

***Australian Competition &
Consumer Commission***

**Privatization of Public Enterprises and Utilities
and
Establishment of Regulatory Framework**

Allan Asher
Deputy Chairman
Australian Competition and Consumer Commission

World Bank, OECD, Global Forum on Competition Policy – International Bar Association
Thailand
International Conference on Competition Policy and Economic Adjustment
Bangkok, 27 - 28 May 1999

Privatization of Public Enterprises and Utilities and Establishment of Regulatory Framework

*The British experience suggests the need for better integration of any privatization proposals with promotion of competition and preventing abuse of monopoly power in the industry, and for getting the regulatory framework right.*ⁱ

(Australian Consumers' Council 1995)

Well might we say the same of any economy moving to privatize public enterprises and utilities.

Privatization is an instrument in a wider collection of tools for attracting investment and improving the structure and performance (level of output and efficiency) of economic sectors. Economies that seek to stimulate investment and growth simultaneously face significant challenges. They have legitimate expectations of strengthening sometimes-fragile infrastructure and bringing short supply of essential services into some sort of balance with demand. They have legitimate wider social goals that are ultimately just as important in the functioning of an economy. These goals include promoting interaction and shared opportunities between rural areas and cities, developing levels of literacy and skills, equitably distributing additions to national wealth, and harnessing technologies appropriate to the financial resources of the economy and the needs of its people and of the environment.

There are difficult decisions to make in choosing the optimal path of development. The deregulation and privatization experience in Australia and elsewhere has lessons for developing economies.

Introduction – the ACCC

The Australian Competition and Consumer Commission (ACCC) is a statutory authority that began operations in November 1995 as part of an agreement between the Commonwealth (Federal) and State governments of Australia to extend competition policy and laws to all trading sectors of the domestic economy, including government enterprises. A notable part of this national competition policy was the introduction of means to corporatize government business enterprises, to provide for third-party access to monopoly infrastructure services and to transform State markets in energy services into national markets. Government business activities became subject to the competition law that was already applicable to the private sector.

The ACCC in fact has a much deeper experience of competition law and prices oversight than its 1995 foundation date suggests. The ACCC incorporates the national competition authority that originated in 1968 (substantially upgraded in 1974) and the national price surveillance authority that originated in 1973 (expanded and refocussed in 1984). The ACCC in 1997 assumed the market regulation functions of the former national telecommunications authority

(which originated in 1989), as part of government policy to open up the telecommunications industry to competition at most levels of service.

In recent years the ACCC has been sharing the expertise it has built up by undertaking consultancies on the establishment of competition agencies in a number of countries in Asia, the Pacific and recently, in South Africa. The ACCC has long-standing exchange arrangements with counterparts in Canada and New Zealand, which it is working to extend to the countries newly establishing competition frameworks for their economies. It is an active participant in OECD competition, trade and consumer policy forums. The ACCC has itself drawn on overseas experience in utility regulation and monitoring of outcomes from bodies such as the World Bank, the International Energy Agency and the Public Utility Research Centre at the University of Florida. ACCC officials have had discussions in visits from and to individual regulators on several continents. Having served as an adviser on the promotion of consumers' economic interests in developing economies for United Nations and Australian development assistance projects, I have a particular interest in the subject of this speech.

Deciding whether to privatize

Wider reform goals for the public and private sectors:

(1) Australian context

Australia has been implementing a programme of microeconomic reform during this decade focussing on the network infrastructure industries including energy, telecommunications, airports, railways and water supply. The level of progress varies according to jurisdiction (Australia is a federal system of government) and the interplay of political, jurisdictional and commercial considerations.

It is not only the government sector that may be in need of reform, as the introduction of national competition policy in Australia illustrates. Australian electricity generation, transmission, distribution and sale have traditionally been activities of State governments. In the natural gas industry, either the public or private sector, varying from State to State, has controlled each level except production. Gas production has been a private sector activity since the start, albeit relying on significant licensing and contractual concessions from the State. Each level of the electricity and gas supply chain has been characterized by a monopoly of that function in the State market concerned. The then Industry Commission in Australia estimated that reform of the energy sector has the potential to contribute most to gross domestic product of all the industries undergoing reform.

Australia has limited investment capital and pressing balance of payments problems. Traditional economic and legal principles would have suggested that the owners of infrastructure assets be left alone to operate their facilities without regulation of their trading activities, and would have focussed on regulation of prices at some market point downstream in the supply chain. To carry the Australian energy example further, one of the potentially adverse outcomes of this traditional approach has been a misallocation of investment funds. Sometimes this has involved selective underproduction relative to demand (gas) and

sometimes over-investment (electricity) absent market pricing mechanisms and interstate links.

There should be no doubt that Australia's competition policy reform goals are intended to serve wider social issues than mere productive and allocative efficiency. The April 1995 Competition Principles Agreement of the Australian Commonwealth and State governments specifies that third-party access regimes in each jurisdiction are to take into account the interests of the facility owner, customers, operational and technical requirements for safe and economic operation of the facility and the benefit to the public from having competitive markets. The same Agreement in dealing with the assessment of policies and courses of action requires governments to take account of the following:

- government legislation and policies relating to ecologically sustainable development;
- social welfare and equity considerations, including community service obligations;
- government legislation and policies relating to matters such as occupational health and safety, industrial relations and access and equity;
- economic and regional development, including employment and investment growth;
- the interests of consumers generally or of a class of consumer;
- the competitiveness of Australian businesses; and
- the efficient allocation of resources.ⁱⁱ

Commonwealth regulations require the ACCC to use the same criteria to evaluate access codes prepared by industry.

International agencies and companies advocating reform initiatives including privatization must address the legitimate social goals of the developing economies. This is the case even when such debate occurs in the context of downturns in economic activity or crises of confidence in financial and commodity markets.

(2) the context of developing economies

If I may expand the energy industry discussion a little further, the International Energy Agency (IEA), an independent body within OECD, released studies of demand and supply trends in the gas and electricity industries in Asia. In a press release advertising the gas study, IEA stated (IEA 1996):

Of all forms of energy in Asia, demand for natural gas is likely to grow the fastest. The gas sector is facing a period of rapid and dramatic change, creating many challenges for governments and companies in the region.

Infrastructure, both for export and for domestic consumption of gas, will need to expand significantly. Regional trade in natural gas could triple by 2010. Most of the gas will continue to be traded as liquefied natural gas (LNG) but pipeline trade is poised to grow rapidly. Investment needs will be large and governments will come under pressure to find alternative ways of raising the necessary funds. The role of the private sector is certain to increase.

As Asian gas transmission and distribution networks expand and become more interconnected, greater opportunities for consumer choice will emerge. How to encourage and regulate competition will become a vital policy question. As gas consumption increases both in absolute terms, and in terms of its share of energy consumption within particular sectors of the economy (for example, as a fuel for power generation), governments will also need to give higher priority to policies dealing with gas security.

The gas study surveyed the economies of Brunei-Darussalam, Chinese Taipei, Indonesia, Republic of Korea, Malaysia and Thailand. The electricity study surveyed Indonesia, the Philippines and Thailand. Commenting on electricity, IEA wrote (IEA 1997):

These changes [in sectoral regulation, structure and ownership] are being driven by the rapidly growing demand for electricity in Asian economies. Demand growth is likely to see Asian developing countries requiring more than one third of the world's total additional generating capacity up to 2010.

To obtain fuel for power plants many Asian economies' imports of energy will have to increase significantly, changing global energy trade patterns. The region's increasing dependence on energy imports will also have important implications for energy security, both for the region and globally.

IEA continued:

Governments in these and many other countries have accepted that some level of private sector financing of power production is necessary if their demand for electricity is to be met. The most common option for private sector participation is the introduction of independent power production (IPP).

IEA's comments suggest that a range of economic issues need to be addressed in bringing energy supply into balance with demand, including investment incentives, fuel choice, security of supply, balance of payments consequences and developing a framework within which competition and consumer choice achieve the broader policy objectives. The decision whether to privatize really forms part of this broader context.

