Competition Policy's regulatory innovations: *quo vadis?* *

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Introduction

The National Competition Policy (NCP) was a landmark achievement in coordinated economic reform across Australia's federation. As the Productivity Commission showed in its 2005 review, the NCP delivered significant, and widely distributed, economic benefits (box 1). Even so, for two of its more innovative regulatory components — the systematic review of anti-competitive regulation and the arrangements for regulating monopoly infrastructure services — there is still much to be done, with some key aspects unresolved.

In the case of anti-competitive regulation, a greater commitment to good regulatory process and review remains fundamental to getting better outcomes. It is achieving this in practice that is proving the hard part. For price regulation of monopoly infrastructure providers, the best way ahead is somewhat less clear. Some of the regulatory regimes that have emerged have proven to be complex and costly. And the clarity of focus of the regulatory endeavour has seemingly diminished.

Moreover, the economic landscape within which these regulatory arrangements now operate is very different from what it was when the NCP was conceived. As well as the implications of a marked shift from public to private provision of infrastructure services, the policy priority has tilted from the need to achieve efficient use of existing assets to the need for efficient investments in new infrastructure to accommodate burgeoning demand.

In this paper, I draw on insights gained from reviews conducted by the Productivity Commission over the past dozen or so years to suggest some ways forward. I also respond along the way to a number of recent criticisms (and some possible misunderstandings) of the Commission's work.

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Box 1 What was NCP?

During the 1970s and 1980s, Australia's economic performance deteriorated markedly, with persistently low growth in productivity and income relative to many other OECD countries. The floating of the dollar in 1983, followed by the winding down of Australia's trade barriers, were the first steps in reversing Australia's economic fortunes. This opening of the economy in turn highlighted the imposts from excessive regulation, restrictive labour and capital markets and inefficient public utilities.

As the domestic reform effort progressed, it became apparent that aspects of Australia's competition policy framework were frustrating better outcomes, including by limiting the scope to create national markets for infrastructure. Based on a blueprint provided by the Hilmer Committee, all Australian Governments agreed to wide-ranging reforms. As well as the extension of the then Trade Practices Act to previously excluded government businesses, these reforms included:

- governance and structural changes to government businesses to make them more commercially focused and exposed to greater competitive pressures (including corporatisation initiatives; the introduction of competitive neutrality requirements; and processes for evaluating the merits of separation of monopoly and contestable service elements)
- regulatory arrangements to guard against overcharging by monopoly infrastructure providers and the introduction of a national access regime to facilitate third party access to 'essential' infrastructure services
- a 'Legislation Review Program' to examine, and where appropriate, amend or rescind, anti-competitive legislation (including in areas such as the professions; statutory agricultural marketing; retailing; transport; and communications).

As well, NCP incorporated previously agreed reform programs in the electricity, gas, road and water sectors. In the electricity sector, for example, these involved various structural, governance, regulatory and pricing initiatives to introduce or boost competition in generation and retailing and to establish the 'National Electricity Market' in the Eastern States.

The package was implemented through a number of intergovernmental agreements. Importantly, these provided for payments from the Australian Government to the States and Territories to 'return' the fiscal dividend from the latter's implementation of agreed reform commitments. Informed by analysis by the Industry Commission (1995) which projected a 5 per cent gain in GDP from NCP's full implementation, some \$5.7 billion of funding was allocated to competition payments over the period 1997-98 to 2005-06.

A subsequent more targeted analysis by the Productivity Commission in 2005 of price and productivity changes in key infrastructure sectors, suggested that reforms in this area alone were likely to have increased GDP by at least 2.5 per cent. Other areas of the economy also experienced lower prices and greater choice for consumers. Gains were realised by low and high income households, and across most regions.

Progressing the reform of anti-competitive regulation

Among the most radical, and certainly ambitious, components of the NCP, was the systematic review of legislation across all jurisdictions, based on the principle that any regulation found to restrict competition could be retained (without financial penalty) only if it passed a 'public interest test'.

The ambition of this Legislation Review Program (LRP) is most apparent in its scale, with some 1800 instruments initially scheduled for review within five years. But the LRP was clearly ambitious from a political perspective too. After all, much regulation with anti-competitive effects did not get that way by accident. Typically it had been expressly designed to benefit particular constituencies. However, once in place, such regulatory protections tend to be seen as 'entitlements' and can become politically very hard to withdraw. The NCP's approach to dealing with the well-known political economy asymmetries favouring measures that benefit special interests, was to place on their proponents the onus of proving that retention would be in the public as well as private interest. Introducing such a presumption or default position in favour of competition in itself represented a radical departure from Australia's traditional policy approach.

By the same token, NCP embodied explicit recognition that competition is not an end in itself, but a means of achieving higher living standards through a more productive economy. And it accepted that while income is important to peoples' wellbeing, social and environmental attributes also matter, and may sometimes justify otherwise costly restrictions on competition. However, for the first time, such benefits had to be substantiated explicitly.

While all governments were prepared to sign up to this revolutionary 'competition test' (in part reflecting the significant fiscal dividends at stake) the NCP's architects recognised that effective follow-through would necessitate properly coordinated review processes at the front end and effective implementation monitoring processes at the back end. Guidelines were developed for review processes and governance, with the National Competition Council (NCC) as the umpire on due process and the monitor of progress.

A mixed record

The Legislation Review Program that commenced in 1995 made considerable inroads into the accumulated stock of anti-competitive regulation, the legacy of decades of flawed or negligent policy-making. Key achievements included reforms to agricultural marketing monopolies — including barley, sugar, eggs and dairy;

removal of anti-competitive arrangements in the legal, real estate, dental and veterinary professions among others; liberalisation of retail trading hours in most jurisdictions; rationalisation of the financial system regulatory framework and removal of regulatory barriers to technological innovation in that sector.

