

# Advancing the Reform Agenda: Selected Speeches

Gary Banks

December 2012

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#### ISBN 978-1-74037-422-4

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#### An appropriate citation for this paper is:

Banks, G. 2012, Advancing the Reform Agenda: Selected Speeches, Productivity Commission, Canberra.

#### The Productivity Commission

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The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

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# Foreword

There is increasing recognition of the fundamental importance of productivity to Australia's future prosperity. But there is also much contention and confusion about what 'productivity' means, what is behind recent declines and how government policy can best promote productivity growth. The essays in this volume are broadly concerned with these questions. They have been chosen from among speeches delivered in a variety of forums since early 2010. They are organised here in two categories: those that focus primarily on the policy agenda and those that are concerned with how to get there.

As with the speeches published in an earlier compendium, a number were co-written with colleagues. Moreover, every speech benefitted greatly from wider feedback from within the Commission. In particular, a draft of my speech on the 'to do' list — the most recent and the first in this volume — was widely circulated among Commissioners and senior staff, whose comments and suggestions helped ensure that the final version was largely a collective view. Of course all of the speeches have had the advantage of drawing on the accumulated store of Commission research and policy advice.

Finally, with my third term as Chairman coming to an end, I take this opportunity to thank more generally all those with whom I have worked over the years. That includes above all the talented members of staff who have constituted the core of this institution's capability throughout its history. No doubt for many of our younger people today, the thought of staying on at the Commission as long as its Chairman would be incomprehensible. In my defence, I would say that I can think of no better place of work for someone who wants to make a difference to people's lives through good public policy, and doesn't mind how long it can take.

Gary Banks AO Chairman December 2012



Gary Banks AO

Gary Banks has been Chairman of the Productivity Commission since its inception in 1998. Throughout his career, he has also worked for all three of the Commission's predecessors — the Tariff Board, Industries Assistance Commission and Industry Commission. He spent nearly a decade working overseas with the GATT Secretariat in Geneva from the mid-1970s, as well as at the Trade Policy Research Centre, London. In the late 1980s, he was a consultant with the Centre for International Economics in Canberra. Since his first appointment as a Commissioner in March 1990, Gary has headed over two dozen public inquiries. As Productivity Commission Chairman, he has also chaired the Government Services Review process under the Council of Australian Governments. He headed the Australian Government's Regulation Taskforce in 2006 and was a member of the 1998 Review of Higher Education. He was made an Officer of the Order of Australia in 2007, for 'services to the development of public policy in microeconomic reform and regulation'.

In early 2013, Gary Banks will take up a new role as Dean and Chief Executive of the Australia and New Zealand School of Government, together with a Professorial Fellowship at Melbourne University.

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# THE REFORM AGENDA

# Productivity policies: the 'to do' list\*

The Productivity Commission has a long list of things to do. My answer to what we can do about productivity is: go get the list and do them. (Glenn Stevens, June 2012)

#### Introduction

In the decade and a half since the Productivity Commission was formally established, it has completed 110 inquiries and other commissioned studies and made some 1500 policy recommendations to governments. All of these recommendations were made because the Commission judged that their implementation would enhance Australians' living standards and quality of life. In many cases, they would do so by raising the capacity of Australia's economy to produce valued goods and services — in other words, by raising its 'productivity'.

On a rough reckoning, around two-thirds of the Commission's recommendations over the years have been accepted and (more or less) implemented by governments. That is not a bad strike rate, given that our reports typically deal with complex and politically contentious areas of public policy, where benefits to the majority can necessitate withdrawing advantages from (vocal) minorities. It nevertheless leaves a sizeable residual, to which Reserve Bank Governor Glenn Stevens was no doubt alluding in his much-reported remarks. Many in the media took him literally though, and were disappointed that the Commission did not in fact have a 'list' at the ready.

Many of the unimplemented recommendations from past reports remain directly applicable today, but others do not. A fair number have been overtaken by subsequent changes to the policy in question or in related areas, changing the 'context' from what it was when the recommendations were framed. The more detailed or distant the recommendation, the more likely that this will be an issue.

The upshot is that devising a list of those recommendations that remain valid — passing the dual tests of delivering net benefits and being superior to alternative policy options — would generally require at least some reconsideration of the broader settings. While that may not always be straight forward, it can of course be

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<sup>\*</sup> Economic and Social Outlook Conference, 'Securing the Future', Melbourne, 1 November 2012.

done. The reasons why the Commission has not actively maintained a list of this kind have more to do with what might be called institutional propriety. Having sought the Commission's independent advice on significant (and frequently contentious) areas of public policy, once an elected government decides for whatever reason not to accept that advice, it would be considered poor form for the Commission effectively to continue treating these as 'live' issues.

#### Lists from the past

That is not to say that constructing lists that include previously neglected, but still relevant, reform opportunities is never appropriate or worthwhile. Indeed, at times, the Commission has been asked to do just that. The first instance occurred while the Productivity Commission's enabling legislation was still before the Parliament, with the interim organisation directed to produce a *Stocktake of Microeconomic Reforms* (PC 1996). This contained over 120 recommendations across such diverse policy areas as labour markets, economic infrastructure, competition policy, social services, taxation and industry assistance. These set the scene for a range of reforms and more detailed follow-up reviews. The Commission's next major agenda-setting report was its 2005 *Review of National Competition Policy* (PC 2005a), which charted reform directions for Australia extending well beyond the competition domain, and was the precursor to COAG's (ongoing) National Reform Agenda.

On the issue of regulatory 'red tape', the Commission has put forward wide-ranging lists of reforms in its series of *Stocktakes of Regulatory Burdens* and its *Regulatory Benchmarking* studies for COAG. And currently the Productivity Commission is engaged in a joint scoping study with its New Zealand namesake to develop a comprehensive agenda for further trans-Tasman integration, much of which involves previously traversed reform areas (APC and NZPC 2012).

Also, as the Commission's Chairman, part of my role over the years has been to make speeches at national forums such as this, highlighting reform themes and policy agendas emanating from our work (Banks 2010a, 2011a, 2012). That includes proposals from past reports with enduring policy relevance. In view of the evident interest in such lists, and the ongoing debate about what really matters for productivity growth, I propose doing so again today — the last such opportunity in my current job.

## Why productivity is important (once again)

Back in 1996 when the incoming government amalgamated the Industry Commission, EPAC and BIE to form the present organisation, some expressed

puzzlement at the name chosen for it. 'Good idea, but why call it the *Productivity* Commission?' more than one person asked me. None of the doubters were business people, however, who would have appreciated the role that productivity played in their own enterprises.

Community groups have had more difficulty seeing why productivity matters, and labour unions have traditionally been suspicious of it as providing cover for job cuts or reductions in wages and conditions. A breakthrough occurred in the Accord years, when national wage increases were directly linked to productivity gains. And this new attitude was sustained through the move to enterprise bargaining and the advent of National Competition Policy. But some ambivalence appears to have reemerged.

#### Productivity's real contribution

One possible explanation is that much of the rhetoric around productivity today treats it as if it were a policy objective in its own right. That is wrong and can lead to perverse results. Productivity, like production, matters not for its own sake, but because growth in it can generate the higher incomes and government revenues needed to raise living standards and rectify disadvantage. Policies to promote productivity need to have these larger ends in view.

Since tariff liberalisation and other microeconomic reforms in the mid-1980s first began to transform Australia's industrial landscape, wages in this country have increased by one-third in real (inflation adjusted) terms. Until recently this was primarily underpinned by productivity growth. The drivers of the gains in labour productivity were capital investment, more efficient production methods within firms and better allocation of resources across industries; not greater work 'intensity' or harsher working conditions. In this same period, the number of jobs in the economy increased from 6.9 million to 11.5 million — at a rate exceeding population growth — with participation rates rising significantly and unemployment rates falling.

Conceptually, productivity is simply a measure of the relationship between outputs and inputs, expressed in volume terms. At a national level, labour productivity can be computed as national output divided by the number of hours worked across the economy. This abstracts from what labour happens to have been paid. Rather, it depends on labour's skills and, more importantly, where and how well these are being put to use (and combined with capital) in enterprises and industries throughout the country.

There are essentially only two ways of increasing the per capita income of a society over time — by producing more per person or by getting higher world prices for what is produced. Over the past decade, Australia's failure to do the former has been more than made up for by the latter. Indeed, the decline in our productivity performance and the rise in our terms of trade have been almost equally unprecedented. But no country (not even a Lucky Country) can expect its terms of trade to rise forever. Their recent decline puts the spotlight back on productivity growth as the main conduit for higher incomes into the future. While the labour force participation rate is important, it is to productivity growth that we must primarily look if we are to meet the ongoing challenges of an ageing society (PC 2005). And it is to productivity growth that we must look if we are to succeed in making necessary fiscal repairs in the wake of the Global Financial Crisis, while addressing important social needs. As has been said, a government cannot redistribute what its economy does not produce. Productivity growth is fundamental to this.

#### Will it recover?

The end of the mining boom will in itself bring about part of the productivity improvement we need. As the Commission has shown in several detailed studies, Australia's productivity slide has had much to do with cyclical and structural forces that are temporary or reversible. Drought is perhaps the clearest example, by curtailing the output and thus productivity of the agricultural sector. It also affected the measured productivity of public utilities for which water is an 'output'. The mining boom has been a much stronger influence, with historically high export prices prompting the biggest investment surge in Australia's history. For reasons that are now well known, this simultaneously dragged down the productivity of capital and subtracted significantly from measured multifactor productivity growth.

Thus, as my colleague Dean Parham put it recently, the pronounced decline in productivity has had more to do with 'adjustment' than 'crisis' (Parham 2012). And a return to more 'normal' productivity growth is to be expected as the forces responsible abate. Meanwhile, during the terms of trade boom, Australia experienced almost the fastest growth in per capita incomes on record, notwithstanding the Global Financial Crisis.

The ability of productivity growth to stage a comeback has been illustrated by the sharp rebound for agriculture following the end of the drought. The end of the minerals export price bonanza should see productivity recover somewhat in that sector too, as new investment subsides and higher output associated with previously 'unrequited' input growth comes on stream. (A jump in economy-wide labour

productivity in the most recent quarterly data has been seized on by some, but the proverb 'one swallow does not a summer make' is apt when assessing productivity trends.)

While there is no cause for panic about Australia's productivity outlook, there is also little reason for complacency. Indeed, there are a number of grounds for caution or even concern:

- For a start, while we can attribute about one-half to two-thirds of the productivity decline in the last cycle to the 'usual suspects', it is less clear what is behind the rest particularly for the manufacturing sector, which was the single biggest contributor to the overall decline.
- Secondly, while the surge in capital inputs in mining is likely eventually to generate output broadly commensurate with the massive outlays, this is much less certain for public sector investments in the utilities sector, particularly those directed at security or 'quality' objectives in electricity and water.
- Thirdly, with the transmission of the mining boom to other parts of the economy
  and, most directly, to those industries supporting mining activities, some firms
  are likely to have tolerated cost increases and inefficiencies in the rush to capture
  higher prices (and profits). Their legacy may not easily be reversed as the boom
  subsides.
- Finally, there is as yet no firm basis for assessing the causes of the further marked deterioration in productivity performance since the end of the last cycle in 2007–08. Moreover, this period has seen a number of significant policy initiatives in areas such as infrastructure, labour markets and environmental regulation for which the productivity impacts are uncertain, but unlikely to be all positive.

#### A little improvement can make a big difference

So the jury is out on how much of a recovery in productivity we can look forward to. If the Inter-Generational Report's projections are indicative, however, we are living in a time of diminished expectations when it comes to productivity (as opposed to public spending). Between the first IGR in 2002 and the third a decade later, the projected rate of economy-wide labour productivity growth was lowered from 1.75 to 1.6 per cent (Treasury, 2010).

This is a projection, not a forecast, and merely reflects the fall in the preceding long term average. But its effects illustrate that small differences in productivity performance make for large cumulative differences in future prosperity. The 0.15 percentage point difference between the two projections translates to a reduction in

per capita GDP of nearly \$7000 (in today's dollars) by 2050. If in practice we only managed to achieve the pre-1990s average rate of growth of 1.4 per cent, GDP per capita would be reduced by a further \$8000. By contrast, if we could recapture and sustain the exceptional 2 per cent average growth of the 1990s — a target set by Prime Minister Rudd in 2010 — we would on average gain \$18 000 per capita, with GDP nearly 20 per cent greater than otherwise. That would clearly be a stretch, but the closer we can get to it the better off we stand to be, both economically and socially.

### The policy framework

While there is widespread agreement that a return to higher productivity growth is desirable, opinions differ considerably as to how governments can best facilitate this. Different interests and parties have focused on different things and been dismissive of others' prescriptions, sometimes with good cause. Almost any policy proposal having an economic dimension has tended to be portrayed as 'pro-productivity', whether that is the case or not. As a consequence, the public has become confused or bemused, making it difficult to build support for policies and reforms that really would make a difference.

In various studies and reports over the years, and notably in its submission to a parliamentary inquiry in 2009, the Commission has set out a framework that explains how policies can foster or hinder productivity growth, and provides a basis for assessing areas of priority (PC 2009a).

The essential insight underlying this policy framework is that productivity begins in workplaces. The 'headline' productivity numbers for our economy, or key sectors within it, represent nothing more than the accumulated productivity results achieved by individual enterprises and organisations. It follows that what matters for the productivity performance of individual organisations — whether in the private or public sectors, and whether operating for profit or not — is also what matters in formulating a 'productivity policy' agenda.

#### The two contributors to productivity

There are two crucial determinants of how much firms contribute to a country's productivity performance: one is 'innovation', the other is what economists call 'creative destruction'.

An organisation cannot raise its productivity without change — whether through doing new things or doing old things better. In this sense, productivity is virtually

synonymous with innovation. However, the innovation that counts is a much richer concept than the exogenous technological advances espoused in economics textbooks. While genuinely new technologies are important in extending the 'production possibility frontier' — particularly 'enabling' technologies like electricity or ICT that have multiple applications — whether and how well organisations apply technologies in practice is more important to a country's productivity (PC 2004a, 2007a). New or different management practices, work arrangements and supply—chain structures also contribute, as can improved delivery systems and customer relationships. Unfortunately, firm-level data on innovation leave much to be desired in seeking to trace this multi-faceted process.

The productivity of an industry or economy depends not just on the productivity levels of constituent firms or organisations but also on their respective market shares. Not all firms in an industry are equally productive. Productivity can be raised in aggregate simply by better performers displacing poorer performers. The decline and exit of the weakest performers is thus an important mechanism for delivering aggregate productivity growth. Indeed, international studies attribute between one-fifth and one-half of (labour) productivity growth to such changes in industry composition (Dolman and Gruen 2012). The process has been called 'creative destruction' because the demise of less successful firms enables the more 'creative' (innovative and productive) use of the released labour and capital in other firms or industries.

#### The three channels of government influence

Decisions that shape the productivity performance (and profitability) of enterprises are ultimately the responsibility of their managers. The quality of management is therefore clearly very important — not just in private enterprise (where market disciplines play a useful role) but also within the not-for-profit and government sectors. That said, managements' decisions, and the consequences of those decisions, are conditioned by governments — both through the myriad of 'rules' within which organisations must operate, and by governments' taxing and spending behaviours. Policies that encourage organisations to be cost-conscious and innovative, while not inhibiting better performers from prevailing over weaker ones, can legitimately be called 'pro-productivity'; those having the opposite effects are 'anti-productivity'.

Governments influence the productivity of firms and organisations through three main channels:

• *incentives* — the external pressures and disciplines on them to perform well

- *capabilities* the human resources and knowledge systems, the institutions and infrastructure, needed to devise productivity-enhancing changes and support them effectively
- *flexibility* the scope to make the necessary changes.

The Commission has characterised the 'incentives' channel as a 'driver' of productivity improvements, and the other two as 'enablers'. All three are strongly interactive. Together, they influence the motivation and the ability of organisations to make the changes needed to enhance productivity. The contribution of information technology to productivity growth illustrates this well. Both theory and evidence demonstrate that competition provides a powerful incentive for the development and uptake of IT. But new business models at the firm level, including changed work arrangements and skill sets, are needed to fully exploit the new technologies (PC 2004a).

Key implications of this framework are that policy needs and priorities could be expected to vary over time and there is unlikely ever to be a 'silver bullet'. A related implication is that productivity is unlikely to improve if policy advances in one channel are countermanded by backsliding in others. A 'pro-productivity' agenda needs to proceed on all three fronts. Policy consistency is also needed to convey the right signals for the managers and owners of enterprises to single-mindedly pursue productivity improvements and undertake the necessary (risky) innovations and investments. In more recent years, the signals have become blurred again, prompting a resurgence of rent-seeking behaviour from firms and industries under market pressure.

#### The Lists

All three channels of policy influence have been a focus for government initiatives over the years, commencing with the progressive liberalisation of international trade and capital flows from the 1980s.

But while governments have hardly been idle on the productivity front, there have also been important omissions and 'blind spots'. A number of these have been identified by the Commission as requiring action, and should continue to be on the list of things for governments to do.

#### 1. Incentive policies

As emphasised, productivity improvements generally necessitate changes within organisations and across industries. But change is never easy: it requires effort; it

can be disruptive, and is often resisted. There need to be good reasons for going to the trouble.

Competition provides such a reason, at least for firms operating in the private sector. In competitive markets, enterprises with relatively low productivity will generally be less profitable than others and will eventually face market sanctions. As Samuel Johnson famously put it in another context, the prospect of a hanging 'concentrates the mind'. Competition accordingly drives both innovation and 'creative destruction', the dual determinants of a country's overall productivity performance.

Actions that foster competitive markets — including for corporate control — must therefore be fundamental to a government's policy agenda to enhance productivity. Exposure to international competition is perhaps the most important area of all, as it obliges local enterprises to strive for world's best practice.

As noted, Australia has undergone successive rounds of reform directed at opening up industries to both domestic and foreign competition. These culminated in the National Competition Policy, which remains embedded in policy-making frameworks today. The benefits to the community have been substantial (PC 2005a). It is therefore of concern that progress has stalled or even reversed in some policy areas. The 'to do list' among Commission recommendations is still a fairly long one.

- Abolish remaining tariffs (PC 2000, 2008a, 2010a). Most industries now receive relatively low levels of tariff assistance, the result of incremental reforms over the past 25 or so years. But remaining tariffs still impose unnecessary costs on the community. They detract from Australia's productivity primarily by helping to prop up an industry's least productive firms. They also confuse the signals for all industries as to whether their futures lie in the pursuit of productivity or preferment.
- Limit provisions for anti-'dumping' action (PC 2009b). Selling goods abroad at prices below those at home is normal business practice in various circumstances and one adopted by many Australian firms. Imposing (often sizeable) penalty duties on such imports protects less competitive firms at the expense not only of consumers, but also other local user industries (as the auto assemblers are finding right now in relation to their steel inputs). The rules allowing such 'administered protection' should be tightened in the true spirit of the WTO accord, not made more permissive.
- Terminate selective industry subsidies that cannot deliver demonstrable net social benefits (PC 2008a, 2009c). Unless they rectify a (legitimate) market failure, industry subsidies merely serve to sustain the market performance of less

productive and competitive firms or activities, lowering Australia's productivity in the process. Such programs, totalling nearly \$9 billion annually from Australian taxpayers (PC 2012e), should be terminated if they cannot be demonstrated to yield a net payoff to the community. (Taxpayer support for private sector businesses cannot even loosely be characterised as 'co-investment' unless this test is satisfied.) In particular:

- subsidies to support 'innovation', including 'green technologies', in specific industries (such as the assistance programs for the Automotive and Renewable Energy industries) which currently amount to over \$3 billion, need to be able to deliver socially valuable spillovers over and above those attainable through generic support (such as the R & D Tax Concession);
- adjustment assistance should facilitate change and be directed primarily at enhancing the skills and mobility of workers, rather than supporting firms under competitive pressure (PC 2001, 2012e).
- Extend reforms to drought support (PC 2009d) so as to move from open-ended assistance for farmers facing hardship, to arrangements with common criteria and duration provisions.
- Phase out public sector procurement preferences (PC 2008a). Favouring local suppliers on grounds other than price and quality inflates budgetary costs, detracts from government service performance (including Australia's defence capability) and, once again, undermines productivity by enabling less productive firms to retain market share and hold onto scarce resources.
- Conduct a second, more focussed round of NCP reviews (PC 2005a, 2011i) Reviews need to target the more significant restrictions on competition that avoided, or were not adequately subjected to, rigorous and independent scrutiny in the first round of NCP legislative reviews, or where the economic environment has significantly changed. Priorities include:
  - pharmacy ownership restrictions, which add to healthcare costs for little apparent benefit
  - taxi licence quotas, which raise transport costs and make it harder to reduce urban congestion, without demonstrably enhancing either safety or quality
  - coastal shipping protection, which has recently been strengthened raising costs to user industries and weakening inter-modal competition without being subjected to a public interest test
  - the ban on parallel book imports, which, although recently retained, would benefit from a further review in light of ongoing market and technological developments

 unduly restrictive licensing and self-regulation of certain professional services, including within the medical and legal fraternities.

#### 2. Capability policies

How well organisations respond to challenges and opportunities in their operating environments comes down to the capability of their people and the systems that support them. Organisations need managers who can effectively seek out and develop better ways of doing things, and employees with the skills necessary to adapt. Investment in human capital development is thus fundamental to innovation and the related productivity improvements within enterprises. But complementary investments in the systems that support firm-level innovation are also important, as are the infrastructure services on which most firms depend.

#### A 'human capital' list

Much human capital is inherent in the aptitudes and life experiences of people. But the demands of the 'information age' increasingly require higher level skills that are best acquired through formal education and training. Such skills are of two kinds: specific and generic. Both are important, but the innovation and adaptation that underpin productivity growth are placing increasing demands on the more general analytical, discovery and communication skills. These are grounded in the literacy and numeracy acquired progressively at school and developed through higher education

The related policy challenges are many, and they vary across the different components of the education system. Ensuring quality teaching is fundamental in all areas, but has been a neglected area of education policy. Indeed certain policies have undermined it. Recent attempts under COAG to rectify the situation, and enhance the performance of education and training systems generally, have resulted in a proliferation of programs, not all of which have been evidence-based.

- Re-focus early education programs on disadvantaged children (PC 2011b). It is these children who most need institutional support and for whom empirical studies show the biggest gains from participation in pre-school.
- *Make greater use of salary differentials* to attract and retain quality teachers in disciplines where there are persistent shortages (maths, science, IT) and in disadvantaged and remote areas (PC 2012a).
- Devolve and enhance performance appraisal for teachers, with principals having the authority to hire the best teachers and fire the worst ones (PC 2012a).

- *Modify industrial relations arrangements* for schools and VET colleges to allow greater variation in remuneration and conditions, more flexibility in hiring to meet skill needs and more effective management of under-performance (PC 2011e, 2012a).
- Raise required 'threshold scores' for school teachers and qualifications required for VET practitioners (PC 2012a).
- Strengthen independent validation and auditing of service providers to ensure they deliver to the standards needed for proper skill acquisition and advancement (PC 2011b, c).

#### A list to enhance the 'Innovation System'

The innovations that shape the productivity potential of organisations can stem from 'internal learnings' specific to a firm, but commonly involve the absorption and application of knowledge generated externally. The institutions and forces responsible for creating and transmitting knowledge are therefore important for a country's productivity performance. These include the regulatory regimes for trade and foreign investment as conduits for access to the much larger stock of knowledge generated overseas.

Because knowledge is hard to contain within an organisation, 'the market' will tend to under-provide it, leaving space for government to play a potentially valuable role. Over the years, governments have provided extensive and diverse support for the various components of Australia's 'innovation system' — academic and public research institutions, intellectual property laws, financial assistance for private R&D, promotion of linkages between firms and research bodies, etc. Indeed, innovation policy has seen considerable innovation itself, which has yielded some useful lessons to enhance policy effectiveness.

The ongoing challenge is to allocate support in ways that are likely to yield a net payoff to the community. It has proven particularly hard to design business support so as to generate additional R&D and associated spillovers that are worth more to society than a program's full costs. The way the tax concession has evolved has generally been consistent with this need. However, it and other programs face incessant pressure for design changes that will make them more 'generous', reinforcing the need for evidence-based policy.

• Conduct rigorous evaluations of all government innovation programs to verify that they are achieving 'additionality' and are cost effective (PC 2007a).

- Focus government support on basic and strategic research, where market failures are potentially greatest, rather than commercialisation activities, which are more likely to be privately profitable (IC 1995, PC 2003, 2007a).
- Facilitate greater cooperative research between businesses and public/academic institutions, but adopt more 'nimble' mechanisms (PC 2007a).
- Lower the rate of public funding for Rural Research and Development Corporations, as the above-average component yields little additional benefit. The savings should be reallocated to a new body that can sponsor more broadly relevant research for the sector (PC 2011d).

## An infrastructure list

The timely and efficient provision of infrastructure services is crucial to firm performance. Transport and communications provide platforms for production and innovation in both the private and public sectors. The costs and quality of these infrastructural services, as well as of energy and water, bear strongly on many firms' international competitiveness. For this reason, the reductions in import barriers from the mid-1980s soon prompted a focus on infrastructure reforms, particularly for inefficient public utility monopolies.

The infrastructure reform task has involved a range of initiatives to enhance the performance of public enterprises and improve regulatory frameworks. These are still evolving today. Among Commission recommendations that remain crucial to future productivity improvements are the following:

- Further reform the governance of public utilities to clarify the primacy of efficiency objectives, and avoid political interference in managerial decisions (PC 2005a, 2008e). While the corporatisation of public utilities brought initial productivity gains, the evidence is increasingly clear that public ownership of infrastructure can undermine the potential for ongoing improvements, including in the vital electricity sector (PC 2012b).
- Undertake transparent cost-benefit analysis of all options prior to any major public infrastructure investment (PC 2008e, f) and when determining quality or environmental standards (PC 2012b). Public investments are otherwise prone to 'optimism bias' and a confusion between political and economic ends. Poor infrastructure decisions have a high opportunity cost and can be a long-term drag on the economy's productivity.
- Extend the use of cost-reflective pricing, including to manage peak demands (electricity) or supply disruptions (water) (PC 2011e, 2012b). Political aversion

to price rises, even where needed to balance supply and demand, can suppress or distort investment and may result in higher prices in the long term.

- Ensure that price-regulation regimes do not inhibit efficient investment and that they enable price differentiation where this can recover costs with less impact on demand (PC 2012b).
- Specifically for *land transport* (PC 2007b), introduce institutional reforms for roads to connect revenue with spending decisions, while progressively moving to location-based road pricing, particularly for freight.
- Specifically for *water utilities* (PC 2011e), align procurement, pricing and regulatory arrangements with an overarching efficiency objective.
- Specifically for *electricity* (PC 2012b), phase out retail price regulation, introduce smart meters, bolster the regulator and modify the regulatory regime to increase consumer orientation and to avoid inefficient investment.

#### A government services list

As for public utilities, the efficiency of government administrative and human services can have direct (within the public sector) and indirect impacts on Australia's productivity. Government spending on human services amounts to some \$170 billion a year, equivalent to nearly 13 per cent of GDP. Health services alone account for nearly 40 per cent of this and are growing rapidly in response to the demands of an older and more affluent population (PC 2005b).

Even small productivity improvements in the government sector would have a substantial cumulative impact. For example, a 5 per cent gain in the health sector would free up some \$4 billion (PC 2006a). That scope clearly exists for gains is illustrated by differences in the performance of human services across states and territories, as revealed in benchmarking data (SCRGSP 2012).

- All major human service programs should be periodically reviewed to ensure that they are well-targeted and cost-effectively delivered, including identifying scope for design changes that would enhance consumer choice and contestability in provision (PC 2006a).
- In the case of aged care, after the current suite of reforms is implemented, move progressively to lift caps on place numbers for care and direct funding through individuals rather than providers, and revise asset tests (PC 2011f).
- In the case of the systemic reforms needed to *support people suffering significant disability*, progress the trials and resolve crucial funding issues to ensure a system that is fair and sustainable (PC 2011g).

• For the *health workforce*, enable services to be provided by those professionals who can most cost-effectively do so to required standards (PC 2005c).

#### 3. Flexibility policies

How well organisations respond to incentives to raise productivity depends not only on the capability of their people and support systems but also on the scope for them to make the changes needed to realise an organisation's productive potential. The key policy issues in this area are regulatory, with a myriad of regulations shaping the behaviour of firms and other organisations in all parts of the economy.

While most of these regulations have worthy objectives — whether economic, social or environmental — many are formulated without sufficient regard for collateral damage on productivity and whether objectives could be met in more cost-effective ways.

Regulations that affect flexibility are essentially of three kinds: those that define what enterprises can (or can't) do; those that prescribe how they must go about their business, and those that otherwise raise the costs of making changes. They can have effects on productivity by constraining and conditioning adjustments not only within firms but also across industries and regions. While there have been reforms in numerous areas, including under COAG's Seamless National Economy work streams, many impediments remain. Reflecting this, of the nearly 1000 enterprises responding to an ACCI national survey earlier this year, one-half indicated that regulatory provisions had 'prevented them making changes needed to expand their businesses' (ACCI 2012).

This underlines the ongoing challenge of embedding a proper accounting of costs and benefits into regulation-making practices, including consideration of alternative options. The Commission's current review of Regulatory Impact Assessment processes has confirmed deficiencies at Commonwealth and State levels. Some 20 broad 'leading practices' have been identified which, in themselves, constitute an important 'to do list' for all jurisdictions (PC 2012g). It is also important to monitor and review existing regulations that affect businesses to ensure that these remain 'fit for purpose' and avoid unintended consequences.

- Requirements for review of regulations should be specified when they are being made and embedded in legislation in cases where there are significant uncertainties about the impacts (PC 2011a).
- Review processes for key regulations should be conducted at arms-length from policy departments and include a public draft report (PC 2011a).

#### Workplace regulation

Industrial relations regulations are among the most pervasive of all in their coverage of organisations and their influence on work arrangements. Whether they are also among the most important to get right from a productivity perspective is hotly contested.

It was more widely accepted in the 1980s when the opening of Australia's economy to international competition (and, thus, best practice productivity levels) exposed the true cost of rigidities embedded in labour laws and work practices that had evolved through the era of so-called 'protection all round'. Since the move to enterprise bargaining under the Hawke-Keating Governments, the industrial landscape has become more accommodating of diversity and change among firms and across regions. This not only contributed to the 1990s productivity surge, but also to the comparative resilience of employment in subsequent downturns (notably the GFC) and the avoidance of a generalised 'wage breakout' during the mining boom (PC 2012h, Lowe 2012).

It has to be said, however, that most of the labour market reforms from the 1980s to the early 2000s were essentially 'no brainers' — redressing obvious anti-productivity features of a highly centralised, prescriptive and adversarial system. While the changes faced political obstacles, there was widespread recognition of the need for reform. This changed with the reforms under 'Work Choices', the justifications for which were neither adequately explained nor widely understood by the public. Industrial relations policy has been a 'war zone' ever since, with reasoned public discussion about fairness/productivity trade-offs the biggest casualty. It would therefore be astonishing if those trade-offs had been properly accounted for.

The Productivity Commission has not been required to provide advice about this, so there is no formal list of recommendations from which I can confidently draw. However, the Commission's reviews into the 'education work force' (PC 2011b, c, 2012a), the retail industry (PC 2011h) and electricity (PC 2012b) have brought to light several features of current arrangements that appear problematic at a sectoral level.

Recently, I found myself being condemned by union leaders for suggesting that such regulations should be treated no differently to other areas of social regulation that have potentially adverse economic impacts; namely that their proponents should be required to demonstrate that there are public interest benefits that exceed the economic costs, and that such benefits to society could not be achieved in more cost-effective ways (Banks 2012). This is not saying that regulation should never

favour fairness over productivity in the workplace, only that the justification for this needs to be transparently tested. The very hostility provoked by what should be an unexceptionable proposal may be confirmation of the desirability of adding it to the list.