Beneath the broad brush of regional surveys of this kind, on closer inspection one finds factors that distort price signals for investment and consumption and that are in need of correction. From official visits I am more familiar with the situation in India than in a number of developing nations, but I am certain that observers would find elements of India's experience that are shared by other developing countries. I am also aware of a published analysis (which is, I note, partly a political commentary) of India's 'energy crisis' by a local consumer/environmental movement observer with overseas energy industry experience, Dr B V Shenoy. As in the case of the IEA studies, Dr Shenoy has made forward projections of energy demand and supply needs to 2010 and has commented on current use of fuels (Shenoy 1997). Outlining the crisis as he saw it, Dr Shenoy wrote:

It is more than five years since India's economy has been liberalized and more than four years since the power sector has been opened up for both foreign and domestic private investment. But for one small power plant in Andhra Pradesh, not one kWh of power has been produced in the private sector as a result of this new economic policy. There are frequent power blackouts in every city and village of India. Power supplies to the industries are cut by as much as 75%. As on March, 1996 the energy shortage in power sector was estimated to be about 10% (resulting in a production loss of at least Rs.21,000 crores per year) and the peaking shortage to be 18% by the authorities. This is a gross underestimation. However if we accept the World Bank estimates of deficits which are more realistic, of 30% during peak hours and 15% during off-peak hours, then the production loss is even bigger.ⁱⁱⁱ

[I have been advised that Rs.21,000 crores exceeds about \$Aust 8, 000 million.]

Dr Shenoy stated that India's total energy requirement (commercial and non-commercial) in 2010 would be 702.5 mtoe [or approx. 30,000 PJ] to 1,156 mtoe [48,750 PJ] depending

whether Gross National Product grows at 5% or 9% p.a. In comparison, the 1995 energy requirement was 363.8 mtoe [15,300 PJ].

Tables in Dr Shenoy's study comparing the world energy mix of commercial resources for power and light generation with India's energy mix (which is dominated by coal and then oil) in the period 1975-1995 indicate that international energy price changes have 'had no impact on supply and demand in India'.^{iv} In the commercial sector, coal would continue to dominate fuel resources in a low-growth scenario, while oil (predominantly imported) would become the dominant resource in a high-growth scenario, as the only fuel likely to be available to make up shortfalls in the other fuels. In the domestic sector, despite severely adverse environmental consequences of rapid forest depletion and loss and atmospheric pollution, fuel wood is and is likely to remain dominant amongst the poor, while wealthier classes have switched to energy sources reliant on petroleum fuels.

The study went on to explore underlying causes of the imbalance between supply and demand. The picture that emerged is one in which arguably well-intentioned price and technology control measures have caused severe counterproductive distortions to the allocation of fuel resources. Dr Shenoy argues that these inefficiencies would ultimately force India to follow a low-growth path. Instances discussed by Dr Shenoy in relation to commercial resources were:

- limited access to overseas nuclear technology constraining development of nuclear power plants.
- despite the potential contribution of non-conventional resources (wind, bio-mass, mini and micro hydroelectric, ocean thermal energy conversion, tide and wave), Dr Shenoy's view was that it is likely that they will contribute only 1.5% to 2% of total energy requirements by 2010. His view was that this is 'mainly due to the fact that conventional energy sources are being sold at highly subsidized prices' and most non-conventional sources, with the possible exception of wind energy, are prohibitively expensive.^v
- coal production inhibited by outdated techniques, lack of capital, lack of transport infrastructure and environmental problems arising from the characteristics of coal.
- inhibition of gas production because of fixed-price long-term contracts, selling gas below the cost of alternative energy sources and policy reliance on an import strategy.
- lack of incentives for investment in oil exploration and production.
- an administrative price mechanism guaranteeing returns from refining coupled with other downstream regulation and imported oil national tendering arrangements that raised the price of imported oil products above a free market level.
- subsidization of kerosene prices (to help the poor), which resulted in its often being 'diverted to blend with petrol and diesel to be used for transportation'^{vi} and used for captive generation. This has led to India 'using the largest quantity of diesel in power generation in the world', with adverse consequences for refinery yield balancing.^{vii}
- subsidization of fuel wood to help the poor, with the perverse consequences that while forest resources are being depleted, most of the fuel wood sold by the State is diverted

to use in hotels, and wealthier consumers pay substantially less for cooking fuel than the poor in terms of heating value, as the wealthier consumers use electricity or LPG.

- electric power is highly unreliable because state generating units have been required to direct power to the agricultural sector and the poor at uncommercial prices, and the incentive structure for private investment in the electricity sector has been unsuccessful in significantly adding to capacity. In consequence, many commercial and industrial establishments have invested in captive generating units. The demand for diesel fuel thus created is in itself an environmental and economic problem.

If I have dwelt at some length on Dr Shenoy's study, it is because his findings, particularly in respect of unsatisfied electricity demand, gel with my own observations from visits to India to discuss the needs of the consumer in economic development programmes.

Privatization and other reform options

To my knowledge, there has not to date been a study in Australia that successfully distinguishes between the impact of technological change and political or regulatory control of prices and levels of service. Nor am I aware of a study that identifies the relative impact of privatization in comparison with other reform paths in the sectors undergoing reform. Those really are tasks for more intensive study of individual enterprises.

In the telecommunications industry, fixed telephone service call charges for the price-capped services of the main carrier (Telstra Corporation Limited) have been trending down over the decade. This has coincided with a change in the rate structure to reflect greater focus on demand-management pricing. Other significant changes in that period have been the introduction of incentive-based regulation of infrastructure services, new competitors to the incumbent monopoly and progressive contestability of customers made possible by facilities-based and access-based competition. Rapid technological advances in the industry have continued to provide opportunities for new services, labour cost reduction and fine-tuning of demand management. Standard prices for Telstra mobile services have not undergone significant change, reflecting a focus by the mobile carriers on attracting new customers rather than reducing prices to existing customers.^{viii} Appendix 1 charts these trends.

Until 1991, Telstra essentially had a monopoly over telecommunications carrier services in Australia. In 1991, the Government licensed a second fixed-network competitor, Optus Communications, and two additional mobile services competitors, Optus and Vodafone. In 1997, further reform occurred when the market was opened to other competitors. Since that time, many new competitors have entered the market, particularly in high-margin areas, such as business services. Until 1997 Telstra was wholly a government enterprise but in November 1997, one-third of the company's ownership was privatized. The possible privatization of the remaining portion of Telstra's shareholding is under debate in the Australian Federal Parliament.

Returning to the energy sector, aggregate statistics are available of average natural gas and electricity prices for residential, commercial and industrial customers, with various degrees of disaggregation into, for example, service providers; rural and standard; and contestable and non-contestable.^{ix} In that period electricity assets in only one State, Victoria, were privatized, distribution assets towards the end of 1995 into 1996 and transmission in 1997. (Victorian

gas assets have only been privatized over the last few months.) What the Australian statistics show is that:

- average real prices for electricity have been trending down over the past decade in most States, with commercial customers generally enjoying the more significant reductions;
- average real prices for gas have been relatively constant for domestic, commercial and industrial customers.

When the pricing patterns of individual electricity utilities are considered, it is notable that utilities that have average to above-average prices to franchise customers have amongst the lowest prices to contestable customers.^x Australian energy users have been made progressively contestable since late 1994, the timetable varying between gas and electricity and from State to State. All customers are expected to be contestable by the first few years of the new decade. Other national patterns are that the Victorian distributors/retailers have relatively high tariffs for rural services compared to some other States' utilities, but lower tariffs on a time-of-use basis, suggesting that the Victorian utilities are pursuing demand management strategies. Refer to Appendixes 2 – 7.

Looking more closely at price and service levels of Victorian electricity distributors/retailers, an economic and social research consultancy, The Australia Institute, has written:

By this stage [when privatization of distributors took place], other reforms of the electricity industry, coupled with a legislated price freeze, had produced many benefits ... The price had fallen by approximately 6% and supply interruptions had dropped to just over 200 minutes per customer per year [from over 500 minutes per customer in 1989/90]. The price has continued to decrease since privatisation, although it should be noted that these price reductions are legislated, and did not occur as a result of competition or privatisation alone. Regarding the quality of electricity supply, since the end of 1995 when privatisation occurred, the Victorian Regulator-General has noted an increase in unplanned interruptions to service ...

In other words, most of the improvements in electricity prices and reliability of supply have been due to features of the reform process other than privatisation.^{xi}

The 'other reforms of the electricity industry' referred to by The Australia Institute authors were the vertical disaggregation of the former State Electricity Commission of Victoria by January 1994 and the corporatization of the new bodies by October 1994 (see Appendix 2). The Institute's comments were consistent with statistical information in publications of the Regulator-General and the Department of Treasury and Finance, Victoria, on which it drew. The Regulator-General, The Australia Institute, the Financial and Consumer Rights Council Inc (Victoria) and others have looked more closely at the quality of service after privatization, an issue to which I will return. A recurring theme amongst consumer advocates is that privatization has not worked well for low-income consumers, and that externalities arising from a change of business focus and operations may cause losses to the community that reduce or offset benefits.