Unsurprisingly, this took longer than the five years originally envisaged. Following a review by First Ministers in 2000 that — despite some push-back from within their electorates — endorsed the broad thrust of the Program, it was progressively extended to 2005. Even then, the results fell short of what had been intended at the outset. In its final assessment report in 2005, the NCC identified more than 170 pieces of 'priority' anti-competitive legislation (and 220 in all) where governments had failed to meet their review or implementation obligations.

Among the more prominent regulatory restrictions on that list were those related to wheat export marketing, anti-dumping, pharmacies, compulsory third party and workers compensation insurance, coastal shipping, broadcasting and radio communications, agricultural and veterinary chemicals, the animal and health plant provisions of the Quarantine Act, and aspects of the regulatory framework for postal services. Some have been reviewed since, but others have not.

As an overall assessment of the nominal coverage of the LRP, versus the actions that eventuated, the promise in the former therefore exceeded the realised experience of the latter. Again, this is not surprising, given the ambitious reach of the LRP. Of greater concern were the process deficiencies along the way and the fact that the reform 'strike rate' was lowest for the more significant restrictions.

Some of the decisions to retain anti-competitive regulations were supported by reviews (for example, liquor licencing). But others were contrary to review findings and, as noted, for some there was a failure to hold a review at all. Where reviews were held, their 'quality' (degree of independence, transparency and analytical rigour) was not always commensurate with the significance of the restrictions being examined. Indeed, the NCC (2005) concluded that many of the reviews did not fully meet the NCP's guiding principles.

Good processes, poor outcomes

Even a quality review proved to be no guarantee of a successful outcome, reaffirming the political and practical difficulties that all governments face in reforming anti-competitive regulations.

The vexed issue of taxi licence restrictions provides one obvious example, with deregulation having been unsuccessfully advocated by a plethora of reviews and

studies over many years. The difficulty of finding a politically acceptable or fiscally viable way of dealing with the loss of licence values for incumbents has proven a particularly hard nut to crack. The current review of the regime in Victoria by Allan Fels is the latest to come up with a way forward, making additional taxi licences available for a set price that would provide a degree of compensation to existing plate holders. But the industry does not appear convinced.

A second, more subtle, example is anti-dumping. Following a decade's postponement, the Productivity Commission was requested to undertake an independent review under LRP rules in 2009. The Commission did not recommend abolition of the regime, notwithstanding its costs, in recognition of the 'system preserving' value of a safeguard on what is widely (if wrongly) perceived to be an unfair trade practice. However, its central recommendation to insert a 'public interest' clause into the statute, as a safety valve for averting certain anomalous outcomes, was rejected (ironically, being a NCP-related review). More problematic though, given that the protectionist devil always lurks in the detail of anti-dumping administration, was the establishment of a Forum to advise on policy implementation comprising mostly import-competing interests. Further, a new review has now been announced to advise, with a view to the pressures currently facing manufacturing, whether anti-dumping should become the province of a dedicated body distinct from Customs.

Some procedural lapses

In these cases and others — such as the ban on parallel imports of books — although restrictions on competition were retained, at least the public had an opportunity through a properly constituted review to understand the trade-offs. And what was ultimately a political (and politically accountable) decision, could be properly informed about the costs as well as the benefits. However, there are other key policy areas where decisions to retain or introduce anti-competitive measures have not adequately met even that test.

Community pharmacy restrictions remain entrenched

One instance is community pharmacy, a sector integral to Australia's health care system, which has been inordinately successful in retaining the protection of anti-competitive regulations. The most notable of these are the ownership restrictions that preclude supermarkets and other retail chains from operating in-store pharmacies, even if staffed by qualified pharmacists.

The restrictions — which increase the prices of medicines for consumers and the cost of the PBS to taxpayers — were examined as part of a national review under

NCP. But that review recommended only limited liberalisation through removing restrictions on the number of pharmacies that pharmacists could own, while endorsing the prohibition on anyone else from owning even one. This proposal was subsequently supported by a CoAG Working Group because it was judged that more substantive reform would give rise to excessive adjustment pressures, rather than on the basis that ownership restrictions had any intrinsic merit. Indeed, the Working Group criticised the review for ignoring evidence from other health service areas and from overseas that such ownership restrictions were unnecessary.

But even those limited changes failed to materialise, being withdrawn following a last-minute Prime Ministerial intervention. The NCC (2005) subsequently found that all of the States and Territories had failed to meet their obligations under the Competition Principles Agreement. Notwithstanding heightened competition in some areas since then through the internet, the basic regulatory apparatus remains in place to the ongoing cost of Australia's (ageing) population.

Has coastal shipping gone backwards?

Cabotage restrictions, which limit competition from foreign flagged vessels with lower labour costs, have long been a feature of transport policy in Australia and other countries as well. These anti-competitive restrictions were listed on the legislation review program, but a review of that kind did not take place. Instead, a 2008 House of Representatives inquiry examined the restrictions from the rather different perspective of 'Rebuilding Australia's coastal shipping industry'.

This has not only led to the introduction of taxation incentives (public subsidies) to encourage investment in Australian ships, but also the replacement of the previous temporary permits with a much more stringent licensing system. Justifying this, the relevant Regulation Impact Statement (RIS) observes:

Over time the provision for coastal trade permits has become a vehicle to subvert the [legislative] preference for Australian licensed operators through a process of regulatory drift that has accelerated in the last decade to allow increased foreign shipping to access the Australian market. (DIT 2011, p. iii)

Such a rationale clearly goes against the current of competition policy and Australia's structural reform efforts over past decades, with the RIS itself acknowledging that the proposed arrangements were 'strictly inconsistent with the Competition Principles Agreement'.