#### Other regulatory restraints on the list

Various other areas of regulation may also inhibit the flexibility that firms and workers need to raise productivity and respond to market pressures. There are regulations that are excessively prescriptive or costly to comply with, as well as some that are simply not justified in policy terms. Many have been addressed in Commission reports over the years, but there is still some way to go in implementing identified remedies. Among the more significant ones that remain relevant are the following:

- Native vegetation regulations are costly and can have perverse impacts. While
  improvements have been made in some jurisdictions, responsibility needs to be
  devolved, with landholders addressing local impacts and the wider community
  subsidising the extra costs of landholders providing public goods (PC 2004b).
- *Heritage regulations* can impose undue costs on certain people and stymie socially valuable developments. They should be restructured to enable up front accounting for the costs as well as benefits of controls (PC 2006b).
- Renewable energy targets are costly and can be counterproductive in seeking to reduce carbon emissions. They should be phased out under carbon pricing or other market-based policies (PC 2008b).
- Development approval processes are complex, duplicative and cause unwarranted delays with high opportunity costs for major projects (PC 2011i).
- *Planning and zoning controls* should meet amenity and other objectives without unduly restricting retail competition (PC 2008b, 2011i).
- *Stamp duties* on conveyancing inhibit housing turnover, contributing to reduced affordability and lower labour mobility (PC 2004c).
- Occupational licencing can inhibit workforce mobility, create barriers to entry and raise business costs. There are potential gains from extending the coverage of reforms (PC 2012c).
- *Rural water*, where ongoing state-based restrictions on trading in the Murray Darling Basin mean that water is still not flowing to its most highly valued uses (PC 2010c).

- *Waste management* programs often have costly targets and collection methods. Policy needs to be refocussed on achieving net social benefits, underpinned by cost-benefit analysis (PC 2006c).
- *Chemicals regulations* are unduly fragmented, lack effectiveness in key areas and impose excessive costs on industry. Governance failures need to be addressed at four levels (PC 2008d).
- *Mutual recognition* is not realising its potential to lower costs for interjurisdictional activities and transactions. The regime needs to be strengthened and exemptions removed (PC 2009e).

#### A cross-cutting issue: taxation

Taxation has a ubiquitous influence on productivity through all three channels of incentives, capabilities and flexibility. It affects the allocation and efficiency of resource use. It also affects the incentives for work and entrepreneurship (PC 1995, 2005b).

Notwithstanding various reforms over the years, it is generally accepted that the tax systems of the Commonwealth and States still comprise too many taxes and rely too heavily on the more distortionary ones. Taxes also differ across jurisdictions in ways that needlessly complicate and raise the costs of doing business. Better tax systems — fewer, less distorting taxes with broader bases and lower rates — would enhance labour force participation as well as industry productivity. It was estimated that the 'Henry Review's' list of tax reforms could raise Australia's GDP by 2-3 per cent (Henry et. al. 2010). Making better use of the GST, by broadening its coverage and raising its rate as in a number of other OECD countries (including New Zealand), would likely deliver additional gains.

## What are the priorities?

It would seem that there is indeed a 'long list of things to do' — even based just on those areas where the Commission has been asked to report. (A comprehensive list would be longer.) The range of recommendations can be summarised as governments needing to (a) spend better and (b) regulate better. Expressed like this, the task at hand sounds pretty straightforward. The evidence has been assembled. The gains are waiting to be tapped. Why have these productivity-enhancing reforms not been done?

When making the remarks cited at the start of this paper, Governor Stevens went on to observe that the things on the Commission's list were not 'popular' and had proven difficult for governments. Most of them involve arrangements that currently provide significant advantages to particular groups, who naturally take more interest in resisting reform than the wider electorate takes in supporting it. The fact that the Commission was directed to such policy areas in the first place reflects this political difficulty, and a perceived need not only to have an independent assessment of what to do, but also to alert the community to the gains and thereby help to generate more support for necessary reforms.

The items that remain on the Commission's 'to do list' are generally those for which this has proven most difficult — the hardest political nuts to crack. Achieving enduring reform in such areas to date has required the concerted support and skilful advocacy of political leaders at both Commonwealth and State levels, and across the political divide (Banks 2010b). But the political capital and bureaucratic resources needed to advance 'unpopular' reforms are not in unlimited supply. They must be harnessed to focus on priorities and sequencing that are manageable and can yield the highest payoffs over time (PC 2011a, 2012f).

So, where should today's priorities lie? How can governments best advance Australia's productivity performance by spending and regulating 'better'?

For a start, spending *more* no longer represents the line of least resistance in promoting productivity. Indeed, the importance of making room for increased expenditure on key human service reforms, and notably disability support (PC 2011g), increases the need to spend *less* in other areas. The list under the 'incentives' heading provides several 'win-win' options (reforms that would lower budgetary outlays while lifting productivity).

In the regulatory area, the structural pressures of the 'multi-speed' economy have lent particular importance to the need to enhance flexibility and adaptability within enterprises and across industries and regions. This will remain the case as our economy changes gears again during the post-boom phase. It suggests that items on the 'flexibility' list should for the present generally take precedence over those on the 'capability' list, reversing recent emphasis.

As noted, taxation reform would simultaneously address both spending and regulatory dimensions. However, taxation involves complex interactions and there is scope for unintended consequences if reforms are not handled in an integrated way, as envisaged in the Henry Report.

#### The bottom line

I am conscious that this list of priorities may look too encompassing or complicated for those seeking quick fixes or simple solutions — or those who sometimes ask at events such as this 'What is the single most important reform to improve Australia's productivity performance?'. My usual response to that question, and the burden of my presentation today, is that there *is* no single thing that can do the job. Indeed, a policy approach based on such a presumption would be destined for failure.

Rather, what is needed is an approach to 'productivity policy' that embraces both the drivers and enablers of firm performance, and is consistently applied. That in turn requires policy-making processes that can achieve clarity about problems, reach agreed objectives and ensure the proper testing of proposed solutions (including on the 'detail' and with those most affected). The beneficial and enduring structural reforms of the 1980s and 1990s are testimony to the value of these policy-making fundamentals. Good process in policy formulation is accordingly the most important thing of all on the 'to do list', if we are serious about securing Australia's future productivity and the prosperity that depends on it.

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# Advancing Australia's 'human capital agenda'\*

#### Introduction

It is a privilege to have been invited to give the fourth Lecture in this annual series in honour of Ian Little.

Ian was a passionate advocate for good public policy and for reform — within his own state and nationally. This was grounded in an equally strong attachment to good analysis and evidence in support of policy decisions. As Secretary of the Victorian Treasury, he championed the use of quantitative analysis, including the development of an input/output based model of the Victorian economy, to gain a better understanding of the effects of policy changes on different industries and on the State's overall economic performance.

It was under his and John Brumby's stewardship of the Treasury portfolio that the Victorian Competition and Efficiency Commission was established, to provide rigorous arms-length analysis and advice on key policy issues affecting the welfare of Victorians (akin to the role of the Productivity Commission at the national level).

Victoria's more systematic attention to good analysis and policy innovation commenced in the 1990s. It has yielded considerable benefits for Victoria's citizens since then, not only in the comparative economic performance of this State, but also in its achievements in the social and environmental domains.

Victoria was a first mover in the 'second wave' of economic reforms in the 90s — reforms that culminated in the National Competition Policy (or NCP). And Victoria was the first jurisdiction to recognise the need to pursue a 'third wave' of reform, one that would not only address the unfinished business of the NCP, but would also encompass reforms and policies in human services, to ensure that this State and this country could get the best out of its most important resource — its people — or, to use the economic jargon, to 'develop its human capital'.

As you know, the Victorian Government pushed for a new National Reform Agenda (NRA) to this end back in 2005. As Ken Henry reminded us in his 2008 Lecture,

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<sup>\*</sup> The fourth Ian Little Lecture, Melbourne, 13 April 2010.

Ian Little was instrumental in this, in close collaboration with Terry Moran and Victoria's political leaders.

Victoria bolstered its case for a national reform agenda focussed on 'human capital' by modelling the potential economic benefits on offer. Facing some resistance at Commonwealth level, it supported an equivalent COAG-sponsored assessment by the Productivity Commission, to affirm that its (large) projected numbers were neither fanciful nor based merely on fiscal self-interest.

In May 2006, shortly before his death, Ian was the dinner guest speaker at a Commission executive 'retreat'. I recall clearly that he urged us to be ambitious in grappling with this complex modelling task and its many unknowns — because he felt keenly the importance of such analysis to the degree of ambition that would ultimately be embodied in the reform agenda itself.

Sadly, Ian was not to see the culmination of this and other work in the final COAG reform program that took concrete shape from early 2008. Nevertheless, that program remains partly his legacy, and something for which Victorians and indeed Australians should feel a debt of gratitude.

My topic for this Lecture was therefore a natural choice, focussed as it is on advancing key strands of the new reform agenda that Ian held dear. It also returns me to the theme of a speech I gave here in Melbourne to the Victorian branch of the Economic Society in September 1998, shortly after I was appointed Chairman of the Productivity Commission. Further, it seems a good time to take stock of developments, given that much has taken place in a short time, and in light of the budgetary constraints now facing further reform in the wake of the global financial crisis.

## What is 'human capital' and why is it important?

When preparing that presentation to the Economic Society in Victoria over a decade ago, I was conscious that while 'human capital' may have been part of the economist's vocabulary (at least since Becker), it was not part of anyone else's. That has changed. Although 'every pet shop galah' may not be calling it out (to borrow Paul Keating's evocative phrase from an earlier reform era), the term has clearly entered the political lexicon and even the public debate.

At its core, the concept itself is actually a pretty simple one, relating to the bundle of attributes that determine how productive people are in their workplaces and in society. Some of these are innate and some acquired, with the former (aptitudes) influencing the latter.

The accumulation of human capital, like physical capital, requires investment of both resources and time, to add to the existing stock and fend off depreciation. It occurs from an early age and continues over a lifetime. Some of it happens naturally as a consequence of everyday experience and observation. But key drivers are structured or institutionalised environments for formal learning — 'education and training' — and maintaining wellbeing — the health system. These have naturally become major concerns of public policy and of the COAG agenda directed at human capital. That said, and notwithstanding that they involve a degree of interdependence, this lecture will concentrate on the education side of human capital development rather than health. (Health reform would require another speech altogether!)

A key distinction can be drawn between the role of education in giving people the ability to do particular things — involving specific skills or technical competencies — and its role in conferring analytical, discovery and communication skills of a more generic (or enabling) kind. These include what are known as the 'foundation skills' of literacy and numeracy, which have very wide application.

Both categories of skill — the specific and generic — are clearly important to the productivity of people, but in a rapidly changing world, demanding periodic adjustment and adaptation, the latter arguably have the more fundamental and enduring contribution to make.

The significance of the foundation skills of functional literacy and numeracy, relative to educational attainment *per se*, has been explored in Productivity Commission research which is to be released shortly. Based on recent survey data, this analysis confirms empirically that most literacy and numeracy skills are acquired through primary and secondary education. In terms of the impact on workforce participation and peoples' wages (the latter being a rough proxy for their workplace productivity) an increase in foundation skills is estimated to have as big an effect as (other) educational attainment. For example, other things equal, the incremental effect on the participation of women from attaining 'level 3' literacy and numeracy (relative to level 1) was estimated to be comparable to that from acquiring a tertiary degree (relative to Year 12). And there were also found to be relatively large estimated differential impacts on wages (Shomos, forthcoming).

Such modelling inevitably has limitations, but the broad finding as to the importance of foundation skills for labour market outcomes appears robust, and has significant policy implications.

Higher levels of human capital, whether measured directly by skills or indirectly by educational attainment, have been found to be strongly associated with higher levels of productivity and workforce participation in a variety of empirical studies,

including some looking specifically at Australia (for example, Chiswick *et al*, 2003 and Kennedy and Hedly, 2003). These include other recent studies by Productivity Commission researchers (Forbes, *et al*, 2010, Laplagne, *et al*, 2007).

Moreover, human capital in its multiple dimensions drives both the creation and application of knowledge, which are at the centre of the process of economic growth, as Paul Romer's seminal work clarified in the early 1990s. Much cited in support of this is Steve Dowrick's meta-analysis of existing empirical studies internationally, suggesting that an additional year's education can yield an increase in a country's GDP of 0.2 percentage points above trend. Over four decades, this would amount to GDP being 8 per cent greater than otherwise (Dowrick 2004).

Another commonly cited analyst in this field, Eric Hanushek from Stanford, finds an even bigger payoff from *quality* improvements in education, as measured by a student's cognitive skills. For example, Hanushek and Woessman's international comparisons of student performance and economic growth find that 'one standard deviation in test scores ... is associated with a two percentage points higher average annual growth rate in GDP per capita across 40 years' (2009, p. 9).

Before going on to explore some of the policy implications, however, it may be worth a quick reality check. 'Human capital', while important, is not *all* that is needed for a successful economy. Throughout much of the post-war period, Australia's productivity performance and income growth were poor compared to other OECD countries, despite our relatively highly educated workforce. Equally, the surge in our productivity growth from the early 1990s — and the rise in per capita incomes that accompanied it — cannot be explained by any sudden improvement in skill levels. Taking into account skills gained through education and work experience, the growth in skills was faster in the 1980s (when productivity growth was slow) than during the 1990s productivity surge (Barnes and Kennard 2002).

As is now generally recognised, the transformation in Australia's economic performance can be attributed mainly to preceding waves of microeconomic reform that removed institutional and policy-related impediments to our economic performance, including the progressive loosening of regulatory constraints on how labour is allocated and used in workplaces. Tackling those anti-competitive arrangements and other rigidities was necessary to realise the potential of Australia's workforce — its human capital — to contribute to more rapid productivity growth, and to Australia significantly reducing the income gap with the rest of the industrialised world.

While this process has been very important, and is not yet over, it is obvious that our future economic progress cannot depend on 'catch-up' alone. As Australia gets

closer to the frontiers of economic performance, our progress will depend more and more on our capacity as a society to invent, innovate and adapt. But it is important to remember that our success in innovation and adaptation will depend both on the skills and attitudes of our people, and on how well they are utilized in enterprises of all kinds throughout the country. In short, the functioning of labour markets and the flexibility of workplaces are as important to the effective contribution of human capital to Australia's economic performance as are our education and training systems.

Further motivation for giving more attention to human capital development is the looming challenge of population ageing. Consequently lower participation rates and higher dependency ratios would see per capita income growth decelerate at the same time as per capita spending on government services accelerates. This does not mean that policies that could cost-effectively promote productivity and participation, including through human capital development, should not have been pursued *earlier* — simply that the opportunity cost of not doing so has increased.

## **How is Australia performing?**

Well, how have we been doing? The short answer to that is 'not bad, but we need to do much better.'

To begin with, we have seen a significant rise in educational attainment in Australia over the past few decades, including Year 12 completions and participation in tertiary study, which is a good thing. However, most of the gains in Year 12 completions occurred in the decade from 1983 — there has been little or no real progress since then.

Also, there are still over 20 per cent of 20-24 year olds in Australia who are not fully engaged in either education and training or employment — and this proportion has not improved much over the past decade, despite historically low unemployment.

In terms of the *quality* of education, as measured by standardised international tests of foundation skills at different ages, the bottom line is that while Australia does well on average, it does less well than other countries for students from lower socioeconomic backgrounds. Moreover, for all students, we seem to have been falling behind in some key areas. Let me elaborate.

#### A mixed international report card

In the most recent data (for 2006) Australian students rated significantly above the average scores for OECD countries in the highly regarded PISA tests (Programme for International Student Assessment). Accounting for the dispersion of results around the mean, we find that across all three areas tested (reading, maths and scientific 'literacy') higher proportions of Australian 15 year olds were in the *top* levels, and smaller proportions in the *bottom* levels, than the OECD average. While this is encouraging, our performance was exceeded by up to eight other countries in these tests and, in every case, we came in well below the top performer.

It is also worth noting that we don't do as well in a separate international test that focuses on maths and science (Trends in International Mathematics and Science Study [TIMMS]) — especially in relation to the proportion of students who do not attain the defined 'low benchmark' (where we are at the median).

When it comes to how well children from lower SES groups do, we slip further down the rankings. The educational attainment and occupational status of parents explain a significant part of the variance in our results — less than the OECD average, but a lot more than for the top performing countries (and New Zealand). This is most clearly illustrated in a 2003 comparison with Finland (the top performer) which shows the 'performance gradient' in relation to social advantage to be significantly steeper in Australia.

As Peter Dawkins from Victoria's Department of Education and Early Childhood Development has noted, 'Australia's high SES students on average achieve outstandingly good outcomes by international standards, whereas the outcomes are comparatively mediocre for low SES students' (Dawkins 2010).

#### Going backwards in 'foundation skills'?

Cause for further concern is evidence suggesting that Australia's comparative educational performance is not improving; indeed that it is *declining* for the foundation skills of literacy and maths. This can be seen from summary information in the COAG Reform Council's first report on the National Education Agreement last year. This shows, for example, that the mean score for reading literacy declined from 528 to 513 between 2000 and 2006, with the number of countries that were 'significantly better' than us rising from one to five. The mean decline was found to have occurred through a sharp drop (from 18 to 11 per cent) in the proportion of students attaining the highest level of proficiency, without any compensating rise at the lowest levels.

The decline in Australia's comparative international performance appears not to be just a consequence of some other countries doing better, but also of Australia doing worse. Andrew Leigh and Chris Ryan (2009), in an innovative but careful study for the Australian Government using available longitudinal data, find a statistically significant fall in both numeracy and literacy over extended periods. They conclude from their research that 'the numeracy of the typical young teenage student in 2003 was approximately a quarter of a grade level behind his or her counterpart in 1964' (p. 7). They observe that, as this decline occurred over a period in which real expenditure per student rose substantially — through smaller class sizes and higher teacher:student ratios — school productivity probably fell during that time.

## **COAG's Human Capital Reform Agenda**

These emergent data on trends and comparative performance have clearly justified a central place for education and training in the human capital reform agenda. This was first agreed to by heads of governments in February 2006, alongside a health stream directed at chronic disease prevention/alleviation and a 'work incentives' stream.

Within the education stream (or Productivity Agenda, as it is somewhat misleadingly called), there are four targeted areas across the life cycle, with a particular emphasis on building good educational foundations early on, and addressing disadvantage.

## The Commission projected significant (qualified) benefits

In responding to COAG's request for it to estimate what the benefits might be from (unspecified) reforms in these areas, the Commission confirmed the potential, in principle, for benefits to flow from better outcomes. We applied an analytical framework which involved: identifying 'best practice', using inter-jurisdictional comparisons; assessing what was potentially achievable in reality; and, finally, what the impact on productivity and participation might be from attaining those goals, and when.

None of these steps was straightforward, with the last one being the most experimental and requiring most judgement. This was generally exercised by erring on the ambitious or aspirational side. (Ian Little would no doubt have approved!)

Overall, the education stream was projected to have the potential to raise workforce participation by up to 0.7 percentage points and productivity by 1.2 per cent — significant gains — with the largest potential gains coming from achieving better

transitions from school and improved adult skill acquisition. (Estimated gains from initiatives in relation to early childhood and literacy and numeracy were casualties of the required time frame of the analysis. Benefits were estimated to 2030, when children today will only just be settling into the labour market.) All this was in turn estimated to increase GDP by up to 2.4 per cent compared to 'business as usual' — or by some \$24bn (in 2006 dollars).

An important caveat, ignored of course in press commentary, was that these benefits did not allow for the costs that would have to be incurred in order to achieve them. That is, they are *gross* benefits and not the result of any cost–benefit analysis. The estimates are thus more indicative of potential impacts on productivity and participation than on value added.

#### What social rate of return?

Since then, a suite of programs has been devised to pursue these gains, totalling outlays of some \$6–8 billion over the next five years. (This of course excludes, and is dwarfed by, the \$16 billion or so being spent on school buildings as part of the recent job stimulation package.) If maintained, this additional spending equates to around a 2 per cent boost in Australia's educational investment. As such, it would be a pretty good investment indeed if it generated returns equivalent to over 2 per cent of GDP.

In reality, the extent to which this can be achieved will depend on the effectiveness of the specific programs adopted and how well they are implemented. This remains to be assessed. Moreover, the expenditure on school buildings may limit the scope for renewing the National Partnership outlays and cramp other education spending.

These represent important reasons for prioritising and allocating funds where the net payoff can be shown to be highest. Even in these fiscally straitened circumstances, human capital investments that can be shown to have high benefit:cost ratios should be allowed to proceed.

#### The fundamental drivers: teachers and governance

With this in mind, I would like to comment briefly on two, related, areas that I believe deserve special attention among the various programs on offer in advancing the human capital agenda. These relate to the quality of teachers and teaching, and the governance and regulatory arrangements that influence how effectively the education profession can be utilised 'at the coalface'. Good teaching and sound governance should not be seen merely as items on a list of reform areas, but as pre-conditions for attaining many of the goals of the reform program itself,

including improved foundation skills, higher school retention and more balanced socio-economic outcomes.

## Restoring quality teaching

No part of an education system is more vital than its teachers. This intuitive truth is reflected I'm sure in the personal experiences of most of us. It has also been amply affirmed in a variety of research studies over the years. Little of this research has been done in Australia, however, where the performance of teachers appears not to have been a priority of education policy. If anything, attention to it seems to have been weakened over the years (at least until recently).

A good teacher will not only effectively impart requisite knowledge to students, but also enliven their interest in the subject matter and in learning itself, yielding lifelong benefits both to them and to society at large. Good teaching is especially important for students who derive little educational motivation or support at home. Those children can be found across the spectrum of society, but are more prevalent in areas of socio-economic disadvantage, especially Indigenous children and the children of those migrants who have limited formal education or facility in the English language.

It follows that teachers can also provide important early role models for children who lack other examples. In later years, they can help elevate the aspirations of their students and help them shape their career goals and choices, based on a good understanding of their abilities.

Given the crucial importance of teachers to human capital development — and the challenges facing our country to do better — there are disturbing signs that all is not well within the 'education workforce'.

In another important recent study, Leigh and Ryan (2008) found that the literacy and numeracy abilities of new teachers declined significantly, on average, in Australia between 1983 and 2003 — with this being particularly pronounced for women.

There is also evidence of significant shortages of teachers of the 'harder' subjects (maths, science) with one study indicating that of those teaching the reduced number of these courses on offer these days, up to one-half lack necessary training. More broadly, some 40 per cent of teachers in Australia's government schools are currently teaching courses for which they have had no formal training. (I think this puts the mediocre TIMMS results in perspective, as well as lending support to

claims from universities that courses at senior levels of secondary school have been 'dumbed down'.)

Added to this is a more general shortage of teachers in country and remote areas, which no doubt has contributed to the lower educational performance on average of their schools, relative to peers in urban communities.

Further, as you will no doubt be aware, there has been a flight of males from the profession. This has been particularly marked in primary schools — and arguably has made it harder to motivate many young boys and keep them engaged in school life, especially those most in need of good male role models.

Looking forward, the education workforce at all levels will be relatively hard hit by population ageing. For example, around one-half of secondary school teachers and 60 per cent of VET teachers are aged over 45. (This might be okay if the exit age were closer to 60 than 50. Unfortunately, it appears from HILDA data that the largest exodus of teachers from the profession actually occurs between the ages of 45 and 50). It follows from the research cited earlier that the age cohorts now leaving teaching are also the more highly 'academic' ones, who entered the profession in the 1970s and 80s.

In addition to all this, there is the looming challenge of upgrading an early childhood workforce to perform more 'instructional' roles under COAG's human capital agenda.

It is therefore of great importance that 'improving the quality of teaching and leadership in Australian schools' has become the object of a 'National Partnership' agreement between the Commonwealth and the States. Emphasis in this agreement is placed on attracting the best entrants to teaching, and also on their appropriate placement, ongoing training and remuneration, to ensure that they *stay* in teaching.

Among the reform areas specifically identified for 'reform reward' payments from the Australian Government, there is recognition of three likely contributors to the teaching profession's position: one focuses on remuneration; a second on in-school support; the third on school-based decision-making.

#### Remuneration issues

When faced with mismatches in demand and supply, economists have a tendency to seek explanations in price or other incentive structures. While teachers are clearly motivated by more than money, in economists' terms the 'opportunity cost' of becoming (and remaining) a teacher has risen significantly over time. As Leigh and

Ryan (2008) have shown, between 1983 and 2003, the real earnings of teachers fell by 4 per cent for women and 13 per cent for men. And the declines were amplified when measured relative to other professions. It would be surprising if this had had no effect on the composition of the profession, or on its perceived status within the community.

Moreover, that study indicates that highly compressed teacher remuneration scales, together with progressively widening pay dispersion in other professions, has especially raised the opportunity cost for the most able people (which in turn is likely to have had a significant impact in the maths and science areas).

In the same period, improved career choices for women have had a more pronounced impact on the 'ability distribution' of female entrants to the profession, with their representation in the top two quintiles falling by around one-half.

All this would suggest a need to address pay relativities within teaching as much as between teaching and other professions. Currently one finds little recognition in remuneration structures for experience or skill levels, let alone for scarcity, or the contentious matter of differential performance on the job. The COAG National Partnership Agreement specifies that there are rewards for 'improved pay dispersion' and it identifies such possible approaches as more highly paid staffing classifications and special arrangements to encourage quality teachers and leaders into remote schools and those with Indigenous or other disadvantaged communities. These are very promising directions. The main constraint on their success — or the scope to extend them — may be resistance by teacher associations, rather than the budget, if the recent experience in introducing higher pay rates for 'highly accomplished teachers' in disadvantaged schools in NSW is any guide.

The reception given to performance pay has been more hostile and broadly based. While there is evidence from the USA of it having beneficial outcomes on students' results, some of the evidence base is contested and would benefit from impartial scrutiny. It would also be desirable to have some 'home grown' evidence from well-conducted trials in this country. (I understand that such trials are indeed now underway in Victoria.)

I won't say much in relation to the *second* area — more in-school support for teachers — but it is clearly an issue in a variety of respects, including administrative workloads which cut into teachers' time, and stress or burnout that can precipitate their exit. In more remote areas, including Indigenous communities, housing can be an obstacle to attracting good teachers — though hopefully this may at last have been addressed through the 'Building the Education Revolution' program.

#### Governance is fundamental

The third area identified for financial reward is described as 'increased school-based decision-making about recruitment, staffing mix and budget'.

To the uninitiated — and indeed to Victorians who have grown accustomed to a more devolved system — this may seem a little odd. But the facts are that in most schools across Australia, unlike other places of work, managers have little or no say about who is appointed to their teaching staff and even about who is promoted or removed. Merit-based appointment is demonstrably lacking, compounding the lack of merit-based rewards.

Professor Max Corden recently wrote a celebrated piece on Australia's tertiary education system provocatively titled *Moscow on the Molonglo* (the Molonglo being the stream that feeds Canberra's Lake Burley Griffin). But the degree of centralised bureaucratic control seems far greater for Australia's school system than for universities, notwithstanding it being a State responsibility.

Centralised decision-making works best for systems that are relatively homogeneous and for which information and transaction costs are low. But school systems are not like that. With the best will in the world, making decisions centrally that can account for the specific needs of each school community is very hard. And centralised bureaucracies often develop their own incentive structures and agendas that can militate against such an endeavour anyway.

By the same token, school managers with little scope to influence the allocation of teaching resources could be expected to have less incentive to innovate or be responsive to community needs. And the best leaders will be less attracted to such a job. Those who are there will understandably feel threatened by accountability tools such as 'My School', particularly since the schools that they lead are not really *theirs* (or the local community's) anyway, at least in any meaningful operational sense.

For such reasons, there has been a global shift towards providing schools (as well as other education centres) with greater autonomy to manage and allocate their budgets and their human resources more effectively. Australia as a whole is defying this trend, being at the most centralised end of the spectrum according to OECD data. (It seems telling that, in contrast, some former communist countries are now among the *least* centralised!)

If not neutered by union opposition, the nationally consistent data that is now for the first time being made public on the 'My School' website should end up driving change for the better — by confirming that wide differences exist and thereby

forcing governments to confront the issues and find ways of addressing them. As things stand, poor performance is neither readily apparent nor acknowledged, and the ability to respond to poor performance is not really there for many school leaders. Nor is there much scope for better performing schools to accommodate any increased student demand.

While decentralised school systems are less likely to tolerate failure, and have more incentive and scope to meet local community needs, the overseas evidence about their comparative performance is of variable quality. It should therefore be instructive to observe the outcomes from WA's recent pilot initiative to devolve decisions about budget allocation and human resources, covering some 30 schools (assuming that baseline data and monitoring are adequate).

Meanwhile, we already have an enhanced capacity through NAPLAN to assess the relative educational performance of Australia's two largest States, with their quite different governance structures. There is little between Victoria and NSW currently in relation to literary and numeracy outcomes. What does seem clear, is that Victoria's devolved system achieves comparable outcomes at significantly lower cost per student than NSW's more highly centralised and bureaucratised one (SCRGSP 2010, CRC, 2009). Or, to put it another way, NSW has achieved similar results to Victoria with additional resourcing.

## Learning about what works best

This leads me to conclude on a theme that by now will not come as a surprise — namely, the importance of strengthening the evidence-base for policy decisions and reform initiatives going forward.

The lack of such an approach is likely to have contributed, in my view, to the observed decline in the measured 'productivity' of our school systems over the past two decades or so, despite substantial additional funding. Arguably the most costly mistake has been to spend scarce budgetary resources on smaller class sizes instead of better teachers, notwithstanding steadily accumulating evidence that smaller classes, in the ranges contemplated, were unlikely to achieve improved learning outcomes.

Such socially unproductive policy excursions are perhaps best explained by what Finance Minister Lindsay Tanner has labelled 'producerism' — the dominant influence on policy outcomes of producers over consumers and the wider community. In this industry, as in others, such an approach appears not only to have served its consumers (students and their families) poorly, it has ultimately served the producers (teachers) poorly as well. For example, while there are many more

teachers in Australia than ever before — and consequently more funding and power for those bodies representing them — the average teacher who joined years ago seems to have effectively paid for this with a lower salary today.

#### The COAG framework holds promise

COAG's human capital reform agenda has the potential to be transformative. It wisely utilizes a blend of cooperation and competition (with only some gentle coercion — or, perhaps more accurately, 'inducements' — from the Australian Government). It is at its best in the education area, where the relevant working group delivered a coherent framework of desired outcomes, targets and program measures that cover the main 'bases' — an impressive achievement thus far.

Importantly, while Australian Government funding is the glue that binds this agreement together, there is little prescription from Canberra about *how* things should be done (little of the 'Moscow on the Molonglo'). Detailed policy design has properly been seen as the province of the States and Territories. However, the National Partnership payments, and the associated transparent monitoring of performance generally, are calculated to create incentives for jurisdictions to apply themselves to achieving the national goals. This should in turn favour an evidence-based approach, in order for them to determine what will actually work. Moreover, in an important first, some funding has been made contingent on conducting evaluations and making use of existing evidence.

Such systemic provision for policy experimentation and learning across jurisdictions has been lacking from our Federal system for far too long. The unique potential contribution which Federalism can offer policy development has effectively been squandered, despite the many meetings and long agendas of MCEETYA and other Ministerial Councils. The reality is that there has been no lack of policy innovation in this country over the years, but not many 'experiments' have been properly evaluated and too few have spread across jurisdictions.

In the fiscally constrained aftermath of the GFC, it will be especially important that any new programs can demonstrate a large payoff, based on solid analysis and evidence. For it remains the case that while there is good evidence to support the broad areas on which COAG has focussed, the question of how best to secure the potential gains (as estimated in projections by the Victorian Treasury and the Productivity Commission) remains unsettled. There is still a risk of misdirecting budgetary resources and of missing opportunities to achieve better outcomes.

#### Priorities for evaluation and review

It follows from what I have already said that an absolute priority in this respect is understanding how we can best enhance the performance of the education workforce at all levels — early childhood, school, VET and university. I have talked about remuneration issues and their complexities, which deserve closer analysis, but there are various other dimensions to this challenge, including more fundamental questions to do with governance, regulatory frameworks and decision-making on human resource matters, as well as the training of new teachers and upgrading of existing teachers' skills.

As noted, what can be achieved in the areas of educational workforce and system governance will, among other things, bear directly on what can be achieved for the lower SES groupings where Australia compares less favourably internationally. While there are low performing students across the socio-economic spectrum, justifying some attention to raising performance *per se*, there is evidence that low SES kids underperform relative to their potential across the board, justifying the targeting of this group as a whole. (That is, the top performers from the lower SES group could also do a lot better.) Hence COAG's attention to schools in lower SES areas would seem warranted, especially for those performing poorly relative to other schools with similar student populations. (This can now be revealed through NAPLAN data — with 'My School' transparency upping the ante for action — again illustrating the perversity of opposition to reporting by those professing to hold the interests of students paramount.)