As part of their study into third-party access and other initiatives for deregulation, titled *Unlocking the Infrastructure* (1996), Australian academics Dr Stephen King and Professor Rod Maddock surveyed overseas literature and concluded:

In the absence of any clear-cut finding in favour of privately owned firms the emphasis of the research has changed to see what other factors might better explain performance. Probably the most widely shared view is that ... 'market structure is of great importance' and more generally it is the degree of

competition to which firms are exposed which best explains their performance. This is one of the few decisive points to come out of this literature: competition seems to work.^{xii}

The limited number of studies I have cited above are consistent with their conclusion. Some publications of the World Bank also support a cautious assessment of the case for privatization. For example, the Australian Consumers' Council^{xiii} cites a privatization framework for decision-making in a World Bank study by S Kikeri, J Nellis and M Shirley (1992), which appears as follows:

	Enterprise	Conditions
Country conditions	<i>Competitive</i>	<i>Non-competitive</i>
High capacity to regulate; market friendly	Decision · Sell	Decision · Ensure or install appropriate regulatory environment · Then consider sale
Low capacity to regulate; market unfriendly	Decision · Sell, with attention to competitive conditions	Decision · Consider privatization of management arrangements · Install market-friendly policy framework · Install appropriate environment · Then consider sale

I must say that this framework displays a predisposition to privatize that needs to be tested in the light of the policy issues facing each nation (described above), whether it is possible to design the privatization process so as to avoid adverse externalities, and whether an effective regulatory framework can be put in place. I will discuss the latter two topics in following sections of this paper.

The inclination to privatize is also evident in a later World Bank collection of papers for the International Forum for Utility Regulation.^{xiv} The papers cite repeated and costly mistakes in the privatization process in developed and developing economies, while remaining positive about the privatization concept and beneficial aspects of it, and drawing numerous redesign lessons from the experiences. An example of perverse outcomes is the introduction of toll road concessions in Argentina. These concessions generated public opposition arising from sharp increases in tolls and location of toll booths so as to capture road users, leading to

concession contract renegotiations and the introduction of State subsidies to the concessionaires, which amounted to a ‘shadow toll’.^{xv}

In my view it is unhelpful to put reform proposals on an ‘all (privatize) or nothing’ basis when other viable options for modernization offering particular advantages may be available, for example, alliances, joint ventures, shared facilities, refinancing, outsourcing functions, corporatization and performance appraisal by means of yardstick comparisons. To take an example close to my home in Canberra, a proposal to privatize the local electricity and water utility was put forward on the basis that it was the only means to address risks for the utility’s business now being exposed to competition under retail electricity contestability (some 10% of revenues), and to fund an unrelated superannuation liability for government employees generally. The proposal was unpopular and after analysis and public debate was defeated in the legislature. A ‘Plan B’ was quickly unveiled involving refinancing measures advocated by critics of the proposal and exploration of a merger with a nearby regional electricity and gas utility.

While noting a very large gap in rate of return on published assets between private and public sectors over the period 1983 to 1992, King and Maddock have commented that:

Corporatisation and yardstick competition have clearly had a substantial impact on the performance of Australian public enterprises.^{xvi}

The goal of ‘closing the gap’ led the authors into their exploration of the avenues to provide access to infrastructure services (and thereby greater utilization of assets, rejuvenation of assets and the prospect of downstream competition) and regulatory reform incorporating incentives for superior performance and rational pricing.

The emphasis by Kikeri *et al* on achieving an appropriate regulatory environment before any sale occurs is entirely justified. In reality, it is a mistake (seldom acknowledged in practice) to make privatization an end-point or goal in its own right. It is only one step in a reform process. Ongoing competition and regulation of market power are fundamental to realizing benefits that may be promised by privatization or other means.

A World Bank policy research working paper by R Bradburd (1992) was (on the basis of economic modelling and normative argument) sceptical of the merits of regulation in less developed countries in order to address deadweight losses attributable to monopoly pricing. These losses were thought by the author to be modest and outweighed by improved efficiency and the costs of regulation. Mr Bradburd nevertheless observed:

Distributional consequences of monopoly pricing are politically potent.^{xvii}

and

The role of regulation in shaping the institutional environment may also be important. If natural monopoly public enterprises are privatized and unregulated in an environment in which property rights are not secure, management is likely to take an extremely short run view of profit maximization. The ‘take the money’ and run policies implied by this will yield all the undesirable deadweight loss and distributional consequences of private monopoly and none of the efficiency and service improvement benefits.^{xviii}

Dr Shenoy, whose work I cited extensively in outlining the policy dilemmas facing national economies in rationally using resources while dealing with the needs of the community and

nation, advocates privatization as a means to modernize and raise productivity and free State enterprises from political direction. However, he qualifies that position by pointing to the need to develop national resource purchasing and use strategies utilizing competitive market practices and rational pricing. Dr Shenoy calls for the establishment of regulatory bodies with a consumer focus commensurate with those in technologically advanced countries like the United States. He also points out that governments must take care in the design of incentive structures for private sector entry so that private sector investment is attractive and such that privatization does not result in perverse outcomes.^{xix}

Some watchwords for privatization

I recognize that the goals of government in privatizations may be wider than microeconomic reforms to address the kinds of production, consumption and resource allocation problems outlined above. Some of these goals may include the redirection of government investment from one area of service delivery to another, the repayment of public sector debt and the reduction of government sector initiatives and responsibilities.

Although my thoughts are cautionary on the subject of privatization, in no way is that to be taken as an endorsement of a ‘do nothing’ strategy where the performance of enterprises is below standard. Invariably a narrow group of interests in government and the private sector wax fat when enterprise is sheltered from competition, whereas a fundamental purpose of government is to foster improvement in national wealth and to enable the community to share in that wealth.

Experience suggests some watchwords for managing potential and actual privatizations. At each stage of reform it makes sense to independently evaluate the merits of courses other than privatization to see whether they better meet economic and community needs. If there is a tenth maxim to add to those stated below, it is ‘don’t overstate the benefits of the proposed course of action’.

1. As governments may lose control of outcomes in a rushed agenda, prior operation of incentive-based regulation is essential.

Privatization should never be the starting point in a reform programme, as the experience of Britain (electricity, gas, water and telecommunications) and developing economies show.

Where enterprises are natural monopolies or dominate their markets, unless reforms to market structure and incentive-based regulatory programmes are designed and trialed while enterprise is in government hands, the benefits of privatization are likely to be wholly captured by the new owners. It is only by trialing regulatory mechanisms that regulators can begin to understand the advantage the regulated entity has because of its control of information necessary for the regulatory task. This is a serious issue where industries such as telecommunications and water account for significant social capital or development potential. Alternatively, if things turn out badly for the enterprise following privatization, in an ineffectual market and regulatory environment the owners can apply stronger pressure for additional concessions at community expense.

The period following implementation of regulation is a vitally important test for the regulator to establish its credentials in taking an approach that is independent of government, business

and sectoral interests, is consistent with the published regulatory framework, is in the public interest and has integrity.

To their credit, Federal and State governments in Australia have taken this issue seriously and put in place adequate regulatory frameworks and in some cases disaggregation before privatizing utilities. To my regret their approaches to implementing and resourcing these regulatory frameworks have in some cases been less desirable, as discussed below.

2. Treat experts with caution.

Governments take up offers made to them by financial service providers to advise them as to whether and how to privatize. These offers and tenders come from financial specialists such as merchant banks, investment houses and other professionals including accounting firms with close links to financiers. The members of this financial family are intimately involved in the privatization process up to point of sale and disbursement of the proceeds. Governments and communities need to bear in mind the real possibility that their analyses and presentation of options and recommendations to government will be narrowly focussed. Bear in mind too that the interest of companies in local investment often arises from constraints on expansion in their traditional markets. Developing economies need to consider whether corporate growth strategies imported from other markets are suited to their needs.

Financiers rarely claim expertise in the design and operation of regulatory regimes, because their role in the project is over when the sale proceeds. Market reform and effective regulation need to be in place before the financiers arrive on the scene. If governments lack the financial means to restructure government enterprises (e.g. if units proposed to be spun off are not viable without significant investment), the costs and benefits of sale in comparison with partnering, aid and refinancing options need to be independently evaluated.

3. Apply relevant financial and social risk parameters when evaluating government enterprises and utilities.

Australian academic Professor John Quiggin has criticized a conventional approach of financial advisers towards financial risk assessment in privatization advice, in applying a private sector equity premium to calculating the worth of enterprises in public ownership and then comparing their profitability with private sector enterprises.^{xx} According to Professor Quiggin, given the financial resources of the State, enterprises in government ownership generally have a lower cost of capital and so the application of a private sector equity premium understates the value of the enterprise.