The National Broadband Network presents new issues

A third example is the National Broadband Network (NBN), where multiple competition issues have arisen. This follows a long history of competition problems in the telecommunications sector that illustrate how failure to address structural matters at the right time can leave a costly legacy and pose major challenges for public policy in the future.

In keeping with the Hilmer Committee's advice, in 1995 First Ministers committed their governments to examining the merits of structural separation before privatising public utility monopolies. But no such assessment had taken place when Telstra was privatised with its vertically integrated structure intact. Telecommunications network access has been a contentious and dispute prone area ever since.

The policy framework for the NBN has sought to rectify this particular matter, in moving to a comprehensive, 'open-access' broadband network comprising 'fibre to the home'. However, it also embodies an averaged pricing structure that cross-subsidises households in higher cost (regional) locations. This is contrary to a principle of the NCP that requires cost-based pricing and separately costed and funded 'community service obligations'. Moreover, a recent investigation by the Competitive Neutrality Complaints Office — a creature of the NCP designed to ensure that government businesses operate on a level footing with the private sector — found that NBN Co. was potentially in breach of the NCP's 'competitive neutrality' requirements relating to its targeted rate of return (AGCNCO 2011).

Various restrictions on competing broadband services have raised further issues. The ACCC has accepted an undertaking and 'migration plan' from Telstra which, in return for payments from NBN Co., provides for the progressive disconnection of customers from Telstra's copper network and their transfer to the NBN. Telstra will also cease to supply broadband services via its hybrid fibre coaxial network. The ACCC has also just released a determination authorising a similar disconnection and migration agreement between NBN Co. and SingTel Optus. Total payments by NBN Co. under the two agreements are expected to amount to \$12 billion in post-tax, net present value terms.

The ACCC's authorisations of these agreements have involved a range of considerations about potential costs versus benefits into the future, made in the context of the Government's commitment to rolling out the new network and 'unscrambling the Telstra structural egg' for its potential retail competition benefits. But the superiority on cost-benefit grounds of the underlying approach to delivering broadband services remains to be publicly verified.

And what about labour markets?

The reach of the NCP encompassed various kinds of occupational licencing, including self-regulation by the professions — which, as Graeme Samuel (2004) observed, is potentially open to abuse at consumers' expense. However, only some of these licencing regimes were subjected to a review.

Industrial relations regulation has generally been regarded as falling outside the purview of competition policy altogether and, secondary boycotts aside, union activities are largely exempt from the anti-competitive conduct provisions of the Competition and Consumer Act. The basis for this has been that labour markets are more complex than product markets and involve a significant human dimension. And these points are correct. But are they good reasons for foregoing scrutiny of whether the benefits of particular restrictions on competition and other regulatory measures in the labour market exceed the costs and, where they do, whether they are the best way of achieving those benefits?

This question is significant because of the pervasiveness of these regulations across the economy and their influence on the ability of enterprises to innovate and adapt to market opportunities and pressures. Also, the industrial landscape today is considerably evolved from what it was a few decades ago — and far removed from the 'dark satanic mills' of the early industrial era. Competition among firms is much greater, most production is technologically more sophisticated and 'human capital' is generally seen as key to competitive performance. Moreover, general social safety nets and government support mechanisms have become well developed.

Ensuring that people are treated fairly in workplaces must remain a central concern. However, any trade-offs with productivity or competitiveness that may be associated with specific regulatory instruments need to be carefully considered and re-assessed over time. After all, productivity gains provide the only sustainable source of higher wages and job security for workers.

In the Commission's recent report on the Retail Industry — an industry under heightened market pressure — questions were raised about whether the balance had shifted unduly in areas such as the 'better off overall test', 'individual flexibility agreements' and 'penalty rates of pay'. The Commission recommended that those matters, which have relevance well beyond the retail sector, be assessed as part of the wider 'post-implementation review' of the Fair Work Act (taking place in lieu of an initial regulation impact statement).

The review's findings have been submitted to the Government, which has indicated that it will respond shortly. How this all plays out in the short and long terms remains to be seen. However, the Productivity Commission's current review of the

default arrangements under Awards for allocating superannuation contributions, which have favoured the nomination of 'industry funds', would suggest that anti-competitive restrictions in the labour arena, as elsewhere, can be difficult to justify on public interest grounds. The Commission's interim assessment of those particular arrangements is that they need to be opened up in the best interests of employees.

Better regulatory processes would bring dividends

That changes to industrial relations regulation have (traditionally) avoided even the requirements of a regulation impact statement is perhaps the most notable instance of a more general struggle to entrench 'good regulatory process'. Ongoing process deficiencies will have inevitably allowed new regulatory initiatives with unjustified anti-competitive dimensions to become added to the stock of those that were not adequately dealt with under the NCP.

While it is vital that we continue to find better ways of quality-controlling the flow of regulation, there is also potential to reap sizeable benefits by periodically reviewing the stock. As the Commission argued in its recent report *Identifying and Evaluating Regulatory Reforms*, a second wave of reviews of the kind undertaken under the National Competition Policy was anticipated in the NCP agreement itself, and would be timely. This time round, it should target those regulations involving more significant restrictions on competition and more significant potential impacts. It would need to include the 'leftovers' from the first Legislation Review Program, as well as regulations introduced since then.

