STRUCTURAL REFORM: PAST ACHIEVEMENTS, FUTURE CHALLENGES

Australia's economy has been radically transformed from the high-cost, inward-looking economy of three decades ago. This is the result of a wide-ranging program of structural reforms, in which the Commission and its predecessors have played a significant part. These reforms and their impacts are discussed here, as well as further reforms needed to secure Australia's prosperity into the future.



Cartoon by Nicholson from The Australian. www.nicholsoncartoons.com.au

Structural reform Australian-style: lessons for others?

'The Government's commitment to reform, its willingness to commission expert advice and to heed it, to try new solutions, and to patiently build constituencies that support further reforms, is ... something that other countries could learn from.' (OECD, Economic Survey of Australia, 2004)

Introduction

Australia has undergone sweeping structural reforms over the past two decades that have helped transform its economic performance. To most economists, the reforms themselves would no doubt appear unexceptionable. They typically apply conventional prescriptions for improving growth by removing policy-related distortions and impediments to a well-functioning market economy. However, given the magnitude of the reform requirements in Australia, and the entrenched political obstacles to reform, the manner in which the reforms were introduced and sustained may be of wider interest and relevance.

My purpose in this paper therefore is not to focus on the why of reform, which I shall take to be understood in this company. Rather, I will briefly outline what reforms were undertaken in Australia and provide some indication of their outcomes, before focussing on aspects of how we went about it. I will look in particular at some institutional innovations that appear distinctive to Australia and which have attracted the attention of a number of other countries — both developed and developing — as well as within international organisations concerned with promoting economic development.

Paradise lost — and (partly) regained

Economic reformers in Australia often observe that our country had the highest per capita income in the world at the dawn of the twentieth century. Like some

3

^{*} Based on presentations to the IMF and World Bank (Washington DC, 26–27 May 2005) and OECD (Paris, 31 May 2005).

others in that privileged position (Argentina, New Zealand), Australia's position on the global income ladder steadily declined in succeeding decades.

In retrospect, the causes of our relative decline seem fairly clear. As the respected Australian journalist Paul Kelly has chronicled, Australia's structural policies following Federation in 1901 were shaped by a social compact known as the 'Australian settlement' (Kelly 1992). Trade barriers fostered domestic manufacturing activity. Relatively generous wages and conditions were determined Australia-wide by the Industrial Relations Commission. Those states of the Federation most disadvantaged by this were compensated over time through fiscal redistribution from the Australian Government. Statutory government monopolies were created to provide public utility and other services at 'fair' prices to the expanding populations. The regime was highly regulated, anticompetitive and redistributive: captured nicely by the expression 'protection all round'.

For many years the economic costs of this regime were masked by the performance of our broad-acre agricultural and mining industries. Until the early 1970s, the terms of trade favoured our primary commodities, and we had benefited from a world-wide expansion in demand following World War II. Australians enjoyed close to full employment with incomes still higher, on average, than those in most other OECD countries.

But we were riding for a fall. During the 1970s, the prices we received for our commodity exports commenced a long decline, while the costs of imports began to rise. The resulting terms of trade deterioration (figure 1) would, in turn, expose the underlying problem of Australia's poor productivity performance. Even in the postwar boom years, Australia's productivity lagged. Between 1950 and 1973, our annual productivity growth averaged 2.5 per cent, compared to 3.5 per cent for OECD countries as a group (figure 2).

The reasons for our relatively poor productivity performance, given the policy environment just described, are not hard to find:

- a fragmented, high cost manufacturing sector, focussed on the domestic market
- indulgent, inflexible work practices, powerful unions and lack-lustre management
- outmoded technologies, low rates of innovation and skill development
- high-cost infrastructure services like power, transport and communications, which effectively taxed business users, while cross-subsidising households.

Australia's poor productivity performance, together with the declining terms of trade, translated into what seemed an inexorable slide in our comparative living

4 AN ECONOMY-WIDE VIEW: SPEECHES ON STRUCTURAL REFORM standards. Whereas Australia was still ranked 5^{th} in the world in 1950 in terms of GDP per person, we had fallen to 9^{th} by 1973 and to 15^{th} by the late-1980s.