A key part of this, given evidence about the bearing that home life has on school life, is providing support for and encouraging greater engagement of families in their children's education. Strategies to make children feel more connected to the schooling part of their lives will also be important.

The biggest challenge of all is to get outcomes for Indigenous children that are comparable to those for other Australians — even to those of equivalent SES status. There is no single or simple policy prescription here. The answer again is likely to lie in tackling the home and school environments, but with more intensive personalised support for Indigenous kids, including through greater provision of Indigenous staff. Of course, this will be relatively costly. But while such investments may not have a net payoff in a conventional economic (productivity) sense, the *social* dividend for the kids concerned, their communities and, I believe, for Australians as a whole, is likely to be large.

A key problem in the past has again been lack of data on outcomes, to know whether programs are actually working. Under COAG's new approach, that is

changing, though there is still some way to go. In Victoria, the data point to significantly improved outcomes over a five-year period — for example, the disparity in Year 7 reading attainment has fallen from 24 to 13 percentage points — which suggests that COAG's target of at least halving the gap by 2018 is attainable.

Noel Pearson has recently emphasised the importance of Indigenous children being 'school ready' from the outset, if they are to make subsequent progress. There is now a substantial body of evidence that attention to early childhood education — *before* formal schooling commences — can indeed have lasting dividends, at least for disadvantaged kids.

COAG's program is currently directed at achieving universal access to pre-school in the year before school-proper commences, with some additional attention to disadvantaged and low SES groups. There is now also a question as to whether policy attention needs to be extended to children in the 0–3 age bracket. Victoria has (again) led the thinking on this and there is some desire to broaden COAG's agenda in this direction.

This whole area would seem to warrant a more substantial research effort in Australia, in relation to the potential *net* payoffs, the types of programs that could be most effective and the extent to which they should involve targeting. The celebrated work of James Heckman in the USA has been most instructive about disadvantaged students, at least in that country, but has been spread a bit thinly in supporting early childhood policy in Australia. Local trials would seem an imperative before further large-scale programs directed at early childhood are implemented.

Better evidence demands both better data and better methodologies. Relative to the USA and UK, Australia has made little use of longitudinal data, which can be of crucial importance in assessing the relative significance of different influences on observed outcomes. Recent breakthroughs have come through the HILDA survey and two longitudinal studies of children, one of which is focussed on Indigenous children. In relation to methodologies, proper experimental trials in social policy have been rare, with little use made of the randomised controls that have been seen overseas as the 'gold standard' (PC, 2010). Further progress in these areas should also now be seen as a priority in advancing the human capital agenda.

## A final comment

In conclusion, I am conscious that in a talk about the education and training component of COAG's 'human capital' agenda, I have ended up talking a lot more about schools than VET or Higher Education. I rationalise that on the basis firstly

that schools are the bedrock on which higher learning is founded; secondly, because they appear in greater need of performance improvement; and thirdly, because the COAG framework presents a particularly promising basis for moving forward through a cooperative and evidence-based approach.

In light of the recent kerfuffle over My School (not to mention over differential pay schemes for top teachers), I could add a *fourth* reason. Opposition to reform seems particularly strong and wrong-headed in this sector. However, as we have seen with earlier waves of beneficial reform in the face of entrenched producer opposition, evidence about the economic and social costs of existing deficiencies and the benefits of reforming them should ultimately be decisive — not only in determining what needs to be done, but in securing community support for it.

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

## 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.

Address to the ACCC Regulatory Conference, Brisbane, 26 July 2012 and the Economists Conference Business Symposium, Melbourne, 12 July 2012. (Co-authored with Ian Gibbs.)

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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 \$10 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. A recent example of the latter is documented in the Commission's 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 decisionmaking. 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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# Australia's mining boom: what's the problem?\*

Australia's past reform successes have generally been founded on a clear understanding of problems warranting policy solutions. Where policy initiatives have struggled or ended badly, this has often been due either to misdiagnosis, or a failure to achieve sufficient public understanding or acceptance of the problem at hand and what policy has to offer.

This is relevant to the session topic on which I have been asked to speak. At face value, 'managing the growth shock' can be taken to suggest that our recent mining-fuelled growth presents problems that governments will need actively to address. However there seems to be considerable confusion about the sorts of problems posed by the mining boom, particularly relative to 'shocks' of the past, and thus about the sorts of policy actions that may be required. Greater clarity about the former is a necessary precursor to identifying the latter.

The Australian economy has in fact experienced many 'shocks' over the years. Those akin to the current mining export boom include a gold rush or two, several agricultural trade booms (most notably for wool, but also other commodities, especially in the early 1970s) and a number of earlier mining booms, the most pronounced being in the 1970s and 1980s. Each of these shocks has set in train structural changes that have ultimately brought about adjustment — or, in econspeak, a new 'equilibrium'. The current one will be no exception, though the adjustment path is proving distinctive in key respects, and for the better.

#### The economic forces at work

The latest mining boom is characterised by an expansion in foreign demand for Australian commodities, which, together with falling import prices, has translated into a dramatic improvement in the terms of trade. To some extent, this is different from some previous booms, which resulted from discoveries of deposits and put downward pressure on commodity prices. But whether a minerals boom arises from a new discovery or increased foreign demand for our resources, increased national wealth will lead to increased domestic spending on goods and services over time.

AUSTRALIA'S MINING BOOM

<sup>\*</sup> Address to the Melbourne Institute and The Australian Economic and Social Outlook Conference, 30 June 2011. (Co-authored with Alex Maevsky, Patrick Jomini and Lisa Gropp.)

With close to full employment, increasing the supply of non-traded goods (services) will require expansion of that sector relative to the traded goods sector.

Put another way, domestic production of traded goods has to make way for our increased consumption of non-traded goods. This shift is accommodated by 'real appreciation' — effected either through domestic inflation or nominal exchange rate appreciation, or some mix of the two. In essence, the real appreciation makes domestically-produced traded goods more expensive relative to their foreign counterparts, reducing both domestic and foreign demand for them.

In addition to this demand-side effect, on the supply side, expansion of the minerals sector will directly draw some resources from other sectors. This can further impact on other traded sectors as well as on some non-traded ones, depending on their factor requirements — for example, specific labour skills.

But the pressures being placed on our traded goods sector are mainly due to us being richer than we were, and consuming more goods and (especially) services, rather than because mining draws labour or capital from manufacturing and agriculture. In this respect, the rapidity and scale of the income growth associated with the boom has served to amplify underlying structural trends.

This adjustment process has been variously referred to as 'de-industrialisation', the 'Dutch Disease' and, most recently, the 'two-speed economy'.

These labels suggest a policy problem, requiring government intervention to reverse or dampen the structural adjustments required by the resource boom. But it is important not to lose sight of the fact that these economy-wide impacts unambiguously raise our national wealth. (Some have claimed that we are not benefiting from the mining boom because companies are foreign owned. But if this were the case, and the income were going abroad, we wouldn't have a 'two-speed' economy!) As was observed about the 'Dutch Disease' literature nearly three decades ago:

Although virtually ignored in much of the discussion, consumption of all goods would increase, as would national expenditure and aggregate welfare; indeed, terms such as 'Dutch Disease' seem to imply that it is a morbid condition rather than the sign of a lucky country (Porter, 1984, p. 16).

## Recent developments in historical perspective

The current mining export boom has been accompanied by sharply rising terms of trade. Indeed our terms of trade attained historic highs in the March quarter of 2011, equalling the iconic Korean War peak. Terms of trade increases have accompanied

some previous mining (and other export) booms. But the recent surge has been considerably stronger and longer than any that have come before. The earlier booms involved shocks that reverberated through our economy in a disruptive way. How has the economy responded this time by comparison?

The short answer is 'very differently'. This is particularly evident in relation to inflation and (nominal) wage outcomes. Both of these have been influenced for the better by the changed institutional settings since the early 1980s.

Importantly, the current export boom is the first in which Australia has had a floating currency. As a consequence, the rise in exports has been met with an appreciation of the exchange rate, directly re-pricing Australia's traded goods and signalling the necessary structural adjustments.

By contrast, when export booms occurred in the past, the only manner in which the *real* exchange rate could adjust was via a (relative) increase in the domestic price level — Australia's inflation had to rise. The Reserve Bank was essentially powerless to stop this blunt adjustment, since commitment to a fixed exchange rate resulted in loss of monetary autonomy.

Clearly, the current experience couldn't be more different — the exchange rate has appreciated greatly, and inflation has remained relatively low.

A further comparison of the outcomes in the current boom with previous ones suggests that our changed labour market institutions have also played an important role for the better. For instance, during the Korean War boom, wage growth accelerated to 19 per cent in the year that the terms of trade peaked. Similarly, when Australia's terms of trade peaked again in 1973-74 during the commodity boom, nominal wage growth reached 17 per cent in that year, accelerating to almost 30 per cent in the following year.

The reason for the different outcomes is clear in retrospect. Australia's centralised wage setting system had the effect of transmitting demand pressures in expanding parts of the economy to aggregate wage outcomes. By contrast, in the current episode, our more decentralised wage setting arrangements have enabled wages to adjust differentially according to changes in demand and supply in specific markets — notably mining — such that wage growth has been subdued overall.

## The sectoral jobs story

Ric Battellino from the Reserve Bank (2010) has suggested that the current boom can be dated from around 2005, based on the behaviour of mining investment and

commodity prices. The period since then has seen a rise in the terms of trade of nearly 60 per cent. In the same period, total employment has grown by about 16 per cent.

The biggest gains in employment during this period have occurred not in mining, but in the services sector, which has created jobs for around 1.5 million people. Mining has undergone a much smaller, though not insignificant, expansion in employment, of around 100 000 people.

By contrast, employment in manufacturing has decreased by around 59 000 or by roughly 6 per cent. The gain in mining employment alone was enough to offset this, but the employment changes in all sectors have been relatively small when compared with the growth of employment in the services sector.

### Longer- term trends

These sectoral employment movements in the recent boom years broadly accord with 'theory'. But it is important to recognise that, to a large extent, we are just seeing an accentuation of longer-term trends.

Employment in Australia's manufacturing sector expanded considerably in the first half of the twentieth century and continued to grow into the 1970s, fostered by expanding domestic market opportunities and high import protection. Although the number of people employed in manufacturing peaked in the early 1970s, the share of total employment accounted for by manufacturing was already beginning to decline. The decline in manufacturing's employment share has thus been happening for around 40 years. Similarly, agriculture's share of employment has also steadily declined.

Delving a bit further into the manufacturing employment story reveals that, in the recent 'two speed' years, the main casualties in employment terms within that sector have been the relatively highly assisted motor vehicle and TCF industries. I think this illustrates firstly the beneficial nature of the current reallocation of jobs within the economy (from lower to higher valued activities) and, secondly, the ineffectiveness, as well as costliness, of using industry assistance for job creation purposes.

Mining has never accounted for a large proportion of the economy's jobs. The high point of just over 5 per cent occurred early in the 20<sup>th</sup> century. Its share then fell to around 2 per cent by the 1940s, and to just under 1 per cent by the late 1990s. With the recent export boom, mining's share of total employment has risen again, but it is still only about 1.8 per cent.

The real action, when it comes to job creation, has been in the services sector, where employment has grown persistently strongly over the past 6–7 decades. Accounting for one-half of employment early last century, the service sector's share now stands at around 86 per cent of the Australian workforce — in other words, nine jobs in ten.

Similar long-term trends are apparent in the sectoral composition of output. The proportion of national output accounted for by agriculture and manufacturing has steadily declined over time, whereas that of services has increased inexorably, now accounting for nearly 80 per cent of the total. As expected, during the recent boom period, the share of output accounted for by the mining sector has also risen strongly, from around 6 per cent to 9 per cent.

Notably, while their shares have fallen, the absolute levels of output in manufacturing and agriculture have continued to rise. It is also notable that there has been no discernible change in the *rate* of decline in manufacturing's share of national output in this same period.

In sum, the biggest impact of the mining boom appears to have been on activity levels and jobs in the mining sector itself. The main effect on other sectors appears to have been to nudge them further in the direction that they were already going, though with differential effects among individual industries. Those longer-term trends — the relative rise of the services sector and decline of manufacturing and agriculture — are a manifestation of the process of advanced economic development, observable in all OECD countries.

In Australia's case, the decline of manufacturing has looked more pronounced than elsewhere only because of its artificially elevated starting point — underpinned by high protection. By the same token, the services sector has benefitted from the liberalisation of previously highly restricted financial markets, plus the further boost to the finance industry that came with compulsory superannuation. (It has also benefitted from technological changes that facilitated outsourcing of activities previously conducted within manufacturing, leading to their re-labelling as 'services'.)

The two service industries under most pressure from our high dollar are education and (domestic) tourism. Arguably some correction in the former's stellar expansion (which in part had been driven by liberalised migration rules that have recently been tightened again) was inevitable, and some shake-out within the sector probably desirable. In the case of tourism, there is a strong domestic demand component and much of this 'satellite' sector has other sources of demand anyway (eg for hotels, transport) and employment has stayed strong.

One casualty of the demand-side boom, has been reduced supply-side performance, as measured by productivity indicators. While there are other ingredients, a key influence on Australia's recent productivity slump has been the massive injection of labour and capital, together with more costly production and resource depletion effects, directed at satisfying minerals demand. However, this can hardly be described as a 'problem', given its flipside of higher prices, profits and national income growth.

Reversing Krugman's aphorism, in the short term productivity clearly *isn't* everything. But of course the terms of trade will stabilise if not decline at some point, by which time productivity growth will again need to have become the mainstay of income growth. And there remain important policy challenges if we are to realise its potential.

## What is the role for policy?

Objectively, the main policy challenge posed by this latest mining boom — apart from holding the line on the institutional reforms that have helped avert the downsides of earlier episodes — is how best to facilitate the adjustments needed to maximise the gains.

#### Macro policy issues

As noted, terms of trade booms in the past posed significant problems for macroeconomic management. These have largely been avoided under current institutional settings. In particular, the floating of the \$A in 1983 — though hotly debated at the time — has benefitted the Australian economy greatly by giving it an external 'shock absorber'. The Reserve Bank has been able to keep inflation within its target band on average since the boom began, and we have not seen the rapid economy-wide wage increases experienced in previous booms.

Contrasting this experience with the past illustrates that reducing flexibility in one area of the economy places extra adjustment pressures on other parts. With a fixed nominal exchange rate, additional pressure is placed on domestic prices and wages. Similarly, measures that inhibit the ability of wages to move in accordance with the demand and supply of labour place additional adjustment pressure on employment levels and regions. Maintaining flexibility in institutional arrangements helps ensure that extreme movements in key variables are avoided.

## A Sovereign Wealth Fund?

The current sustained rise in the terms of trade has prompted questions about the appropriate role of fiscal policy in an environment of ongoing growth in income and output, and low unemployment. As discussed earlier, one of the most important effects of a mineral discovery or the terms of trade improvement is an increase in real national income. An intertemporal dimension is how much of the increase in income should be saved.

There has been active debate about whether the government should set aside at least some of the increase in revenues it receives from taxing the extraction and sale of non-renewable resources in a 'sovereign wealth fund'. The Greens have seen this as warranting an inquiry by the Productivity Commission. It is a matter on which our Federal Treasury has already had a bit to say.

The former Secretary, Ken Henry (2010) outlined four possible objectives of such a fund:

- to sterilise foreign exchange flows and limit nominal appreciation;
- to provide a source of saving (and to smooth consumption);
- to reduce revenue volatility, and
- to discipline government spending.

The first of these has to do with curtailing 'Dutch Disease' or 'two speed' effects. The idea is that by investing abroad, such a fund will increase the demand for foreign currency and reduce the extent to which Australia's currency appreciates. In turn, this could limit contractionary pressure on other traded sectors. As Henry points out, however, a country wishing to limit exchange rate appreciation does not have to explicitly earmark receipts from the sale of mineral resources for investments overseas to achieve this. Using the proceeds to retire debt or purchase domestic financial assets — reducing the demand for foreign liabilities —would have the same effect.

Increased exposure to economies such as China and India may lead to higher, but more variable, economic growth in Australia in the longer term. As Glenn Stevens (2010) has noted, there may be a case for some of the adjustment to higher income variability occurring through the public finances. However, individuals in their daily decisions about whether and how to consume or save are already implicitly managing the potential variability in their future incomes — without the significant governance issues and administrative costs that come with a sovereign fund. (Note the recent sharp — and probably largely precautionary — increase in household savings.)

In earlier years, proponents of a sovereign wealth fund cited unfunded superannuation liabilities and the ageing of the population as reasons for its establishment. The former Treasury Secretary, Ted Evans (2003), pointed out that the ability of future governments (and citizens) to meet their expenditure needs essentially depended on the size of the economy at the time. The best contribution the current population could make to the welfare of future generations is to help maximise future income (through high productivity and participation). It is not clear that setting aside current tax revenue for future expenditures will necessarily achieve that objective more effectively than allowing the present population to allocate its own income itself. Moreover it appears that, internationally, sovereign wealth funds have not proven very effective in disciplining government expenditure.

#### Other fiscal issues

Questions also arise as to how much of the additional revenue government receives from increased mining and other activity should be allocated for current uses. Should additional revenue facilitate a reduction in income or other taxes? Should government increase its expenditure? If so, on what, and for how long?

Ultimately, decisions about government spending should be made on cost-benefit grounds. If new infrastructure or some other public project is assessed to yield sufficient net benefits, it should be worth undertaking regardless of whether the government has received more tax revenue than it might otherwise have expected. (Nevertheless, the availability of more revenue may influence the *timing* of major expenditures — especially if governments are reluctant to issue new debt.)

In the current fiscal circumstances, in the aftermath of the GFC, the task of budgetary consolidation would clearly be ameliorated by greater taxation revenue from mining. Much contention surrounds the vexed issue of how taxation and royalty systems should be configured to appropriate the 'right' returns from Australia's natural resources. The two related questions, both addressed in the Henry Review, are whether the structure of taxation is efficient and whether the share is sufficient. You will not be surprised that I do not propose to offer any comment on these contentious matters, the Commission having last addressed such questions some 20 years ago! (The 1991 Mining Inquiry supported a move from output-based royalties to charges based on 'pure rent' for high unit value commodities, though allowing existing projects to stay with the status quo. It also came to the view that, in practice, no tax can avoid having some impact on production or investment decisions.)

What I do feel able to observe is that taxation policy has as much art as science to it, and the nature and extent of the consultative processes for developing it will generally be crucial to how good the outcomes turn out to be. A second observation based on recent experience in Latin America, is that whatever Australia does is being closely watched internationally. No country's taxation system is an island. Relative expected returns across resource-prospective countries will be the main determinant of international investment and thus domestic activity in the long term.

The second route to fiscal consolidation is to cut existing public outlays. This is never easy and is compounded by the need for additional spending in some areas. For example, more fiscal room will be needed if the Government accepts the Commission's arguments for a significant step-up in aged care funding and in support for people with profound disabilities, both yielding important social benefits and arguably well overdue.

The cost-benefit logic informing such new initiatives should also be brought to bear on existing programs, with those yielding the smallest relative payoffs the first to go. Indeed some of the worst have already gone. These include the (stillborn) 'cash for clunkers' program and the Green Car Innovation Fund, both of which were more likely to have yielded net losses than gains to society.

But no doubt there is more low-hanging fruit waiting to be picked. For example, the case for Australia spending \$36 billion or so on another dozen homemade submarines, when imported alternatives could be purchased for a fraction of the cost (and risk) has never been adequately explained publicly — notwithstanding the generally acknowledged failure of the Collins Class precedent. The whole area of defence procurement seems ripe for a thorough independent review.

The justifications sometimes offered for 'build rather than buy' policies — skilled job creation or technological spillovers — even if they had some merit in the past, have little credibility today, given the pressing need for such skills in mining and associated industrial activities.

## What microeconomic policies?

This brings us from the macro to the micro policy spheres. The microeconomic policy challenges for Australia essentially remain the same whether there is a mining boom or not. The imperative must be to drive productivity improvements and efficiency throughout the economy, through actions that can effectively foster competition, facilitate organisational flexibility and adaptability, and build capability. Whatever the economic question, 'productivity' is generally the answer.

As outlined on previous occasions, there is a broad potential reform agenda for governments across the key drivers of productivity just mentioned. However, the current structural pressures arguably put a premium right now on the economy's ability to allocate and reallocate labour and capital to the industries where they can do most good.

This economic logic is not universally accepted. It is therefore worth looking briefly at some of the key policy areas where contrary policy approaches for our 'two speed' economy are being advocated.

#### Trade and industry policies

One is industry policy, as a means of supporting sectors under pressure. However, the old saying about 'having and eating one's cake' is apposite in the current circumstances. Attempting to hold resources in sectors and industries under pressure from dollar appreciation by providing them with (additional) government assistance can only succeed in lowering our living standards. As observed by Bob Gregory in his seminal article of 1976 on the Dutch Disease (before it acquired that title), attempting to assist those parts of the traded sector adversely affected by currency appreciation would be 'self-defeating'. By attempting to push exports up relative to imports it would only trigger further real appreciation. And while assistance targeted at a few selected industries might ameliorate their circumstances, it would force more adjustment onto industries that were not so favoured.

If the boom were to be short-lived, it could be argued (and has been) that some defensive industry support might avoid double adjustment, or the permanent demise of activities that would have been viable again in normalised circumstances. However, evidence and logic suggest that the recent step up in export demand for minerals is unlikely to be reversed in the foreseeable future. As David Gruen from the Australian Treasury recently expressed it:

this global changing of the Guard [from the economic re-emergence of China and India] seems more like a generational change in Australia's comparative advantage than it does an example of the Dutch Disease, in which we might wish to return Australia to its pre-boom industrial structure once a short-lived disturbance has passed (Gruen, 2011).

Moreover, implicit in the doomsday scenarios for certain trade-exposed industries (including education and tourism) is the notion that structural adjustment is a one-way street. However if and when the mining boom comes to an end, there will be forces within our economy that will automatically favour other traded activities again. The best possible illustration of this comes from the Netherlands itself, where the decline of the gas reserves that prompted the 'Dutch Disease' literature has seen

a strong resurgence in manufactured exports. In the meantime, the Dutch benefitted greatly from their 'disease'! Again, the best way of potentially securing such a reallocation for Australia in the future is by adopting policies now that can further enhance the flexibility of our economy.

This does not, of course, rule out actions by government that could help industries under pressure by addressing policy-related impediments to their performance. For example, as argued previously, there remains an array of regulation that weakens the competitiveness of these and other industries. Some key ones at a national level are being addressed through COAG's 'seamless economy' processes. The current structural pressures give force to arguments for advancing these reforms as rapidly as possible (particularly in such significant and pervasive areas as OH&S).

Equally, there remains a good 'in-principle' case for support for research and development. However, its design and extent need to be carefully directed at achieving additional benefits for the wider economy, not just for the firms or industries concerned. Research and development consumes productive resources and is not an end in itself. And designing socially beneficial programs is not straightforward. It is made less so by the apparent political difficulty of introducing desirable modifications in the light of experience, where that involves withdrawing perceived 'entitlements'.

Political resistance of the same kind can also be expected when it comes to terminating high cost carbon abatement measures, which should be an essential adjunct to introducing a more cost-effective market-based instrument. (Indeed this is already evident in recent attempts to reform the very costly solar 'feed in tariffs' in NSW and the ACT.)

A second area where the policy devil is in the detail is anti-dumping. A 'tougher' anti-dumping regime — one more receptive to imposing duties on imports — has been advocated by some as a means of alleviating the exchange rate pressure on import-competing manufactures. While such duties are usually portrayed as serving domestic over foreign interests, the main winners and losers are located within our own economy — the losers being user industries like mining, and of course consumers.

Getting the right balance in the anti-dumping regime among competing interests — and between efficiency and 'fairness' goals — has never been easy. It places a premium on transparency and good analysis to inform individual decisions and any changes to the regime. It also requires limitations on the discretion of administrators, in circumstances of uneven political pressure. The history of anti-dumping policy is marked by successive advances and retreats against these tests.

Which category the recently announced arrangements fall into will reveal itself in time.

I have thus far ignored the arguments sometimes made for policy intervention on the grounds of the superiority of certain industries, particularly manufacturing, over others. It is not so long ago, for example, that the 'New Economy' rhetoric was deriding our mining industries as 'so last century'. It is hardly necessary to point out how erroneous that was. While manufacturing is important to our economy — and its activity levels have not diminished in absolute terms — the reality is that its *relative* decline has been integral to the marked increase in the living standards of Australians.

## Regional policy

An expansion in mining and in non-traded industries attracts mobile factors of production from other parts of the economy. Some regions will accordingly experience an influx of workers and others will face a decline, as certain industries contract. While mobile labour gains from being able to exploit regional differences in wage rates, those made worse off by the expansion in mining will be the less mobile and owners of fixed inputs in declining industries and regions.

Some have argued that these resource movements are undesirable, and that policy initiatives aimed at retaining resources in declining regions are needed.

As it turns out, the impacts of the mining boom appear to have been benign for most regions of Australia, whether or not they are engaged in mining. Indeed there has been a decline in the regional dispersion of unemployment, with two-thirds of 'statistical subdivisions' experiencing a drop in unemployment rates over the period 2003 to 2010. The Treasury observes in its recent Budget Papers:

The fall in the regional dispersion of unemployment as the national unemployment rate falls is evidence that to date ... the national gains of the nation's economic success are being spread broadly to people across Australia through (among other mechanisms) improved labour market outcomes.

That said, clearly not all regions are prospering, particularly at finer disaggregations, with some experiencing declines in employment and population. However, as for the inter-industry effects, in many cases these changes are consistent with longer term trends.

The potential benefits of geographic mobility of labour during a mining boom were explored in recent modelling conducted by the Commission. Unsurprisingly, GDP and average real wages were projected to be higher when labour was fully mobile

across jurisdictions, reflecting the gains from resources moving to higher valued uses. A less obvious, though equally important result, was the role of labour mobility in distributing the benefits of the resource boom across Australia. The ability of workers to move to work in another state or territory moderated the growth in wages in booming jurisdictions, and increased it elsewhere.

The Commission found in earlier studies that the drivers of regional change comprise a complex amalgam of forces, including various technological and demographic changes. Policies designed to arrest or reverse the consequences of such changes have historically not been very successful.

Past inquiries, have concluded that the best approach to regional policy is for governments to reduce regulatory impediments to regions exploiting their differences and adapting to change, as well as enhancements to governance arrangements at the regional level. In practice, as the Grattan Institute noted recently, there has been a range of expenditures on infrastructure and other services in declining regions with dubious cost-benefit outcomes. Such expenditure also reduces the resources available to meet the more pressing needs of expanding regions.

## Labour and immigration policies

Although mining is not labour intensive, its recent sharp expansion has created demands for skilled labour which appear not to have been adequately met from domestic labour markets. This is reflected in the wide wage differentials that have opened up — a topic of conversation in bar rooms around the country.

Some have argued that this provides a strong argument for a larger immigration intake, essentially to lessen nominal wage growth and alleviate pressures on other industries. However general immigration is a blunt tool for ameliorating industry-specific labour shortages. And skilled migrants, who generally bring families with them, have an impact on the demand as well as supply sides of the economy. More targeted, 'temporary' (457) work visas are likely to be more effective in meeting skill needs in particular enterprises, while also usefully serving as a screening device for longer term settlement.

Ideally such actions would be complemented by measures to achieve greater skill development and workforce participation in the local population, and considerable policy attention has been given to this recently. From this perspective, high *relative* wages should not be seen as a problem — they constitute an important signalling device for skill acquisition. And, pending a labour supply response, their effect is mainly distributional — delivering more of a company's profits to its workers than

otherwise. (A notable finding from our recent inquiry into Executive Remuneration was that the earnings of employees of mining companies were on average significantly higher as a proportion of CEO salaries than was the case for workers in other industries.)

## Summing up

The problems posed for Australia by the mining boom are not the associated structural changes. To the extent that we have a two (or more) speed economy, that should be welcomed as the mechanism by which we are capitalising on our external good fortune, yielding higher living standards for Australians. The real challenge confronting policy makers is to ensure that the adjustments can proceed smoothly. This also means holding the line on past reforms that have enhanced our economy's flexibility and avoiding introducing new rigidities.

Attempting to slow the structural pressures emanating from the mining boom would only reduce the net dividend in national income. Feasible policy actions are unlikely to succeed in averting adjustment pressures anyway, or may simply divert them onto other parts of the economy. In any case, such pressures have many sources other than mining — including changes in demography, consumption and savings behaviour, and global competition. Moreover, for many enterprises, including in the industrial sectors, a drop in mining activity would have adverse effects.

By the same token, policies intended to shelter particular industries or regions would be both costly and ultimately ineffective, as our own protectionist history attests. Again, the best we can do for industries facing increased competitive pressure is to remove regulatory or other policy-related impediments to their ability to respond.

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# Industry assistance in a 'patchwork economy'\*

The Commission's remit has evolved considerably over the years, expanding beyond the traditional industry assistance domain of its predecessors, to encompass not only a wide range of other economic issues, but also key areas of social and environmental policy and regulation. If we have been able to make a useful contribution in these areas, this can be attributed, in large part, to what we have learned from business and community groups along the way. For the Commission, consultation is not a discretionary activity; it is integral to our business model.

The Australian Chamber of Commerce and Industry has been an important source of information and insight in many of the Commission's public inquiries and studies. This reflects well on those involved in the organisation and their interaction with its membership base. But it may also result from the very breadth of that membership, comprising businesses of all sizes in all sectors of Australia's economy. Such breadth could be expected to encourage the organisation to focus on the 'big picture' – on what matters for the generality of Australian business, rather than the diverse and sometimes conflicting concerns of particular constituents.

This perspective is aptly illustrated by the theme chosen by ACCI for its annual dinner: 'prosperity through productivity'. It is a theme that recognises not only that prosperity matters to the well-being of society – something occasionally contested in public discussion – but also that how prosperous we become as a nation depends ultimately on how well we use our resources in the myriad of enterprises that make up our economy.

As Nobel Laureate Paul Krugman has famously put it, "productivity isn't everything, but it in the long run it is *almost* everything." In a sense that observation is not merely true, it is a truism. Rising per capita incomes in a country can only be achieved in two ways: by producing more per capita or by getting higher prices for what is produced.

The former route is generally the most enduring or dependable one. But it has been overshadowed somewhat in recent years by the dramatic rise in prices received for

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<sup>\*</sup> ACCI Annual Dinner, Canberra, 23 November 2011. (Co-authored with Ralph Lattimore.)

our mineral exports. The surge in Australia's terms of trade is estimated to have added some 15 per cent to our GDP. That is no mean achievement. It has also contributed to the resilience of Australia's economy since the advent of the global financial crisis. Nevertheless, it is important to remind ourselves that such good fortune cannot last forever, even for a 'Lucky Country'. And it is worth recalling that 80-90 per cent of the per capita income growth in Australia over the preceding five decades came from (labour) productivity growth. It is to productivity growth, therefore, that we must look if we are to secure further increases in living standards beyond the mining boom – and indeed, if we wish to maximise the benefits of the boom.

With this longer term productivity imperative in mind, the recent picture does not look too promising. While there are indeed reasons to be concerned, close analysis by Commission researchers suggests that at least some of the forces behind the marked productivity slump this century are likely to be temporary.

One significant contributor has been the mining boom itself. Rising export prices have provoked massive flows of new capital and labour into mining to exploit the prospect of higher profits – including by tapping lower grade ores – and this has been outstripping measured output growth. This input expansion, while so far 'unrequited' in physical output terms (reducing measured productivity) has nevertheless yielded rich financial rewards to mining companies, which is naturally their prime concern.

Notwithstanding the high degree of foreign ownership of these companies, it is estimated that over one-half of this income growth has flowed into the Australian economy. While non-traded activities and industries supplying the mining juggernaut have done well out of this, trade-exposed industries that are not in its aura have been forced to 'make way' by our rising dollar.

Thus, in the midst of plenty, there is some pain. Viewed dispassionately, this is integral to the adjustments needed for Australia to gain maximum benefit from the mining boom. However, most of those on the receiving end understandably don't see it that way. There have been strident calls for government to support industries under pressure, particularly manufacturing (but also tourism and education services). This, of course, is not an unprecedented phenomenon in Australia. However, it has found a degree of receptivity across the political spectrum that has not been seen for many years. Unchecked, it could pose a threat to the hard-won reforms that commenced in the 1980s, compromising Australia's productivity potential and the future prosperity that will depend on it.