Regulating monopoly infrastructure

The importance of efficient, affordable and reliable infrastructure services for productivity and economic growth, and to meet various social and environmental objectives, has been widely documented. So too has the challenge of addressing current and prospective gaps in Australia's infrastructure — most recently in a report by the Bureau of Resource and Energy Economics on bulk commodity exports.

Just one of several policy dimensions

The range of issues relevant to future infrastructure policy were synthesised in a recent Commission submission to Infrastructure Australia (box 2). A particularly important requirement where public provision or funding is involved is to entrench

more rigorous cost-benefit analysis in the decision-making process. Where private entities are considering investing large sums of money in infrastructure, their decisions will generally be based on a hard-headed assessment of the costs and revenue streams, and of the attendant risks. Yet despite experiences like the Ord River Dam and the Alice Springs to Darwin railway, governments continue to base decisions on 'vision' or to achieve goals that are not subjected to rigorous, publicly tested analysis. The most recent example of the latter is documented in the Commission's recent report on urban water, where we calculated that inefficiencies in the desalination plant options adopted in Melbourne and Perth could collectively cost consumers as much as \$4.2 billion over a twenty year period.

Box 2 The infrastructure policy agenda is broad

The Commission's work in the infrastructure area over the past 20 years has highlighted a range of policy and regulatory requirements for good outcomes. These requirements — as they apply to public provision, private provision and the interface between the two — are spelt out in the Commission's submission to Infrastructure Australia's National Infrastructure Audit (PC 2008). They include the need:

- for clear objectives focused on enhancing efficiency
- to improve the governance and institutional arrangements shaping the activities of Government Trading Enterprises
- to further unwind under-pricing and non-cost reflective pricing of certain publicly provided infrastructure services
- to underpin public funding of infrastructure with more rigorous cost-benefit analysis
- for 'investment friendly' price and other regulation of privately provided infrastructure
- for resolution of some outstanding structural (vertical and horizontal integration) issues
- to recognise and address the challenges in getting public-private infrastructure partnerships 'right', particularly risk allocation and ensuring sufficient competition among potential private sector partners
- to take account of the impacts of policies in other parts of the economy.

The choice between public and private provision is itself a key issue. In the past, ownership has been viewed, including by the Commission, as secondary to promoting competition. However, evidence has been accumulating that public ownership can be a significant drag on performance. Cost under-recovery remains widespread, and government interference in decision-making can create inefficiencies in service delivery and misallocation of investment. In the words of the NSW price regulator, 'In our experience, improving efficiency is only one objective and driver of performance in government businesses, and may not be

necessarily the most important' (Cox 2011, p. 15). So while the case for privatisation should continue to depend on the specific circumstances, the starting question now should be 'why not' rather than 'why', akin to the reverse onus of proof under the NCP.

In short, getting it right on infrastructure involves more extensive policy territory than the regulatory arrangements for monopoly providers. And while regulation has an important role to play, it is equally important that the rationale for regulating is cogent and that regulation can achieve its goal in cost-effective ways.

The rationale for price regulation (revisited)

The Hilmer Committee was clear that the primary reason for regulating monopoly infrastructure services is to prevent the exploitation of market power in ways damaging to efficient outcomes. In simple economic terminology, efficiency is synonymous with minimising 'deadweight losses' — thereby maximising contributions of infrastructure to national income (or aggregate living standards).

The potential deadweight losses from monopoly power have both static and dynamic dimensions, however, such that the efficiency goal for price regulation is multi-faceted. It requires price levels and structures that will (a) encourage efficient use and delivery of monopoly services, while (b) also encouraging efficiency in the nature and timing of investments — both for the monopoly services and in related markets.

While this is clearly a very challenging goal, and one that can never be perfectly realised, the Productivity Commission has successfully recommended having an objects clause inserted in several pieces of generic and industry legislation that at least spells out the key dimensions of the regulator's task in seeking to enhance efficiency. It has also successfully advocated the inclusion of a number of pricing principles that would promote efficiency. And it has recommended against price regulation in particular circumstances where it found little potential for misuse of market power and saw price regulation posing risks to investment (for example, airports).

Against this backdrop, the ACCC has recently suggested that the pursuit of allocative efficiency that results in excessive prices is not politically viable, and that public utility regulators do not in practice have it as their primary goal (Sims 2012, Biggar 2011). Moreover, regulators' apparent concern for 'fair' and stable prices over time and their aversion to discriminatory pricing structures, is seen to have a theoretical justification in the need for regulators to devise what amounts to implicit

long-term contracts between facility owners and customers that avert the risk to the latter of the 'hold up' of their (sunk) investments by the former.

The proposition that the risk of downstream 'hold up' constitutes the main rationale for price regulation of monopoly infrastructure services, rather than being part of the broader efficiency case advocated by the Productivity Commission (and most economists), raises a number of issues.

- One is why potential downstream investors in such assets could not enter into long term contracts with facility owners themselves. The contention is that this is defeated by transactions costs, but there is evidence to the contrary. For example, in the gas sector, foundation contracts between pipeline developers and their customers are commonplace.
- While transactions costs might loom large for small players in downstream markets, their investments are likely to be commensurately small as well.
- In practice, (strategic) 'hold up' behaviour does not appear prevalent, relative to more straightforward monopoly pricing though time. The greater risk is that rents will be dissipated through rent seeking or productive inefficiency, both of which are part of the conventional rationale for regulation.

More generally, while the possibility of efficiency losses from downstream 'hold up' cannot be ignored, it constitutes only one of a number of investment effects that need to be considered in making a case for price regulation. Indeed a partial focus on the downstream investor could itself become a source of problems by neglecting the need for regulators to avoid 'chilling' infrastructure service investment upstream, thus compromising the provision of essential services in the long term.