Figure 1 Australia's terms of trade

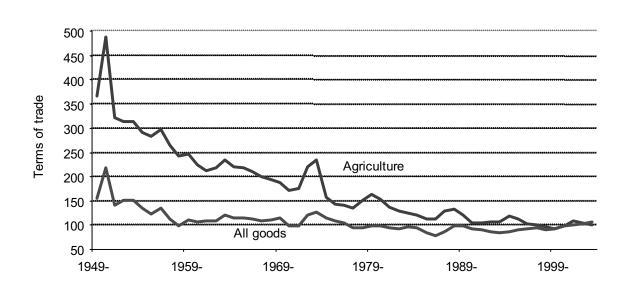
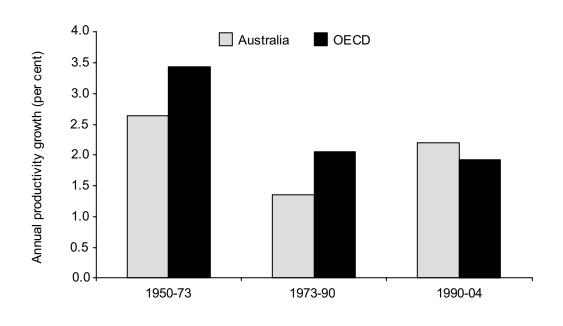


Figure 2 Australia's relative productivity performance



Wide-ranging 'microeconomic reform'

Structural reform could be said to have commenced with a false start in 1973, when the Government introduced a dramatic 25 per cent across-the-board tariff cut. However, the measure turned out to be a one-off. In conjunction with other events, the cut precipitated a backlash against reform and there were only 'piecemeal' further reductions in tariffs for over a decade.

Following the election of a new government in 1983, the reform of border protection arrangements was reinvigorated — with the conversion or elimination of import quotas as well as reductions in tariffs themselves. At first, these reforms were introduced on an *ad hoc* industry-by-industry basis. Then in 1988, the Government introduced the first in a series of phased reductions in tariffs across most industry sectors such that, by 1996, virtually all tariffs (other than for the automotive and textile, clothing and footwear (TCF) industries, which were on their own liberalisation paths) had fallen to 5 per cent or less.

The early 1980s had also seen the floating of the Australian dollar (facilitating subsequent adjustment to tariff liberalisation) followed by significant liberalisation of the finance sector, including the removal of exchange and interest rate controls.

Increased international competition in Australia's traded goods sector led to pressures for reductions in input costs, notably in labour markets and (non-traded) public utility services. In turn, pressure mounted for the reform of government policies and institutions that were impeding these changes, and an increasingly broad-ranging program of domestic microeconomic reform was hatched (box 1).

If any single indicator could convey the extent of structural reform in Australia, it would be that essentially Australian measure of relative net protection levels, the effective rate of assistance (ERA). The ERA for manufacturing has declined from 25 to 5 per cent over the past two decades, while agricultural assistance has also fallen (figure 3).

Equally, it would be hard to find more striking illustrations of consequent structural and behavioural change than the coincident rise in the trade intensity of Australia's economy, from 27 per cent in the mid-1980s to 44 per cent in 2003, and the sharp increase in business R&D spending as a share of GDP (figure 4).

Box 1 Two decades of economic reform

Trade liberalisation — reductions in tariff assistance (that began in 1973) and the abolition of quantitative import controls — mainly in the automotive, whitegoods and textile, clothing and footwear industries — gathered pace from the mid-1980s. The effective rate of assistance to manufacturing fell from around 35 per cent in the early 1970s to 5 per cent by 2000.

Capital markets — the Australian dollar was floated in March 1983, foreign exchange controls and capital rationing (through interest rate controls) were removed progressively from the early 1980s and foreign-owned banks were allowed to compete.

Infrastructure — partial deregulation and restructuring of airlines, coastal shipping, telecommunications and the waterfront occurred from the late-1980s. Commercialisation, corporatisation and privatisation initiatives for government business enterprises were progressively implemented from around the same time.

Labour markets — the Prices and Incomes Accord operated from 1983 to 1996. Award restructuring and simplification, and the shift from centralised wage fixing to enterprise bargaining, began in the late-1980s. Reform accelerated in the mid-1990s with the introduction of the *Workplace Relations Act 1996*, further award simplification and the introduction of individual employment contracts.

Human services — competitive tendering and contracting out, performance-based funding and user charges were introduced in the late-1980s and extended in scope during the 1990s; administrative reforms (for example, financial management and program budgeting) were introduced in health, education and community services in the early 1990s.