The ACCC and its counterpart State regulator faced a variation of this problem in their assessments of proposed access arrangements for gas transmission and distribution assets in Victoria during 1997 - 1998. ACCC considered it appropriate to use a private sector equity premium and equity beta as elements in calculating the weighted average cost of capital (WACC) of the transmission assets, since they had been publicly earmarked for privatization once the access arrangements were in place. The WACC was a significant parameter in calculating the allowable revenues for transmission services to apply to the new owners.

ACCC and the State regulator came under sustained pressure to increase the allowable WACC they proposed from an initial figure of 7% pre-tax real or 8.5% pre-tax nominal. Critics argued that with the proposed WACC the revenue stream and derived value of the

business in private hands would be too low, with a chilling effect on investment. ACCC did increase the figure in its final decision to 7.75% pre-tax real or 10.7% pre-tax nominal, but subsequent proceeds realized on sale of the assets implied that the figures initially proposed were well within the ballpark for a regulated utility enjoying a steady income stream.

Critics of the ACCC's approach have dismissed high premiums on the sale of regulated assets as reflecting the individual expectations of particular buyers. However, so far there has been no shortage of buyers prepared to pay such premiums, implying that the businesses have a higher value than the ACCC's critics have been prepared to concede.

Another dimension of this issue of valuation of the enterprise arises in deciding whether or not to sell the enterprise. According to Australian critiques of the privatization process, policy makers have sometimes neglected to take account of retained earnings in the enterprise, not just dividends foregone upon sale. If taken into account, a comprehensive comparison can then be made between earnings foregone upon privatization relative to interest saved through repayment of debt from sale proceeds.^{xxi}

'Social risk' is my expression for risks to quality and quantity of service delivery and external consequences such as employment or unemployment effects and other impacts arising from microeconomic reforms on the wider economy, infrastructure, people and environment. I address this in more detail in following sections.

4. Design incentive structures for regulation and for the privatization process itself to address economic goals, the economy's pattern of social organization and production and wider community aspirations.

I will deal with regulation below. If the privatization is designed on the basis of maximizing returns to the selling government, that is likely to create negative pressure on quality and scope of service delivery at a given price of service. Privatizations will deliver better outcomes for the service provider and community when market structures and incentives encourage the service provider to try new services (for example, interruptible services in the power industry) so as to improve productive efficiency.

By taking account of wider community aspirations, I mean preserving important beneficial externalities. For example, when a sewage treatment plant in public ownership confers primary benefits on downstream users who are not customers, if standards of sewage treatment seen as uncommercial are reduced to a minimum standard the community loss may far exceed the cost saving to the utility.^{xxii} In economies where the very survival of communities depends on the health of species maintained by the local environment, such as crops and fish and livestock populations, this is a serious issue, as would be privatization terms or a regulatory framework that gave incentives to expand hydro generation rather than practise demand management.

An example of a detrimental externality is the potential loss of research and development capabilities suited to the needs of a developing economy. There is the risk that this will occur as part of dividing the enterprise into 'core' and 'non-core' functions prior to sale, or in the event that the new owner imposes 'off-the-shelf' infrastructure solutions as part of a cost reduction programme. Will solutions that work well in Moe or Minneapolis work in a rural African setting? The imposition of inappropriate technology has the potential to increase balance of payments problems.

It may be possible in some cases to devise community service obligations and alternative privatization decision criteria, including bidding on the basis of provision of services at least cost/highest standards, to address such concerns. However, it is unreasonable to expect a regulator of a privatized enterprise or utility to take account of wider social goals if the terms of privatization cement contrary outcomes in place or if the goals are impossible to define in regulation but are clearly policy makers' responsibilities.

5. Take an accountable, transparent approach to privatization.

This is self-evident but if the community is not consulted on the sale process, it is less likely to accept that regulation is effective and that will in fact undermine subsequent regulation. Transparency is equally important in maintaining the confidence of investors.

6. Prepare a transition path from a closed industry to open competition rather than perpetuate a closed industry structure in private ownership.

One of the problems of the revenue-raising approach to privatization is the temptation of governments to lock in long-term contractual arrangements favouring incumbent suppliers or customers over (or even locking out) new entrants. We are seeing this repeatedly in the Australian gas industry. In 1994 Australia's Federal and State governments embarked on a programme to deliver free and fair trade in gas, with third-party access to pipelines one of the major elements of the programme. However, there are exceptions from access principles for existing contracts (even if made post-1994) and derogations altogether of particular pipelines. Don't underestimate the difficulty of following a coherent reform programme in a federal system of government.

I recognize that to expose industry players having substantial sunk investments to total immediate deregulation may impose on them costly risk to little benefit if the market involved is thin. However, in my view if deregulation of markets achieves market growth it opens up opportunities that offset such risks. It is not beyond ingenuity to manage a transition in a shorter timeframe than in the time horizons of 10 years and more we have seen the industry and governments cement in place.

7. Don't overlook the need for reform in sectors in private ownership with which government enterprises interact.

To again take the example of the Australian gas industry, at the time of the commitment to free and fair trade in gas, transmission pipelines were in public ownership and distribution pipelines in public ownership except in substantial markets in New South Wales and Queensland. The predominance of public ownership gave impetus to introducing third-party access. Notwithstanding (and probably because of) the significant concentration of ownership of upstream gas production and processing facilities, legislated or voluntary third-party access to these facilities has been strongly and successfully resisted by the industry. In the ACCC's view this has limited the prospects for successful independent entry to gas exploration and production, the potential development of greater competition and the ultimate level of reform benefits.

8. Prepare an income and employment transition path for members of the community affected by privatization.

Not to do so is to risk civil discontent, community disfunction and loss of production from the inevitable casualties of privatization, drawn from among the former workforce.

9. Involve the community long-term in regulation of the privatized enterprise by addressing the economy's particular social and economic organization, institutions and literacy and numeracy levels.

In the following section I will describe measures the ACCC has implemented and urged (where beyond its powers) to promote active and meaningful community involvement in the regulation of corporatized and privatized enterprises. Many concepts are of global application in a global economy, but they have been developed in an economy that has a high level of literacy and numeracy, ready access to modern communications, a relatively high level of integration between rural and urban lifestyles and forums for the public debate and workshopping of regulatory measures. In the final section of this paper I discuss adaptations that are necessary to meet the needs of a developing economy.

Structural and regulatory framework for industry reform

Why regulate?

Why pay special regulatory attention to utilities, particularly when the direction of reforms is to make their services increasingly contestable, and to foster inter-product competition?

Markets in these industries operate at different functional levels, and at some levels firms are in a position of market power owing to natural monopoly, in that it is uneconomic to duplicate their facilities, and users are unable to exercise effective bargaining power.

Where competition is sufficient at a functional level of an industry to constrain the price, quality and externalities of services that are cost inputs to a retail sector that is competitive, it is unnecessary and inefficient to superimpose regulation of trading relationships, except transitionally. Where competition is not feasible, there is a case for regulating infrastructure at bottleneck points in the supply chain. Regulation of issues that are not adequately addressed by market mechanisms, such as standards of public health, environment, industrial relations and public and occupational safety is also necessary but is the province of specialist policies and agencies that are outside the scope of this paper.

In Australia there is a policy intention to create more diverse markets generally, for instance, by permitting energy end-users to gain access to transmission systems so that they can deal directly with initial suppliers. The utility service industries are characterized by degrees of vertical integration. Without regulation of infrastructure services it is problematic whether purchasers would have sufficient bargaining power to obtain access on fair commercial terms. Bargaining power is a function of the number of options available rather than simply of size. Hence legislative regimes have been developed under which government, regulators and

business have arrived at frameworks for the negotiation of terms and conditions of access, and the development of ring-fencing regimes where there are diseconomies or simply disagreement as to the merits of structurally separating vertically-integrated suppliers.

Finally, there are limits to the degree of retail competition possible in utility service industries such as airports, telecommunications and gas and electricity (which might be argued as a preferable alternative to price or access regulation).

In the cases of airports and telecommunications, price controls apply. The essential purpose of those controls is to bring about at least some sharing of the benefits of improvements in performance with as broad a range of consumers as possible. Consumers most in need of this regulatory supervision are those who mainly consume services that are subject to lesser degrees of competition, such as access to the telecommunications system (rental, connection) and local call services. That is, the controls can act as a form of safety net for consumers.

To turn to the energy industries, applications where gas may be substituted for electricity include domestic water heating, space heating and cooking. There may be competition at the margin in new residential developments and factories on the metropolitan fringes. However, there are limited substitution possibilities between electricity and gas in industrial applications. State jurisdictions practise retail price control in these industries while the phased introduction of contestability occurs over the next few years.