Distributional motivations

The act of constraining prices to limit monopoly rents will transfer income from the service provider to users of the service and ultimately to consumers. Hence, soundly-based price regulation has the potential to simultaneously improve both efficiency and distributional outcomes (limiting 'price gouging'). Viewed in these terms, the NCP's focus on promoting efficiency should not be seen as contrary to distributional goals.

This is not to deny the potential value of further analysis of the interplay between efficiency and distribution and its implications for regulatory policy. More explicit recognition that price regulation should not be blind to where monopoly rents finish up might also be warranted.

But this needs to be distinguished from using price regulation as a more proactive tool to assist disadvantaged consumers; in effect extending the reach of regulation to address a matter (disadvantage) that is not contingent on the basis for that regulation (market power). This would further complicate an already complex regulatory calculus, with a range of new considerations relating to the incidence of prices on household income and wealth and the interaction with other redistributive mechanisms — and with no guarantee of better distributive outcomes. For example, if disadvantaged consumers presume that retail price caps on default services signal a good deal, they may be discouraged from switching to cheaper unregulated services. Accordingly, assistance to such consumers will almost always be best provided through measures targeted at income, such as hardship policies or utility allowances, rather than through regulated prices.

'Does it really matter?'

This latest debate about the rationale for regulating monopoly infrastructure providers is not simply a case of 'economists at three paces' with little practical consequence. Robust, clearly articulated rationales are fundamental to good policy and regulatory practice, and thereby to good outcomes for the community. As well as leading to inappropriate decisions on when to regulate, getting it wrong on rationales or objectives could also skew interventions in ways that would reduce rather than enhance community well-being.

Any notion that rationales for price regulation should be revised to better accord with regulatory practice, would turn the purpose of policy making on its head. The right approach is to start with what should happen — informed by actual market behaviour — then determine the regulatory practice that accords with that and, finally, take steps to ensure that this is followed through.

Regulation brings its own problems and costs

High transactions costs come with the 'territory'

If there is one thing that all parties can agree on, it is that the process of regulating prices for major infrastructure services has been time-consuming, legalistic and expensive. The stand-out example is electricity, where the decision documentation for Victorian distributors grew from 400 to over 1800 pages in the decade to 2010. The Chairman of the Essential Services Commission has observed that, if all of the supporting paperwork were accounted for, he would 'not be remotely surprised if the geometric growth rate was something closer to a factor of ten' (Ben-David 2012).

Sometimes transactions costs can be inflated by inappropriate or overly intrusive regulatory approaches. For example, IPART currently sets 66 miscellaneous fees for Hunter Water, many of which are small and would apply only to a few customers. In its recent urban water inquiry, the Commission found that although there are unlikely to be efficiency gains from such micromanagement, the practice requires a large amount of information to be passed between the regulator and utilities.

But for the most part, high transactions costs are an unavoidable consequence of the decision to regulate. The complexity of the issues, and for access regulation the abrogation of property rights involved, mean that the need for thorough analysis is a given. This also suggests that efforts to streamline processes in the cause of reducing transactions costs carry the risk of introducing costs of their own.

Establishing precedents to guide the operation of new regulatory regimes can be resource and time intensive. And decisions that are a long time in the making are not necessarily bad ones. Getting some of the lengthy Part IIIA cases right may well have been worth the wait, and an illustration of the value of a robust appeals system. That said, it would be reasonable to anticipate some stabilisation, if not reduction, of decision-making costs and time frames over time. So the growing procedural burden in the electricity sector is a legitimate cause for concern.

Regulated pricing regimes involve compromises and inevitable errors

The difficulties of devising regulatory pricing regimes that improve on unregulated outcomes are widely recognised, but sometimes underestimated.

Part of the problem is that regulators are trying to juggle multiple objectives that are sometimes conflicting and not prioritised. They sometimes also have to deal with externally-imposed constraints. For example, despite the widespread installation of smart meters, the Victorian Government has introduced a moratorium on time-of-use pricing. Pricing and investment can also be affected by externally-imposed requirements on the means of supply (such as a preference for desalination plants); by legislated service reliability standards; and by environmental standards.

But the very fact of exposure to price regulation — and the uncertainties this creates — can in itself deter investment. This is the flipside of the 'hold up' rationale for regulation, with the regulator rather than the monopolist posing the threat to investment.

Moreover, 'errors' in the balance of regulated prices are unavoidable. Being armslength from the business, regulators can never know as much as their 'clients'. They

will also be vulnerable to regulated businesses withholding information, or presenting it in ways favourable to their interests. Regulators have sought to compensate by engaging in increasingly forensic analysis; a source of costs in its own right. Yet there will always be the spectre of what Donald Rumsfeld famously called 'unknown unknowns'.

In a recent submission to the review of appeal arrangements in the energy sector, Allan Fels (2012) has emphasised 'the long-term insidious effect of regulatory error on investment incentives'. Pricing errors can in principle cut two ways, with opposing investment consequences.

- Too *high* a price and investment in downstream markets may be precluded or inefficiently delayed. Likewise, the timing of investments to refurbish or augment the regulated infrastructure may not be socially optimal.
- Too *low* a price and, in the short term, there may be too much investment in downstream markets. More importantly, over the longer term, investment in the regulated infrastructure service will be inhibited, in turn precluding downstream activity and the investment associated with it.

A now well-known problem in the latter regard is the potential for 'regulatory truncation' of premium returns on successful investments. These premium returns are required to compensate for the risk that, at the time of investment, commercial success is not guaranteed. If there is an expectation or even threat that the regulator will appropriate these premium returns in the name of preventing monopoly pricing, then the investment may not proceed (or may proceed in a sub-optimal fashion.)