So while the Productivity Commission spends more time these days on other policy matters, I'd like to take this opportunity tonight to revisit the question of what role industry assistance should play in our contemporary 'patchwork' economy.

I hasten to assure you that I am not going to say it should have no role at all! Rather, my message is that we need to tread warily on selective assistance schemes because of the risk of doing more harm than good to Australia's productivity and prosperity. By the same token, I believe there is scope for governments to do much more under the broader 'industry policy' banner. Unfortunately, political economy tends to favour the first course more than the second (which involves reform). But many of those approaches are no more suitable in today's circumstances than they were in the past.

## Import replacement is a bad idea

At the top of the list of perennially bad policy measures are those that promote Australian industries by reducing imports. I am not just referring to tariffs and other barriers 'at the border', since their costs are now well recognised in Australia and few openly advocate a return to them.

#### The attractions of 'anti-dumping'

That said, there has been resurgent interest in the use of 'anti-dumping' duties as a WTO-sanctioned form of protection against 'unfair trade'. It is not commonly acknowledged, however, that the WTO's rules were devised primarily to discipline government's anti-dumping actions, not businesses choosing to sell their goods at lower prices overseas.

But public policy is on a hiding to nothing with this one. The very use of the term 'dumping' – coined initially, I suspect, by a linguistically gifted import competitor – connotes something unsavoury. And if it causes (or threatens) 'injury' to a local industry, then surely it must reduce Australia's prosperity?

In fact, shocking as it may sound, neither proposition holds true. Employing a less emotive term for a moment, there are many legitimate reasons, commercially and economically, why a firm might engage in 'differential export pricing.' There may be higher tariffs or less competition at home than abroad. The firm may have a surfeit of stocks with high holding costs. Or it may need to counter a lack of brand recognition when entering foreign markets. There is nothing inherently 'unfair' about any of these practices. Australian exporters commonly engage in them and have been encouraged to do so by government agencies.

The *least* likely reason for differential export pricing is 'predation' (driving out competitors in order to gain local monopoly power) given the existence of other world competitors and scope for new entry or re-entry. Yet this seems to be the main cause of its bad reputation.

In its recent report on anti-dumping, the Commission nevertheless recognised that notions of unfairness had become so entrenched that retaining some form of anti-dumping system was inevitable, and on balance may serve to prevent something worse (as is sometimes said of FIRB). We therefore opted simply to moderate its potential to impose costs on Australian industry and consumers by such means as limiting the scope for penalty duties to be applied in perpetuity, and enabling actions to be avoided where these would most clearly be counterproductive for our economy (such as where large costs would be imposed on downstream industries to little effect, or where a domestic supplier's market power would be significantly enhanced).

Most of the Commission's recommendations were accepted by the Government, but some of the more important ones were not, and ambiguities remain as to how much more restrictive the new regime will prove to be in practice. However, no such ambiguity is to be found in the Opposition's recently announced policy, which pushes the boundaries of allowable restrictions. Getting the right balance in anti-dumping policy between addressing perceptions of fairness and avoiding actions that would be costly domestically – and harmful to our bilateral relationships (including with China) – is a very difficult challenge for policy makers and always has been. Unfortunately the Opposition's policy falls well short of the balance required, and has now made harder the Government's own efforts to hold the line.

## Local sourcing rules

A form of administered protection that operates well behind the border, and that has had a good run recently in Australia, involves requirements by governments for their own agencies or private firms to purchase goods and services from domestic sources. (I am not referring here to the more benign information and suasion campaigns such as the 'Australian Made' logo and Buy Australian). Unsurprisingly, the WTO has rules about this too. However Australia is one of few developed countries that is not a signatory to the 'procurement code'.

Like most WTO rules, although often seen by domestic parties as serving the interests of foreigners, the main beneficiaries are the very countries whose governments' actions are curtailed. Local content rules, to the extent that they are successful in diverting purchases from the lowest cost sources internationally, merely reduce a nation's purchasing power. While some local firms may do better,

others will do worse as their competitiveness is eroded. Productivity and prosperity are both impaired.

Admittedly, this kind of economy-wide logic gets little purchase in the electorate and the costs of such protection are much harder to discern than for tariffs. So, once again, the politics of good policy do not favour the faint-hearted. Nevertheless there has been considerable resistance to the most costly regulatory proposals so far. Even the initiative to ramp up conditionality requirements on large projects' access to tariff concessions – dubbed 'local content watch' by one wag – may not prove very costly, mainly because it is unlikely to distort purchasing decisions much. Large mining companies can handle red-tape more easily than smaller enterprises and most already make substantial purchases locally. Indeed, their very use of the tariff concession to date indicates that such imports (including of heavy machinery) have been officially recognised not to be available locally.

A legitimate rationale for such rules would require that there be 'information failure' or other possible sources of disadvantage experienced by local suppliers. However this is hard to sustain. If anything, local firms typically have significant advantages over foreigners, related to greater proximity and familiarity and fewer transaction risks. This is in fact the main rationale for the existence of Austrade and the support it provides to Australian firms seeking to sell in foreign markets. When large firms operating here source inputs overseas, this will typically be because it makes financial sense for them to do so. In such cases, it will generally make sense for Australia's economy too.

#### 'Offshoring'

This same logic applies to Australian-based firms acquiring inputs of services offshore – such as the ubiquitous call centres with those acquired Australian accents that we have all come to know.

Airlines, banks, telecommunications companies and other businesses are contracting more of their service inputs overseas. People worry that this is exporting Australian jobs and lowering living standards and employment. But the logical flaws that beset instinctive protectionism of local manufacturing apply equally to fear of offshoring of services. Just as for trade in goods, Australia increasingly sells services abroad where we have an advantage (for example, education and specialised medical care), while buying services abroad where we are not competitive.

The latest data on trade in services supports this positive picture. In 2010, Australia exported in total roughly as many services by value as it imported, and has a \$6.5

billion surplus in services trade with Asia – so in this region there is actually more 'inshoring' to our country going on than offshoring.

A capacity for offshoring means that businesses reliant on globally competitive inputs can actually compete and survive. Creating barriers to offshoring would undermine domestic businesses and adversely impact on other jobs. In short, like other import restrictions, barriers to offshoring do not secure employment – not necessarily even in the activities concerned – they just make Australians poorer.

#### Job creation?

That trade barriers do nothing for overall employment in our economy (other than reducing workers' wages) is well illustrated by the steadily rising share of Australia's population in work since the advent of trade liberalisation in the mid-1980s, and their rising real incomes. (In 1985, the participation rate was about 60 per cent and the unemployment rate was 8½ per cent; today participation has risen to 65 per cent and unemployment has fallen to 5 per cent). Industry assistance directed at job creation can, at best, influence the *pattern* of employment. But it only achieves this by helping some workers at the expense of others.

The main exception is in times of high unemployment. However, notwithstanding the Global Financial Crisis, under-utilisation of labour has fortunately not been Australia's problem. On the contrary, there have been increasing calls for the liberalisation of visas for foreign workers in order to fill labour shortages. And, notwithstanding that mining activity is confined to certain parts of the country, regional disparities in unemployment have declined since the boom commenced – through labour movements and generally higher incomes underpinning jobs.

## (Potentially) good assistance

If industry assistance that targets import replacement and job creation in certain sectors is generally 'bad' for Australia's productivity and prosperity, what is *good* industry assistance? This is harder to answer as unequivocally, since such assistance not only needs to have a good rationale (which those other forms demonstrably lack) but must also be implemented through measures that meet their goal without giving rise to costs that exceed the benefits.

#### Innovation policies

Perhaps the best illustration of how hard this can be is industry assistance directed at innovation. No-one can question the importance of innovation to an economy's

productivity performance. Equally, although most innovation takes place spontaneously in response to market pressures and opportunities, we know that some innovations that may be socially valuable will not be privately profitable, because of an inability for investors to appropriate enough of the returns. So a sound rationale for some form of government intervention clearly exists.

But that is the easy bit. The real challenge for assistance policy is to design measures that encourage innovation that would not otherwise have occurred ('additionality') and that would generate private and spillover returns large enough to exceed the costs of the subsidies. That calculus has to take into account that public financing can distort investment and decisions about working, the resource costs of developing, implementing and monitoring innovation policies, the costs of selecting poor projects, and the resources that might be wasted through firms seeking public support for privately profitable ventures.

Australia has used a plethora of approaches over the years to stimulate business investment in innovation – perhaps too many, given the uncertainty that continuing policy change poses for business. While its form has changed considerably over time, generic support for business R&D through the tax system has been one of the few constants in the innovation assistance landscape. Indeed, over time, it has assumed a bigger role. (It comprised around 40 per cent of budgetary assistance to business innovation in 2001-02 and an estimated 75 per cent by 2010-11). The R&D tax concession has several major advantages over alternative measures such as direct grants. Businesses, rather than an interposed judge, make the investment decisions, and the incentive is generic – applying to many different industries and types of innovation.

The biggest hurdles to an effective R&D tax incentive are questions about its ability to achieve additionality and the capacity for activities without much novelty to be classified as R&D. It has always been hard to balance the gains from designing the scheme for higher additionality (for example, through requirements that only projects above some historical base be funded) and the costs from the complexity that such designs entail. Defining R&D has also always been a challenge, particularly discriminating between innovation that involves small developments in existing products and processes (with likely low spillovers) and genuinely novel innovation. In its 2007 review of the innovation system, the Commission recommended a reorientation of support to more risky and novel R&D in line with international definitions and, against some opposition, the government recently introduced a narrower definition in its new tax credit.

In the past, there have been major loopholes in the scheme that, for example, saw cattle entering pilot plant abattoirs being classified as deductible 'feedstock' under

the tax concession. Another problem was the practice of 'grave digging' whereby consultants (for a finders' fee) would trawl through a company's expenditure records to identify concessional opportunities. In those cases, any subsidy that was granted simply amounted to a transfer with no (desirable) behavioural impacts.

These experiences illustrate the risk of unintended consequences with even well-based industry assistance. Understandably, firms and their agents look to maximise the commercial returns from government-funded programs, but that may not be in the national interest.

These shortcomings are particularly persistent for commercialisation grants. These face the problem that they tend to focus on projects with lower levels of risk and prospects for high private returns, and therefore for obtaining private financing. (By mid-2010, 82 per cent of completed Commercial Ready projects were considered successful). In comparison, a grant program that successfully targeted genuinely novel innovations – projects with the highest spillover rates and additionality – would be likely to have a significant technical failure rate.

These quandaries will be confronted by the recent programs to encourage new 'green technologies'. The amount of money is large, so the stakes are high. The Clean Energy Finance Corporation is to invest \$10 billion in businesses seeking funds to commercialise new alternative energy technologies; the Australian Renewable Energy Agency will manage \$3.2 billion of grants for R&D and commercialisation of such technologies, and there will be an additional \$200 million for a Clean Technology Innovation Program. Although the three programs share some common purposes, they will be run by three different agencies.

As noted, there are valid arguments for encouraging R&D in alternative energy, given that private businesses cannot always appropriate the gains from their own R&D – and that remains true even with a price placed on carbon emissions. However, it is less certain that there should be R&D incentives *specific* to these technologies. That would require induced spillovers significantly greater than the average.

The long-running Innovation Investment Fund (IIF) may have lessons for the new CEFC. They share the goal of stimulating ultimately viable financing from the private sector of early-stage commercialisation of risky new technologies. However, an evaluation of the IIF program last year, by three British researchers, concluded that the goal of creating a self-sustaining and privately financed, early-stage venture capital market is unlikely to be realised. They noted that there was negligible evidence that any country had successfully used a public or hybrid venture capital program to achieve such a market.

That said, the losses to taxpayers from the IIF do not appear large, given the modest size of the program and that there have been some returns. The CEFC faces bigger challenges, being a much larger fund and a more narrowly focused one, involving just one technology group – 'clean energy'. In fact, the technological opportunities are even narrower, since carbon capture and storage technologies are excluded, being covered by other programs. That confronts the added difficulties that a small country's innovation capabilities in alternative energy are likely to be constrained (particularly with the nuclear alternative disqualified). Of course, all this may not matter too much as long as the managers of the program feel under no obligation to spend all the money!

#### Innovation for adjustment

The fact that there is a potentially sound rationale for assistance to promote innovation has seen it become popular as a label for many assistance programs that have little to do with encouraging innovation, let alone addressing market failures. For example, all of the major recent structural adjustment packages for declining industries are referred to as 'innovation' programs. However, innovation does not figure much in most of them. For example, the only references to innovation in the eligibility criteria for the North East Tasmania Innovation and Investment Fund (a response to the closure of the Tonganah Sawmill in Scottsdale) are to the name of the program.

More significantly, the sizeable financial support still being provided by taxpayers to the automotive and (to a lesser extent) TCF industries, although presented under the innovation banner – which has a green light in the WTO – mainly comprises what amounts to production subsidies, which are hard to justify on any 'market failure' grounds.

That is not to suggest that government assistance to help industries adjust is inappropriate – on the contrary – but again it needs to be targeted at justifiable objectives and it needs to facilitate, rather than impede, adjustment to market realities.

In general, the rationale for assistance is much stronger for workers than for businesses. Unlike business, most workers cannot readily diversify risks and are poorly informed about such risks when making employment decisions. Even here, however, there are questions about when selective support is justified (beyond existing generally available welfare and employment programs). Support has tended to be directed at particular instances of job loss that are not different in character to many others. For example, in the past five years, adjustment packages totalling

\$150 million have been triggered by around 4,000 job losses – equivalent to only 0.1 per cent of total involuntary job losses Australia-wide.

There are also risks from moral hazard in some adjustment programs. For example, in its recent inquiry, the Commission found that some forms of drought support had essentially evolved into an entitlement, and had frustrated farmers' long-term management of normal climate risks.

## What about manufacturing?

The adjustment pressures currently experienced by manufacturing, or at least those industries not directly benefitting from the mining boom, have been seen by some as a special case for government assistance. In thinking about the merits of this, some context may be instructive.

Manufacturing's place in the Australian economy has actually been in secular decline for the past four decades. As with the decline of agriculture in the 19<sup>th</sup> century, this trend has been common to all advanced economies. For example, in the USA, the share of manufacturing in total employment has fallen from over 20 per cent in 1970 to less than 10 per cent today. As RBA analysis has recently demonstrated, the richer the country, the greater the share of services in its total output. As people's incomes rise, they want to purchase more restaurant meals and commercial holidays. And, as they age, they want more health services and activities complementary to leisure. It is hard to see this as a symptom of economic failure, and thus as a problem requiring remedial policy action.

In Australia, the 1.4 percentage point decline in manufacturing's share of total employment since 2007 is 0.5 percentage points greater than the long term average rate. In other words, the combined effects of the GFC and the so-called 'Dutch disease' related to the mining boom since then, have brought forward ongoing trend structural change by less than 2 years.

The fact that the relative importance of manufacturing is falling does not mean that its *absolute* importance has changed that much. Real output has actually risen by around 50 per cent since 1984. A shift to more capital-intensive production nevertheless saw manufacturing employment fall from 1.1 million in 1984 to 950,000 in 2011, but this is a small change relative to the economy-wide increase in employment over that period.

Furthermore, official employment numbers significantly overstate manufacturing's relative decline. Part of this is a statistical artefact, with many services once provided 'in-house' – such as transport, accounting, IT, legal, and design services –

now being outsourced, and the jobs therefore no longer classified as 'manufacturing' in official statistics.

Indeed, the distinction between 'manufacturing' and agriculture, mining and services activities is becoming increasingly tautological rather than conceptual. Considerable transformation occurs in both mining and agriculture, and the sophistication of the machinery, the complexity of processes and the level of labour skills to recover the useful outputs from these industries can be much greater than for many manufacturing operations. For example, bringing oil and gas up to a drilling platform is an extraordinarily complex engineering task, yet it is only after these transformations have taken place that later transformation is possible. Robotics, new metals and remote sensing devices used in mining are at the frontier of technologies.

Equally, the transformation of raw data into useful information in insurance, finance, health, the internet and mining exploration (to name a few) through remote sensing, neural network software and complex search engines – all services – involves more valuable and complex transformations than those from a sewing needle or lathe.

Against that background, the notion that the mining boom is a 'curse' because it drives up exchange rates misses the point. The mining boom involves sophisticated industries, whose discoveries and activities – and the buoyancy of export demand for those – have greatly increased the buying power of Australian consumers and industries and produced large income flows. As The Economist magazine has put it: "to refer to a vast, valuable energy resource as the source of a 'disease' sounds rather ungrateful".

Ultimately, a dollar is a dollar, regardless of where it is earned or spent. All output uses scarce resources and a well-functioning, productive economy allocates those resources to where they can yield the biggest payoff. Sometimes that will be in manufacturing, but mostly these days it will not.

None of this ignores the reality that many enterprises in the manufacturing sector are doing it tough, particularly with the currently high value of the \$A. But, again, there is little support for the proposition that financial struggle is unique to manufacturing. While nearly 30 per cent of manufacturers recorded a loss in 2009-10, the share was 40 per cent for farmers and 53 per cent for miners.

What's more, relative to other industries, manufacturing already gets a lot of government assistance. Net tariff assistance alone was estimated to be around some \$6.5 billion in 2009-10, with another \$2 billion or so in various subsidies. Rather than providing more assistance, our current fiscal settings suggest that the bigger

priority is to determine what this assistance is achieving for the country and whether it could be better spent.

## More productive industry support

It follows that while some forms of industry assistance can potentially meet the 'productivity test', to achieve this in practice they need to be not only well targeted, but also well designed. Given the difficulties, a degree of program experimentation in areas such as innovation policy is not a bad thing (provided any failures can be weeded out). However, too great a focus on finding assistance solutions to industry's problems could distract us from doing better in the policy areas that really would make a difference — not only to industry's productivity and competitiveness, but also to the Australian community at large.

The Commission has shown in various studies how the productivity performance of firms is influenced by policy settings in three key areas:

- incentives the external pressures and disciplines on organisations to perform well;
- *flexibility* the scope for organisations to make changes in order to respond to market pressures, and
- *capabilities* the human and knowledge capital, as well as the infrastructure and institutions, needed to devise and implement changes effectively.

These areas are mutually interactive and all three need to be attended to in a policy framework to enhance industry performance. This has as much if not more to do with reforming existing policies in place that are shown to detract from performance, as devising new ones. However, the reform of policies impeding productivity is generally a lot harder than implementing them. Historically, Australia faced a bigger challenge than most, given its starting point. Despite this, much has been achieved, commencing with the market-liberalising initiatives of the Hawke-Keating Government in the 1980s.

These reforms transformed the incentives environment for industry, placing much stronger market pressures on Australian companies to lift their game. However, their success in doing this was facilitated by further reforms to enhance their flexibility and capacity to respond to the new pressures and opportunities afforded by more open markets.

In some important respects, we are seeing a re-run of this scenario today, with the recent ramping up of competitive pressures on Australian industries. This time, the medium is not tariff liberalisation and other pro-competition reforms, but the strong

appreciation of the Australian dollar and the factor demands of the booming mining sector. How well firms and industries manage to respond to these pressures (and how well the economy adjusts) will again depend largely on how much flexibility they have to make the necessary changes – or to adopt new "business models", as the Treasury's Martin Parkinson has put it.

This provides a compelling reason for governments to devote more policy effort right now to identifying impediments to the adaptability of enterprises and employees. Reforms in this area would help industries under pressure compete, while at the same time facilitating resource flows to expanding industries.

So which policy areas are likely to be most 'prospective' in promoting flexibility and adaptability? Given the importance of organisational change to innovation and productivity throughout the economy, labour market policies and Industrial Relations regulation in particular are clearly one important candidate. The taxation system, with its own pervasive effects, including on factor mobility, is another. There is also a range of policies bearing on business start-ups, development approvals and land-use changes that can be significant roadblocks to adjustment. And there is the proliferation of red tape in all jurisdictions that imposes dead weight on firms. I could go on.

## The regulatory challenge

Such policy areas share in common a reliance on regulation to influence behaviour. Reforms would be needed to remedy deficiencies in the regulatory 'stock', as well as to prevent additional problems emerging in new regulation. This is obviously easier said than done. But the rewards are potentially large (with red tape reductions alone estimated to be worth some \$12 billion in extra GDP). Governments that take the lead in reforming their regulatory systems can create an important source of national competitive advantage.

Poor regulation is often pre-ordained by the processes responsible for it. Over the years, governments have sought to instil greater rigour into regulation-making through requirements to prepare regulation impact statements containing the key elements of good policy process. Notwithstanding considerable efforts to strengthen these requirements, compliance has remained patchy, with considerable resistance apparent within the bureaucracy.

A disturbing manifestation of this is the growing resort to exemptions from the RIS process at the Commonwealth level, under an 'escape clause' in the Government's 'best practice regulation requirements'. This provides for exemptions to the requirements to be granted in exceptional circumstances, provided any such

regulations are then subjected to a 'post-implementation review' within 1-2 years. This clause was inserted as a failsafe to ensure that any regulations made in haste or without adequate scrutiny under the rules, did not give rise to undue costs or unintended consequences – and could be amended or terminated if they did.

As the Commission observes in its recent draft report on Regulation Reform, it was anticipated in crafting this provision that little use would be made of it. However the number of exemptions has increased exponentially since the new arrangements were introduced. Some 60 regulations that would normally be subject to the RIS process have received exemptions, half of these in the past 12 months. They include some important regulatory initiatives, including ones of particular relevance to firm flexibility, such as the Fair Work Act.

It would appear that, contrary to the original conception, some departments may have anticipated that post-implementation reviews would only address relatively limited implementation matters. The Commission has argued that if the integrity of the Government's best practice requirements is to be sustained, these failsafe reviews need to be able to assess all the impacts of such regulations and recommend any necessary modifications. It also argued that in the case of regulations with pervasive impacts, reviews need to be conducted at arm's length from the responsible policy department. (This approach has since been announced by the Government for the review of the Fair Work Act and related regulation early next year).

## **Concluding comment**

At the dawn of the 20<sup>th</sup> century, Australia was the most prosperous country in the world. This was partly the luck of having ample resources that the world happened to value highly, as Donald Horne highlighted. Nevertheless our subsequent decline – from top position to eighteenth in the world in per capita GDP by the 1980s – was largely self-inflicted, through policies built on the myth that interests could be protected 'all round' from the realities of markets. One hundred years later, having reversed many of the policy-related causes of our previous decline, we find ourselves yet again blessed by burgeoning global demand for our natural resources. This has been a further boon to our economy and to Australia's prosperity, but it does not negate the need for us to be productive if we are to remain prosperous into the future. How we now handle the structural tensions emanating from our present good fortune will determine whether we have learnt the lessons of our own history.

## ACHIEVING SUCCESSFUL REFORM

# Successful reform: past lessons, future challenges\*

#### Introduction

My assigned topic, the future course for reform in Australia, is an important one. There are two dimensions to it. One relates to priorities within the reform agenda itself. As Chairman of the Productivity Commission, that of course is something I am more than willing to discuss, and have done so previously at some length. But, important as it continues to be to know what future reforms are most needed, arguably the bigger challenge for Australia right now is the other dimension, knowing how to implement them successfully.

Paul Kelly, Australia's pre-eminent policy journalist and chronicler of our reform history over the past three decades, asserted earlier this year that "the historic post-1983 reform era is terminated". Ross Garnaut, one of the most policy-influential academics of that era, recently made the following assessment: "Economic policy since the GST [2001] has been characterised by *change*, rather than productivity enhancing reform". He went further: "Attempts at major reforms have failed comprehensively and poisoned the well for further reform for a considerable while".

Similar sentiments have been expressed by other observers of the policy scene. It is notable that they have been doing so despite what must be the most extensive and ambitious national reform agenda ever placed before the Council of Australian Governments. Their assessments appear to have been prompted by the recent setbacks for the major reform initiatives for climate change and taxation, together with the handling of the 'Big Australia' issue in the lead-up to the recent federal election. But they may also reflect on some policy excursions over the past decade in areas such as infrastructure, industrial relations, industry assistance, energy efficiency, water, hospitals and family support.

The electoral outcome itself, in bringing us the so-called 'new paradigm' of minority government dependent on the cooperation of independents, is seen by many as an obstacle to further productivity-enhancing reforms. The Australian

<sup>\*</sup> Address to the Annual Forecasting Conference of the Australian Business Economists, Sydney, 8 December 2010. This speech was shortlisted for the 2011 John Button Prize.

Financial Review's editorial just after the election declared it "the worst possible outcome for stable government and the unpopular economic reforms that are needed...".

Moreover, reform must now occur in a post-GFC context, with fiscal pressures that will limit the scope for investment in a number of the 'human capital' areas within a National Reform Agenda devised in fiscally more bountiful times. The need to rebuild its budget has also constrained the ability of the Australian Government to 'reward' the States for their reforms, a central tenet of the National Competition Policy's successful implementation and likely to remain the key to ongoing state support for the COAG Reform Agenda.

This comes at a time when the promise of a more cooperative or collaborative Federalism has been wearing increasingly thin. Not only has Western Australia continued to play hard to get on national reform, there has been strong resistance to Commonwealth initiatives in key reform areas by the two 'heavyweight' eastern states, Victoria (eg water, hospitals) and NSW (eg OH&S, national curriculum). This apparent discord may be heightened by changes in government at the state level.

## The productivity imperative

If 'productivity enhancing' reform is indeed becoming a no-goer, Australia is in for a tough time. For a start, this would make it harder for us to meet the fiscal challenges from the Global Financial Crisis in the short term and, in the long term, the ageing of the population. We would also struggle to meet the demands and costs of more sustainable resource use and desirable environmental rectification. Australians may again start to see international competition and globalisation as threats rather than opportunities. And our capacity to raise the living standards of Indigenous and other disadvantaged members of the community would be weakened, when it needs to be strengthened.

Productivity enhancing reform is so crucial to our economic (and social) futures because productivity growth itself — the ability to get more out of a country's resources — is the mainstay of economic progress. Growth in labour productivity accounted for around 80 per cent of the growth in per capita incomes of Australians over the past four decades, with 'multifactor' productivity growth (which abstracts from the growth effects of increasing capital) accounting for about 40 percent of that.

If, as the Nobel Laureate Paul Krugman has famously put it, 'in the long run productivity is nearly everything', Australia's prospects currently may not appear

very promising. Following a stellar performance in the 1990s, driven in large part by the structural reforms initiated in the previous decade, our productivity growth in the early 2000s fell back to its long term average. That in itself is no cause for alarm. But since then it has fallen below even pre-1990 rates. In the most recent year for which we have data, 2009-10, there was only slight growth in (the traditional 12 industry) market sector MFP; though this was an improvement on the previous year when MFP, buffeted by the global crisis, actually fell by 2.4 per cent, something not seen in almost 30 years.

Just as the productivity surge in the 1990s yielded substantial income gains on average for Australian households, the productivity slump of the 2000s could have been expected to bring with it a decline in incomes. In fact, thanks largely to our rampant terms of trade, income growth for most of that period was at historical highs. But both history and economic logic tell us that this cannot go on indefinitely. I will leave forecasting to those expert in that field, simply noting that the escalation in prices for our mineral exports reflects circumstances on both the demand and supply sides of markets which can be reversed or which can give rise to 'correcting' changes.

At some point we will then return to Krugman's long run, and reliance on productivity growth to achieve further improvements in the living standards of Australians. I am intentionally abstracting here from growth in the other two Ps, participation and population. The former has natural limits — and is currently historically high — while population growth is dependent on (net) immigration, the impact of which on the average per capita income of existing residents is ambiguous (with a greater likelihood of it being negative than positive).

So how do we ensure that productivity again rises to the occasion? This question is being posed primarily as a challenge for further reform. While I would naturally agree with its importance, we need to keep things in perspective. As Commission research has demonstrated (and we have previously been at pains to point out) much of the recent pronounced decline in *multi-factor* productivity can be traced to developments in a few specific markets — reflecting the mining boom and drought — that cannot be blamed on lack of reform or poor policy. It is therefore likely to be at least partly self-correcting in time. (Agricultural MFP has already rebounded — growing by 14 per cent in 2008-09 — but mining much less so, in part because investment and employment continue to grow strongly.)

This is set out in some detail in a number of Commission research publications (and in a refereed journal article). But even without the benefit of such 'forensics', the coexistence of historically low growth in multifactor productivity with historically

high growth in income, capital investment and jobs over recent cycles is likely to have been more than coincidental.

That said, some of the decline has also reflected unusually high growth in labour and capital absorbed by the energy and water sectors, which in part has been induced by policies that are likely to have a lasting negative influence on *measured* productivity. By the same token, Australia's recent productivity declines obviously would not have been so pronounced had there been more productivity-enhancing reform over the past decade, depending on the lead times involved. And even if we can expect some 'natural' recovery in the productivity numbers in time, reforms that reinforced or added to such gains could bring substantial additional benefits to the Australian community.

For example, if (labour) productivity growth could just get back to the long-run average rate of 1.75 per cent that preceded the 2004-2008 cycle, rather than the 1.6 per cent average growth assumed in Treasury's latest Inter-generational Report, then, abstracting from changes in the rate of employment and investment, per capita incomes would be 6 per cent higher by 2050. And if we could reclaim the 2 per cent average annual growth recorded in the 1990s in a sustainable way — admittedly a big ask — Australia's GDP would be some \$400 billion larger than otherwise, with per capita incomes 17 per cent higher (worth nearly \$19,000 per person in today's dollars).

In short, a little bit of productivity growth goes a long way. Any reform that could achieve this successfully is a reform worth pursuing. The real risk stemming from the boom, if our own history is any guide, is one of complacency about pursuing those reforms.

That of course begs the question as to what 'successful reform' actually means in this context. This is not a trivial question.

#### What is a 'successful reform'?

The term 'reform' is being employed liberally today by the proponents of almost any policy change, whether it is likely to advance the public interest or not. It has accordingly begun to lose meaning in public discourse and, worse, risks giving real reform a bad name. (A senior state official mentioned to me recently that his government now avoids using the term.)

The dictionary tells us that the word 'reform' actually means "change for the better". In a policy context, that translates to changes in existing government financial, regulatory or procedural arrangements that are likely to make the

community 'better off' (which I interpret broadly to encompass living standards and quality of life).

Against this (reasonable) benchmark, I am sure that many of us can think of policy initiatives that have had a doubtful entitlement to the reform label. For example, over the past decade, there has been widespread questioning of the benefits of such initiatives as the subsidy for local ethanol production, the Baby Bonus, the bans on filament light globes, the Fuel and Grocery 'watches' and Cash for Clunkers, among many others. (You will have noted that even this truncated list transcends politics.)

For a policy initiative to be worthy of the name 'reform' we must have some confidence, based on established theory or evidence, that it is likely to yield a net benefit to the community over time. Moreover, the likely gains should exceed those from other policy options directed at the same objective. To take a topical example, the estimated 'price' for a tonne of carbon abated varies greatly, depending on the particular policy measure employed, ranging around \$10-40 per tonne under an explicit tax or trading regime, to hundreds of dollars for solar feed-in tariffs, and thousands of dollars for some other schemes. The latter programs accordingly should have little claim on the term 'reform' in a greenhouse policy context (apart from any claims they may have on industry policy or other grounds).

So what is a 'successful' reform? There are two key conditions that I believe need to be satisfied.

One is that the outcomes of the reform broadly accord with its objectives and what was anticipated when it was introduced. In other words it should achieve its goal, and do so without major collateral damage or unintended consequences. The fact that the latter phenomenon has acquired the status of a 'law' (more popularly attributed to 'Murphy') tells us that bad surprises are all too common. While sometimes this may be of little consequence in the total scheme of things, in other cases it can compromise the objective being pursued. For example, it is possible to imagine a greenhouse policy that actually *increases* global emissions, or a resource rent tax that *reduces* production activity, or alcohol or drug initiatives that encourage *greater* usage by target populations.

The second feature of a successful reform is that it is *sustainable*; that it is not vulnerable to being reversed, or substantially amended in ways that negate its objectives. To satisfy this condition, the reform must either be broadly accepted by the public when introduced or, if not, it must become so in time. It must not remain too contentious, nor (related to this) meet much ongoing organised resistance.