In these circumstances, in the ACCC's view there cannot be a 'hands-off' policy approach to essential facilities. They are essential facilities because users upstream or downstream of the facility have limited options, for significant periods of time, to switch products in response to differential price changes. In fact, in the case of gas in Australia, there is a significant rising baseload of demand.^{xxiii} Were there not regulation of essential facilities, that demand would give increasing scope for the capture of monopoly rents.

Where there is not yet sufficient competition in the provision of goods or services (telecommunications), or it is inherently improbable (airports), there remains a case for 'safety net' price control.

Regulatory principles

I will deal first of all with the framework of regulation specifically developed for third-party access and price and revenue cap regulation of infrastructure services that the ACCC administers in Australia. This takes in telecommunications, energy, and airports and, eventually, is likely to take in at least the interstate elements of rail. I will then go on to describe how competition and consumer protection law are equally relevant to utilities.

The actions of a regulator could introduce elements of uncertainty and risk for an investor. Such uncertainty weakens incentives for the enterprise to initiate changes in operations, so that a higher rate of return is required for investment. The risk to the community is that enhancements to economic efficiency and other social goals may be foregone or come at a higher price.

In order to minimize regulatory risk, the ACCC is committed to achieving best-practice regulation and has adopted a set of guiding principles developed for the Utility Regulators'

Forum, the national body of jurisdictional regulators and competition policy advisers in Australia.

The principles describe goals rather than quantifiable performance indicators. The ACCC intends to be guided by these principles but recognizes that it is possible for them to conflict. For example, flexibility and predictability may not always be simultaneously achievable. In such cases the ACCC will exercise discretion, always with the aim of achieving the best possible regulatory outcome.

The four key principles are:

1. Communication/Consultation

Effective communication assists stakeholders to understand regulatory initiatives and requirements. Communication that is educative helps to build commitment in the community. Consultation supports accountability in decision-making and brings out alternatives and improvements.

Effective communication and consultation require commitment by the regulator and the regulated entity to providing stakeholders with relevant and timely information.

2. Predictability

Predictability is essential for regulated businesses to feel confident that the regulator will adopt consistent, well-defined decision-making criteria and timelines. Businesses can then plan for future investment. Predictability is necessary for consistent treatment of entities, over time, and across jurisdictions.

A public process of review strengthens these objectives.

3. Flexibility

Flexibility means that the regulator is open to alternative regulatory tools that may evolve over time, and that the regulator recognizes local and changing market conditions.

4. Effectiveness and efficiency

The regulator will need to assess the cost-effectiveness of the proposed regime and other options.

While the ACCC intends to conduct open consultative processes in the assessment of regulated parameters, its decision-making will be at arm's length. Outcomes will not be decided by negotiation. Rather, the ACCC is to make decisions that draw attention to the trade-offs, explain the key judgements that have been made, and the reasons for those judgements.

Regulatory design

Incentive regulation is the use of rewards and penalties to induce the utility to achieve desired goals where the utility is afforded some discretion in achieving goals.^{xxiv}

A relevant comment to explain the rationale for incentive regulation is:

Generalized incentive regulation could be characterized as decoupling prices from costs via new regimes, such as yardstick regulation or price caps. As regulators move away from command and control micromanagement, they are lowering entry barriers and utilizing incentive regulation in those markets with residual market power.^{xxv}

Regulation is effectively used as a substitute for competitive market discipline and aims to replicate the assumed beneficial effects of competitive markets, that they achieve optimal efficiency in production, pricing and economic welfare. The regulatory regime used will be most effective where it provides incentives for the regulated business to improve efficiency and disincentives for inefficiency and poor quality of service.

The theoretical underpinning for incentive regulation is that with the ability to retain cost reductions as profits the service provider has a strong incentive to be more efficient in the provision of services, to expand its market share and to contribute to market growth. Higher than expected performance in these areas will lead to better than initially expected profits and better utilization of resources. Generally, users of the service benefit directly only in future periods after regulated revenues or prices are subjected to review. At that time the new cost structures are taken into account in establishing the regulated revenues or prices for the next regulatory period.

The concepts and methodologies underlying incentive regulation are international in nature and have been the subject of OECD research. However, there are a number of factors, chiefly the need to coordinate regulatory effort to address unconstrained market power, that pose severe challenges to the realization of the ideal. While, unfortunately in global terms, many of these difficulties are shared by nations, that at least gives the opportunity for some global cooperation in finding solutions.

To achieve the potential efficiency gains from competition it is important that the regulated revenues or prices not reflect the exercise of market power by the service provider and that the structure of pricing among users and between different categories of service be based on the costs involved in providing each service. The price paths for services in question are usually defined at the beginning of a review period to achieve these ends.

If regulation results in the adjustment of prices to simply allow the service provider to recover costs and achieve a normal rate of return on investment, the service provider will have little incentive to be efficient in the provision of such services; indeed there may be an incentive to reduce efficiency. Hence the need for incentive-based regulatory mechanisms.

Most incentive mechanisms seek to avoid detailed revenue control and, as indicated in the above quotations, to divorce the permitted revenues or prices from the reductions in costs or efficiency gains the service provider is able to achieve over and above those that were expected at the beginning of a review period. Hence above-normal profits are only restrained after the period under review has passed and the regulator looks forward to the next period.

A price cap mechanism should be distinguished from a revenue cap. Price caps provide the service provider with incentives to increase output and reduce costs in order to maximize revenue. With revenue caps, the incentive is to reduce output and increase price. A revenue cap has been externally mandated for the electricity transmission industry, notwithstanding regulatory preference for a price cap.

A major issue in incentive regulation is commitment by the regulator. If the entity is concerned that at the end of or during the period in which the price or revenue cap applies ('the review period') the regulator will penalize it for success, the entity may not pursue efficiencies as strongly as implied by the incentives. Therefore the ACCC accepts the notion of a 'regulatory compact' whereby the regulator stands by the terms of the cap. There may be circumstances in which a reconsideration of the cap is necessary. That would only proceed according to criteria publicly incorporated in the regulatory framework at the outset, and would itself be a public process with submissions invited from the entity and interested parties. In its Draft Regulatory Principles discussed in the following section, the ACCC has adopted electricity code provisions that the following circumstances would trigger such a reconsideration, termed 'regulatory recontracting', within the normal review period:

1. the revenue cap was set on the basis of false or materially misleading information provided to the Commission;
2. there was a material error in setting the revenue cap and written consent of the parties affected by any amendment to the revenue cap has been obtained; or
3. a change in asset ownership leads to a material change in the revenue requirement.

Preferred incentive mechanism

In the following comments I outline a number of features of an incentive regulation framework. I draw heavily on features of a draft Statement of Principles for the Regulation of (Electricity) Transmission Revenues, known as the 'Draft Regulatory Principles'.^{xxvi} Some of the detail in the Draft Regulatory Principles is novel but has substantial foundation in theory and regulatory experience to date. However, because my comments are intended to be considered in the more general context of this conference, and because certain features of the Draft Regulatory Principles are mandated by the specific electricity Code to which it is a response, in places I draw on other ACCC and indeed overseas (UK) work on regulation, not limited to electricity.

- A revenue cap is based on forecasts of the cost of service over the regulatory review period.

The transmission regulation framework outlined in the Draft Regulatory Principles is an accrual building block approach based on forecasts of the cost of service over the regulatory period. The building block approach calculates the maximum allowable revenues or 'MAR' as the sum of the return on capital, the return of capital, and operating and maintenance expenditure, that is:

$$\text{MAR} = \text{return on capital} + \text{return of capital} + \text{O\&M}$$

$$\text{MAR} = (\text{WACC} * \text{WDV}) + \text{D} + \text{O\&M}$$

where WACC = weighted average cost of capital;

WDV = written down (depreciated) value of the asset base;

D = depreciation allowance; and

O&M = operating and maintenance expenditure (including administrative costs).

Productivity forecasts will be used by the ACCC to aid in judging cost estimates given that the regulated entity has superior information about the enterprise compared with the regulator. In a capital-intensive industry, expenditure on operations and maintenance is the major element of controllable expenditure. However, the regulator would not normally be zealous in setting the operating and maintenance expenditure forecasts (based on aggressive assumptions on potential productivity savings), as this may introduce unnecessary regulatory risk.

The review period is set to take account of the rate of technological change in the industry, so that cost forecasts do not go out of kilter with actual net revenues. In the case of the electricity industry, the code obliged the ACCC to adopt an initial review period of five years, which is in line with independent advice to the ACCC. The service provider may present a case to the ACCC for extension beyond five years.