The Commission has previously argued that the efficiency losses from setting regulated prices too low could generally be expected to be higher than from setting them too high. One intuition here is that it is likely to be more costly for infrastructure services of a broad 'enabling' character to be delayed or deterred — precluding multiple downstream uses — than if some downstream activity that depends on it is held back or forestalled. Also, the costs of errors are likely to loom larger when they threaten the large scale lumpy investments that are more typical of monopoly infrastructure businesses than their downstream customers. That said, the proposition that there is an asymmetry in investment cost impacts has been contested and the Commission will need to revisit this in its forthcoming review of Part IIIA.

To the extent that there is any bias in regulatory price-setting, it is more likely to favour the low side than the high side. If prices are set too high, at least some of the costs to customers will be plain to see in the short term, whereas the adverse investment effects of erring in the other direction may take years to manifest

themselves. And this is likely to be reinforced by political pressures on regulators to keep prices to households down — pressures that are especially evident right now in the electricity sector, following recent retail price rises and the introduction of carbon pricing on top of other abatement measures.

What lessons emerge?

Regulation should be a last resort, not first port of call

The preceding observations are not to trivialise the monopoly problem, nor to deny the case for price regulation or oversight. However, no amount of research, discussion or experimentation can eliminate the fundamental information deficiencies that make errors in the balance of regulatory prices inevitable, or the incentive structures that may bias those errors in particular directions. Similarly, the Australian and international experience tells us that the transactions cost burden of price regulation will usually be a heavy one. In other words, a decision to regulate prices itself comes with a price ticket.

This in turn means that the focus of policy should not simply be on better regulation — where 'better' connotes more precision in price-setting or expedited decision-making. The benefits and costs of less intrusive regulatory approaches, or even of dispensing with regulation entirely in some cases, must be given consideration.

If this all sounds familiar, then it is — indeed, merely restating the Hilmer Committee's position of nearly two decades ago:

Regulated solutions can never be as dynamic as market competition, and poorly designed or overly intrusive approaches can reduce incentives for investment and efforts to improve productivity. ... from a government's perspective, resort to price control might be seen as an easy and popular way of dealing with what is in reality a more fundamental problem of lack of competition in an area. Since price control never solves the underlying problem it should be seen as a 'last resort'. (ICICPA 1993, p. 271)

As the experience with Australia's airport price monitoring regime indicates, less intrusive approaches can, and have, improved community well-being. Much better investment outcomes have been a particularly important benefit of the light-handed approach adopted for airports (box 3). However, the ACCC has continued to advocate more stringent controls in that case. Its contentions are fully addressed in the Commission's recent report (PC 2011d). But it is worth merely noting here that neither the airports nor the airlines wanted to turn back the clock and reinstitute formal price regulation.

Box 3 The light-handed airport pricing regime

In the period 1997 to 2002, Australia privatised its major airports and introduced price cap regulation. It was generally agreed that this regime was overly intrusive, particularly in regard to new investment. As one stakeholder commented at the time:

The ACCC now scrutinises every investment decision airports make in relation to their aeronautical businesses ... The ACCC determines what expenditures are to be considered for price increases, whether those expenditures are acceptable and how prices are to be calculated. This is all to constrain price increases that are smaller than those experienced on a weekly basis in metropolitan petrol markets. (Australian Pacific Airports Corporation, 2000, p. 5)

In line with recommendations in a 2002 report by the Productivity Commission, these heavy-handed price controls were replaced by price and service monitoring at the mainland capital city airports, with an emphasis on commercial negotiation to determine terms and conditions. Subsequent Commission reports in 2006 and 2011 found that this lighter-handed approach had facilitated a marked increase in aeronautical investment, without the bottlenecks experienced in other infrastructure areas; and that these benefits had been achieved with pricing that did not indicate the inappropriate exercise of market power.

The Commission nevertheless recommended changes to the regime to provide for more meaningful sanctions on any misuse of market power. In its most recent report, the Commission proposed a transparent process for dealing with prima facie evidence of misuse of market power by an airport, with the ultimate sanction being a recommendation to the Government by the regulator for a formal price inquiry. A key objective of this process was to 'place responsibility on the ACCC to be robust in its process, explicit and definitive in its judgement and be prepared to stand by and act on that judgment' (p. 191). To avoid this process supplanting commercially negotiated dispute resolution protocols, the Commission further proposed that it not apply where an airport had offered an 'approved' dispute resolution framework with binding arbitration during the contract formation process.

As well, the Commission proposed that the separate arrangements for monitoring car parking charges at the major airports be continued and that these airports should in future publish charges and terms for access to their facilities by transport operators. But it rejected the proposal from the ACCC that landside vehicle access services at major airports be subject to mandatory Part IIIA undertakings — arguing that regulatory involvement could lead to de facto price setting, and that divestiture of property should only be contemplated after case-specific investigation has shown this to be warranted. The Commission also noted that the removal of anti-competitive restrictions on public transport options to and from the airports would put further downward pressure on car parking charges without the need for intrusive price controls.

The airport experience — and particularly the positive investment story — raises the question of whether a lighter regulatory touch might also be appropriate in other infrastructure areas where market power is more significant. The risks and possibly the costs of moving to less intrusive approaches could be higher. Yet so too might the benefits.

