime of regulatory oversight of the industry (e.g. ORG, IPART). These bodies are independent commissions with legislated powers and a mandate to attain the economic objectives of the competition policy reforms whilst maintaining existing service standards. Other states, such as Queensland, have established a regulator but have not provided the group with the same degree of independent legislated power.

The second category is that group of assets that has monopoly characteristics. These include headwork's (treatment facilities, dams etc) and distribution (trunk and reticulation mains). The objective of the reforms for this group of government businesses focuses on the monitoring of monopoly power and provision of regulated access to third parties. This group represents by far the most significant asset base within the industry with a current replacement value estimated to be \$80million.

The final category is that of retail and other contestable markets (e.g. provision of management, operation and maintenance services, customer service interface, construction etc). These markets have hallmarks of a competitive industry and are currently largely open to third party competition.

The Overseas experience:

The difficulties inherent in managing essential infrastructure in a changing world is perhaps most evident in the diversity of models available overseas. Whilst discussion of individual cases is beyond the scope of this paper, the diversity in development of the international water industries may be summarised into three broad models:

- The UK Model (Privatised)
- The French Model (Franchised Access)
- The US Model (Hybrid Public and Private)

Perhaps the most relevant of these generic models, is that of the UK experience. Changes in this market have direct parallels with the development of the Australian domestic water industry.

The UK Market:

In a similar manner to the Australian market, the UK Water industry had a long history of public ownership, management and operation. The Water Act of 1973, reformed the highly fragmented industry by establishing ten (10) Regional Water Authorities (RWA's). In 1983, the management structure of the RWA's was again reviewed in an attempt to introduce a more commercial and cost conscious approach (Lester,1995). As a result of this reorganisation, the RWA's achieved significant and continuous efficiency improvements throughout the 1980's (Lynk). However, over the period from 1983 to the time of privatisation in 1989, it gradually became clear that the "efficiency gains" resulting from targeted reductions in operating costs and externally imposed financial limits had been met partly at the cost of significant degradation of service quality by the RWA's. In addition, capital investment had not been sufficient to maintain the integrity of the assets (Lynk 1993).

This created an interesting problem for the incumbent government. By the mid to late 1980's it became clear that the Victorian heritage was more than showing its age and,

to overcome the problems of neglect, significant investment in the industry was required. However, buoyed by the successful disposal of the gas and telecommunications industries, the incumbent government saw the opportunity to turn such a liability into an asset through privatisation of the industry. The Water bill of 1986 established the legislative framework for Privatisation of the Water Industry and, under the terms of the Water Act of 1989, the regional water authorities were privatised as Water and Sewerage Companies. At the same time, responsibility for the economic regulation of the industry was transferred to the Office of Water Services (OFWAT).

So, how effective has privatisation been? As is the case in the reform of the Australian industry, the objective of privatisation is to maximise "economic efficiencies" by allowing market forces to determine the appropriate allocation of factor inputs. However, critics of privatisation argue that charges for household water and sewerage services in England and Wales increased every year since privatisation. "Consumers are paying an additional 95% (or 45% after adjusting for inflation) than they would have done in 1989/90" (BBC News). However, the increases in user charges may simply reflect the fact that, by the time of privatisation, the water and sewer industry was in a parlous state" (Lynk). Indeed, those supporting the process have stated that "If the water industry had remained under state control, these expenditures would have posed serious burdens on the public purse"(Mayer). Indeed an increase in price levels is consistent with theories of economic efficiency in ensuring that the true cost of providing a limited resource is achieved.

However, the effectiveness of a water industry should not be measured in terms of price alone. Recent studies (Lynk) indicate that, whilst the price level has risen, so has the standard of service provided.

Whilst the cost to consumers may have increased as a result of privatisation of the industry, there is evidence to suggest that investors in the industry have earned lucrative returns through greater operational efficiencies. Indeed, recent statements from

the regulating body OFWAT(1998), indicate that “significant efficiency savings” have been achieved. Hence, privatisation of the Water industries may have been successful in creating a more efficient market, although these savings have, to date, been captured by the private firms.

In addition, several of those private firms who have been involved in the development of the UK industry are now operating as “world leaders” in many aspects of management of the water industry. Supporters of privatisation would state that such status confirms the superiority of market forces in providing an incentive to innovate.

Franchised Access (French) Model:

Under the French system of franchised access, ownership of monopoly infrastructure remains in public hands whilst the franchise for operation and maintaining the asset is contracted out (over long periods) to the private sector. Whilst such a system requires careful consideration in structuring the contract terms and conditions to ensure that appropriate risk transfers are in place and information flows maintained, the system appears to offer a tangible alternative to the UK Model of private ownership.

Conclusions – Implications for the Australian Industry:

The diversity of industry models available both domestically and internationally confirms that there is no universally accepted “best way” to manage monopoly assets such as those included in the water industry. Whilst the efficiency of UK firms may support greater private sector involvement in the industry, it may also be argued that privatisation was prompted by a serious lack of investment in a degraded infrastructure. In contrast, the success of alternative models (e.g. French and US) indicate that wholesale sell off of public assets is not necessary to achieve efficiencies in the market. The message for Australia may be “if it ain’t broke, don’t sell it”.

The unique nature of the Australian domestic water industry indicates that **any** change

requires sound assessment of both the economic principles and anticipated business strategy. In particular, given the scale of the infrastructure involved, decisions need to consider the probable reaction of profit maximising organisations in achieving set goals. Measures of “good” versus “bad” models are simplistic and do not account for the enormous diversity in the structure of the industry, range of objectives (social, environmental, and economic) and complexity of the industry. Politically expedient measures (such as privatisation) may have significant long-term impacts.

Recent trends in favour of carrying out a complete quantitative and qualitative Public Benefits Test (PBT) provide a mechanism for evaluation of the probable TOTAL impact of proposed change. The need for such broad analysis is acknowledged in the original Hilmer report, is supported by the NCC and is gaining greater currency among state governments.

Finally, Competition policy has the potential to deliver significant benefits in terms of economic efficiency, technical efficiency and allocative efficiency. However, such benefits will only be realised through a greater understanding of the process, commitment to reform and a full appreciation of the range of issues involved in what is a complex industry. Current trends have the potential to take the water industry “higher, faster stronger” but to do so, we need to ensure that our actions today deliver tangible results to current and future generations.

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Author Biography



Chris Adam has over ten years in the water industry and local government sector, undertaking business analysis, project delivery, asset management and optimisation, financial risk analysis and Value Management projects. Chris has recently undertaken business planning and transition management projects for large public sector clients including Brisbane Water and Gold Coast City Council.

Chris is familiar with the issues and constraints which characterise the water industry including the current changes resulting from implementation of National Competition Policy and the corresponding regulatory regimes. In addition, Chris has recently undertaken a review of the effect of competition policy on the water industry, comparing and contrasting the economic ideology with business strategy theory.

Postal Address: Chris Adam, PO Box 246 Springhill, Qld, 4004

E-mail: Cadams@skm.com.au