This is illustrated by the contrasting experiences of the GST and Work Choices. The former, which was vigorously debated and opposed politically when implemented, has come to be accepted as an established part of the policy framework. Indeed the only remaining contention surrounding the GST is over its rate and coverage — and how the revenue should be distributed among the states. Work Choices faced similar initial resistance, but this did not subside after implementation. Rather, opposition escalated — ultimately contributing to the defeat of the government that introduced it.

Other illustrations that come immediately to mind are the 25 per cent tariff cut of 1973 versus the incremental program of 'tops down' tariff reductions introduced from the late 1980s, and the contrasting electricity market reform experiences of Victoria and NSW.

It follows that a reform could be a 'good' one at some level — in terms of its foundations and likely community-wide effects — yet still not be successful. Reform will often fail if its effects have not been sufficiently thought through or it does not win acceptance as being beneficial. Among such failures in earlier years one might arguably again include the original 25 per cent tariff cut, together with various aborted reforms in such areas as taxi regulation, property taxation, nursing home funding, pharmacies and broadcasting.

## Why is it so *hard*?

Knowing what reforms are needed, while difficult enough to get right, is clearly only half the battle. Getting such reforms up, and making them stick, are arguably the more difficult challenges. There is nothing new or particularly Australian about this. On the contrary, it could be described as the natural order of things and has been long observed. In his famous little instruction manual for heads of state in Renaissance Italy, Nicolo Machievelli described the problem thus:

There is nothing more difficult to carry out, more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all who profit from the old order, and only lukewarm defenders in those who would benefit from the new.

While political scientists and public choice economists have since elaborated in more technical terms on the political and informational forces at work, Machievelli's insight remains the essential one.

The corollary to it is that often there is nothing easier for governments to do than to introduce *bad* policies, especially those that can meet the wishes of particular interest groups without being on the wider public's radar. Consider how easy it is

for governments to provide a new subsidy or regulatory benefit to an industry or community group and how hard it can be to remove them again. Australia's tariff history once again provides the stand-out illustration, with the 'removal' phase having gone on for some 40 years so far, even then being partially offset by new forms of assistance along the way. But there are many others. For example, even the dismantling of the home insulation subsidy scheme, though it was in existence only a short time and having public support for its termination, required a special further assistance program to compensate the emergent suppliers who were beneficiaries of the scheme.

The obstacles to success are so great that any true reform might fairly be considered a significant achievement. This is particularly so in Australia's case, given the additional challenges posed by the relatively short and multiple electoral cycles in our Federal system. That Australia has successfully implemented as much reform as it has since the 1980s — reforms that have significantly enhanced the average living standards of Australians — is therefore something to be celebrated, and has attracted international attention.

#### Achievements of the 'reform era'

The range of reforms has been extensive. But some could be described as 'game changers' because of their scale or scope, or the ongoing impetus they provided for further necessary change and reform. Among these, the stand outs were the floating of the dollar in 1983 — which exposed structural weaknesses in our economy while facilitating adjustment to further necessary reforms and market shocks — and the opening of our markets to foreign capital and merchandise, which heightened competitive pressures on Australian enterprises and led in turn to pressure on governments for reforms that would reduce the costs of businesses and improve their operational flexibility.

The dismantling of centralised wage fixation and advent of enterprise bargaining was a key consequence — enabling firms more scope to fashion remuneration and work practices to the circumstances of their markets and regions. Another was the reform of inefficient government monopolies responsible for such vital infrastructural services as energy, telecommunications, transport and water. The reforms brought improved governance and more competition, yielding higher productivity and lower costs, with more cost-reflective pricing.

Those latter reforms commenced at the state level, but eventually found more consistent expression in the National Competition Policy, which also incorporated a

process for systematically identifying, and testing the justification for, anticompetitive arrangements across the whole of Australia's regulatory landscape.

The 1980s also saw some important reforms to the tax system that reduced burdens and inefficiencies, and helped improve the attractiveness of Australia as a place to do business. These included the broadening of the tax base through the introduction of a fringe benefits tax, taxation of realised (real) capital gains, and plugging of various loopholes and exemptions (eg for the gold industry), combined with cuts to high marginal rates on income and the introduction of dividend imputation. While some unjustifiable tax concessions for investment were removed, a justifiable one for Research and Development was introduced. This period also saw the successful introduction of the Petroleum Resource Rent Tax.

There were also some path-breaking reforms in key social policy areas of education (notably the HECS scheme) and health (such as Victoria's 'casemix' funding mechanism).

Some of these reforms admittedly could be categorised as 'low hanging fruit'. But none were straightforward to engineer and nearly all faced high political hurdles at the time.

#### What were the success factors?

A number of aspects of the 'design' of the reform program in this period help explain its success. One has already been alluded to — namely, the prioritisation or sequencing of reforms. Addressing major reforms one at a time enabled adequate public resources to be brought to bear, while also enabling a focussed public discussion. The sequence chosen — beginning with the international markets for currency, capital and goods — in itself created pressure for further reforms in key domestic markets (for labour and infrastructure services in particular). These gained momentum and ultimately accumulated into a reform program of considerable breadth. The range of ongoing reforms in different areas brought further advantages through the ability of losers from some reforms to become winners from others.

The pace of change in the different reform streams differed, depending on the nature of the market and the adjustment issues. Thus, while the floating of the dollar happened overnight, the tariff reform process, following the attempt to do essentially the same thing a decade before, became a gradual 'tops down' one. An incremental approach was also followed for the public utility and labour market reforms. The phasing of reforms served to reduce both the potential economic and political costs of adjustment. In addition, some specific labour and industry

programs were introduced to assist the adjustment process further (though with variable success).

These design features of the reforms of the 1980s and 90s, while important, can nevertheless only be part of the story. They beg the question of how such features were arrived at in the first place. And they are unlikely in themselves to have overcome the political economy obstacles noted earlier.

There are several other factors that I believe were of more fundamental importance. None could be said to be novel, let alone offering blinding insights. They boil down to what we would hopefully all accept as simply good process for developing public policy — a process that begins by identifying why change is needed; that then communicates this to the community; before going on to reach a policy solution that has been properly analysed, tested and, once again, explained. In all of this, leadership and institutional support were crucial.

#### Establishing the need for reform

A common theme in the successes of the 'reform era' was general recognition that reform was needed. This did not mean that there was *consensus*. It was to be expected that those who saw themselves disadvantaged by reform — and most real reforms involve some losers, at least in the short term — would resist it. Support was strongest among the professional policy cadre — within government, academia and the 'commentariat', including opinion media. But there was also strong support from peak business, and to some extent from community organisations, depending on the reforms. Broader public opinion, if not actively supportive, was at least not actively hostile.

Acceptance that reform was needed did not come about overnight. It emerged over time, with mounting awareness of the costs of the status quo and the potential gains from doing something about them. This in turn resulted from research and evidence on the deficiencies of existing policies, and deliberate efforts to communicate that information to the community.

For example, Australia is one of very few developed countries to have substantially liberalised its industry protection regime unilaterally, outside the conventional concession-swapping milieu favoured by other countries. It is hard to imagine this happening in the absence of evidence on the true levels of industry assistance, who benefitted from it and who effectively paid for it. A novel feature was the development of analytical tools to estimate relative (net) assistance levels across industries, and the impacts of protection not just on consumers but also on domestic user industries. As a result, the farmers and miners came to appreciate that, contrary

to the accepted myth of 'protection all round', a tax on imports was actually a tax on (their) exports. They accordingly became a countervailing political force for reform.

Similarly, the reforms that eventually became the National Competition Policy were built on the foundation of evidence about the costs of existing anti-competitive arrangements that protected public utilities and other services. For example, it was demonstrated that many businesses, who were increasingly exposed to international competition, were bearing excessive costs for vital energy needs because of both inefficiencies in supply and cross-subsidisation of household demand. The costs to the economy of governments effectively using public utilities as vehicles for social welfare became manifest, informing public debate and creating increased momentum for reform.

A number of key reforms in social policy were similarly made possible by publicly available evidence of deficiencies in existing arrangements. Sometimes this evidence was counterintuitive, or contrary to the conventional wisdoms that had sustained the policies. For example the introduction of the HECS model of university funding (another Australian innovation) was preceded by information and public discussion about the perverse distributional effects of 'free' education. Similarly, regulatory reforms to reduce adverse selection in private health insurance as a consequence of the 'community rating' system — long an article of faith and regarded as politically untouchable — became possible through credible public evidence that the system had not only became inefficient and unsustainable, but ultimately also unfair.

Industrial relations provides a more mixed story. The initial moves to a productivity-based general wages policy, and then to enterprise bargaining, under the Hawke-Keating Governments, were founded more on commonsense than detailed empirical verification of the costs of the status quo. Nevertheless, some benefitted from research demonstrating the adverse effects on costs and productivity of work practices in 'strategic' industries (coal, building and construction, stevedoring, meat processing) and research on such issues as youth and long-term unemployment and their relationship to wage-setting.

#### Finding and selling the solution

The major reforms that defined this era also followed considerable research and public testing of the pros and cons of different possible reform measures. This generally occurred through review processes that made effective use of discussion papers, draft reports or 'green papers'. In most cases, sufficient time was allotted to the consultation processes to enable proposals to be properly explained, digested and responded to, and to inform a wider public debate. This was central to the

industry assistance and national competition policy reform processes, as well as to the major reforms to financial regulation and taxation.

In the latter case, the Labor Government, on coming to power in 1983, had the advantage of a detailed report on taxation reform instigated by the preceding Coalition Government (though still not acted upon). Specific proposals in the Asprey Report were developed for further public discussion, with this process culminating in the Tax Summit of 1985. Some options, notably the GST, did not find sufficient favour and were jettisoned, but as noted, other important changes were implemented, including capital gains taxation and imputation. (Only one reform — the abolition of negative gearing — was subsequently reversed.) As we know, the GST was to make two further appearances in the public arena before ultimately getting up, demonstrating that even reforms with strong credentials often need considerable time and effort before winning sufficient support to make them politically viable.

The process of exposing reform options to proper public scrutiny and debate, in most cases resulted in significant changes to what was actually implemented. In some cases, these were necessary improvements to make the reform more cost-effective, or to avoid what would have been unintended consequences that only became apparent through such consultation. In others, changes were negotiated to overcome political resistance (as finally for the GST). In both circumstances those changes ensured that reforms could be implemented and, importantly, sustained.

The experience has been that consultation is valuable not only to develop and get acceptance for broad reform options, but also to get the detail right in the option that is finally implemented. For example, the Petroleum Resource Rent Tax took a couple of years to be developed and a couple more to be refined, through intensive consultations with industry, before it was finally implemented in 1989. The detail of the Life-time Community Rating Scheme took some 18 months to work through, once the Government had accepted its in-principle merit following the Industry Commission's 1997 inquiry into private health insurance.

Without good feedback on the design details, even a broadly agreed reform can run into trouble through implementation glitches and unintended consequences. Some of the most useful feedback often comes, not from experts, but from those in the firing line of the new policy (especially in relation to its workability and compliance costs).

#### Institutions and processes mattered

Evidence, analysis and their influence on the environment for reform did not occur in a vacuum. Institutions and processes within government played a crucial role in the reform successes.

Virtually every major reform in that period was preceded by public review processes that were commissioned by but conducted at arms length from government; that undertook in-depth research and analysis, and that engaged in extensive public consultation. These included the Asprey Review, the Campbell and Martin reviews of the finance sector; the series of inquiries into industry assistance, government business enterprises and other competition-related topics conducted by the IAC and Industry Commission, and the Hilmer review of national competition settings.

These reviews played a central role in establishing the case for reform, and in identifying (and explaining) the best solutions. In most cases, they drew on earlier work, and often considerable time elapsed before their recommendations were finally implemented — in some instances after a further election or change of government. This again demonstrates the importance of *time* to reform: allowing enough of it, and choosing the moment.

The arms length nature of these reviews had a number of important benefits. For one thing, it meant that the reviews were generally seen as being not only 'expert', but above politics — in what were often politically sensitive, as well as complex, areas of public policy. This ensured that their recommendations carried more weight with the community. At the same time, because the reviews were removed from executive government (at least in a formal sense — they often had secretariats composed largely of departmental officials) the governments of the day had the advantage of 'deniability'. They also had an opportunity, at a distance, to read the public's reaction and to consider the implications of different courses of action.

As an aside, it is a fact that most members of the community are rationally ignorant about policy detail, but they are not oblivious to good process. Their very ignorance about complex policy matters means that they look to institutions in which they can put their trust, and those institutions and processes can become politically very important in advancing reform. Arguably one reason for the loss of support for the 'Carbon Pollution Reduction Scheme' in the lead-up to the last election, for example, was the 'Climate-gate' email scandal that weakened the IPCC's authority on the (incomprehensible to most) science of global warming.

In the case of the National Competition Policy, the Hilmer Review identified a procedural way forward, as well as making recommendations for specific policy

actions. It thus spawned many smaller, more targeted reviews in different jurisdictions, with public benefit as the common assessment criterion. The National Competition Council was the institutional vehicle for bringing coherence to this process and played an important role in sustaining ongoing reforms (armed with the ability to recommend fiscal sanctions if justifiable reforms did not proceed).

Nevertheless the experience of the NCP's legislative review program was that 'reviews ain't reviews'. The quality of the reviews undertaken in that period was highly variable. This was in part due to the sheer number of them, which exceeded the resources available to do them all well. A proliferation of reviews also confused the public about what was important, and what governments were trying to achieve. There was an emerging sense of 'reform for reform's sake' and this was unhelpful to further progress.

A related problem was that many of the reviews lacked sufficient distance from the policy department most concerned with the outcome. Experience tells us that if external consultants are to properly inform public policy, there must be governance arrangements that can effectively deter them from simply reflecting or second-guessing their client's wishes. These are also important to the wider credibility of the reviews. However such arrangements are not very common. More often, consultants seem to be engaged with the opposite intent.

#### Leadership was paramount

The reform era was unusual in the quality and depth of political leadership. It was manifest not only at the Federal level, beginning with Bob Hawke's ascendancy in 1983, but also among key states. Moreover, the leaders of the reformist governments often had the benefit of Opposition leaders who were broadly supportive of the major reforms.

Leaders with the right vision for a better Australia and the skills to realise it, were fundamental to all the individual success factors just described — they could be said to be have been the ultimate success factor.

Their effectiveness was enhanced, however, by other initiatives at the political level for which they were ultimately responsible. These included effective cabinet processes and special committees to provide forums for scrutiny and debate. Among these, the Structural Adjustment Committee of Cabinet was perhaps the most notable. It enabled a more coherent approach to identifying priorities within the wider structural reform agenda, as well as bringing cross-portfolio scrutiny to individual reform proposals, enabling the various impacts and tradeoffs — economic and political — to be discussed among the most relevant Ministers.

Another key ingredient lay within the offices of the political leaders themselves — namely, the people they chose as their advisers. The high calibre and extensive experience of 'political staffers' at that time has perhaps never been equalled. It ensured that the leaders not only received good advice, overlaying that from their departments, but that they had people of substance around them to act as sounding boards and, importantly, to 'speak truth to power'.

As noted, the task of reformist leaders in that period was also made politically more tractable by the support they often received from the 'other side'. For example, it was crucial to the second round of tariff reductions in 1991, with recession clearly looming, that Keating's 5 per cent target, though challenging, was more moderate than Hewson's target of zero!

Moreover, the Reform Era was also characterised by strong support from business. The Business Council of Australia, National Farmers' Federation, Australian Mining Industry Council and Australian Chamber of Commerce and Industry were prepared to back key reforms publicly, even those that some of their members may not have liked. That was partly because, as organisations encompassing wide interests, they could rely on the support of other constituents, but it also reflected the qualities of the people leading those organisations. A similar observation could be made about the Australian Council of Trade Unions, which supported, or at least did not actively oppose, a number of key reforms, including enterprise bargaining, more pro-competitive arrangements for public utility services and, to some extent, trade liberalisation.

## The challenges ahead

So what does all this mean for the challenges we face in advancing reform today—and into the future? While there were clearly some special forces at work during the Reform Era, most of the success factors are surely generaliseable. If anything, the systematic approach to identifying, prioritising and building political support for structural reform—which the OECD has referred to approvingly as 'the Australian model'—would seem more relevant than ever. Following the recent election, Government ministers emphasised that the imperative was to build consensus behind all their policies to get them through Parliament.

The challenge implicit in this, of course, is to achieve necessary political support for the *right* policies. This applies within COAG as well as within the Federal Parliament. While there is a large menu from which to choose — the COAG Reform Agenda alone entailing some 200 policy initiatives — governments cannot prosecute reform successfully on too many fronts at once. A key lesson from the

past is that prioritising and sequencing the reform effort are fundamental to its success.

The current economic context for considering reform priorities to promote productivity is itself a challenge. One key dimension is the budgetary constraints that governments face in the aftermath of the Global Crisis. This has limited the scope for governments to promote productivity improvements through further spending and investments in the human capital and infrastructure areas that have been at the centre of the COAG Reform Agenda, pre-dating the crisis. (Moreover, many of those reform areas cannot yield productivity dividends for a decade or more.)

A second challenging feature of the current public policy landscape is paradoxically a bi-product of our economic success, namely structural pressures associated with the mining boom.

The 'two (or three!) speed economy', as it is now called, is not a new phenomenon in Australia, though it is a few decades since its last major manifestation. (In earlier times it was labelled the 'Gregory Effect', after Professor Bob Gregory's 1976 exposition of the forces at work.) Now, as then, the chain of economic impacts begins with windfall wealth from mining and increased domestic spending on nontraded goods, squeezing other traded goods industries via real appreciation of our currency. There are also some more direct impacts on the supply side, to the extent that mining competes labour away from other sectors. However, the main pressures have come from higher incomes and consumption of domestic services, accentuating longer term structural trends.

The combination of fiscal constraints from the Global Financial Crisis and structural pressures from the mining boom suggests that the productivity enhancing reforms that deserve some priority right now are those that can reduce business costs and enhance the economy's supply-side responsiveness, while being fiscally parsimonious.

Attempts to counter structural pressures by either hobbling the mining sector or (further) assisting manufacturing, could only detract from Australia's longer term productivity performance and living standards. Indeed, there is a stronger case than ever right now for *reducing* any government assistance to manufacturing (or other) activities that is not justified by genuine market failures — to free up skills needed in the expanding sectors. As the Commission has noted previously, this would be a win for both productivity and the budget. (Concerns about the possible reversal of our good fortune at some point would be better met by saving some of it for later than undermining it.)

Other big spending areas previously identified as providing scope for 'win-win' reforms, include government procurement (not forgetting *defence* procurement that favours high cost local production — like submarines costing multiples of equivalent imported models — without a clear quid pro quo for society); infrastructure projects that do not demonstrably yield a net social benefit (not forgetting railways), and those human services programs where benchmark data suggest scope for more cost-effective delivery (especially health services, given their magnitude and growth trajectory).

Most other prospective territory for productivity enhancing reform is regulatory in nature, with attention needing to be given not only to reducing compliance burdens (where progress is being made) but also to regulatory constraints on flexibility and adaptability at the enterprise level, and regulations that distort business decision-making. As noted previously, the challenge here is both to reform existing regulations and to prevent *new* regulatory impositions that would erode our productivity performance. Regulatory proposals that would have pervasive effects across the economy need particular scrutiny, especially those impacting on the markets for labour and capital, and key infrastructural inputs to production such as transport (not forgetting coastal shipping), energy, telecommunications and water.

Among these, industrial relations regulation is arguably the most crucial to get right. Whether productivity growth comes from working harder or working 'smarter', people in workplaces are central to it. The incentives they face and how well their skills are deployed and redeployed in the multitude of enterprises that make up our economy underpins its aggregate performance. It is therefore vital to ensure that regulations intended to promote fairness in Australia's workplaces do not detract unduly from their productivity. Getting the balance right is challenging and requires careful ex ante assessment and ex post review. This is particularly important in the context of the structural pressures described earlier, given the premium they place on flexible, adaptable labour markets. However, regulatory changes (in both directions) have generally been exempt from even the cursory obligations of regulation impact statements. If we are to secure Australia's productivity potential into the future, the regulation of labour markets cannot remain a no-go area for evidence-based policy making.

The renewed policy priority being attached to carbon pricing also has significant implications for productivity. Given the marked asymmetry between the costs and benefits of action by Australia — pending a significant global response — perhaps the strongest economic argument for carbon pricing is that it would displace more costly alternative measures targeted at particular products or technologies. If this were not achieved, the potential value of any new economy-wide instrument would be compromised. Unfortunately, most of the programs in question serve more as

industry assistance than environmental assistance, and they will accordingly be difficult to terminate.

The need for regulatory vigilance has if anything been heightened by the Global Financial Crisis and its aftermath. For one thing, in times of fiscal stringency there is more risk of regulatory measures being adopted to get around budgetary constraints (for example, anti-competitive regulation rather than subsidies for Community Service Obligations); for another, the economic crisis has given rise to renewed pressure for regulatory interventions of various kinds. To take the example of banking, Australia managed to 'dodge a bullet' from template international regulatory changes; but recent domestic proposals — such as to address alleged 'price signalling' — pose risks of their own.

Even this brief re-cap of some current priorities suggests that the political difficulties facing (real) productivity-enhancing reform are at least comparable to those of the past. As in the past, it will be necessary to carefully build and effectively sell the case for such reforms, while resisting demands for policies that would take us backwards. In both cases, sound evidence on what is at stake for our economy and society has a fundamental role to play. Under the 'new paradigm' there will be more call on political negotiation to get reforms through than in the past. The challenge is to ensure that this does not compromise their essential character and their potential benefits. The stronger the evidence base for a proposed reform, and the better the consultative processes underpinning it, the greater are the chances that it will end up being a 'successful reform'.

## Independent policy advice and the Productivity Commission\*

#### Introduction

During the past decade, the number of reviews commissioned by governments on key policy issues appears to have increased exponentially. However, as the Commission has found in its current 'review of reviews' of regulation, some of these reviews and inquiries have done better than others in achieving improved outcomes. To borrow a catch phrase, 'reviews ain't reviews'. How well they have performed has depended not just on whether they have targeted the right issues, but crucially on their governance, their skill base and how they have gone about their tasks — especially their consultation processes.

In this lecture I intend to focus on one aspect of governance that has stood out as a success factor across a variety of these policy or regulatory reviews — namely 'independence'. While many reviews have been characterised as independent, in practice this has not always been accepted by stakeholders, and that in itself has affected their influence.

I will speak about independence specifically in relation to the Productivity Commission. This is because independence is integral to the Commission's role in advising governments and informing public opinion. It is also something that, as Chairman of the Commission, I have frequent cause to reflect on — as no doubt did my predecessor, Bill Scales, Chancellor of Swinburne University, which has sponsored this lecture.

There are two threshold questions. First, why is independence of value in a public policy sense? And, second, what does it require?

Swinburne University, Chancellor's Lecture, 22 September 2011. An earlier version was delivered at the 2011 National Administrative Law Conference, Canberra. This speech was also published in the AIAL (Australian Institute of Administrative Law) Forum No 69, July 2012.

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#### Why independent policy advice?

The simplest answer to the first question is that governments need advice that is based on a broad understanding of the public interest. Otherwise the policy-making arena could become dominated by self-interested or ideologically based claims, and end up generating exclusively bad outcomes. Claims of that kind are of course pervasive in any democracy — that's what democracy is all about. If all goes well, they should be sorted out by the political decision-making process, with advice from different parts of the bureaucracy and vigorous parliamentary debate ultimately securing courses of action in the national interest; and with the ballot box providing ultimate adjudication.

While the system works tolerably well overall — not perfectly, but as they say better than any alternative we can think of — it's an empirical fact that much bad policy does nevertheless get through.

The reality is that, particularly in complex policy areas or where good evidence is not readily available, self-interested arguments can escape the scrutiny and checks they deserve. Parliamentary debates are often not as well informed as they might be about the choices and trade-offs. And the structure and interests of government departments don't necessarily always facilitate an understanding of what is in the wider public interest.

Independent advice, if it's also well researched, public advice, can complement these other institutions by helping governments identify the best ways forward in complex or contentious policy areas. But it can also facilitate implementation, by building public confidence that the policy is well founded and therefore likely to be generally beneficial. In other words, it can increase the trust of the wider community in circumstances where many will not have, or be able to acquire, a detailed understanding of the particular policies under consideration.

#### What advice is 'independent'?

At bottom, independence essentially hinges on the incentives and constraints that can affect the advisor's ability to be objective and to exercise judgement based on facts and analysis, without being unduly influenced by special interests or 'third parties'. This suggests that independence is not an absolute concept. There are degrees of independence. In a formal sense, it depends on the governance arrangements around the advisor. But in a practical sense it also depends on the resourcing of advisory bodies and on the characteristics of the individuals concerned — their attitudes and beliefs, as well as their experiences and interests.

All these things affect not only how independent a particular source of advice is able to be, but also how independent it is *perceived* to be. The latter can be just as important if the advice is to serve the role of enhancing public understanding and trust in the policy-making process.

In terms of the governance arrangements, the minimum requirement for 'formal' independence is that the advisory body operates at arms length from the decision maker. The more substantive requirement is that the advisor is not able to be unduly influenced by any party, including the decision maker. This one is much harder to satisfy. It invokes more subtle considerations of the nature of the relationship between an advisory body and policy maker, and how the entity is funded and staffed.

In my view, the second requirement is rarely satisfied to a sufficient degree. And this deficiency in many cases has detracted from the contribution of the reviews concerned to achieving better policy outcomes.

I won't surprise you if I suggest that the Productivity Commission passes both tests for independence. Further, I believe that this has been fundamental to the Commission's ability to make a sustained contribution over the years. So tonight I'm going to briefly talk about those aspects of the Commission's origins, design and operation that relate to its independence. I will consider how that independence, together with other features, have helped public policy and then allude to some challenges associated with this. (Even an independent life wasn't meant to be easy!)

#### **Origins of the Commission's independence**

The Commission's independence is formalised in its statute, the *Productivity Commission Act 1998*. But key features of this legislation have their origins in the *Tariff Board Act, 1922*. The Tariff Board had a quasi-judicial role in relation to its advice to government. Tariffs involve both winners and losers, and impartiality in making judgements based on the 'evidence', was rightly seen as essential.

The same rationale for independence was adopted by Sir John Crawford in his report to Gough Whitlam in 1973 on the replacement of the Tariff Board by an Industries Assistance Commission. The IAC was assigned a similar role, though with a wider remit, in the conflicted area of industry assistance. Its purpose, like the Tariff Board, was to provide evidence-based, impartial advice. But a crucial difference, introduced into its statute, was that it was required to take an 'economy-wide perspective'; that is, that it must promote the interests of the community as a whole over that of any particular industry or group.

Over the years, the Commission has evolved considerably further and its work now covers much more extensive policy territory than tariffs and other industry assistance. However, the formal statutory independence that had its origins in the Tariff Board has held it in good stead. Indeed, I would argue that it has facilitated the extensions to its public policy role.

Having its own statute is clearly fundamental to the Commission's independence. The most basic reason is that it makes it hard to abolish the organisation! That would require legislation to terminate the Act, for which there would need to be reasons that got the support of both Houses of Parliament — and thus reasons that the public itself would broadly accept.

There are two aspects of the statute that bear on the Commission's independence. One relates to appointments, the second to the operations of the Commission particularly its relationship with the government or Minister of the day.

#### Independent Commissioners

In relation to appointments, the independence of the Productivity Commission is embodied in the Commissioners. Together with the Chairman, they are responsible for its advice to government. This is accomplished with the support of some 200 permanent public servants; about 150 of whom are professional researchers.

Under the Productivity Commission Act, Commissioners can be appointed for up to five years. This period has the advantage of spanning more than one electoral cycle. Perhaps more importantly, it gives the Commissioners job security for their term of appointment. The only grounds for removal of a Commissioner are for demonstrated misbehaviour — the dimensions of which are specified — or physical or mental incapacity.

This means that Commissioners can't be sacked merely for giving unwelcome advice on public policy matters. That's quite significant, because there's little statutory limitation on the ability of the Commission to offer such advice. Indeed, in conducting an inquiry, the Commission has licence under its statute to "make recommendations in the report on any matters relevant to the matter referred".

Placing that in perspective, however, the Commission has no executive power. It is not a decision maker. Its functions are advisory and informational. It is thus really only as influential as the quality of the advice and information it provides — which depend on the processes, the research and the analysis on which these are based.

Secondly, although the Commission can undertake research in support of its other activities, it cannot initiate its own public inquiries. And the inquiries that it is asked to undertake are framed by the government and can be bounded as it sees fit. (For example, the terms of reference for the 1997 review of private health insurance explicitly ruled out any recommendations for the wider health system. And our recent study on carbon policies around the world was restricted to a comparative assessment of measures in place, rather than proposing what Australia's policy should be.) Nevertheless this still leaves the Commission with scope through its supporting research to get public attention for policy issues it sees as important. For example, the recent inquiry into aged care was preceded by a self-initiated research study identifying deficiencies in existing arrangements.

#### Full time vs part time

How potential conflicts of interest are handled is obviously central to the independence of the Commissioners and their perceived credibility. Originally, in the IAC, Commissioners had to be full-time appointees. This had the same rationale as for the judiciary, that it would eliminate scope for conflicts that could come from other activities — particularly remunerated activities.

However in the Commission's case, that requirement became impractical over time. It was hard to recruit the kinds of people the organisation needed — people with a lot of experience, skills in a range of areas, often towards the end of their careers, who didn't necessarily want to work full-time. So currently, of the ten Commissioners, apart from myself and my deputy — both of those positions having to be full-time — half are part-time. (I might also note that half our Commissioners are women.)

While this has been beneficial in enabling the Commission to draw on people with diverse skills and experience, it has obviously increased the potential for individual conflicts of interest. In addition to provisions in the Act requiring part-timers to obtain approval for involvement in other activities, where there is a perceived conflict, that person is 'quarantined' from any related Commission matter.

#### Appointing the right people

Often the first question I'm asked when talking about the Commission to a foreign audience, is "how are appointments made"? People in other countries find that particularly intriguing. I suppose what they have in mind is what's to stop the government loading the Commission with people chosen mainly for their political affiliations or support for the government?

That has been an issue for some of the ad-hoc policy reviews, but in my experience it has not been thus far for the Commission.

Firstly, there are some formal protections within the Act. Appointment is by the Governor General. While obviously acting on the advice of the government of the day, the Governor General must accept that 'the qualifications and experience of the Commissioner are relevant to the Commission's functions'. Under the original IAC Act, the overriding consideration was to have Commissioners who would represent the public interest, rather than representing some section of the community. There was accordingly mention of Commissioners having general competencies rather than specific skills or fields of experience. The Productivity Commission Act, as part of the deal in getting it through the Senate, specifies that there should be at least one Commissioner with skills and experience in each of three specific areas — the environment, business and social service delivery.

This still allows for plenty of discretion and it would be fair to say that any government might naturally prefer to appoint people regarded as 'one of ours'. Such appointments no doubt have been made over the years, but rarely has that outweighed considerations of competence and credibility.

There are a number of reasons for that. One is the public scrutiny that such appointments attract, and the potential for criticism of the government if an appointment wasn't seen to be appropriate. Secondly, an appointee who was appointed on political grounds and lacked the necessary skills, would struggle in the job. Commissioners need to preside on inquiry topics that can be quite contentious, that demand a detailed understanding of the subject matter and that ultimately require good judgement. The Commission is quite exposed to public scrutiny and must be able to defend its reasoning, particularly where its recommendations, if adopted, would have a significant impact on the community, or involve some losers.

So we have seen governments appoint and reappoint Commissioners with no political affiliations or connections, and some who might if anything have been seen to have been on the 'other side'. In my own case, I was originally appointed as a Commissioner with the Industry Commission by a Labor Government; I was then made Chairman of the Productivity Commission by a Liberal Government, and reappointed to this position under a Labor Government.

The integrity of appointments has been enhanced by the changes introduced in 2008 for all Commonwealth statutory appointments. These are now required to be advertised and to undergo a formal merit-based selection process, with recommendations to the Minister by a panel headed by the Portfolio Secretary. If the Minister chooses not to follow the advice of the panel, or to appoint someone

outside the merit process, this has to be noted or justified when seeking Cabinet approval. Two rounds of appointments to the Commission have been made under this system. It has proven beneficial both in identifying people (with about 100 applying in each round) and in securing the most suitable appointees.