- A 'CPI-X' adjustment of the revenue cap and an inflation adjustment of the regulatory asset base are made annually.

These features are designed to remove any inflation risk for the business, and they apply whether the allowed rate of return on the regulatory asset base (below) is calculated on a real or a nominal basis. The 'X' component is a proxy measure of efficiency - if the service provider achieves efficiencies in excess of 'X' it retains all of the benefits, i.e., profits during the regulatory period and, subject to the sharing mechanism in the 'glide path' (below), to an extent beyond that period. The 'X' is the primary driver in the ACCC's regime.

In a departure from the traditional interpretation of CPI-X, the ACCC proposes to adopt an 'X' factor that combines the potential efficiency gains over the review period of the regulated entity with smoothing of the path of revenue change within that period.

- There is flexibility to allow for periodic revaluation of assets.

Under the building block approach, the value of fixed assets is fundamental to the calculation of the allowance for both the return on capital and return of capital and will flow directly through to the MAR and therefore transmission network prices.

Deprival value is often advocated as the best approach to valuing utility assets; however it suffers from circularity in that the value lost is the value that the regulator is trying to establish by setting a revenue or price cap. Depreciated optimized replacement cost (affectionately known as 'DORC') has been adopted in some regulatory decisions in Australia to date and has been accepted by the ACCC in the Draft Regulatory Principles as the cap or upper limit in respect of calculating the asset base underlying electricity transmission revenues. The service provider or the ACCC may then write down the asset value below the DORC under certain conditions. The service provider may do so when it identifies bypass options, in which case it will receive accelerated depreciation on those assets. The ACCC may write down part of the asset valuation below the DORC on the basis of evidence that the regulatory asset base valuation exceeds DORC.

Only prudent capital expenditures may be added to the regulatory asset base but the regulatory framework acknowledges that economies of scale exist in transmission networks, and overbuilding of the network may be economically efficient in some cases.

Other industry codes or regulatory frameworks (gas and telecommunications and the general access provisions of the competition law) give the regulator greater discretions in the determination of asset values. As a ‘reality check’ the regulator may derive the value of the regulatory asset base after considering a range of options, taking into account physical indicators of efficiency of the utility and comparisons of its performance against financial indicators.

- The allowable return on assets is determined on a post-tax nominal basis, with estimated tax relevant to the regulatory period treated explicitly as part of the cost of service.

Given the capital-intensive nature of the network infrastructure businesses, the return on capital component of the regulated revenue could account for most of annual aggregate revenue. Therefore relatively small changes to the rate of return can have a significant impact on the total revenue requirement and ultimately on end-user prices.

A post-tax nominal approach to calculating rate of return is taken in the Draft Regulatory Principles as it is more transparent, tax provisions being directly observable. This approach is readily understood by financial markets and it provides a rate of return that is directly comparable with other financial benchmarks.

- Depreciation recovery (return of capital) will equate in a meaningful way to depreciation of the asset over its economic life.

Traditional accounting approaches to depreciation make simplifying assumptions and may create difficulties in terms of determining marketable tariffs over time. The ACCC proposes in its Draft Regulatory Principles a depreciation profile that is more akin to that observed in a competitive market, in which prices of services are to a large extent independent of the age of the asset base. There are two aspects to the proposed depreciation profile. One is the smoothing of revenue paths, designed to avoid inter-generational price disparities - the impact of assets of different vintages is smoothed out. Secondly, adjustments are made to reflect the impact of future potential stranding of identified assets.

- A ‘glide path’ formula will allocate efficiency gains between the service provider and users.

Given the disincentive to pursuing efficiencies if all gains have to be shared at the start of the next review period, the ACCC proposes a glide path for one regulatory period beyond the regulatory period in which the efficiency gains accrue.

This would allow for the gradual sharing of the benefits of efficiency gains between users and the entity in the form of lower prices, while minimizing short-term distortions in pricing structures. For reasons of simplicity the glide path would be a simple straight-line phasing out of efficiency gains. That is, for a regulatory period of five years, efficiency gains beyond the ‘X’ factor would reduce at a rate of 20 per cent per year.

Not all components of cost reductions will be glide-pathed. The Draft Regulatory Principles provide for the service provider to present a case outlining the efficiencies it has achieved and the ACCC will assess the merits of the case.

- Publicly available service standards will be established as part of the regulatory compact.

The economic rationale for setting and monitoring performance to service standards is to protect users of monopoly services from the abuse of market power. As indicated earlier in this paper, delivery of utility services normally has wider social impacts. Under a CPI-X revenue or price cap, in order to maximize profits, a monopoly entity may attempt to provide a lower than agreed quality of service.

Speaking in more general terms than in the Draft Regulatory Principles, quality-of-service monitoring by a regulator needs to be backed by provisions for independent expert audit and a suite of penalties for non-performance so designed that proprietors of the entity rather than its customers pay in the event of non-performance of service undertakings.

Effective incentive-based regulation will include a level of service made explicit at the latest at the time of the regulator's decision on the regulated revenue. That revenue must be sufficient to maintain the assets necessary to provide that level of service. Service standards should balance good industry practice against customer expectations, and be reasonable for the utility and its customers.

Service standards can be addressed in many different ways, and operational licensing of the utility will influence the standard of service delivery.

As an economic regulator, the ACCC has concerns about undertaking what could be seen as 'technical regulation'. Nor would the ACCC wish to solely determine service standards that must apply to utilities, either individually or collectively, given that many service standards already exist. However, it is imperative that all interested parties have the opportunity to provide input to the service standards that will apply to the regulated utility for the regulatory period.

Therefore the ACCC process will be that the utility include explicit service standards in its regulatory application. These proposed service standards will be made available to interested parties and an opportunity to comment on them will be provided. The ACCC may also employ expert consultants to advise on the proposed service standards.

Following consultation with industry, the UK Government has developed a comprehensive utility regulation framework to give a 'fair deal' to consumers. This would include regulatory powers to deal with breaches of overall and individual standards for a high quality service in monopoly markets. The framework recognizes that less intervention may be necessary as competition develops, with a greater emphasis then being placed by regulators on benchmark comparison.^{xxvii}

- There will be mechanisms providing for independent resolution of disputes over terms and conditions of supply.

Two types of mechanism are involved in wider regulatory practice. As will be demonstrated in a following section, consumers need free access to an ombudsman or similar intermediary who can independently review whether monopoly service providers have been reasonable in their dealings with customers. Third-party access to monopoly infrastructure services (for instance, telecommunications systems, broadcasting facilities, rail, airports, pipelines, electricity wires) will typically be of interest only to business consumers but they too need

assistance to overcome unequal bargaining power. Typically access regimes will include provisions for independent expert decision, mediation and arbitration.

Other important tools for achieving competitive outcomes

An integral part of regulatory reform is in exposing government enterprises and utilities to legal sanctions to prohibit anticompetitive conduct. Such conduct would include agreements between competitors to adopt common terms of supply and allocate customers to each other, constraints on choice imposed by a supplier as a condition of supply, and mergers or misuse of market power that give an entity enhanced power in the marketplace by swallowing up the competitor or driving it out of business.

In Victoria, Australia, preparations to privatize the gas and electricity industries included the disaggregation of the former integrated gas and electricity businesses into transmission businesses, a number of retailer/distributors and contracted service providers. The sale of government pipelines in other States has also resulted in the introduction of new players to the industry. However, there is a view held in industry that the current state of disaggregation of the industry is only a passing phase, with new combinations being built up as the regulatory framework beds down nationally. For instance, one recent report stated:

But with profit margins in electricity already razor thin and gas looking to go the same way with the advent of competition, a shake-up in the industry is inevitable. It is expected that energy companies will rationalise down from 28 players to no more than 10 within 5 years.^{xxviii}

The stated premise for rationalization, industry viability, is familiar to regulators dealing with industries in government and private ownership. It is the regulator's task to test such arguments and to assess whether or not merger proposals will damage competition. Therefore ongoing merger control is a fundamental part of seeing through the promises held out by deregulation or privatization.

Frequently public interest arguments in terms of economies of scale or other benefits are advanced in support of mergers and anticompetitive agreements. The regulator needs the power to assess the costs and benefits to the public of these proposals. In Australia, this power is contained in the authorization provisions of the competition law. These allow for exemption of arrangements that have a net benefit to the public.