'National Competition Policy' reforms — in 1995, further broad-ranging reforms to essential service industries (including energy and road transport), government businesses and anticompetitive regulation were commenced by all Australian governments through a coordinated national program.

Macroeconomic policy — inflation targeting was introduced in 1993. From the mid-1980s, fiscal policy targeted higher national saving (and a lower current account deficit) and, from the mid-1990s, concentrated on reducing government debt, primarily financed through asset sales (privatisation).

Taxation reform — capital gains tax and the dividend imputation system were introduced in 1985 and 1987, respectively. The company tax rate was lowered progressively from the late-1980s. A broad-based consumption tax (GST) was implemented in 2000, replacing the narrow wholesale-sales-tax system and a range of inefficient state-based duties. Income-tax rates were lowered at the same time.

Figure 3 Falling effective protection

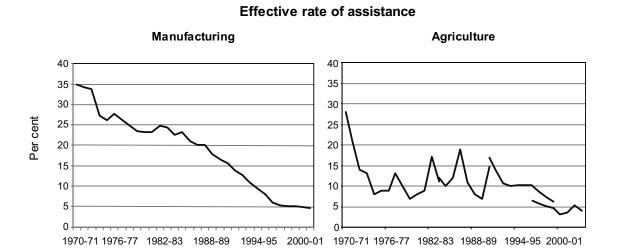
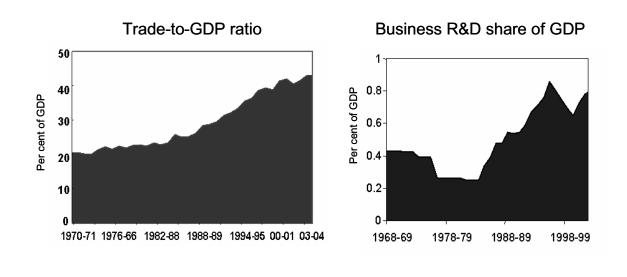


Figure 4 Increased trade and R&D intensity



A more productive economy

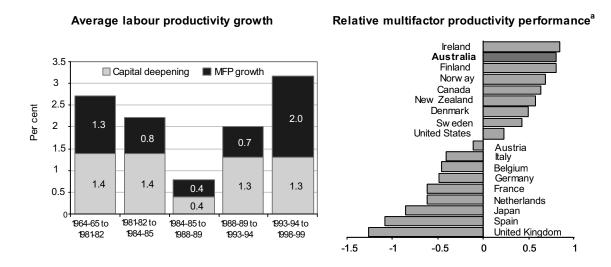
As a consequence, important changes have been wrought in each of the areas previously identified as contributing to our poor productivity performance. For example, there has been:

• a marked decline in high-cost, labour-intensive or standardised manufacturing activities and a rise of 'elaborately transformed manufactures' (PC 2003g)

- major changes in work practices in all sectors, including to accommodate new technology
- a rise in the intensity of business R&D, and increased innovation generally, with Australia having one of the highest rates of ICT uptake among OECD countries in the past decade (OECD 2004a).

These and other forces are reflected in the productivity performance of a range of industries. At the aggregate level, Australia experienced a surge in multifactor productivity (MFP) growth during the 1990s, averaging almost 2 per cent, more than double its previous rate (figure 5). Australia's MFP performance was also among the best in the OECD and its labour productivity growth exceeded even that of the United States (OECD 2004b).

Figure 5 Australia's productivity turnaround



^a Percentage points change to average annual MFP growth 1980-1990 to 1990-2000.

Accompanied by rising labour utilisation, this translated into annual growth in per capita incomes of around 2.5 per cent in that decade, well above the previous average and that for the OECD as a whole (1.7 per cent). As a consequence, Australia has seen its position on the international per capita GDP scale rise again from 15th to 8th over the past decade or so.

Some (unusual?) features of the reform program

While Australia's structural reforms could be said to have followed standard economic prescriptions, the way the reforms were implemented had some distinctive features.

'Opening the boarders' became the first domino

For example, the literature on the 'optimal sequencing' of reforms generally argued in favour of addressing domestic distortions and inefficiencies before exposing an economy to international competitive pressures — in order to minimise adjustment costs. The Australian approach effectively turned this sequence on its head. Opening the borders to foreign goods, services and capital played a critical role in exposing 'upstream' inefficiencies, generating political pressure for reforms in government utility service provision and in labour markets. In particular, it is difficult to imagine that industrial relations reforms could have gone as far as they did without the increased discipline that international price competition placed on unit labour costs. In political economy terms, therefore, a lesson from Australia's experience is that external liberalisation has distinct advantages as a first-mover strategy.