There is also provision for 'Associate Commissioners' to be appointed for specific inquiries and this has often been utilised. Such appointments can add greatly to the Commission's authority and credibility in areas where a deeper knowledge or background are seen as important. The Minister has unfettered discretion in making these appointments, apart from having to consult with the Chairman first (and of course obtaining agreement with relevant ministerial colleagues). Over the years many good appointments have been made, with only a few being problematic. The crucial requirement is that an Associate be capable of bringing knowledge and experience that is relevant to the topic, but with an open mind and willingness to follow the evidence about what is in the wider community's interests.

#### Relationship with 'the Minister'

The other element I wanted to talk about briefly is the Commission's relationship to the Executive, and to the Minister in particular. As I said, the Commission has no executive powers and its reporting relationships within government are obviously quite different to those of a department of state. These are best summarised as 'the Minister can tell the Commission what to do, but not what to say'. When I stated this at a recent international conference in Seoul — held to celebrate the  $40^{th}$  Anniversary of the Korean Development Institute — it provoked a bit of a buzz. I took it that this distinction may be unusual internationally.

The Minister has formal responsibility for the Commission's work program and the Commission reports to and through the Minister. It is the Minister who formally commissions studies. However, proposals for Commission inquiries do not emerge only from the Minister's portfolio (Treasury). They can originate from community groups, from State governments, from other portfolios and indeed from the Parliament or the Council of Australian Governments (COAG). The Minister is required to table the Productivity Commission's final reports in the Parliament within 25 'sitting days', which reflects the organisation's dual role of advising government and informing Parliament and the wider community.

The tasks given to the Commission are set out in Terms of Reference which are made public. While we are consulted for their workability (as to timing, staff resourcing etc.) and the scope in practice to do what is contemplated, the Terms of Reference obviously come to us from the Minister and reflect his judgement and

that of the Prime Minister and other relevant Ministers about what is appropriate. Any other instructions from the Minister are also made public.

So the intent of the Act is clear that, for public inquiries, the Commission's relationship with the Minister, or the government more broadly, needs to be arms length and transparent.

A number of protocols and practices have developed in keeping with that. Periodic briefings are given by the Chairman to Ministers and to Parliamentary Committees on the Commission's activities and progress. But the specifics of particular inquiries underway and what might be recommended are not discussed, and that is understood and respected.

By the same token, it is a reasonable expectation on the part of any government that there be 'no surprises', particularly with the Commission making recommendations in what are sometimes very sensitive policy areas. Accordingly, there is a long-standing convention that the Government receives briefings on a report in advance of its public release — but only after it has been signed and 'gone to the printer'.

Now this degree of separation can take a new government or a new Minister a little getting used to, and I would suggest that it has not been the norm for other 'independent' reviews. In many of these, it would seem that emerging findings are made known to and discussed with the Minister in advance. Indeed, desirable outcomes for the review may even be canvassed at the outset. However, the public credibility of such reviews has not always been high.

#### The portfolio matters

Which Minister or portfolio has responsibility for the Productivity Commission is not specified in the Act. It has little direct bearing on the Commission's formal independence, but it can make a big difference to its relationship with the Minister and the government of the day and, more importantly, the contribution of the organisation to public policy.

The Commission prospered least when it reported to a Minister with responsibility for a particular sector of the economy. The Commission's job is to assess industry or group claims for policy changes in a community-wide context, and this sometimes can be at odds with such a Minister's perceived role. Thus, when located in the Industry Portfolio in the 1980's, the IAC was 'withering on the vine' — to use the words of the departmental secretary at the time — whereas the institution

had a second lease of life when moved into the Treasury portfolio in 1987. Since then its remit has been widened and enhanced.

## Funding and resourcing

The Act is silent on the manner and extent of the funding or resourcing of the Commission. In practice these can have a significant bearing on an organisation's independence, or more precisely its capacity to exercise it.

Policy advisory bodies — whether standing ones like the Productivity Commission or ad-hoc ones appointed for specific tasks — are most independent where they have control over their own staffing. Reviews headed by independent figures, but provided with secretariats from the relevant policy departments, can in practice be constrained or compromised. (As Sir Humphrey put it, 'I don't care who chairs the meeting, as long as we can write the minutes.')

The Productivity Commission and its predecessors have always benefited from having their own staff and that's enabled the organisation to build expertise in analysis and in the processes that the Commission follows. Over time it has also helped create a *culture* of independence throughout the organisation.

The Commission also has always been funded through a single annual appropriation, which has given it desirable flexibility in allocating its resources. (Although, I would hasten to add, never more funding than was *needed!*)

We managed to resist two funding innovations (or fads) over the years that arguably have undermined the independence of other research and advisory agencies in the public sector. One of these is project-based funding. Apart from uncertainty, it has the downside of potentially enabling greater leverage or capacity to provide pressure by the funders. We have also resisted proposals for external funding. Private funding for public research bodies was heralded in the 1990s as enabling such organisations to become more 'relevant', while boosting their resourcing. In practice it merely displaced government funding, such that the capacity of those organisations was unchanged, while their independence was compromised, at least as perceived publicly.

### What difference has independence made?

So has the Commission's strictly independent role made a difference to public policy? You'd expect me to say 'yes'. I could end it there, but you deserve some explanation.

If anything surprises visiting foreign officials more than the Commission's independence, it's our *survival*. The Commission in its modern form has been around for nearly four decades. It has operated under three successive statutes, had two name changes and seen its remit widened under both Labor and Coalition Governments. That suggests that governments have seen the Commission as making a useful contribution to public policy, even though they have not always agreed with or been able to accept its recommendations. The generally accepted objectivity of the Commission's work and the transparency of its processes have, in my view, been central to that.

Against the background described earlier of the twin challenges in public policy—the technical challenge of what to do, and the political challenge of how to implement it—the Commission and its predecessors have been able to add value in a number of ways.

#### Impartial and considered advice

The most fundamental of these is that, in a world of many self-interested claimants for preferment and advocates for 'causes', governments have been able to rely on the Commission for advice which by its mandate must be motivated only by the public interest.

At the same time, governments have been able to depend on the rigour of the research and analysis contained in the Commission's reports, knowing that its findings and recommendations have been informed by extensive consultations and tested through public scrutiny.

Those two features have seen the organisation being called on by governments to assist in a wide range of quite difficult policy areas; areas that are complex and contentious, but with the prospect of a high payoff to the community from getting it right.

This is illustrated by some of the inquiries on our books this year. They include aged care, disability support, international carbon pricing policies, the education workforce, urban water policy, rural R&D support, airport regulation, planning and zoning, and the retail sector. Last year's crop included bilateral trade agreements, public *vs* private hospital performance, paid parental leave, gambling policy, the not-for-profit sector and executive remuneration. I think you will agree that all of these topics pass the 'complexity and contention' test, as well as being important to community living standards and wellbeing.

The Commission has also been an honest broker on policy issues with inter-jurisdictional dimensions and has become a resource for the Council of Australian Governments. The question in 'cooperative federalism' of which jurisdictions should regulate or fund which activities has often been at issue in Commission inquiries (disability services being perhaps the most important recent example). The Commission has also been asked by COAG to provide advice in areas that could be expected to remain a state responsibility, such as gambling, urban water, and education. And it has assisted the 'competitive federalist' process by conducting benchmarking of regulation and government service provision (the latter as Secretariat to a COAG senior officials group).

#### 'Ammunition' and education

The third way in which the Commission has assisted is by providing 'ammunition' for governments (and sometimes opposition parties as well), in advocating policy initiatives to the public and Parliament and in countering policy proposals from special interests. For example, the evidence and analysis in Commission reports have been actively employed by the Australian Government recently in areas such as paid parental leave (against an alternative model strongly advocated by the Opposition during the last election), gambling (against the strident opposition of industry interests) and executive remuneration (against some vocal corporate objections). Wide-ranging reform programs such as the National Competition Policy and then the National Reform Agenda have been successfully advanced in part due to evidence produced by the Commission of substantial potential gains.

In some cases, the Commission's work has helped build active constituents for reform, by demonstrating to certain industries or groups the costs to them of the status quo and the benefits of a change in policy direction. This is generally acknowledged, for example, in relation to the role played by the farming and mining associations in tariff reform, and business support for the reform of public utilities. But it has also been a factor in some of our more recent work in social policy areas, such as aged care and Indigenous disadvantage.

And we've arguably made government's 'selling' job a bit easier through our own consultative processes, which on key policy issues such as those just mentioned, have assisted public understanding and helped bring the community along.

In those various ways, the Commission's inquiries and reports have helped create a more benign or receptive political environment for policy change.

Finally, our processes and, in particular, our draft reports can provide a source of political learning for governments, giving them an opportunity to observe how the

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public responds to different policy proposals and thus better judge the politics of different options. In some cases this has led government to accept and implement 'bold' recommendations (eg. the modification of community rating in private health insurance — long regarded as untouchable); in others, it has led it to reject or defer reforms (eg. the ban on parallel book imports).

These benefits have seen the Commission being assigned an increasingly diverse range of tasks, with a large consignment at any one time. Unfortunately, resourcing hasn't always kept pace. There is a rough justice in using a blunt rule like the annual 'efficiency dividend' to oblige government departments across the board to be cost-conscious and to reduce unnecessary or low payoff spending. While research agencies may also need some prompting to be cost-effective in their activities, there is a limit to which they can produce quality outputs with fewer inputs, particularly when the research agenda itself is externally imposed. The American economist Joseph Baumol's analogy of trying to get ever higher productivity out of an orchestra is apt — ultimately you would be left with a drum and a fife to play a Beethoven symphony!

#### The role of Parliament

Some new demands on the Commission have arisen under the so-called 'new paradigm' of minority government at the Federal level. The Commission has been called on to play an informational role in the context of negotiations with minority parties and independents; negotiations which have become important to policy outcomes. Examples include our studies on gambling, private *vs* public hospitals, and comparative carbon policies. This is essentially an extension of the Commission's 'honest broker' role and one that we are well placed to perform.

However there has been a further development in the past year, whereby the Parliament has sought to override the government, the executive, in commissioning work directly from the Productivity Commission. There have been two routes. One is by introducing legislation requiring us to undertake certain tasks. Examples are the recent Bill on a cost-benefit analysis for the NBN (defeated) and another on foreign ownership of agricultural land (passed the lower house). The second, and more problematic route, has been through Orders by the Senate for the Commission to provide it with reports on certain matters (one related to default super fund allocation mechanisms, another to the introduction of a sovereign wealth fund.)

These initiatives are unprecedented in the nearly four decades of the institution's existence. If successful, the latter route in particular would pose obvious problems for the effective operations of the Commission, in terms of logistics and the disruption of existing inquiries. But, more importantly, it would also become a

threat to its continued existence. It would be likely to tip the balance, from any government's point of view, from the Commission being seen as an asset to it being seen as a liability.

So it was with some relief that I read recent advice from the Australian Government Solicitor that such orders — going beyond requiring us to furnish documents based on information in our possession, to undertaking new work — would exceed the Senate's powers. The AGS advice is a particularly erudite piece of work and deserves to be widely read in the current political environment. It states in conclusion:

... the power of the House of Parliament to require production of documents is not a power to require original work to be undertaken and it cannot be exercised to usurp the power of the Executive.

And it cites an earlier authority, Hearn's *Government of England* (1886), in more colourful terms:

It is the duty of Parliament to advise, but not to command, the Crown ... It cannot of itself issue orders even to the doorkeepers of any public departments.

Whether this will be accepted as the last word remains to be seen, however — so watch that space!

## Summing up

In conclusion, policy making occurs in a complex and conflicted arena, one that in many cases is hindered by lack of evidence and biased in ways that can favour special interests over the public interest. Independent policy advice can play an important role not only by helping governments determine what to do amidst such competing or conflicting claims, but also by helping them achieve it through greater public understanding and a more benign political environment.

There are degrees of independence. The Commission and its forebears were created and expressly designed to achieve it to a high degree. This has enabled the organisation to contribute to better policy development in an increasingly wide range of areas. Those qualities may be at a premium right now under the 'new paradigm' federally, and this is also raising some interesting new challenges for the organisation.

## Economics, economists and public policy in Australia\*

The topic for the 2011 Symposium, 'Does Australian public policy get the economics it deserves?' has been partitioned into two questions. One asks 'whether public policy gets the economics it needs?' The other, no doubt inspired by Alexis de Tocqueville's famous observation about people and their elected governments, is 'whether Australian economics gets the public policy it deserves'.

My answer to the first question came readily: in short, no — or at least not often. The answer to the de Tocquevillian one required reflection, however, not only about the state of public policy in Australia, but also about that of Australian economics. And my answer to that one is: I'm not sure!

Much could be said from both perspectives. In setting the scene, I will confine myself to some observations about what might be called the 'contextual' influences on public policy and its use of economics (or information generally).

My key message, which should not be surprising, is that systems determine outcomes. Public policy will only get the economics it needs, or indeed that society needs, if the processes, the institutions and the individuals responsible for developing it are receptive to good economics, and responsive to it. Equally, I'd argue that how 'deserving' Australian economics or economists might be — in other words, the health of the supply-side — is not independent of the incentives generated by the policy system — the demand side.

#### What sort of 'economics'?

Now the term 'needs' might suggest that it is challenging to discover and apply this necessary economics. In some areas of public policy that may indeed be so, but in many cases the sort of economics needed to inform policy decisions isn't very complicated or sophisticated.

<sup>\*</sup> Opening address to the 40th Australian Conference of Economists Symposium, *Does Australian public policy get the economics it deserves*?, 14 July 2011, Shine Dome, Canberra. (This is an edited version, as published in *Agenda*, vol. 18, no. 3, December 2011.)

Much public policy could go a long way with a few basic principles or precepts. I'll just mention four.

- The most basic is that there is no 'free lunch'. Economies have finite resources, which means scarcity and therefore opportunity costs to their use.
- A second principle is that prices matter in allocating scarce resources to where they can do the most good for an economy and society. Market prices signal both production costs and people's valuations.
- Third, the responsiveness of people to relative prices and to changes in relative prices will vary, but the lower the price, generally the greater is demand: as economists put it, 'demand curves slope down'.
- Fourth, no part of an economy is an island. What happens in one industry, sector or region affects and is affected by what happens in others.

One might say that all of these are just common sense. But we see policy proposals and decisions that violate those principles almost on a daily basis. We see policy proposals and decisions that seem to assume that there is no such thing as scarcity; that there are no substitution or income effects, and that there is no interdependence within the economy. Decisions based on such anti-economic thinking are not just a relic of the bygone era of 'protection all round'.

The reality is that even the most basic economic concepts are not intuitive or self-evident to the average person (the 'man on the Clapham Bus', as my Welsh friend Steve puts it). Indeed some economic principles and tools can be forgotten or lost even by people with economics training.

The foreword to my favourite economics primer, by Alchian and Allen (1969), cites Alain Enthoven, the Assistant Secretary of the US Defence Department, on the rationale for an economics PhD, as follows: "Many economists don't believe what they've learned until they've acquired a vested interest in marginal analysis." (The Defence Department was a pioneer of cost benefit analysis in the USA — contrasting somewhat with our own.)

We also need to acknowledge that art as well as science is called for in applying economic principles and frameworks to real world problems: in relation to understanding the exact nature of those problems, assessing what will work best, and identifying the relevant impacts, given that there will be many influences at work. Policy-makers must operate in what economists refer to as a 'second best' world. This calls for more than the textbook when contemplating additional government interventions. It calls for judgement; it calls for experience, and indeed it calls for incentives for decision-makers to make the best call (a point to which I'll return). And, even when these conditions are satisfied, we can never be certain of

the outcome. Good policy is not a one off event: it requires ongoing review, and amendment in the light of experience (Banks 2010).

#### What sort of 'process'?

That is why processes and institutions can be crucial to whether and how effectively economics is brought to bear on public policy. Good policy, and indeed having good economics behind it, requires good process. It may not be sufficient, but it is certainly necessary.

At face value, the requirements for good process in policy-making are not that demanding. The essentials are well described by the legendary American economist Frank H. Knight, in his book *Intelligence and Democratic Action* (Knight 1960). Knight sets out the conditions for what he describes as 'intelligent' — what we'd call today well-informed — political decision-making.

According to Knight, 'if policy is to have a reasonable chance of improving a situation, certain steps need to be followed.' The first of these is understanding what will happen without intervention and why. The second step is to decide what interventions are feasible; the third to assess their consequences and the fourth to rank the alternatives, ultimately reflecting the value judgements of political representatives.

#### Easily said

That sequence for 'intelligent' policy-making anticipated the 'impact assessment' framework for regulation-making that has since been embraced by many OECD countries, including Australia. Yet, we've struggled to inculcate such an approach within government, notwithstanding that these provisions commenced some 25 years ago. Often only lip service is paid, or assessments undertaken after a policy decision has already effectively been made. Why is that so?

I've become fond of quoting the observation by Maynard Keynes that 'There's nothing a government hates more than to be well informed. It makes the process of arriving at decisions much more complicated and difficult' (Moggridge and Johnson 1982). He might have added that it also makes the process more *inconvenient*, in circumstances where governments are keen to follow a course that good economics might not support.

The reality is that there is generally more vocal support within the electorate for bad policy than for good, reflecting well known asymmetries in the impacts of policy

and reform within an economy and community. We also often see political deal-making acquiring a life of its own within the Parliament, taking a policy in unfortunate directions, regardless of how good the starting point might have been.

It is therefore to be celebrated that in the 1980s and 90s substantial headway was made against these forces, resulting in an important series of economic reforms from which we are still benefiting today. We've also seen those obstacles being overcome in some individual policy actions since then, but not a lot.

The principal success factors in what the OECD now calls the Australian Model of structural reform, arguably boil down to two: one is having solid research to identify the problems and their causes, and thereby to establish the case for reforms that would actually make things better. The second is the effective communication of this to the public, to build support based on the understanding that a policy that is being contemplated will indeed make people better off overall.<sup>1</sup>

## How 'deserving' are Australian economists?

As indicated, the existence of good process or good policy-making systems is also relevant to the second question — whether Australian economics gets the public policy it deserves. I take this to mean the contribution of Australian *economists*, rather than some special Australian branch of economic theory. It is rather topical to be talking about this just now, given the Leader of the Opposition's recent critical comment about the profession in Australia.

How deserving economists might be obviously depends on the quality of their contribution. However I'd argue again that this is not independent from how demanding or 'receptive' the policy-making process itself has been. This has

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A referee has remarked that this assessment neglects 'the lesson of political economy that, if you do not compensate them, the relatively few losers, who have relatively large stakes, can derail a policy' and notes that 'compensation also provides a crude test of Pareto superiority'. While compensation has indeed played a role in some areas (notably the GST), it has generally been a subordinate one, having more to do with implementation and transition than gaining acceptance of the need for reform itself. Compensation has only been explicitly addressed where a reform was seen to violate (defacto) property rights (eg dairy deregulation, taxis) or to be unfair in its incidence. That said, transfers have been implicit in the gradualist approach that has typified some major Australian reforms (notably tariff liberalisation) and also in the 'grandfather clauses' used in tax reform and the 'no disadvantage test' in labour market deregulation. And the National Competition Policy was underpinned by 'competition payments' from the Commonwealth to State and Territory Governments, even though the latter were individually winners overall without it. (For a discussion of the role of compensation and adjustment assistance in structural policy reform, see PC 2001.)

fluctuated considerably over time, but has arguably been trending down over the past several years. <sup>2</sup>

Australian economists have been very influential in relation to public policy and reform over the years. The question is whether they are less so today then in the past. There are four main sources of economic advice or analysis that I'll go through in considering this.

#### The academics

The first is academia. Academic economists in Australia have played an important, indeed crucial, role in laying foundations of theory and research on which others, including economists in government, have depended.

Traditionally, academic economists were attuned to the particular policy needs of this country. Australian academics have produced seminal work in such areas as trade theory and protection measurement, agricultural economics, open-economy macroeconomics and CGE modelling.

Australian academics have also been directly engaged in the policy-making process over the years, including through stints within government itself. They have thereby had a significant impact not only through their writings, but also through more direct involvement in the policy process. That seems less evident today and may reflect a more general malaise in academic economics.

Observing from the 'outside', there appears to have been a loss of mainstream economics within many of our universities, both in teaching and research. Economics seems to have gone in two directions — a softer commerce-related direction, and a highly 'mathematical' one.

There is a question as to whether that has contributed to 'economics' becoming a less attractive proposition for many young potential students. We've certainly seen a drop off in the number of economics graduates and in the number of young people choosing to study economics proper.

There is also a question as to whether enough academic economists in Australia are applying themselves to the policy issues of the day. If we think about the burning policy debates in relation to social and environmental issues, how prevalent are

Henry Ergas, in commenting on this presentation, raised whether this may be due to the lower opportunity cost of inefficiency in good times than in bad. He notes that our 'golden ages' of economics were times of economic crisis — the 1930s and 1980s — observing that strong terms of trade have been bad for Australian economics and, by extension, economic policy.

academic economists in these? Only a few come to mind as being active public contributors on such topics as education, health, welfare, migration and, even that most 'wicked' contemporary policy challenge of all, Australia's response to global warming. <sup>3</sup>

Another issue is whether the long-standing existence of different 'camps' and dissenting views within the profession may have weakened its collective influence. Are we fueling the public's perception of economics as a 'two-handed' discipline, one that rarely ends up coming to decisive conclusions or policy solutions to real world problems? Of course that would not be a new perception: recall George Bernard Shaw's quip that 'if economists were laid end to end they would not reach a conclusion'.

You may also recall comments last year by then Treasury Secretary Ken Henry indicating some frustration that the Government's major policy initiatives on mining taxation and carbon abatement at that time were not receiving stronger support from the economics fraternity, given that the core economic principles in those areas — related to economic rent and market-based mechanisms — are ones that economists would generally all accept at some level. This suggests that policy in Australia may not be getting the *economists* it deserves.

However, it is not at all clear that the dissenting views of some of the leading protagonists have been about matters of little consequence. For example, while 'economic rent' is a well-defined concept in theory, its identification and extraction in practice through government taxation — such as to avoid impacts on production or investment decisions — are very difficult, if not impossible, and will depend crucially on the detailed policy design. Equally, while market-based mechanisms have superior economic credentials for addressing pollution, and thus also in principle for reducing carbon dioxide emissions, their form, scope and timing are all germane to their efficacy and efficiency in practice.

Further, returning to one of my themes, it is questionable whether there *was* sufficient opportunity for such differences to be debated (in the Knightian sense) before the policies in question were fully formed. And, as we have seen, if there is no great effort made to attain some resolution among economists and other experts

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One of the commentators for this paper has explained this in terms of the incentives facing academics under 'managerialism' within universities, in which 'Heads of Schools are given little scope to reward academics who contribute to public policy'. Another commentator notes the 'emphasis put on work models, performance indicators and possibly even on what might be termed 'political correctness''. A third cites in particular 'the ERA journal ranking exercise' as influencing what academics do. And a fourth speculates whether 'the rising proportion of non-Australian origin academics is playing any role', noting their 'lack of context and therefore lack of confidence in adding their voices to public debate'.

early on, later resolution among politicians and key interests may well generate outcomes that would satisfy no economist.

#### The bureaucrats

A second key source of economic advice is the *bureaucracy*. This has traditionally been a stronghold of economic thinking and application. During the reform era of the 1980s and early 90s, several 'practising' economists headed key departments of State. Economists were also commonly key advisors in ministers' offices.

At the departmental level, I think Treasury is now the last refuge of economists — in terms of a working environment in which economic thinking is central — and lawyers and publicists now greatly outweigh economists among 'political staffers'.

Beyond the departments, there is the Reserve Bank, which does excellent research and brings a measure of contestability to macroeconomic policy debates. And there are those research agencies that are adjuncts to particular departments, though these appear to have become less independent and influential over time.

Finally, I shouldn't omit my own organisation, the Productivity Commission, which continues to apply economics and evidence to a range of key policy questions through its public inquiries and other studies.

The scope of the Commission's work has widened considerably over time, extending well beyond its predecessors' staple fare of industry assistance and economic infrastructure, to important areas of social and environmental policy. There are a number of reasons for this. I'd like to think that a key one is greater recognition of the value of the Commission's evidence-based and consultative approach to policy development on the 'hard' (complex and contentious) policy issues. But this has no doubt been reinforced by a loss of research capability elsewhere in the public service.

One likely cause of that is the blunt, across-the-board cutbacks in funding of government departments and agencies that have taken place over recent years in the name of 'efficiency'. These have tended to fall more heavily on research, it being seen as a more dispensable activity. Another may be the lack of what I'd call a 'hospitable' working environment for young economists seeking to make their mark on public policy.

Economists are often seen as mainly useful for generating numbers. Mike Finger, an American economist who worked with the World Bank for many years, has given a delightful account of a public hearing at the old US Tariff Commission in the early

1980s, in which the petitioning industry's flashy advocates ask their dowdy, hushpuppy-wearing economist, "How many chickens *were* there in Georgia in 1947, Dr. Brown?" (Finger 1984).

And David Henderson's depiction of the 'do it yourself economics' prevailing in the UK Civil Service, contains heartfelt insights about how the discipline is perceived (Henderson 1986). While science, engineering or accounting are seen as areas requiring trained specialists, economics is often regarded as something that anyone can pick up on the job (or on the run).

A good example of this is the confident assertion by non-economists of 'market failure' rationales for government intervention. Any deviations from perfect competition, or even failure of private firms to supply a good or service seen as desirable, can be cited as instances of 'market failure' justifying government action. There is much less recognition or acceptance of *government* failure — of the costs of intervention, of concepts like optimism bias and the scope for unintended consequences.

#### The consultants

Economic consultants and consulting firms are a third source of economic advice. The decline in economic capacity or capability within government has seen a parallel rise within these firms. Consulting firms have attracted many of Australia's best economists from academia and government. Indeed in a number of cases government officials have left the public service to set them up. (I recall that the IMF, on one of its periodic visits to Australia some years ago, greatly offended senior Treasury officials by referring to Access Economics as the Treasury 'A Team').

While the rise of economic consultancies as a source of policy analysis and advice has brought benefits, there is a risk of governments becoming too dependent on such external expertise, at the expense of their own core policy-making capability. There is a related concern about the capacity of the public sector to effectively monitor and evaluate the work it commissions externally. Poor quality control invites poor quality. And that can be damaging when the advice relates to important areas of public policy.

#### The journalists

The final category of economic advice and analysis that I want to mention is the media. I think Australia has been well served over the years by its economic

journalists. They have been few in number, but disproportionate in impact. Among other things, they have played a valuable role as translators and simplifiers of economic concepts and jargon.

They have been important in that respect not only in educating public opinion, but also political opinion. On a number of occasions it has transpired that a politician's understanding of one of our tomes has been acquired through newspapers, rather than from reading our work directly. That is not necessarily a problem if the reporting is accurate, though it has encouraged us to do better in summarising our own reports! The reality, though, is that in many cases such articles tend to be partial accounts at best, or actually get it wrong.

The facts are that, outside the small number of 'economist-journalists', the typical treatment in the press of economic ideas is not very good and often not even very accurate. That may partly reflect the nature of the medium. Newsworthiness and accurate information don't always coincide. This is particularly evident within the electronic media and especially television, where the 'grab' is not compatible with complexity, and there is a desire to identify adversaries and conflict to make a 'story'.

Good economics is generally only 'news' when things have reached such a sorry state that basic economic logic appears novel. I like to think that that is why the Productivity Commission's reports can find themselves on the front page as headline news. However, I would not agree that the media has debauched our political or policy processes to the extent that Lindsay Tanner has recently described (Tanner 2011). I see it more as a *reflection* of these developments than the instigator: a mirror on reality, that hopefully may enable us to gain an understanding of the problems and the need to do better.

#### The bottom line

I've given a longish explanation for my very short initial answers to the two questions I was asked to address. My bottom line is that economics — good economics — can only flourish in the market for public policy if governments demand it. While this may not be the norm, Australia has benefited from creating policy-making environments in the past in which good economics has indeed flourished. It is timely to consider what may be needed to regain this in the future.

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# Evidence and social policy: the case of gambling\*

Sir Humphrey: ... Now in Stage Two you go on to discredit the evidence ... You say it leaves some important questions unanswered, that much of the evidence is inconclusive, that the figures are open to other interpretations, that certain findings are contradictory, and that some of the main conclusions have been questioned. ...

*Minister Hacker*: But to make accusations of this sort — you'd have to go through it with a fine toothcomb?

Sir Humphrey: No, no, no. You can say all these things without reading it.

Evidence is crucial to good public policy outcomes in two respects:

- it helps policymakers work out which policy options are likely to achieve the best results;
- it helps in getting a policy implemented in circumstances where there is opposition to it.

Opposition to genuinely 'good' policy — policy that makes the community as a whole better off — is actually quite common. It can be the result of ignorance or interests. The former is an easier obstacle to overcome than the latter, since it will generally suffice to be able to explain or demonstrate the benefits of the proposed policy action. Disarming the opposition of special interests is a lot harder. This is because evidence of public benefit will rarely ameliorate the reason for their opposition — namely, expectation of private loss or disadvantage. Thus, opposition from special interests to such policy proposals tends to persist, unless it can somehow be bought off. But this can be a perilous path for governments to take.

In such circumstances, credible evidence of the potential gains from policy change can play a vital role. It can provide government with ammunition to counter the claims of special interests, as well as alerting the beneficiaries of the proposed policy to what is at stake for them — thereby creating a more active political constituency for change or reform.

In short, evidence about the public interest is the friend of the reformer and the enemy of vested interests, who will accordingly often seek to undermine it in an attempt to preserve the perceived legitimacy of the status quo.

<sup>\*</sup> Presentation to South Australian Centre for Economic Studies, Corporate Seminar, Adelaide, 30 March 2011. (Co-authored with Ralph Lattimore.)

Thus, as many here will appreciate, the story of structural economic reform in Australia has been a story of the effective building and selling of evidence about the need for reform and how it should be advanced. It represented the triumph of public over private interest — reversing previous experience — and has yielded substantial rewards to the Australian community.

# Social policy is harder

Evidence has played a less central or dramatic role in the evolution of social policy in Australia, at least until relatively recently. Many policies have been devised without much evidence or even close analysis. As I have previously remarked, perhaps the most calamitous instances were the policies introduced some four decades ago that simultaneously made it harder to employ Indigenous people, while making it easier for them to get by without work, the consequences of which are all too evident today. However, there are many other illustrations from areas such as welfare and community services, public health and education.

Social policy is often directed at equity goals, and reflects the (changing) norms or values of society. It is thus inherently more value laden and 'political' than much economic policy, and it can evolve in new directions. The focus tends to be on doing good or avoiding obvious harms to people — on the *ends*, rather than detailed assessment of alternative means.

It is also the case that the potential payoffs from alternative social policy measures can be very hard to evaluate in advance. Theory is often not settled and evidence can be difficult to collect, and rarely definitive. There are several dimensions to this evidentiary challenge.

#### People are complicated

As shown in the behavioural economics literature, people's actions can reflect complex preferences and motivations, which make it hard to predict the impacts of policies. Blood donations are a classic illustration. People are strongly motivated by altruism in donating blood, but periodically there are shortages in blood supplies. In the United States and some other countries, this led to money being offered. However, payment undermined altruistic motivations, with the seemingly perverse effect of partly crowding out donation. Moreover, donors induced by payment had a higher risk of transfusion-transmitted infections, affecting blood quality. (In fact, the evidence suggests that paid donation need not have undesirable consequences if artfully presented and structured. But the point is that policy formulation in such areas needs to be much more subtle than might be expected).

#### Collecting good data is difficult

It is often hard to get salient data about impacts of policies or about people's behaviours. There can be significant ethical and privacy issues in acquiring evidence. For example, inquiries into suicidal ideation may strengthen those ideas. Or there may be a conflict between the obligation to maintain respondent confidentiality and disclose revelations to others (such as child abuse). Such issues do not usually pervade other areas of policy research. An additional barrier to understanding problems that might invite social policy responses in areas such as domestic violence and drug use is that people often hide stigmatised behaviours.

# Policy outcomes can take a while

In addition, there can be particularly long lags before the efficacy of some social policy initiatives can be determined. For instance, the HighScope Perry pre-school experiment in the USA assessed the impacts of a intensive education for at-risk children from poor areas. The follow-ups undertaken when the children were adults were key to detecting much of the benefits from the program. But the cost of such longitudinal studies is high and often they are too slow to meet policy design needs.