The ACCC has found this power useful in bringing into public discussion provisions of supply agreements that arguably entrench the position of incumbents in industries undergoing deregulation and the introduction of third-party access. Another instance arose because the electricity code and the Victorian gas code created independent systems operators and rules for market operations as part of structures for clearing imbalances of supply and demand. The ACCC was required to consider applications to authorize these rules, and, as part of its approval, imposed reporting obligations to the ACCC where not already covered by code reporting obligations to market participants. It is currently engaged in discussions with Victorian authorities over the budgeted costs of the gas system operator, which flow on in fees to market participants. The ACCC foreshadowed when it approved the access regime that too steep an increase in costs would put at risk the claimed benefits of the rules and cause the ACCC to reconsider its authorization.

Where an integrated service provider dominates a market, these protections in competition law do not go far enough to underpin competitive market operations. This has been recognized in Australian legislation providing special regulatory measures as a check on access services policy and pricing of the main telecommunications provider in the transition to a competitive market, and ring-fencing of commercially-sensitive information by gas and electricity service providers offering third-party access. Notwithstanding this, the regulator needs to be continually vigilant as to how the companies concerned implement ring-fencing.

Competition measures such as these need to be complemented by comprehensive consumer protection legislation and powers giving the regulator standing as an advocate of ‘best practice’ regulatory measures to protect consumers from unfair use of market power, for reasons I describe below.

Consumer protection issues

At this point some economic policy advisers may be tempted to ‘tune out’ of the discussion. On the basis of experience in Australia and other countries undergoing reform of public sector utilities, to do so would be to put at risk just policy outcomes for the people whom policy serves.

In Australia, relatively early in the process of utility deregulation the Federal Government published a series of booklets to review the issues arising for consumers and to put forward for debate remedies for problems, such as perceived losses of service and one-sided dealings between utilities and customers.^{xxix} Throughout its history, the ACCC and its predecessors have themselves been active in convening meetings and publishing discussion papers and guidelines.

Given that Australia is a multi-jurisdictional system, progress in establishing or refocussing regulators to closely monitor the performance of utilities has been somewhat patchy. It has occurred over a period of years (in some States significantly preceding publication of the Federal booklets) and State-based regulators have been equipped with differing sets of regulatory powers and resources. The industries they regulate are not common across the board. However, the Utility Regulators’ Forum, which brings together competition policy-makers and regulators, has stimulated useful exchanges of information even when there is vigorous debate on regulatory approach.

In fact, I would like to see the Forum concept spread internationally. In APEC and ASEAN there are already economic policy groups who could sponsor the development of such regulatory forums. They would provide useful means of buttressing the independence of regulators against pressures to compromise regulation in home markets, and assist regulators to improve their knowledge of matters of technique in dealing with what are essentially the same issues and, frequently, the same industry players. Where it is technically possible for cross-border trade in utility services to develop, particularly with the development of energy demand foreshadowed by IEA, unless such forums are developed economies of the regions will potentially incur unnecessary delay and cost in tapping supplies from neighbouring countries. The European Commission has brought about such coordination in its efforts to extend electricity trade across borders in the European Union. The UK has foreshadowed that it will require its industry regulators to collectively consider matters of common interest.^{xxx}

In Australia the published service standards and monitoring reports (including on Internet Home Pages) of regulators' work have been important in exposing the service expectations, levels of performance, difficulties and benefits arising from reform processes. To take an example, the provision of water and sewerage services in the Melbourne area of Victoria has been corporatized and disaggregated into a wholesale water and sewerage treatment business and franchise area retail water distribution and sewage collection businesses, reflecting a structure in which privatization might be undertaken in the future. The Office of the Regulator-General, Victoria, reports that:

The Office with the companies and customer representatives, developed a Benchmark Customer Contract and Benchmark Customer Charter (the latter being a summary of the contract) as models that the companies will use in developing their own contracts with customers. These Benchmarks are periodically reviewed, the latest review being 1997. The companies submit a revised customer contract to the Office annually based on these Benchmarks and are encouraged to improve on the Benchmarks with their specific innovations.^{xxxix}

Notwithstanding these measures in this and in privatized utility industries, consumer advocacy bodies have identified shortcomings in the standards of service of regulated entities impacting hardest on those consumers least equipped to cope. Supply outages, often attributable to weather conditions, are investigated and reported on by the regulator. Of greater concern to consumer advocates is the accumulation over time of a body of cases of harsh treatment of consumers having payment difficulties, particularly when coupled with shortcomings in communicating the availability of 'Safety Net' assistance under Community Service Obligations.^{xxxix}

A criticism made of service monitoring by regulators is that it focuses on industry and company trends (just as I have done in the earlier part of this paper) and that industry regulators are not well placed to deal with individual cases that, in aggregate, may indicate systemic problems. It is of concern to me that it is only at the Federal level in Australia, in the ACCC, that industry regulation is combined in the one agency with legislated capacity to bring competition and representative consumer protection actions. The States continue to observe a distinction between consumer affairs bureaux and industry regulators. Further, the pattern of funding of consumer advocacy bodies is tenuous and can be politicized.

A market in which business is unfettered by obligations to consumers is fundamentally unhealthy. I am thankful that we are far from being in that situation in Australia but the criticisms must be taken into account at home and when lending advice to developing economies on the design of regulatory protections. Accordingly, I am firmly of the view that effective regulatory mechanisms to complement efficiency-based reform of utilities would encompass a suite of nationally operational measures including competition and consumer protection legislation dealing with issues of general application. Practices that consumer law would address include misleading and deceptive conduct, systemic unfair dealing and harassment, and, on the positive side, provision of inferred warranty rights. Utility regulators have an important role in developing benchmark standards of service in consultation with suppliers and customers. They should also ensure that protections including supplier of last resort (in the event of the business failure of a utility) are put in place, and that conditions of supply termination and conditional supply are widely known by customers and that customers are similarly aware of avenues for assistance and dispute resolution.

The UK has taken the step of foreshadowing that Ministers will give statutory guidelines to regulators on social and environmental objectives, following a process of public consultation,

and existing obligations on regulators for the special needs of at-risk groups will be extended to the chronically sick and the unemployed.

All of this experience suggests to me that the downside effects on community welfare of corporatizations and privatizations are being acknowledged in the advanced economies. It would be a tragedy if, in the pursuit of privatization in the developing economies, those problems were not addressed.

Particular needs of a developing economy

From the foregoing experiences I have formulated a checklist of measures that I believe are necessary in a developing economy contemplating privatization or other reform measures.

Legislative level

National competition and consumer protection law with complementary law and codes providing a framework for efficient incentive regulation of essential service providers enjoying natural monopoly or significant incumbency advantages.

Government and legislated commitment to the independence of the regulatory agency in the implementation of a public regulatory framework.

Introduction, where not already available, of appeal bodies and bodies for the protection of integrity in decision-making. Transparent processes where the communication of government views and guidelines on wider social issues is contemplated.

Government and legislated commitment to full public participation in regulatory review processes through the Internet, media and public forums convened by the regulator.

Public consultation in the development of community service obligations. Commitment of funding and measures to guarantee ongoing funding in the event that services are corporatized or privatized.

- This is particularly important as there is an emphasis in incentive-based regulation on cost-reflective revenue raising, or ‘user pays’, and users are expected to wait for benefit-sharing some years down the track. Society has a responsibility to those for whom hardship is created by the reform process.

An open approach to considering the full range of reform options.

Government commitment to setting transitional paths to deal with social needs such as unemployment consequences of corporatization/privatization and environmental issues, and to address contractual and cultural factors favouring incumbents.

Regulatory level

Establishment, preferably on a national basis, and resourcing of a regulatory body capable of taking an integrated approach to the solution of competition, consumer protection and essential service regulatory issues.

Capacity-building in that body (e.g., recruitment, information services and training) to prepare for the reform of infrastructure utility industries and exposure of government enterprises to normal commercial and competition law.

- I note that many developing economies are only now establishing competition agencies, and that incentive regulation of utilities is something of a leap in terms of skills, intensity and expense of regulatory effort. It would be wise to build up, on an accelerated timetable, skills in and a record of enforcement of competition and consumer law before proceeding into the complexities of incentive regulation. Overseas experts in utility regulation who may be brought in cannot be expected to have an appreciation of the public interest issues flowing from regulatory decisions if they lack experience in competition and consumer law.

Participation in wider regional and international regulatory forums in order to expose regulators to the experience of counterparts and to assist in developing cooperation in regional issues and to develop links with representative business and consumer organizations.

Compliance education for the business community and community education and outreach programmes to consumers, farmer bodies and small business in urban and regional areas.

A focus on establishing and maintaining in regulated industries standards for the quality and level of service and the developing codes and charters to underwrite them, access by consumers to avenues for redress and dispute resolution, and effective information communication to consumers.