We liberalised unilaterally

Unlike other OECD countries, most of Australia's trade liberalisation has been undertaken unilaterally, rather than in exchange for reciprocal concessions by other countries. This has not reflected any failure to engage in or support the then GATT (now WTO) system, but rather the reality that multilateral trade negotiations for many years did not encompass agricultural trade — which at that time was Australia's main export interest. This meant that there was little incentive to do reciprocal deals.

We hastened slowly

Another issue that has exercised reformers is the optimal breadth and pace of reform. For example, some economists have advocated a 'big bang' approach of rapidly introducing substantial reforms across an economy, to offset distributional impacts in any one sector and bring forward gains that might otherwise be delayed or forgone as 'reform fatigue' or opposition set in.

Australia adopted a more incrementalist approach, though ultimately with a broad reach. The 25 per cent tariff cut was an abrupt change that was not pre-announced

by the Government. In hindsight, this bold initiative probably set back the case for tariff reform. Later tariff liberalisation programs involved pre-announced and graduated reductions.

Likewise, in the 'sensitive' sectors, including steel, autos and TCF, 'industry plans' were devised to provide incremental reform. For instance, under the first auto industry plan, which commenced in 1985, quotas were initially converted into tariff-quotas and then abolished, and the tariff of 57.5 per cent was phased down to 35 per cent in 1992. Subsequent plans have involved gradual, pre-announced tariff reductions, such that auto tariffs fell to 10 per cent in 2005 and are scheduled to decline to 5 per cent in 2010. Industry plans have also variously included export, investment and R&D subsidies and, in some of the early plans, specific restructuring targets and incentives.

We acted on a broad front

While Australia's structural reforms could be said to have begun sequentially and were incremental in nature, the program evolved in a cumulative way to encompass reforms across much of the economy. This brought many of the benefits attributable to 'big bang' approaches, but without all the costs. Potential losses in some sectors from reductions to protection were at least partly offset by benefits derived from reforms in other sectors, thus avoiding undue adjustment and making reform more 'palatable'.

We 'oiled the wheels' in sensitive sectors

In the main, Australia used the phasing of reforms to minimise adjustment costs, relying on general retraining schemes and the (relatively generous) welfare safety net to address the needs of displaced workers. However, particularly in sensitive sectors, governments also introduced some specific measures to deal with adjustment issues. The industry plans often entailed specific retraining schemes or assistance for displaced workers. In other cases, reform has been accompanied by direct compensation for the economic losses entailed. Governments have also provided specific support for regions in which the costs of reform were concentrated.

Two institutional innovations in Australia's reform story

Structural reforms of the kind Australia has implemented have long been recognised as economically desirable by most economists, but have faced strong political obstacles in all countries. This reflects the fact that many of the policies or regulations that have efficiency costs also have pronounced distributional effects. Reform (by definition) is intended to benefit the wider community. But in doing so it typically threatens the privileges or perceived entitlements of a minority.

The inherently adverse political calculus of structural reform is made worse by the front-loaded timing of the losses relative to the benefits. Given the three year electoral cycles that obtained in all Australian jurisdictions until very recently, this almost guaranteed that an incumbent government would experience more of the pain than gain from reforms that it introduced — while potentially seeing the reverse occur for its successor. The bicameral nature of most jurisdiction's parliamentary systems provided a further obstacle to reform, particularly at the wrong end of the political cycle.

Finally, in some countries, including Australia, there are the additional challenges for nationally beneficial structural reforms posed by a federal system of government. In Australia, the six states have regulatory powers and responsibilities in all relevant areas. In areas that require national systems, such diversity can manifest itself as productivity-sapping fragmentation.

International surveys and case studies have identified a range of other conditions conducive to reform. These include strong and well-motivated political leadership, 'technocratic' capability within government, 'good timing' and the emergence of pro-reform lobbies. Where Australia appears to have differed is in fashioning domestic institutional arrangements expressly to promote and sustain reform. The two institutions most distinctive of the Australian approach in this respect are the Productivity Commission (and its direct forebears, the IAC and the Industry Commission) and the inter-jurisdictional framework for National Competition Policy (NCP).