#### Hard to compare 'like with like'

It can be hard to apply the results from one policy to others, unless great care is taken to ensure that the policy applies in truly congruent contexts. For example, the Perry pre-school policy proved effective for underprivileged children, but was found to be less relevant for others. The detail matters. More generally, it is often hard to confirm causality simply based on correlation between an 'outcome' and some factor amenable to policy change.

#### Assessment often must depend on what people say

In many areas of policy, outcomes can be readily observed. But in some areas of social policy measurement — for instance, people's emotional states, or their satisfaction with community services — the information available is mostly based on self-assessment. While this is subjective, it can still constitute legitimate evidence. But it has to be carefully collected and interpreted — particularly where dependent on recollection. It is not like measuring salinity in the Murray River!

#### Intangible and value-driven tradeoffs

Social policies, like other policies, often have multiple impacts, but their relative importance can be much harder to weight. For example, a social policy might promote equity, but reduce some peoples' job prospects. It is hard to assess the total impact without valuing each different component.

Moreover, views may differ about what constitutes a 'benefit' in areas where community norms are evolving. For instance, at one time a policy that incidentally increased female workforce participation would have been seen as a bad outcome, whereas currently it would be seen as a good one. (Prior to the mid-1960s, a woman in the public sector was required to resign when she got married.)

#### A reasonable standard of 'proof' is called for

So if not quite 'dancing in the dark', social policymakers have access to imperfect and hard-to-interpret evidence, and they must often make their moves in the shade. Some might say that imperfect evidence should mean *no* policy action until there is greater certainty. In many cases, this is a reasonable rule of thumb. Its underlying premise, however, is that the consequences of wrongly adopting a poor policy (a false positive) are likely to be more costly to society than the consequences of wrongly rejecting a good one (a false negative).

But in some social policy areas, the potential cost of false negatives — not acting when it would have helped — could be much higher than false positives. In such cases, a precautionary approach may be called for, requiring a lower standard of evidence, or even reversal of the onus of proof. The telling issue for making a policy decision may not be the evidence for action, but the evidence for inaction.

The issue, therefore, is not the desirability of evidence *per se* — but the extent and nature of the evidence required to preserve the status quo or to make a policy change. The test in social policy needs to be more akin to the test in civil law 'on the balance of probabilities', than the criminal law's 'beyond all reasonable doubt'; though with the proviso that outcomes should be monitored to verify the verdict.

# The case of gambling policy

This is all highly relevant to the history and evolution of policies concerned with gambling. For many years, the various forms of gambling were either illegal or heavily constrained in Australia, notwithstanding some variation across states and territories. This essentially reflected community norms, with gambling generally

seen as a 'bad thing' or, at best, a 'questionable pleasure' (as a senior executive at Tattersall's once put it).

The extensive liberalisation of poker machine gambling which occurred through the 1990s was not the result of new evidence about the social effects of gambling. Rather, liberalisation was mainly driven by pressure from the gambling industry itself, in a policy environment that was more receptive to market forces, together with the desire for tax revenue by governments — buttressed by the mistaken view that more gambling would create more jobs.

This illustrates the special difficulty of achieving good public policy when it comes to gambling. It not only faces all the difficulties of an evidence-based approach that are inherent to social policy, it also faces the political difficulties that stem from strong vested interests. It is hard to think of another area of social policy where this combination of obstacles is so marked. Indeed, gambling has often been seen as industry or regional policy as much as social policy, with this confusion often also being present in administrative arrangements.

Evidence is thus both very important to achieving gambling policies/reforms in the public interest and very hard to assemble. In its 1999 Inquiry, the Commission had the benefit of little evidence other than what it was able to generate itself, including through surveys. It accordingly recommended that evidence be collected through trials and other means for a number of policy measures that it considered prospective on prima facie grounds.

Returning to the field a decade later, we were disappointed to find that although many research studies and policy initiatives had been undertaken, few had been directed where they were likely to do most good. Different jurisdictions had commissioned a number of prevalence studies, and there was considerable research into the behaviour and traits of 'problem gamblers'. But methodologies lacked consistency and key data and indicators were not always presented.

Evidence on the effectiveness of alternative harm minimisation options has been a particular weakness. In the case of gaming machines, where the social costs loom largest, there have been few targeted trials to assess the impacts of machine design features — where harm minimisation has the most potential. Where trials have taken place, their scale and design have often detracted from their policy usefulness.

All this has provided fertile ground for the selective use and mis-use of data. Perhaps the most egregious example has been Clubs Australia's selective use of data from surveys with different methodologies to falsely claim that the prevalence of problem gambling had been greatly reduced. (Careful analysis by the Commission, allowing for different survey characteristics, suggests at most a small

decline.) The industry has also cited research results for weak policy measures in arguing against stronger variants. And it has argued that large revenue losses would result from recreational gamblers being 'put off' by the more effective harm minimisation measures, when in reality their revenue comes predominately from a small group of big spending 'regulars' — a large proportion of whom are likely to be experiencing significant problems.

Further, most of the harm minimisation measures that were introduced by governments in the decade between our inquiries had little evidence to support their efficacy, let alone cost-effectiveness. Indeed, we found that virtually no machine design change with an *a priori* likelihood of effectiveness had been introduced in any state or territory. For example, there is little evidence that requiring clocks on machine displays would ameliorate the disorientation of people playing gaming machines (most of whom have watches). Governments have introduced short periods of machine shutdowns, but these are mainly in the early hours of the morning, and do more to facilitate the work of cleaners than to reduce harm to consumers. The measure that had the biggest impact — smoking bans in hospitality premises — was only incidental to gambling policy.

This illustrates the double standards displayed by the gambling industry when it comes to evidence. The industry essentially owes its existence and current size to the lack of an evidence-based approach to liberalization, which has resulted in extensive 'community-based gambling'. It subsequently protested only a little at the lack of evidence for most of the (ineffectual) harm minimisation measures introduced over the past decade, despite their compliance costs. But it has been insistent on high standards of proof for measures that promise to be effective. One major industry group even suggested that no measure should be introduced if the possibility of error was more than 1 in a 1000!

#### The Commission's pursuit of evidence

Some degree of uncertainty must be present when devising policies in an area as complex as gambling. As noted, policy has to weigh up the risks of introducing an ineffective measure with the risks of failing to introduce a measure that would have been effective. Minimising one risk necessarily maximises the other. For this purpose, rarely will any one source of evidence be sufficient in itself, especially given the data deficiencies just described. In informing its judgments about these risks and the most appropriate policies, therefore, the Commission used a 'triangulation' approach, drawing systematically from a range of sources. These included:

- analysis of the unit records of seven major surveys that investigated gambling behaviours and impacts. The data enabled the Commission to analyse the types of harms affecting different categories of gamblers, their gambling behaviour and (from some surveys), the strategies used by gamblers to address risks to themselves
- our own survey of people receiving counselling assistance, conducted with the cooperation of counselling agencies throughout Australia
- consultations with government bodies in the United Kingdom, New Zealand and Norway about significant changes in their gaming machine (and related) policies, and their impacts
- unit record data from one large club in Sydney detailing the playing styles and losses of thousands of players
- national data disaggregated by state and territory on expenditure, turnover and other aspects of gambling over time
- extensive consultations with leading experts in gambling research and policy in Australia and overseas
- discussions about the functioning of gaming machines with monitoring agencies, gaming machine manufacturers and other technology providers. Several regulators also provided technical and cost advice, as did ATM operators in gambling venues
- unit record data from the Worldsmart pre-commitment trial in South Australia
- Australian and overseas academic literature on gamblers' behaviours, harm minimisation measures, and treatment efficacy, and theory about the behaviour of different types of gamblers and insights into their likely responses to different policies
- last, but not least, extensive consultation with all stakeholders, involving visits, public hearings and evidence from 422 submissions, including detailed responses to our preliminary findings and recommendations, well ahead of our final reporting deadline.

The Commission used evidence from such multiple sources to assess the likely effectiveness of particular measures in reducing harm, the extent to which different measures would affect people not experiencing harm, the practical aspects of administering any arrangement, the costs of measures, and the appropriate pace of implementation given those costs and benefits. As a result, we felt sufficiently confident about the likely payoffs to recommend a number of significant measures. However, where significant uncertainties remained, we recommended trials or proposed measures in a form that could be readily monitored and adjusted.

# Why is gambling a policy 'problem'?

Many people see gambling as part of a social night out, or as a cheap dream of transforming their lives with a big prize. Most spend little, but people spent (lost) around \$19 billion in total on gambling in 2008-09, which is around the same as purchases of motor vehicles, and 40 per cent more than retail alcohol purchases. All things being equal, this reveals strong consumer preferences for gambling. Meeting this demand comprises the major source of economic benefits from the gambling industry.

But of course, all things are not equal. Some people experience significant harm from some types of gambling, particularly electronic gaming machines — the 'pokies' — and this distinguishes gambling from most other recreational activities. It also explains the community's ambivalence towards it. A national survey found that three-quarters of Australian adults thought gambling did "more harm than good" — a view unlikely to apply to most other (legal) recreational pursuits.

Adverse impacts are experienced by many people in different ways and to differing degrees. For some people — 'problem gamblers' — they can be intense, involving major personal and family impacts (depression, suicide, financial hardship, relationship breakdown) and community problems and costs (fraud and other crime, social welfare and other government services).

Based on the accepted screening methodologies, the estimated number of problem gamblers ranges around 115,000 people (0.7 per cent of the adult population) with another 280,000 (1.7 per cent) at 'moderate risk'. On the face of it, these numbers — or at least the percentages — appear 'small'. This interpretation is fostered by the gambling industry, which often characterises any social problems as being confined to just the irresponsible few.

However, small population prevalence rates do not mean small problems for society. (We do not regard mountaineering or drug-taking as safe pursuits on these grounds, for example.) Moreover, population prevalence rates mask the real risks. The risks for lottery players are low, as they are for sweeps and bingo. However, the Commission estimates that among those who regularly play on gaming machines, around 15 per cent are problem gamblers with an additional 15 per cent at risk. And pokie players are estimated to account for 75-80 per cent of all problem gamblers.

Moreover, problem gamblers play for longer intervals and at much higher intensity (spending rates) than other regular players, so it should come as no surprise that they also account for a disproportionately large share of the people 'on the floor' at any one time, as well as of total losses or industry revenue — our 'triangulated' estimates ranged around 40 per cent. This is also consistent with the 'reality check'

provided by the records of spending by loyalty card members at a large Sydney club – with 0.5 per cent of members accounting for one-half the club's total gaming revenue, and 2 per cent accounting for nearly 80 per cent. (This is well beyond the '80:20 rule' that is said to apply in some other areas of business). The club's records show that one player actually lost \$210,000 in just six months, averaging \$600 per hour played. While neither that person nor other 'big spenders' are necessarily problem (or at-risk) gamblers, the evidence correlating problems with amounts lost suggests that many would be.

The large spending of problem gamblers has major implications for the social costs of gambling and the likely efficacy of 'light-handed' regulation, or self-regulation. And it has been strongly disputed by segments of the industry. The Commission was therefore careful to document its methodology, to use a variety of sources less susceptible to the difficulties posed by gamblers' inaccurate recall and to give ranges of estimates. Even the lowest point — a share of 20 per cent of total gambling losses arising from problem gamblers — is sizable, amounting to some \$2.5 billion.

Clubs Australia has argued that problem gamblers' spending share is much lower than the midpoint of 40 per cent found in the Commission's analysis of multiple surveys. They did so by selectively using our statistics, finding a problem gambling share of 'only' 16 per cent. But this implicitly presumes that problem gamblers' self-assessed spending is accurate whereas that of all other gamblers is under-stated. The reverse (and equally arbitrary) assumption would elevate problem gamblers' share to considerably more than 40 per cent. (As an illustration, in the NSW 2006 survey, the Clubs Australia approach yields a problem gambling share of 18 per cent, whereas the alternative yields a share of 66 per cent).

#### Estimating costs versus benefits

The Commission estimated both the costs and benefits of gambling. The benefits were derived from the estimated 'consumer surplus' — a measure of people's enjoyment of gambling — and from tax revenue. The Commission did not separately measure 'production' benefits since the evidence is that these are small. The major reason is that gambling displaces other production and employment, which would benefit from any contraction in it (and this is confirmed by empirical models of the economy).

On the cost side, the calculations included a share of the 'excessive' losses experienced by problem gamblers (where the usual concept of consumer surplus does not apply), and the impacts on their relationships, work performance and emotional wellbeing. The calculations also took account of broader social impacts,

such as crime, noting that the major documented source of fraud is gambling-related.

Such costs are obviously hard to estimate with any precision. The Commission's estimates ranged from just under \$5 billion to around \$8.5 billion. The lower number is based on the most conservative assumptions and the lowest estimates of problem gambler spending. But the whole range is likely to be an underestimate of the total social costs to the extent that it excludes harms that cannot readily be costed (like suicide) and impacts on other gamblers, including the significant proportion 'at risk'.

The benefits are also large, lying somewhere between \$12 billion and \$16 billion annually. These suggest that gambling produces a net social benefit for Australia overall. Some have taken that to mean that no policy change is therefore required. However, the aggregate net benefit numbers include the more benign gambling forms, such as lotteries. The range for gaming machines alone includes a net social cost at the low end. More importantly, from a policy perspective, the issue is whether a *bigger* net benefit could be achieved by devising policies that reduce the social cost, while preserving most of the benefit. The magnitude of the costs suggests that even measures of modest efficacy could yield substantial dividends for society.

#### Not (just) a 'medical' problem

In framing a policy approach, it is important to recognise that 'problem gambling' is only at the pointy end of the adverse social impacts. As just implied, the problems are far more extensive than those affecting this group of people. While the prevalence *rate* of harm is much lower among non-problem gamblers, the absolute *number* of people experiencing some form of harm is high, because the population of recreational gamblers is large. Indeed, 'non-problem' gamblers sometimes account for more than half the people affected by specific harms (such as health problems resulting from gambling). Moreover, many people have trouble understanding the nature of the gambling 'product' and its likely 'price'.

Gambling is therefore best seen through a public health or consumer policy lens—like alcohol, drugs and other socially 'risky' activities. Such an approach does not just take account of the traits of a person that may predispose them to problematic play, but also considers how gambling technologies, venue behaviours and other aspects of the gambling environment can contribute to bad outcomes.

#### Gaming machines should be the main focus of harm minimisation

Modern electronic gaming machines have come a long way from the old 'one-armed bandits' that were once the preserve of NSW clubs. Modern machines offer much higher levels of playing intensity and much greater ease in loading up the machines with cash. Sometimes referred to overseas as 'Australian-style' machines, they allow repeat bets at rates far in excess of other gambling forms, such as wagering, roulette or blackjack. It is easily possible for someone to play up to 1000 separate games every hour. This partly explains why gaming machine expenditure as a share of household income roughly doubled from the 1980s to the 2000s in NSW, despite the 'maturity' of its gaming market — that state having introduced pokies in the 1950s.

A modern two-cent machine allows people by definition to bet as little as two cents every button push. But by betting on multiple 'lines' and with multiple credits per line, gamblers can end up wagering \$10 every few seconds. Based on data provided by the makers, Commission researchers simulated a machine currently in the market to understand the outcomes from playing. It found that people could 'expect' to lose \$590 per hour of play if they staked \$10 per button push at an average speed of 5.5 seconds per button push. Someone with a quick 'trigger finger' could expect to lose \$1050 an hour, with the most common outcome being a loss of \$1750. These losses bear no comparison with any other form of (legal) entertainment in community settings. As noted, the Commission has evidence of gaming machine players losing tens of thousands of dollars in a few months.

In addition, people playing the pokies often do not understand the 'price' of the games, which admittedly is not easy to work out. There are also widespread faulty cognitions (such as a belief that machines can 'run hot or cold' or the view that successive losses must be followed by successive wins). Some of the design elements of machines — such as frequent but irregular prizes — facilitate loss of control through their operant-conditioning effects ('human skinner boxes' as they have been called). Moreover, as noted, gaming machines are very accessible throughout the community, being available at most times of the day, within a few kilometres of everyone, and at venues that are routinely used for socialising.

# **Policy options**

As in other areas of public health and consumer policy, reducing harm for people who gamble requires a focus on two strategies:

- strengthening people's capacity for informed choice ('self-responsibility')
- moderating the hazardous features of the 'environment' in which people gamble.

These strategies go beyond reducing the prevalence of problem gambling, to include reducing the number of new cases (incidence), and reducing the impacts on ordinary consumers. They are underpinned by a more fundamental requirement for good regulatory governance, and institutional arrangements that can respond to risks as they emerge.

# The Commission's policy trilogy

# STRATEGY 1 Enhance Personal Responsibility

Pre-commit to time/money limits

Earlier self exclusion

Warnings, education, information on cost of playing

Dynamic warnings

Providing counselling and treatment for gamblers experiencing problems

# STRATEGY 2 Reduce Risks and Intensity of Play

\$1 bet limit

\$20 max cash input

\$250 max ATM withdrawal

\$300 prizes and above paid by cheque

Win banks

Shutdown times

Venues – Training and staff guidelines

#### STRATEGY 3 Institutional Structures and Research

Regulatory independence and effective complaints and penalties

Ministerial responsibility for gaming AND harm minimisation

Research Centre – Independent and consultative with policyrelevant research

Consistency in surveys and public domain data

The Commission's guiding principle in selecting measures within the three areas was to reduce the social costs of gambling without unduly detracting from its recreational value, thereby enhancing net benefits to the community as a whole.

The Commission recommended a raft of measures based on a significant body of evidence from different sources. Drawing on triangulated evidence, we assessed the potential effectiveness of each measure for the target population relative to its impacts on others, as well as considering potential implementation costs.

The Commission's evidence-based approach not only led us to recommend the measures indicated above; it also led us to reject others. For example, while we judged that imposing withdrawal limits on ATMs would be cost-effective, removing these machines entirely from venues was considered unlikely to be, given evidence of the likelihood of gamblers still accessing cash 'outside' and the costs of relocating the machines. And we found a case for further liberalisation in some cases – such as allowing the Canberra Casino access to gaming machines, with an

equivalent reduction in machines in community venues, and allowing scope for Australians to legally participate in regulated online poker *card* games.

Perhaps the most important, as well as most contentious, of our harm minimisation proposals were:

- reducing maximum bets on gaming machines to one dollar
- introducing a 'pre-commitment' regime to all gaming venues in each jurisdiction.

The second of these recommendations has become the centrepiece of an agreement between Senator Wilkie and Prime Minister Gillard in the aftermath of the 2010 election. This agreement also requires the introduction of other recommendations, including incorporating 'dynamic warnings' and cost-of-play displays on gaming machines; and the \$250 limit on ATM withdrawals.

#### The dollar bet limit

As noted above, most Australian gaming machines allow very high intensity play, leading to expected losses (or 'prices') that are out of kilter with their apparent recreational function. A direct way of affecting the losses and thus the 'problems' associated with gambling is to lower the maximum bet limit. The Commission recommended a dollar bet limit to replace the existing 'limits' of five to ten dollars.

This would still allow people considerable scope to choose their desired playing style (for example, how many lines they play versus how many credits per line). And the research suggests that such a spending constraint would not have significant impacts on recreational gamblers. For example, one survey suggested that only 12 per cent of recreational gamblers typically staked one dollar or more, whereas 50 per cent of problem gamblers did so. Data relating to loyalty card players showed that 98 per cent of gamblers bet on average one dollar or less. And one regulator indicated that the average stake across all gamblers on a popular game was 50 cents.

Some have argued that problem gamblers would adapt to this constraint by playing longer. However, the only real-life test of the impact of reduced bet limits found that problem gamblers did not extend their playing duration. In any case, there is no feasible increase in player duration that could produce the same losses!

By itself, a dollar bet limit would obviously not resolve problem gambling, since losses could still exceed one hundred dollars an hour. But it would be likely to reduce harm for many, without inhibiting the enjoyment of others.

#### **Pre-commitment**

Many gamblers find it difficult to control how much they spend when gambling. Not surprisingly this is most accentuated for problem gamblers, with around 90 per cent saying that they have difficulty resisting gambling. But significant numbers of other gamblers also face difficulties in limiting their play, their bet size, and keeping to a voluntary limit. In fact, of the total *number* of people who 'at least sometimes' experience difficulty in resisting gambling, 90 per cent would not be categorised as problem gamblers.

The goal of pre-commitment is to allow gamblers to set limits on their expenditure that are binding for a certain period and cannot be revoked during that period. The classical form of pre-commitment is drawn from the story of Ulysses, who tied himself to the mast so that he could enjoy the sirens' song without dashing his ship on the rocks. For that reason, these arrangements are sometimes referred to as 'Ulysses contracts'. In essence, pre-commitment is an aid to informed consent. It is also an ideal measure conceptually, in its targeting of the source of social cost.

Among other evidence in favour of such an approach, there is the testimony of problem gamblers in treatment, the strategies that gamblers are known to adopt in the absence of such a mechanism (such as wearing thongs when out, knowing that this would preclude entry to gaming venues) and the willingness of some to submit to the extreme sanction of self-exclusion (and the difficulties of arranging this).

An effective pre-commitment regime could accordingly be expected to have a significant take-up rate at *binding levels* over time, and thus also to have a significant impact on player losses and industry revenue. The industry has strongly opposed pre-commitment in its classical binding form, being more favourably disposed to voluntary arrangements.

#### Voluntary schemes have limited effectiveness

The empirical results point to some benefits from voluntary pre-commitment. In one trial in South Australia, people reported greater adherence to desired spending limits, with problem gamblers reducing their spending (and time played) by more than other groups. However, overall, a relatively small group of players took it up — which was also the experience of trials in Queensland.

The relatively low take-up and the capacity to renege on any limits is the Achilles heel of voluntary pre-commitment. Like New Year's resolutions, partial or voluntary pre-commitment can prompt good intentions and some changes, but are

easily circumvented. They are akin to tying Ulysses to the mast, but leaving him with a knife to cut his bonds.

#### The requirements

Given these significant limitations, the Commission recommended a 'mandatory' pre-commitment system:

- People would be required first to choose whether to set spending limits or not, and then either to nominate an amount and duration, or adopt the machine's relatively low 'default' settings. For example, someone might limit their spending to no more than \$300 every fortnight for the next six months. The amount would be up to them, but while they could decrease it at any time (or increase the duration of the contract), they could not do the opposite.
- The machine must be able to identify the person playing. In turn, that would require people to meet some identification requirements to obtain the necessary smart card or other device.
- The machine or smart card must be able to collect information about play to determine whether the gambler's contract has been violated.
- All (high intensity) machines must be included within the system.

#### Design issues

Some have identified major concerns about privacy and paternalism in such measures. However, a requirement for identification to obtain the rights to some products (DVD loans, mobile phones) is now commonplace. All clubs already require people to identify themselves before they are issued a membership card or visit a club of which they are not a member. Such identification requirements have generally served the interests of businesses. The pre-commitment proposal is similar, but involves a requirement that benefits consumers. Moreover many recreational gamblers could gamble modestly without being part of the system (for example, by using a low value cash card without significant ID requirements or a machine in 'low-intensity' mode).

There are legitimate concerns about privacy whenever data are collected. However, such requirements are ubiquitous in modern society — such as for most financial transactions, tax, health care, the use of the internet and mobile phones. Under current gambling arrangements, many people are part of card-based loyalty schemes that identify them and record their transactions. Under pre-commitment, information would be collected and stored under the control of the body that

monitors machine revenues and functioning (currently, private technology companies contracted to government). No government need have access to the information.

Far from being paternalistic, pre-commitment is a mechanism to ensure consumer sovereignty. Gamblers get enhanced choice because they have an ability to set their own limits at a time when they are most rational, to control their behaviour during their more irrational times. Gamblers could choose high limits and never alter them, or they could choose low ones. But no one would be telling them how they had to play — the spectre of 'big brother' is a contrived one.

Some have argued that while pre-commitment might help 'normal' gamblers acquire greater control, it would not work for 'addicted' problem gamblers — whose resistance to gambling is generally weak. However, clinical and research evidence shows that people with impulse control difficulties do have periods of lucidity and experience regret and guilt over past gambling behaviour. (Guilt is a key characteristic of problem gambling behaviour and one of the items used to test its presence in screening questionnaires.)

That said, such gamblers can become desperate to gamble, so that an effective pre-commitment scheme must minimise the risks of them evading their self-imposed limits. For example, card swapping was significant in the Nova Scotia trials. However, this could be simply countered by requiring gamblers to identify themselves before receiving cheques for major prizes.

It has also been asserted by the gaming industry that gamblers would simply shift from pokies to other gambling forms. However, this is again not supported by evidence. Major changes to gaming machines (including the adoption of pre-commitment technology) were introduced in Norway from 2006 to 2009. These significantly curtailed 'slot machine' participation rates. But there was no increase in participation in any other gambling form, including no evident shift to online gambling and 'help line' calls declined significantly.

#### What about the costs?

Like other policies that aim to improve public health or increase consumer safety, there are both benefits and costs. Pre-commitment would require changes to gaming machines, devices such as smart cards that people would use when playing, and the upgrading of central monitoring systems in some jurisdictions to allow the two-way passage of information between the system and gaming machines. The industry has claimed that these costs would be prohibitive, amounting to billions of dollars.

However, the costs would depend greatly on the period over which the system is implemented.

There would be significant costs with the *rapid* implementation of pre-commitment — an overnight change has been implicitly assumed in the industry's estimates — because it would require the premature scrapping of many relatively new gaming machines or costly retrofitting. Rapid change would also entail practical difficulties, given constraints on the gaming industry undertaking large numbers of retrofits. Effective pre-commitment would also require the development of appropriate national standards, which would inevitably take some time. (A new national set of gaming machine standards would over time significantly reduce the regulatory burdens experienced by the manufacturers, which have had to modify machines for each jurisdiction for sometimes trivial variations in their standards.)

The Commission accordingly proposed a staged implementation of pre-commitment, such that capacities for it would be introduced at the time of machine manufacture (at low incremental cost), with that functionality switched on later, in line with the normal turnover of machines. We also envisaged that small clubs and hotels with few machines and low usage would face a slower transition.

Sometimes it is asserted that unemployment would also represent a major cost. The Commission judges this to be unlikely. Staff in clubs and other gambling venues have skills valued in the hospitality sector. The sector has drawn attention to impending staff shortages. Modelling commissioned by the gaming machine industry also found that reductions in gambling would not have adverse employment effects.

That said, there is no doubt that pre-commitment and other measures targeted at excessive spending — such as \$1 bet limits and limits on how much cash can be loaded into a machine at one time — would have a significant impact on industry revenue, given the high share coming from problem and 'at risk' gamblers, at whom they are targeted. But this is not a reason to forgo reforms that would be generally beneficial, and has not stopped other reforms with distributional implications. The club industry has tried to position itself as a special case, given its community-based activities. But the evidence suggests that only a small proportion of most clubs' gambling revenue tends to be devoted to genuinely 'public benefit' causes (and, in any case, the concessional tax treatment of this revenue potentially displaces government spending of the same kind).

# The way forward

Evidence is a decisive factor in good policymaking, though its use involves more nuances in the social arena. The Commission's approach to gambling reform was to gather evidence from disparate sources about what may work and how people behave, while taking into account the risks of both action and inaction.

In this spirit, we recognised the value of creating a regulatory system that is adaptable, flexible and efficient. A key aspect of implementing pre-commitment is the development of a versatile technology platform that would reduce the costs of any major subsequent regulation of machine design features. This enabling technological shift should be the prime focus of policy change. Pre-commitment is a useful initiative for lowering harm, but it is not a silver bullet and should be seen as part of a package of measures. A new technology platform would allow the low-cost tweaking of policies to achieve their maximum impact.

Technology in the gaming industry is already heading towards systems in which the central features of gaming machines can be configured remotely. That could include their settings for lines, credits, cash input levels, denomination, bets size, button push speeds and many other aspects of their design. It would allow regulators to introduce regulated changes to machines without costs to venues. This is already possible to some extent in Queensland, which changed the cash input amount remotely. Such a technology platform also has potential commercial benefits (such as the capacity for quicker changeover of games, multiplayer games, and cashless gambling).

Evidence-based policy-making also recognises that it is hard to design all aspects of a policy optimally in one go, particularly in complex areas of social policy. Pre-commitment is a significant policy initiative that must confront many choices about specific design features. Getting the detail right can be crucial to achieving a system that is cost-effective. Matters such as sign-up and ID requirements, protection of privacy, the choice of 'safe play' options, the appropriate defaults for limits, and measures to stop people borrowing others' identities, are all relevant to its success as a consumer protection and harm minimisation measure. For that reason, the Commission proposed that the Australian Government sponsor trials in a distinct region (it could be the whole of Tasmania), to identify the best parameters.

Finally, ongoing evidence-based approaches to gambling policy — or indeed policy in general — require appropriate governance arrangements. In the gambling area, these have not sufficiently kept at arms' length political, tax and commercial influences. The Commission accordingly stressed the need to establish better institutions and processes to enable the right research to be pursued and for the results of such research to be reflected in policy.

# Statistics, productivity and reform\*

#### Introduction

As often happens, I was asked to provide a preliminary title for this address well in advance of it being written. The preliminary title I chose seemed a safe bet, giving me enough room to cover whatever I might decide to say consistent with the conference theme. Once having prepared my remarks, however, I saw no reason to change it. Productivity is central to living standards in both our countries; reform is central to realising our productivity potential; and advancing both is often crucially dependent on statistical evidence.

In what follows, I will explore those important inter-relationships. With your particular interests in mind, I will also give a bit more attention to the statistical side of things than I might otherwise do.

# The why's and wherefores of 'productivity'

The (relatively) recently elected governments of both New Zealand and Australia, though of different political hues, from the outset placed 'productivity' at the centre of the policy stage. In New Zealand, as you know, a Taskforce has been established to advise the Government on the policies needed to close the income/productivity gap with Australia by 2025. The Government has also just announced the creation of a 'New Zealand Productivity Commission', akin to the organisation of the same name that I lead in Australia, to advise it on policies and reforms to promote productivity and income growth.

Meanwhile, the Australian Government has set the bar higher. The Prime Minister has recently set an aspirational goal of 2 per cent labour productivity growth for our economy into the future. The third 'Intergenerational Report' has illustrated what that could mean: if productivity growth increased to an average of 2 per cent per annum over the next 40 years, the economy would be over 15 per cent larger, with GDP per person around \$16,000 higher, than otherwise. But such a growth rate would be one-quarter higher than the average experienced over the past 40 years.

The elevation of 'productivity' in government policy discourse is a welcome development, given its importance to income growth and living standards over the

<sup>\*</sup> Keynote presentation, *The Official Statistics 'Forum 2010'*, Wellington, New Zealand, 24 March 2010. (Co-authored with Don Brunker.)

long term; for, as Professor Krugman has famously put it, in the long term productivity "is almost everything". However, the concept itself is not always well understood. Nor is it well-measured at an economy-wide level. And there is some contention about what government policies might best serve to promote it.

Krugman's aphorism, though perhaps a revelation to some, would be accepted as a truism by most economists, relating as it does to the productivity of *labour*. Value added per hour worked — the technical definition of labour productivity — obviously accounts for a large proportion of income per person or household. And, equally, its growth economy-wide makes a large contribution to the growth in average incomes of society at large, assuming little change in labour force participation and the terms of trade (important provisos, to which I return).

Labour productivity is the most commonly used productivity measure mainly because it is relatively easy to comprehend and to compute. For example, a rough estimate for an economy can be obtained by dividing GDP by official estimates of total hours worked. And, once expressed in purchasing power parity terms, comparisons across countries can be readily made on this basis. However, despite its title, labour productivity is not necessarily a good indicator of how productively labour is employed over time or across countries. It hides the role, and indeed the expense, of capital accumulation in increasing outputs, as well as the proportion of the population actually employed.

Multifactor productivity, on the other hand, is a measure of the output obtained from a 'unit bundle' of both capital and labour — which entails complex techniques for measuring and aggregating capital services and then combining these with hours worked. However, MFP growth is a better indicator of improvements in productive efficiency, as it reflects economic growth, in value-adding terms, above and beyond that resulting from increased primary inputs. As such, MFP growth is generally (though not necessarily) lower than labour productivity growth. However, MFP growth contributes to *sustained* per capita income growth, as it increases the amount of final goods and services produced from any given amount of labour and capital. Over the past few decades, MFP growth has accounted for just over 35 per cent of GDP growth (in the 'market sector') in both Australia and New Zealand.