Coordination with other government agencies, advocacy bodies, parliamentarians and relevant enterprises to ensure that communication difficulties arising from illiteracy are surmounted.

Business and rural level

Introduction of internal compliance education programmes in government enterprises and in utilities in the private and public sectors.

Cooperation by representative bodies in outreach programmes and participation in debate to resolve reform implementation issues.

Cooperation by professional bodies representing lawyers, accountants and other professionals in educating members and reviewing ethical issues arising from the new regulatory framework.

Consumer level

Formation of vigorous broadly representative and funded public forums and associations to debate and resolve reform implementation issues, such as structural reform, consumer representation and contact points, and input to regulatory code drafting and implementation.

International agencies

Independent oversight by the World Bank and other global agencies involved in economic reform issues to see that the necessary structural and regulatory reforms and transitional measures are implemented prior to and continued after privatization.

A refocussing from predisposition to privatization to policy formulation and advice focussing on all the available options to meet the economic and social needs arising from modernization of government enterprises and utilities.

Provision of independent research expertise, through the International Energy Agency or other bodies, to evaluate whether target benefits in productive efficiency, resource allocation and pricing are being delivered.

Aid from experienced partner countries in capacity building regulatory institutions, including regulatory agencies, legal and consumer advocacy bodies and community education initiatives.

Sponsorship of cross-border regional regulatory forums.

Going forward

If a refocussing of effort to the measures I have advocated occurs, I am optimistic that a range of reforms can be designed and can proceed to the benefit of the people of developing economies.

Bibliography

- Asher, A Network Industry Regulation and Convergence in Service Delivery: Challenges for Suppliers, Users and Regulators
APPEA Journal 1998
- Australian Consumers' Council Privatisation of utilities: How are consumers affected?
Australian Government Publishing Service, Canberra, April 1995.
- Australian Gas Association Gas Statistics Australia 1998
The Australian Gas Association, Canberra, Sept 1998.
- Australian Gas Association Supply and Demand Study – Participants' Report
The Australian Gas Association, Canberra, May 1997.
- Australian Competition & Consumer Commission Draft Statement of Principles for the Regulation of Transmission Revenues
Australian Competition & Consumer Commission, 27 May 1999.
- Australian Competition and Consumer Commission Telecommunications Charges in Australia
<http://www.accc.gov.au/contact/fs-telecom.htm> Dec 1998.
- Bradburd, R Privatization of Natural Monopoly Public Enterprises: The Regulation Issue
Public Sector Management and Private Sector Development, Country Economics Department, The World Bank, April 1992 (revised).
- Berg, SV Introduction to the Fundamentals of Incentive Regulation
ACCC/PURC Training Program 16/10/1997.
- Department of Trade and Industry (UK) A Fair Deal for Consumers: The Response to Consultation
<http://www.dti.gov.uk/urt/fairdeal/response/> July 1998

Electricity Supply Association of Australia Limited	<u>Electricity Prices in Australia 1998/1999</u> Electricity Supply Association of Australia Limited, 1999.
Federal Bureau of Consumer Affairs	<u>Utility Reform – Consumer Service Boards: A Consumer Advocacy Model</u> Federal Bureau of Consumer Affairs Sept 1995.
Federal Bureau of Consumer Affairs	<u>Utility Reform – The Consumer and the Community</u> Federal Bureau of Consumer Affairs Oct 1995.
Financial and Consumer Rights Council Inc. – B Kliger	<u>An Unfair Deal</u> Stegley Foundation, South Yarra, 1998.
Gas Fax	<u>Mergers: 18 Energy Firms to Go Predicts AGL</u> EWN Publishing Pty Ltd, Balmain (quoting <i>The Australian</i> dated 3/5/99) 10 May 1999, page 4.
International Energy Agency	<u>IEA Reviews Electric Power Sector in Asia</u> Http://www.iea.org/pubs/studies/files/asiafly.htm March 1997.
International Energy Agency	<u>Asia Gas Study</u> Http://www.iea.org/pubs/studies/files/asiafly.htm 1996.
King, S & Maddock, R	<u>Unlocking the Infrastructure: The Reform of Public Utilities in Australia</u> Allen & Unwin Pty Ltd, 1996.
Lewis, T & Garmon, G	<u>Fundamentals of Incentive Regulation</u> PURC / World Bank International Training Program on Utility Regulation Strategy, June 1997.
McHugh, Hon J, Minister for Consumer Affairs	<u>Utility Reform – Information Disclosure and Redress Mechanisms</u> October 1995.

Office of the Regulator General, Victoria	<u>Benchmark Customer Charter: Melbourne Metropolitan Water & Sewerage Retail Industry</u> <u>Office of the Regulator General, Victoria, Jan 1998.</u>
Office of the Regulator General, Victoria	<u>Water Industry Act 1994 – Licences</u> Office of the Regulator General, Victoria, Melbourne, Jan 1998.
Office of the Regulator General, Victoria	<u>Industry Structure, Regulatory Framework, Water Industry, Guidelines, Pricing, Standards and Procedures, Performance Reports, Regulatory Statement, Licences</u> http://www.reggen.vic.gov.au/water Oct 1998.
Quiggin, J	<u>Great Expectations: Microeconomic Reform and Australia</u> Allen & Unwin, Sydney 1996.
Quiggin J, Saddler H, Neutze M, Hamilton C and Turton H	<u>The Privatisation of ACTEW</u> Discussion Paper No. 20, The Australia Institute, 1 Hall Street, Lyneham ACT 2602, Dec 1998.
Shenoy, BV	<u>India's Energy Crisis</u> Mysore Grahakara Parishat, 6/1 Vivekananda Road, Yadavagiri, Mysore 570 020 India, Jan 1996.
Trade Practices Commission	<u>Utility Reform – Service Standards and Consumer Charter</u> Trade Practices Commission August 1995.
World Bank	<u>The Private Sector in Infrastructure: Strategy, Regulation & Risk</u> The International Bank for Reconstruction and Development / The World Bank, 1997.

Endnotes

- i Australian Consumers' Council 1995 page 28.
- ii Australia, *Trade Practices Regulations (Amendment) 1997*, regulation 2, inserting new regulation 6J in the *Trade Practices Regulations*.
- iii Shenoy 1996 page 5.
- iv *Ibid* page 9.
- v *Ibid* page 18.
- vi *Ibid* page 31.
- vii *Ibid* page 32.
- viii Refer ACCC 1998 pages 2 - 3.
- ix See for example, The Australian Gas Association (AGA) 1998 and Electricity Supply Association of Australia Limited (ESAA) 1999.
- x Refer ESAA 1999 page 73.
- xi Quiggin *et al*, The Australia Institute 1998 pages 51 - 52.
- xii King and Maddock 1996 page 6.
- xiii Australian Consumers' Council 1995 page 24.
- xiv World Bank 1997.
- xv Refer A Estache and J Carbojo, 'Designing Toll Road Concessions - Lessons from Argentina' in World Bank 1997, pages 113 - 116.
- xvi King and Maddock 1986 page 7.
- xvii Bradburd 1992 page 38.
- xviii *Ibid* pages 38 - 39.
- xix Shenoy 1996 pages 36 – 45.
- xx Refer Quiggin 1996 pages 147 - 153 and Quiggin *et al*, The Australia Institute 1998 pages 37 - 40.
- xxi Refer Quiggin 1996 pages 146 - 147 and Quiggin *et al*, The Australia Institute 1998 page 26.
- xxii Refer Quiggin *et al*, The Australia Institute 1998, page 48.
- xxiii Illustrated in the Australian Gas Association 1997.
- xxiv T Lewis and C Garmon, 'Fundamentals of Incentive Regulation', PURC/World Bank International Training Program on Utility Regulation and Strategy, June 1997, quoted in Berg 1997.
- xxv Berg 1997.

-
- xxvi See ACCC Home Page at www.accc.gov.au under ‘electricity’.
- xxvii See Department of Trade and Industry (UK) *The Response to Consultation* 1998.
- xxviii *Gas Fax* 10 May 1999 page 4 quoting *The Australian* 3 May 1999 page 44.
- xxix See Federal Bureau of Consumer Affairs, McHugh and Trade Practices Commission 1995.
- xxx See Department of Trade and Industry (UK) *The Response to Consultation* 1998 conclusion 7.8.
- xxxi See Office of the Regulator-General, Victoria *Standards and Procedures* Oct 1998 page 2.
- xxxii See Financial and Consumer Rights Council inc. – B Kliger 1998 and Federal Bureau of Consumer Affairs *Utility Reform – the Consumer and the Community* 1995 page 9.