The role of 'the Commission'

Paradoxically, the institution most identified in Australia with the microeconomic reforms of the past few decades, had its origins in an institution that had underpinned the protectionist side of the Australian settlement for much of the preceding 50 years.

The Tariff Board was created by statute in 1922 as an independent inquiry and advisory body on tariff making. At the Government's request, it would examine the claims of particular industries for increased protection through a public inquiry process, and issue public reports with formal recommendations. Reflecting the consensus of the time, the Board's recommendations were essentially designed to offset local industry's 'margin of cost disadvantage' against imports (while avoiding 'excessive' protection).

When the socially reformist Labour Government swept to power in the early 1970s, it created a new organisation, the Industries Assistance Commission (IAC), to provide a more wide-ranging institutional vehicle for arms-length advice in the national interest about the costs and benefits of tariff and other assistance to industry. This was predicated on the (then) radical notion for the political left that the fiscal requirements of social programs depended on having an efficient and productive economy.

There are three features of the organisation's design that have collectively distinguished its contribution:

- *Independence*. The Commission was established by Act of Parliament. Its role was purely advisory, having no judicial, executive or administrative functions. Members of the Commission were appointed by the Governor-General for up to five years and could not be removed by the government of the day.
- Openness. By statute, the government was obliged to obtain advice from the Commission before changing any tariff or financial assistance to industry. The Commission was required to hold public hearings and release draft reports before finalising its recommendations to government. The Commission was also required to prepare an annual report covering its operations and analysing the structure of assistance to Australian industry and its effects. And the government was obliged to release publicly all Commission reports within a specified period.
- *Economy-wide mandate*. Guidelines in the legislation stated that the Commission should be concerned with improving the efficiency with which the economy uses its resources and take account of the interests of consumers and users of products affected by its proposals.

With some variation, these three features remained fundamental to the role and operations of the two organisations that succeeded the IAC; namely the Industry Commission (from 1990 to 1998) and today's Productivity Commission, which was established in April 1998. The main differences between the organisations have been in their coverage, which has been progressively extended beyond industry assistance matters to cover structural reform issues across all sectors of the economy, and in social and environmental as well as economic spheres.

How has the Commission assisted reform?

The Commission has been able to assist reform in a number of ways.

Firstly, it has provided government with a source of well researched advice on structural reform that is impartial and concerned with the longer-term interests of the community as a whole. The Commission's processes also ensure that the arguments of vested interests will be subjected to rigorous scrutiny, weakening their influence if they do not hold up. For example:

- Claims by opponents of NCP that depopulation and other problems in regional Australia were attributable to the policy were examined in a 1999 inquiry. The Commission found that longer-term factors including technological advances, changing consumer tastes and lifestyle preferences, and declining prices for agricultural commodities were primarily responsible. Further, modelling undertaken as part of the inquiry indicated that NCP was likely to increase net income in all but one region (PC 1999b).
- To help justify the proliferation of gaming machines during the 1990s, gambling industry interests (and some state governments) promulgated a number of studies, incorporating 'multiplier analysis', that suggested that growth of the industry created significant additional employment. These and other claims were examined in the Commission's 1999 inquiry into Australia's gambling industries. It showed how gambling industry expansion had largely displaced other forms of economic activity, with little net effect on job numbers. Claims of major employment benefits appear to have been made less frequently (and treated more sceptically) since (PC 1999a).

Second, the Commission's findings and recommendations to government generally have the advantage of having been shaped in the light of extensive public input, and feedback on a draft report. This means that they are more likely to have taken into account all relevant considerations and thus be more robust and reliable. Recent examples include the Commission's report on the regulation of third-party access to gas pipelines, where it changed and refined its proposed criteria for using more light-handed regulation; and its report on an assistance program for the pharmaceuticals industry, where it changed its position from recommending termination of the scheme to re-focussing it as an R&D support measure (PC 2001b, 2003b).

Third, the Commission's processes — including public submissions, hearings, draft and final reports — provide governments with an opportunity to gauge at arms length the likely reactions of the community and interest groups to different policy approaches. This can reduce the prospect of unanticipated responses which could

ultimately force policy reversals. For example, the Commission's 1997 inquiry into private health insurance led to changes to the community rating system. This system — which prevented health funds discriminating on the basis of age — was thought 'fair' by many and seemed politically off limits. However, the Commission showed that it led to adverse selection problems and ultimate inequities, with younger people not contributing to the pool causing premiums for remaining (generally older) members to spiral up, resulting in further exits. The Commission's recommendations that people entering insurance late pay higher premiums than those who enter early, gained more support than expected and were eventually adopted by the Government (to considerable effect) (IC 1997b).