Avoid going 'back to the future' on investment

Consistent with the notion of a likely intrinsic 'suppression' bias in price regulation regimes, there have been some specific initiatives to encourage sufficient 'investment headroom' in regulated prices. For example, the price setting rules introduced for the NEM require the Australian Energy Regulator, when assessing the efficiency and prudence of investment and other spending proposals, to apply the highest cost that just meets a 'reasonableness' criterion, rather than its best cost estimate. Other more specific initiatives have included arrangements that have allowed regulated firms to keep the benefits of efficiency improvements — and thereby of cost-saving investment — for longer.

However, there is now some pressure to reverse direction. Indeed, the ACCC has recently implied that concern about investment headroom was misplaced, observing that:

For a time during the mid-2000s, there was a school of thought that considered economic regulation had the potential to delay efficient investment in bottleneck infrastructure, leading to declining productivity in the economy. (Sims 2012, p. 9)

These comments were made with the particular circumstances of electricity regulation in mind, which the Commission is examining in its current inquiry into electricity network regulation. The Issues Paper (PC 2012a) observes, though, that the impacts of these regulations on the level and nature of network investment, and thereby on consumer prices, are far from straightforward.

More generally, while it is possible that particular regulatory regimes might be generous to service providers, it seems clear that regulators should not 'go to the wire' in seeking to strip monopoly rents. There is more at stake here than the specific problem of regulatory truncation (which in fact involves inappropriate regulatory taking of a return that is not a monopoly rent). As in other markets, the prospect of earning rents is a driver of innovation in service provision and the investment to support it. The broad pricing principle now incorporated in regimes that regulated prices should be 'at least sufficient to cover efficient long run costs, including a return commensurate with the commercial and regulatory risks' therefore remains fundamentally sound.

Do not eschew efficient price differentiation

Price discrimination linked to elasticities of demand and multi-part pricing approaches can have significant efficiency benefits. There can also be considerable value in finer differentiation of usage charges to reflect inter-temporal variations in the cost of supply. The use of peak load pricing for electricity to modify consumption levels and patterns, and thereby to delay the need for expensive new investment in capacity, is an obvious example here. Similarly, the Commission has pointed to the efficiency benefits from greater reliance on scarcity-based pricing in the water sector.

It is therefore for sound reasons that governments have endorsed the use of multipart pricing and price discrimination that aids efficiency in various specific infrastructure contexts and within the access component of the Competition Principles Agreement.

That some regulators have been averse to soundly-based price differentiation ostensibly reflects a concern about its impacts on disadvantaged consumers. But as discussed above, such concerns lie beyond the limited set of distributional matters that might in theory be relevant for price regulation. At best, the use of price regulation, rather than instruments that directly target the consumers concerned, will increase the cost of meeting the distributional objective involved. At worst, there could be a cost without any benefit. For example, Littlechild (2012) argues that regulatory limits on differences in tariffs that UK energy suppliers can charge their in and out-of-area customers, have reduced the benefits to 'active' customers from shopping around, without providing any offsetting price benefits for the remainder of the customer base.

It might be argued that regulators' aversion to some forms of price differentiation has more to do with the costs and difficulties of establishing that efficiency would indeed be enhanced. However, precluding it on this basis would be a case of the regulatory tail wagging the dog.

Transitional regulation should be just that

The potential for temporary price regulation to facilitate the development of competition in infrastructure and related markets is not in dispute. But as the experience with some transitional regimes indicates, there is an ever-present risk that they will morph into something more permanent.

'Transitional' price caps in the telecommunications and electricity sectors have proven to be particularly resilient. In the latter case, for example, a process for phasing out caps where retail electricity markets are assessed as being contestable has been in place for several years. Yet the end point of this process still seems a long way off, with caps still in place in all jurisdictions except Victoria.

Grain handling provides another example, with the scheduled phase-out in 2014 of the compulsory undertaking mechanism for port terminals having been called into question by the ACCC (Sims 2011). These access arrangements were put in place in 2008 as part of the deregulation of export wheat marketing. In its 2010 review of the new regime, the Productivity Commission found that, as a transitional mechanism, compulsory undertakings had facilitated the rapid entry of entities able to trade wheat. But it also argued that these benefits were diminishing over time as competition became institutionalised in a market that was formerly the preserve of the Australian Wheat Board.

Realistically, it is hard to see why the package of measures the Commission proposed (box 4) would not be sufficient to deal with what may not be a particularly significant longer term competition issue. As the Commission's report points out, a range of factors will tend to constrain the market power enjoyed by a port terminal operator, including the fact that the export wheat market is a competitive one.

Another illustration of the problems that arise when transitional issues and the core rationales for price regulation collide is provided by recent debate on the future of price setting in the urban water sector. The Commission has recently proposed a major strengthening of the governance regime for water utilities and, once this is in place, price monitoring rather than independent regulatory price setting (box 4). Some regulators have strongly criticised this approach, with one characterising it as a return to the pre-Hilmer days where Ministers and government departments were effectively price regulators (Sims 2012, Ben-David 2011).

However, to juxtapose the Commission's proposals with the arrangements that prevailed pre-Hilmer is to misconstrue them. The proposed regime involves a set of checks and balances to support a service charter between governments and their utilities. This charter would focus on delivering water and sewerage services in an economically efficient manner; and promoting competition and contestability in the procurement of water supply.

Box 4 Wheat and water: what did the Commission propose?

Wheat export facilities

In its 2010 report, the Commission found that the transition to competition in exporting bulk wheat had progressed relatively smoothly, aided by the accreditation arrangements for bulk exporters and the sector-specific access regime for port terminal services.

However, it also concluded that the benefits of these regulatory instruments would diminish over time. For example, it expressed concern that the access regime would provide incentives for wasteful strategic behaviour by both port terminal operators and traders, constrain the efficient delivery and pricing of port services, and reduce the incentives for investment in terminal facilities and dependent supply chains. Accordingly, it recommended that the accreditation scheme be abolished in September 2011 and the access regime in September 2014.