This brings me to the (by now, obvious) point that productivity is best considered in policy terms as a means to an end — higher incomes for the populace — not as an end in itself. And, of course, while raising incomes makes for higher material standards of living, this too is only important to the extent that it enhances societal wellbeing. (Wealth gained by squandering environmental assets, for example, may make citizens worse off, particularly citizens of the future.)

In this broader context, the French President asked Joseph Stiglitz, Amartya Sen and Jean Paul Fitoussi to identify the limits of GDP as an indicator of economic and social progress ('Commission on the Measurement of Economic Performance and Social Progress'). In its report last year, the Stiglitz Commission re-stated the limitations and biases inherent in GDP metrics, and suggested that the time was ripe for measurement systems to shift emphasis from economic production to sustainability and wellbeing. The report did not dismiss GDP and production measures, but rather argued for the development of a broad statistical system to capture as many of the dimensions of wellbeing as possible. (Of course, recognising the different dimensions of well-being is one thing, measuring them is another.)

All that said, the relationship between income and wellbeing has held pretty well as a first approximation in most circumstances. In other words, although wellbeing has numerous dimensions, *per capita* income growth and its distribution have proven central to families' current and future consumption, and the ability of governments to fund social services and support creative endeavours.

Moreover, in what is (hopefully) the aftermath of the Global Financial Crisis, the income generated from productivity growth assumes particular importance — to help service debts accumulating from fiscal deficits, as well as to offset the effects on aggregate demand of the withdrawal of stimulatory public spending. Over the longer term, ongoing pressures related to globalisation, demographic ageing and environmental sustainability will remain, as imperatives for the governments of our two countries to do what they can to ensure that productivity growth realises its potential.

# Some trans-Tasman comparisons (and conundrums)

In its recent report, the 2025 Taskforce shone the spotlight on a gap of around 35 per cent in GDP per capita between Australia and New Zealand. That gap, which developed gradually from the mid 1970s, was also reflected in differing levels of economy-wide labour productivity, as reported by the New Zealand Treasury in 2008. The trans-Tasman disparity in labour productivity seems to have emerged in two phases:

- First, economy-wide labour productivity (\$US PPP basis) in New Zealand was at about the same level in the mid 1980s as it had been in the mid 1960s, while in Australia it rose by some 40 per cent over that period.
- Second, through the 1990s, New Zealand economy-wide labour productivity increased by some 15 per cent, whereas in Australia it rose by around 30 per

cent. Outside these two periods, labour productivity growth rates have been similar in our two countries.

These data also imply average annual growth rates in (\$US PPP) labour productivity since the late 1970s of around 1.7 per cent in Australia and 0.7 per cent in NZ

It should be noted that this information on our respective labour productivity levels over time are based on data released by the Conference Board and Groningen Growth and Development Centre (Groningen) just this year. It differs significantly from what was in the NZ Treasury 2008 publication. The difference results from major downward revisions by Groningen to estimated hours worked in New Zealand, giving rise to a much higher relative level of labour productivity. The older series indicated a gap of around 40 per cent in PPP labour productivity levels in 2007, whereas the most recent data suggest the gap was more like 15 per cent.

Moreover, it is significant that productivity growth (using both multifactor and labour metrics) in the 'measured' or 'market' sector of New Zealand's economy as opposed to the economy as a whole — has been quite similar over the past 30 years to that in Australia, with MFP actually growing slightly faster in New Zealand.

This raises something of a conundrum, and further analysis will be important in helping to inform policy directions.

#### The 'missing' sector matters

One explanation, at least in part, would seem to be the larger size of the government sector in New Zealand than in Australia, combined with national accounting practices that essentially define away that sector's productivity growth — equating the value of its output with the value of its inputs (mainly salaries).

Using Groningen data along with ABS and SNZ data on productivity and hours worked, suggests very significant growth in the labour share of the non-measured sector in New Zealand relative to that in Australia since the late 1970s. Together with the zero (or near zero) labour productivity growth recorded in the non-measured sector, this in itself will drive a wedge between economy-wide measures of labour productivity in our two countries. However, a lack of good quality and consistent time series data covering the period since the late 1970s precludes accurate estimates of the size of this effect. But a threshold issue is to establish the extent to which the accounting conventions for the non-measured sector may be biasing measures of aggregate productivity growth. To answer this,

we need to develop much more sophisticated productivity indicators for the non-measured sector, particularly for government services.

In any case, given their magnitude, improvements in the cost-effectiveness of government services would yield significant gains in Australia as well as in New Zealand. Although, under current methodologies, efficiency improvements in the government sector might not show up directly in official statistics, with general government outlays at around 37 per cent of GDP in Australia and 42 per cent in New Zealand, even modest improvements matter. Establishing and operationalising robust measures of performance in the public sector would again seem central to the task of identifying where to access these potential gains.

As many here will know, the UK National Statistician commissioned Sir Tony Atkinson in 2003 to conduct an independent review of the measurement of government inputs and outputs in the context of National Accounts. The UK Centre for the Measurement of Government Activity was launched within the Office for National Statistics two years later to take forward the 'Atkinson agenda'.

Since then, it has developed new methods to measure inputs and outputs in the provision of certain public services — notably in healthcare and education, where outputs are based on quality adjusted activity measures. Outputs are also measured directly in adult social care, social security administration and public order and safety, though not quality adjusted. (The 'outputs=inputs' convention is still used for the rest of government services.) The estimates are described as 'experimental' in recognition of many difficulties still to be resolved. Nevertheless, the progress made in the UK is to be commended, and we should be pursuing similar programs in our own countries.

Indeed, I am aware that Statistics New Zealand has just released the results of a study into the feasibility of measuring government sector productivity in New Zealand, and the ABS is also taking an interest in such developments.

Further, Australia's federal structure, though often derided for alleged administrative inefficiencies, has enabled a comprehensive process of benchmarking to be developed in my country that encompasses indicators of the efficiency and effectiveness (including equity) of about a dozen government service areas. Over time, the Review has brought about considerable improvements in administrative data on government services and, more importantly, contributed to improvements in service provision itself, on a 'follow the leader' logic.

Returning to the apparent difference in GDP per capita, there is a range of potential causes beyond the relative size and roles of the public sector and its influence on labour productivity. These include differences in the rate of capital investment

(higher in Australia), a higher ratio of hours worked per capita in Australia, and changes in the PPP exchange rates between our two countries.

# The 'Australian Story'

Clearly, if we are to understand the reasons for differences in productivity performance between our two countries, we need first to have a good understanding of what is happening *within* each country, and why. That is obviously no easy matter, and continues to be the subject of debate (and some confusion) in Australia itself. The reason for this is not hard to find, as Australia's productivity growth has been on something of a rollercoaster ride during the past two decades.

Through the 1990s productivity cycle, MFP growth surged to an all-time high, averaging 2.1 per cent a year, more than double our long-term average rate of 0.8 per cent. The reasons for this productivity 'surge' were hotly debated at the time. However, analysis by the Productivity Commission ruled out most of the 'usual suspects' such as recovery from recession, higher workforce skills, or special technological advances, leaving the structured reform program of the latter part of the 1980s and the 1990s as the prime candidate. That program was very wideranging. It encompassed changes to monetary and fiscal policies, capital markets, industry assistance, taxation, government enterprises, regulation, labour markets and industrial relations, and innovation and training. These changes produced greater economic flexibility, improved efficiency and a more outward looking, opportunity-focussed business culture. That they also yielded significant productivity dividends should therefore not have come as a surprise!

Following the upswing of the 1990s, MFP growth in Australia returned to only a little above the long-term average through the next productivity cycle to 2003-04. Such a decline could have been expected, as the 'easy' gains from the earlier economic reforms subsided. However, developments in MFP growth since then *have* been a surprise and the cause of some concern in Australia. Annual MFP growth over the most recent cycle, 2003-04 to 2007-08, has actually averaged *minus* 0.2 per cent, with poor MFP growth being recorded in all years. (In the most recent year, 2008-09, MFP fell by 2.7 per cent.)

Like the story about the man who drowned crossing a stream with an average depth of 6 inches, or the old joke about being comfortable on average with one foot in the oven and one in an ice bucket, aggregate data frequently hide differences in the constituent parts, which can confound interpretation or be misleading. The first step in better understanding aggregate performance, therefore, is to disaggregate.

#### A tale of three sectors

Recent research directed at this by the Productivity Commission, using various official and other data sources, has determined that much of the decline in Australia's MFP growth between the last two cycles can be accounted for by developments in three sectors: agriculture, forestry and fishing; mining; and electricity, gas, water and waste services.

The first of these, agriculture, has suffered from recurring drought years over the past decade, with 2003 being the most notable. Mining, on the other hand, has experienced a decline in the quality and accessibility of some key resources, and from supply constraints in the face of rapid growth in demand from China — driving production up its short-term cost curve. Additionally, lags between large capital expenditures to meet demand and the associated output coming on stream — typically of up to three years later — have further depressed measured productivity growth in the interim.

The productivity of energy, water and waste services has also suffered from the drought, together with strong growth in demand. Output in water treatment and supply has been severely impacted by a lack of rain and by the introduction of associated demand management initiatives. This has resulted in a drop in measured output, in concert with major new capital expenditures designed to increase water supply (for example new desalination plants) or to better manage existing water resources (re-cycling and conservation capital). The output associated with much of this new capital, as with mining, is yet to come on-stream, but it is also more demanding of economic resources (including energy).

Electricity generation (particularly hydro) has also been negatively affected by the drought and this, together with major new capital expenditures resulting from strong growth in demand for electricity, has dragged down productivity growth. Another, as yet unquantified, consideration is the impact of Australia's renewable energy targets on MFP growth, given the higher cost of wind and solar energy production compared with more traditional sources.

(This also points to the challenges for traditionally *measured* productivity growth inherent in the drive for low-carbon emission energy generation. What will happen to measured MFP as the pursuit of environmental objectives leads to more capital intensive production technologies, but no greater measured output? What will happen to the correctly conceived *concept* of multifactor productivity growth? Merely to pose these questions is to warn of some of the problems when setting future targets based on past performance using traditional methodologies for measurement.)

Removing the three industry sectors from the market sector data, average annual MFP growth in Australia rises to 0.8 per cent (the long term average), compared with *minus* 0.2 per cent for the full market sector.

#### Improving productivity statistics

The point in all this is not that the official productivity estimates are 'wrong'. Nevertheless, our analysis has highlighted some issues in productivity estimation methodology that are not helpful to interpretation. Some of these could be addressed relatively easily, whereas others present difficult challenges, both from methodological and data perspectives.

For example, the issue of lags between capital expenditures and the associated additional output, such as for major mining investments, could be addressed through estimates of these lags being incorporated into the timing of the capitalisation of investment expenditures in the productivity accounts. Also, the centring of estimates of capital within an accounting year, rather than at its beginning, would provide more consistent productivity accounting.

More difficult, but no less important, are the challenges associated with getting better measures of inputs and outputs. For example, much of the measure of output in the water industry is based on the volume of water consumed, but that water is not accounted for as an input — either intermediate or primary. So when a lack of rain constrains consumption, and therefore measured output, there is no offsetting reduction in water inputs — so measured productivity automatically falls.

Disaggregated data have helped to identify specific areas of low productivity growth in Australia's economy. From there, a closer look at what has been happening to inputs and outputs in those sectors has taken us further towards a proper understanding of the ultimate causes, and a better appreciation therefore of the potential for policy to make a difference to aggregate outcomes. New Zealand has to date not presented official estimates of productivity growth at the industry level (either in labour, or multifactor terms). This inhibits comparable analysis of your productivity performance — though I understand that such estimates will become available shortly.

That said, the New Zealand Treasury paper from 2008, to which I referred, did provide an approximation to recent average annual labour productivity growth by industry using 'output' per 'job' as a proxy. On that basis, the poorer performing industries (negative average annual LP growth) included: primary; construction; wholesale trade; and hospitality. Of these, construction was the stand-out, with productivity declining by 3.1 per cent a year. However, of the 13 industry sectors

listed, it had the 6<sup>th</sup> highest output growth at 4.1 per cent and by far the highest jobs growth at 7.4 per cent. This industry would therefore seem worthy of closer examination with the benefit of better data (as would the 'primary' sector, with annual labour productivity growth estimated to be around minus 1.2% per cent).

This is a further reminder of the point I made at the start. Productivity is important only because of its link to incomes and living standards. Australia's recent poor productivity performance has in part been the flipside of an export boom originating in the mining sector. While that has seen costs rise, prices have risen much more, generating historically high growth in national income. If productivity had been the only motivator for policy, interventions to raise it might have 'killed the goose'! The more appropriate course for policy in Australia is to free up the supply-side of our economy to enable it to respond more effectively to opportunities on the demand-side (which incidentally will promote productivity anyway).

# Statistical foundations of Australia's major reform breakthroughs

Good data and the analytical tools necessary to their proper interpretation are fundamental to effective policy analysis. There have been some notable examples in Australia of the public policy benefits to be had from quantitative analysis based on relevant and robust statistics.

As in New Zealand, tariff reform was a threshold challenge for structural reform generally in Australia. Our own 'breakthrough', in the face of entrenched opposition, rested heavily on the Industries Assistance Commission's ability to demonstrate that there were substantial economy-wide costs from the existing protection regime.

Key to this were the use of 'effective rates of assistance' methodology and, later, 'general equilibrium' modelling, developed through the IMPACT project. Both these IAC initiatives relied heavily on access to quality industry data. In particular, the policy modelling exercise focussed attention on the need for statistical information that traced the input-output linkages between industry, final consumers, investment and foreign trade. This created momentum for the maintenance and upgrading of input-output tables in Australia. Prior to the IMPACT project, the ABS had been publishing such tables 5 years apart, with their release not occurring until 8 years after the reference period. The new demands led to the ABS enhancing its methodology and providing input-output tables annually.

In the mid 1990s, a more disaggregated version of the earlier ORANI model of the Australian economy was employed by the Industry Commission — the successor to the IAC — to estimate the long-term economic and financial impacts of proposed

National Competition Policy (NCP) reforms. The headline estimate, that the reforms could raise Australia's GDP by 5.5 per cent, was generally accepted as providing a compelling case for their adoption. At the same time, that report also provided estimates of the additional government revenues that would accrue from the reforms. These revenue estimates formed the basis for 'competition payments' by the Australian Government to the States and Territories for satisfactory progress in implementing their reform commitments. Those payments in turn proved crucial to the States and Territories agreeing to the reforms and to them actually implementing them.

During the reform implementation process, there was a backlash from rural and regional Australia that threatened to de-rail key NCP reforms. An inquiry by the Productivity Commission — which had replaced the Industry Commission in 1998 — drew on a range of data and analysis to assess the impacts of NCP on jobs and economic activity in 'the Bush'. This included further GE modelling calibrated to provide results by 57 regions. This work demonstrated that, taking the reforms as a whole, most regions were actually benefiting overall from NCP — which proved instrumental in turning the politics around and enabling the reform program to proceed.

There is now broad (though perhaps not universal) agreement that the NCP reforms delivered stronger economic growth in Australia through the 1990s and into the 2000s, and contributed to the resilience of our economy more recently. But, as noted, any tendency towards complacency (or reform fatigue) has been overtaken by the realisation that in the years ahead Australia faces some further major challenges to its hard won prosperity, not least being the fiscal pressures stemming from the ageing of our population and the GFC itself.

In February 2006 the Council of Australian Governments (COAG) agreed to pursue an ambitious new National Reform Agenda (NRA). That agenda embraces not only additional competition and regulatory reforms, but also a 'human capital' stream covering health, education and training, and work incentives. In December 2006, the Commission released a major commissioned research paper demonstrating that the *gross* benefits from reforms in the areas identified were potentially very large, with *net* benefits potentially rivalling those from the early NCP wave of reform — depending on the specific policy programs and reforms adopted *and* their costs. This analysis has been credited with ensuring support across governments for the development and implementation of the new reform program.

The need for good input-output data has been further reinforced in the last decade by the use of CGE modelling for analyses of the impact of both the NCP and the NRA. This led to the accelerated compilation of input-output tables for 2001-02 and

an upgrading of the treatment of transportation services. It is also leading currently to a renewed interest in official data for regional economies by input-output classification, and the greater integration of Australian public finance information with input-output data.

The more recent NRA analysis by the Commission also brought into relief the relative weakness of existing data bases in social and environmental policy areas, relative to economic or financial data systems. If we are to get good policy and successful reform in those important 'non-economic' domains, the statistical underpinnings will need to improve greatly. Let me illustrate with a few examples that draw on the Productivity Commission's recent work.

# Illuminating the 'Not-for-profit' sector

In January, the Commission completed a report at the Government's request into the 'not-for-profit' sector. This sector comprises a very large and diverse array of organisations established for a community purpose, encompassing both market-based activities (like sports and education services) and non-market activities such as charities and religious organisations. In both cases, these organisations provide services that can have significant net benefits to society, the extent of which is affected by government regulation, taxation and administrative arrangements. We were therefore asked what government could do to enhance the sector's performance and we were also asked to assess the sector's contribution and advise on how this might be better measured in the future.

Measuring the 'contribution' of the sector turned out to be a challenge. It was reasonably achievable for market-based activities and also to an extent for 'volunteering', based on a purpose designed official (ABS Satellite Account) survey. The sample size was small relative to the diversity of the sector, however, so only limited disaggregation was possible. This made the identification of trends particularly challenging — yet it was in these that the interesting stories lay. (Such as why volunteering was growing as a whole, but falling in community services).

Many in the sector believe that their contribution goes well beyond that captured by economic activity measures — into building social capital and community connections and endowments (such as through protecting the environment), and advocating for peoples' rights. Yet there is little data that can be drawn on to back such claims (as indeed applies to the good works of organisations in the market sector). National data sets are being improved, but *longitudinal* data is needed to support analysis of trends and the potential contribution of NFP activities (and

government policies) to outcomes bearing on these broader aspects of community wellbeing.

The study set out a measurement framework to guide the development of indicators that NFP organisations could use in evaluation of their activities. It also proposed the establishment of a Centre for Community Service Effectiveness, as a mechanism to share evaluations, improve their quality, and draw together the evidence as it accumulates.

Evaluation is expensive, which is one reason why there is a lack of it. There is, nevertheless, considerable reporting on government-funded services occurring for performance monitoring purposes. This reporting imposes a considerable burden on NFPs. Lack of consistency in measures having to be reported adds to the cost for organisations involved in multiple programs. It also limits the value of administrative data sets, even if they are made available to researchers. Agreement on data standards, data sharing, and linkages to longitudinal data collections, emerged as important areas for getting greater benefit out of the funding already going to data collection. The size of the sector (at least 4 per cent of GDP) and its relatively rapid growth, suggests that, at the very least, statistics about its inputs and outputs should be compiled on a regular basis, as occurs for other sectors.

# Improving hospital performance through (data-intensive) funding

As noted, population ageing has crystallised the importance of securing a more cost-effective health sector. The past decade alone (even before any pronounced demographic shift) has seen the sector's share of Australia's GDP rise from 7½ to 9 per cent. As a proportion of State budgets, health/hospitals dwarf all other spending categories. Hospital costs are expected to rise particularly steeply in future (old people use them a lot more). They have accordingly been identified as a priority for reform — both in their own right and, importantly, in terms of their interaction with other parts of what is a highly interconnected health system.

A recent Australian Government proposal for hospital reform would centralise funding responsibility, while introducing stronger 'pricing' signals into funding of public hospitals, providing them with funding commensurate with the nature and volume of their activity, and with financial incentives to improve their efficiency. It is therefore greatly reliant on information relating to what hospitals do, who they treat, the quality of that treatment and what it costs (or should cost).

This in turn presents two main implementation challenges:

- putting in place a nationally consistent approach to the classification and costing of hospital services, and
- assessing the extent of any adjustments to those prices to allow for the range of issues indicated by the government (eg, access in regional areas, clinical safety, services to Indigenous Australians).

The extent of the ambition here becomes apparent when considering where we are at currently with respect to activity-based funding. The fact is that Australia does not have a standardised approach across States and Territories to the classification of admitted inpatient services. Those jurisdictions that have moved to activity-based funding of their (largely) urban-based public hospitals, do not have a consistent approach to what is included and excluded from the relevant costs for a particular admitted inpatient episode – which is particularly important in dealing with some of the fixed costs of hospitals. Moreover, there are deficiencies in the quantity and quality of information on emergency department and outpatient services, in terms of both what is provided and the respective costs.

In November 2008, COAG recognised these deficiencies and agreed on a number of steps (and funding) to remedy them. However, establishing robust, nationally consistent, activity-based prices will be some years off.

Extensive data improvement will need to be complemented by further analysis and judgements, to adjust the derived nationally efficient prices to the level of funding provided to individual or small groups of hospitals for the range of services they offer, and the relative difficulty of treating their patient population. A recent study by the Productivity Commission into the performance of public and private hospitals in Australia, published in late 2009, found:

- significant differences in the costs of providing public hospital services across jurisdictions, with costs generally higher for smaller hospitals and those in outer regional and remote areas;
- greater 'complexity' of cases measured by such things as co-morbidities of patients, their socioeconomic status and use of intensive care was found to reduce a hospital's best practice target efficiency; but
- an indicator of hospital quality (risk adjusted mortality) was in practice not found to have any influence on hospital efficiency — perhaps reflecting offsetting dimensions that seeking to deliver higher quality care may require greater inputs, and that hospitals with higher rates of infection also consume more hospital resources.

It seems clear that the task of the 'independent umpire' in this proposed regime would be a formidable one. The ability to secure much better data would be an absolute precondition for its success. Analysis such as that undertaken recently by the Commission, drawing on the base of improved data, will also be necessary to deliver the most appropriate funding to local hospitals.

# Overcoming Indigenous disadvantage (and poor data)

If there were ever a case of policy failure for want of adequate statistics, it is in the important area of Indigenous policy. Over the past four decades, a period which can be characterised as taking a more 'contemporary' policy approach, there have been many policy initiatives and there have been substantial financial outlays. But the lamentable fact is that the circumstances of Indigenous people appear in many respects not to have advanced and in some important respects they appear to have deteriorated.

However, we don't know this for sure. That is for the same reason that we don't really know for sure which of many policy initiatives across the country have been successful and which failures — lack of data.

When the first edition of the path-breaking series of reports to COAG Overcoming Indigenous Disadvantage was produced in 2003, all seven identified 'strategic areas' for policy action had major gaps and deficiencies in key indicators. For example, an understanding of the state of play in relation to 'early school engagement' could not rely on having basic data on school attendance. In the intervening years, this specific deficiency and various others have been remedied, with a new commitment by all Australian Governments to collect the statistics needed to assess whether their policies are actually achieving better outcomes. However, in presenting the fourth report in the series to a special COAG meeting in Darwin last year, I was obliged to report that the data would still not allow conclusions as to whether things had improved for half of the 49 indicators. Moreover, this included at least two of six indicators specifically singled out for improvement by COAG itself.

Among them is arguably the most fundamental indicator of Indigenous disadvantage, life expectancy. The life expectancy gap between Indigenous and other Australian males, as measured in official statistics, declined from 20 years in the 2003 OID report to 12 years in the 2009 report. However, this apparently dramatic improvement was entirely due to more accurate mortality data and better methodologies. It has required some effort to ensure that the public and policy makers understand that while the gap, though unacceptable, is not as large in

absolute terms as we thought — which is indeed good news — we cannot be confident that there has been a *trend* improvement. (This is not a criticism of our statistical agencies. Rather, it illustrates the difficulty of the task.)

When it comes to the 'pointy end', of evaluating specific policies and proposals, the main problem *ex post* has been lack of preparation *ex ante*, to ensure the data needed for robust evaluations, especially 'baseline' data.

However, as noted, improvements are now in train in a range of areas. One where the Productivity Commission is again closely involved is the collection of information nationally on expenditure related to government services to Indigenous people. Knowing what resources are being directed to Indigenous people is obviously a pretty important prerequisite for evaluating its cost effectiveness. However, existing official statistics (such as the GFS framework) have a number of limitations in this area, including lack of alignment with policy areas, poor data quality at disaggregated levels and simply lack of identification as to where the money goes. Administrative collections across jurisdictions can provide richer data, but there is often a mismatch of frameworks and definitions.

# Achieving better environmental outcomes through better data

The pursuit of 'sustainability' in all of its dimensions — economic, social and, especially, environmental — is crucially dependent on data. Ensuring that future generations are no worse off in those (interconnected) domains requires good information about the state of play now and over time, as well as of the forces and relationships that influence outcomes.

There is an old saying within policy circles that when policies are being formulated "what doesn't get measured doesn't count". There is much truth in this and we have all seen examples — from the deregulation of gambling to the destruction of old growth forests. By the same token, the political backlash that can occur once poor outcomes become manifest, can sometimes lead to bad policy in the opposite direction, effectively imputing infinite values to benefits or costs, in place of the previously imputed zeroes! The common reflex to 'ban' things, for example, is generally based on a lack of appreciation that there are *both* costs and benefits associated with most activities that people engage in, and that their relative magnitudes will typically vary. (That is not to say that bans are *never* justified.)

Policy errors in both directions can be averted (or at least reduced) where there is scope to assess the nature and magnitude of both the costs and benefits of a policy or program based on relevant data of reasonable quality. Unfortunately, that is not

currently where we find ourselves, even on the most pressing environmental policy issues.

One example is that important resource, historically undervalued in Australia, water. The Productivity Commission has just finalised a report on market mechanisms to increase the availability of water for 'the environment' from the Murray-Darling Basin (covering five jurisdictions and a land mass larger than New Zealand). For many years, any such need — even when recognised — was subjugated to the prior claims of agriculture. That may have worked out satisfactorily when water was more plentiful and industry demands on it were smaller, but that is demonstrably not the situation we now face.

Billions of dollars have been ear-marked from taxpayer funds for 'water buybacks' for the purpose of restoring and sustaining key environmental assets. The problem we face at this stage though, is that no-one yet knows how much extra water each 'icon site' will need to restore it to good 'environmental health'. Nor do scientists yet know much about how wildlife and trees will respond to different levels, frequency and duration of watering. Responses are also likely to vary across subcatchments. All this makes it very difficult to assess whether the benefits to society of more environmental water will exceed the social costs of reduced agricultural production.

Understanding the threats to the Great Barrier Reef resulting from coastal production activity polluting the lagoon, faced similar informational lacunae, when the Commission was asked to review the situation and propose a way forward back in 2003. As a consequence of that review, there is now a well-funded program to collect data about soil erosion on pastoral leases and about chemical discharges from coastal cultivation of sugar and vegetables. An adaptive management strategy is now in place, backed up by rigorous monitoring and R&D. This, of course, was neither cheap nor easy to do.

But the standout environmental policy problem with respect to data deficiencies is 'Greenhouse'. Putting aside the ongoing controversy about the threshold scientific question of what warming is occurring and its anthropomorphic origins, there are major data obstacles in the way of effective policy responses — both in relation to mitigation and adaptation.

The most pervasive uncertainty relates to the potential impacts of climate change and its associated economic implications. This requires not only good science and projections (with error bands more explicit than has sometimes been the case), but also valuation of both market and non-market impacts. There are also still major uncertainties about the costs of action to reduce carbon emissions. In Australia,

estimates range from close to zero (McKinsey) to as much as 10 per cent of GDP (Allen Consulting), with official estimates in between. A useful first step to better understanding an economy's mitigation potential would be to extend the input-output statistical system to include key environmental flows and to incorporate this extended accounting framework in economic modelling frameworks. As the pressure of human activity on the environment increases and as our understanding of the feedback links between the two systems evolves, we can expect increased public policy pressure to model and report on the implications of environmental changes on the economy and vice versa.

Mitigation policy also needs to consider the international context, including the potential for carbon leakage. To this end, two roles have been signalled for the Productivity Commission under draft legislation to establish the so-called 'Carbon Pollution Reduction Scheme' (based on a 'cap-and-trade' approach, as in New Zealand). One relates to assessing industry claims about the impact of the CPRS on their activities; the other is directed at estimating effective carbon prices in major economies as part of a five-year review of all assistance for emissions-intensive, trade-exposed industries. Both tasks would benefit from the improvements to input-output data just mentioned. Estimating effective carbon prices (including equivalent 'shadow' prices where non-price mechanisms are used) will be particularly difficult, as it requires consideration of international policies in circumstances where there is little internationally comparable data.

# Some implications

Hopefully by now I have done enough to support my main point that good evidence based on good statistics is fundamental to good public policy; and that, notwithstanding the notable achievements of our independent statutory agencies in building a robust body of official statistics, we continue to face debilitating data gaps in priority policy areas.

At this point, you might naturally expect me to make a plea for more resourcing of statistical agencies and for data provision generally. I won't disappoint you — this, clearly, is an issue. In Australia, we have seen fairly blunt razors and annual 'efficiency' deductions being applied to budgets across the public sector over a long period of time. In practice, these have arguably cut deepest into the sector's informational and research capabilities — functions generally seen as politically more dispensable when 'push comes to shove'.

But it must also be said that good data doesn't come cheaply. The onus is on statistical agencies, and those who depend on what they do, to demonstrate the

value of their collections and the case for maintaining and extending them. Data is not of value for its own sake. Its costs need to be justified by the benefits it provides to society, relative to the benefits obtainable from alternative uses of taxpayers' money. That applies to existing collections as much as to potential new ones.

There are a number of dimensions to this. One is the importance of making existing data as accessible as possible to potential users. This has pricing and 'confidentiality' aspects. Both have been 'battlegrounds' in Australia, with the former ultimately being resolved in part through the technological development of (almost) zero marginal cost electronic delivery. The latter battle is ongoing. While some progress has been made, there would appear to be considerably more scope to allow researchers access to unit record and other data vital to many areas of public policy analysis, without official statistical agencies compromising their statutory duty to protect the privacy of individuals.

But the more important and difficult challenge is to ensure that data is not only accessible and of high quality (the latter a given, of course, for the ABS and SNZ!) but that it best meets the needs of society, and of public policy in particular. More than this, it should also be evolving such as to anticipate the needs of the future, given the leads and lags involved in its collection.

It is therefore of crucial importance for the contribution and perceived performance of official statistical agencies that they have well-developed mechanisms and forums for understanding both the current and emerging issues that call for their services. They also need to be seeking feedback on the utility of existing collections.

By the same token, statistical agencies should not be expected to go it alone in this, or be required to *divine* the demand for what they supply. What is needed to bring out the best in our official and other data systems is a policy-making environment that contains intelligent, proactive and demanding users of statistics. In other words, an environment that values evidence, and that seeks it out and actually *uses* it in addressing policy questions.

In Australia, we have seen greater recognition of the importance of data emerge in recent years as a by-product of COAG's National Reform Agenda and a shift to performance-based funding of the States and Territories by the Commonwealth. This has provided a focus for prioritising data collection, to enable assessments of whether agreed outcomes and targets are being achieved in a variety of areas of service delivery. It is also creating demands for better statistics to assess impacts across socio-economic and other population groupings, as well as by region.

My own organisation, the Productivity Commission, is closely involved in these developments. Indeed, along with its direct predecessors — the Industry Commission and IAC — it has played an instrumental role on the statistical 'demand side' over many years.

The Commission's role is to provide independent advice to governments on complex or contentious policy matters, where there is much at stake for the community in 'getting it right'. Extensive public consultation and in-depth analysis of evidence have been its hallmarks. Evidence-based advice of course depends on having access to robust data and, as noted, such data have not always been found 'on the shelf'. The Commission has accordingly forged strong links with data providers over the years, dating back to the first push for better input-output data in the late 1960s.

The Commission's relationship with the ABS has been of special importance. For many years, there has been an 'outposted officer' of the Bureau installed at the Commission itself, which has proven invaluable in helping staff access data and in facilitating liaison on more complex statistical issues as they arise. Commission research staff have also, on occasion, in effect worked as officers of the ABS, as a means of overcoming some of the confidentiality constraints referred to earlier. And the most senior people from both organisations meet periodically to discuss emerging priorities and other strategic matters.

Our experience hopefully may presage how things will evolve in New Zealand with the establishment of your own Productivity Commission. The statistics fraternity should see this as a promising development, not only for the enhanced capacity for evidence-based policy analysis and advice in New Zealand, but also for the consequently greater recognition of, and support for, the vital role that official statistics must play now and into the future.