That said, in the case of access to port facilities the Commission noted that the Part IIIA regime would still be available to deal with disputes. And to further facilitate efficient commercial negotiation of access, it:

- advocated the development of a voluntary access code to supplement the Part IIIA backstop
- recommended continuation of the requirement for terminal operators to disclose on their websites specified information relevant to potential port users.

Urban water

The Commission's 2011 report found that poor institutional and governance regimes had impaired the urban water sector's ability to respond efficiently to drought, growing demand and ageing assets. It had led to inefficient allocation of water, misdirected investment, undue reliance on water restrictions and costly conservation programs. The Commission concluded that the early policy priority should therefore be on establishing clear roles and objectives, improving institutional performance and governance, competitive procurement of supply and pricing reform, rather than trying to create a competitive market as in the electricity sector.

To this end, 'generally applicable' reforms proposed by the Commission included:

- articulation by governments of a common overarching objective focused on delivering services in an economically efficient manner
- alignment with that objective of procurement, pricing and regulatory frameworks
- implementation of best practice arrangements for policy making, regulator and utility practice and the introduction of robust performance and reform monitoring
- replacement of regulatory price setting with price monitoring.

Central to these proposed reforms was a major strengthening of governance requirements, including through incorporating utilities under the Corporations Act, and instituting charters between major utilities and owner governments — with independent reporting of performance and sanctions for underperformance.

Moreover, the move to independent price regulation under NCP was not intended to be an enduring policy goal in its own right. Rather, depoliticisation of decision making was one component of the transition away from an inefficient model of public monopoly provision to a market environment where the need for explicit price regulation would be greatly reduced. Given that prescriptive independent price regulation has to date proven singularly unsuccessful in promoting efficient water procurement and service delivery, there is a strong case for trying the alternative.

Implications for future institutional arrangements?

It follows that while the reasons for contemplating price regulation of monopoly infrastructure providers remain broadly unchanged, there is more thinking to be done on when, in practice, to regulate and how best to do so. A key message is that in considering the 'how best to' issue, policy makers should look seriously at means to lighten the regulatory burden, rather than simply trying to make inherently intrusive regulatory approaches work better. By the same token, given the significant discretion as well as expertise that is needed to regulate well, institutional arrangements matter too.

A bigger role for consumers?

One issue is the benefits that could ensue from greater customer involvement in the regulatory process. This has been advocated by some regulators, including the ACCC, and is also the subject of a current review by IPART. The Productivity Commission too has made specific proposals to support such involvement (PC 2008a, 2011a).

It is possible that greater customer involvement could facilitate a move towards more light-handed regulatory approaches in some areas. Some regulators have approached it from the other direction — namely, that better engagement by service providers with their customers would be a means to forestall more heavy-handed and prescriptive price setting (Ben-David 2012).

Better coordination across relevant policies

In some infrastructure sectors, there is an urgent need for better coordination between pricing regimes and other policies affecting demand and supply. In the urban water sector, for example, demand management by non-price measures, water conservation policies and security driven decision-making, have largely supplanted the role of prices in allocating water and promoting efficient supply augmentation.

The message here is that, with the best will in the world, price regulators will generally not be able to correct for problematic policies implemented elsewhere, which need to be tackled directly. As a result, some of the gains anticipated from past infrastructure reforms have not materialised.

Reassign responsibilities?

Another important question is whether the current assignment of regulatory responsibilities in relation to infrastructure is conducive to getting the best outcomes for the community, with various proposals for institutional 'improvement' in the public domain.

For example, the NCC has questioned the value added by the Australian Competition Tribunal in hearing appeals against declaration decisions under the Part IIIA national access regime. And some of the functions of the NCC could in turn be affected were greater use to be made of 'deemed' declarations. Other proposals doing the rounds include wider application of the 'rule-maker, regulator, reviewer' institutional structure that applies for electricity; and the transfer of the ACCC's regulatory roles in the infrastructure area to other entities.

Such suggestions — particularly those that would reassign regulatory responsibilities — would need careful assessment. The entities responsible for regulating monopoly infrastructure have built up expertise over the past 20 years, and developing it afresh in new bodies could take some time. That said, institutional arrangements should not be set in stone. In an environment where infrastructure needs, markets and the regulatory dynamic have been changing, arrangements that might have served well in the past may not do so in the future and it is appropriate that they be periodically revisited.

The further issue of how much legislative guidance should be provided to price regulators raises some conundrums. Without regulators having discretion, regulatory regimes would become intolerably prescriptive and inflexible. But the existence of discretion means that regulatory proclivities and incentive structures matter for outcomes. It also means that for regulatory regimes to operate effectively, stakeholders must have confidence in the regulator. Perceptions in this respect do not just depend on the specific decisions that regulators make. They will also be conditioned by the tenor of their contribution to debates on regulatory policy itself.

In sum

NCP's regulatory innovations have been transformative in many respects and have yielded considerable gains for the community. Twenty years on, however, it seems clear that the aspirations of the Hilmer Committee remain to be fully realised. In relation to the quest to eradicate anti-competitive regulation that cannot be justified on public interest or cost-benefit grounds, there is much unfinished business and some additional areas demanding attention. In relation to the price regulation of monopoly infrastructure, we are still grappling with the fundamental trade-offs between imperfect markets and imperfect regulation. However it seems clear that the way forward needs to account for the specific circumstances of different infrastructure markets, that these will change over time and that the scope for a lighter regulatory touch needs to be kept in view.

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