Fourth, governments can use the Commission's reports and analyses in making the case for policy changes, or in resisting pressures to introduce policy measures that would be costly nationally. Thus, for example, the Commission's analysis of the effects of NCP on regional Australia, together with modelling indicating that the program would generate significant net benefits, blunted attacks on the NCP and contributed to its renewal and extension in 2000 (see below).

Finally, the Commission's public inquiry processes and reporting can in themselves engender a wider awareness within the community of the costs of existing policies and the benefits from reform. The Commission's detailed analysis of the costs borne by the mining and agricultural sectors as a consequence of manufacturing protection is perhaps the clearest (and most significant) example. The evidence it produced helped to galvanise those sectors as major political forces for tariff liberalisation in Australia.

The Commission's role in perspective

These observations should not be interpreted as suggesting that the Commission has been the sole driver of liberalisation. At various times other review bodies have been used to perform a similar role. Moreover, as for all such bodies, the Commission's role is informational and advisory. It is reliant on others to help take up its message and, ultimately, to implement reforms — a process which has not always delivered, or sometimes taken a considerable time.

The Australian press has often played an important part in promoting the Commission's findings to a wider audience, as well as in encouraging governments to implement its recommendations. But ultimately political leadership has been crucial, both in selling reform and implementing it. Australia has been fortunate over the past two decades in having leaders who were willing to expend short-term political capital in pursuit of the longer-term benefits of reform.

The National Competition Policy

A second distinctive institutional innovation in Australia's structural reform story has been the mechanisms for the national coordination of pro-competition reforms across the nine jurisdictions of the Australian federation.

Faced with political pressure from businesses increasingly exposed to international competition, some state governments began to reform their public utilities and other infrastructure service provision from the mid-1980s. While some progress had been made over the next decade, it was variable across jurisdictions.

In October 1992, an independent review (the Hilmer Review) was established to devise a framework for progressing pro-competitive structural reforms across all jurisdictions. Following further discussions and analysis, the NCP — comprising a comprehensive program of reforms — was agreed to by government leaders (through what had by then become the Council of Australian Governments) in 1994.

Again the identified reforms, while having some special features, were for the most part not novel. What *was* new and unprecedented in Australia, was the manner in which the reform program was implemented and adhered to across jurisdictions. A recent review of the NCP by the Productivity Commission singled out a number of features that contributed to its success (PC 2005e).

Key success factors in the NCP

An essential condition was the acceptance by government leaders that reforms were needed and would yield net benefits. Broad agreement was achieved on some key reform principles, priority areas and policy prescriptions. Other design features of the NCP that contributed to its success in driving structural reform across different jurisdictions included:

- While establishing agreed principles and approaches to reform, it allowed for some flexibility in how individual jurisdictions met their commitments.
- The establishment of another independent statutory body the National Competition Council (NCC) to monitor reforms across jurisdictions, to report on progress and to identify where commitments had not been met or where actions fell short.
- Provision within the agreement for financial payments from the Australian Government to the states and territories. These 'competition payments' were calculated on the basis of projections undertaken by the Industry Commission, and amounted to an allocation of \$5.7 billion spread over nine years. Whether

particular states received their payments in full depended largely on the assessments of their progress undertaken by the NCC.

Heads of Government agreed to renew the whole NCP process after five years, with only minor modifications, and it has held together now for a decade. It represents an achievement in inter-governmental economic reform that is without precedent in Australia (and possibly in other federations as well).

Further reform challenges for Australia

There remains considerable scope and indeed a pressing need for further reform if our country is to realise its potential, and successfully manage some major challenges that lie ahead.

While Australia's productivity growth has been among the highest in the OECD, this has reflected a need to catch up from a low base — we still have a fair way to go. For example, in terms of GDP per hour worked, in 2004 we were at 81 per cent of the US level, only slightly above where we were in 1950. Our manufacturing productivity in particular remains well below US (and other OECD) levels (OECD 2004b).

The biggest looming imperative for further reform is the pronounced ageing of Australia's population. Though not unique to Australia, and largely a consequence of beneficial increases in longevity, this will significantly reduce the potential labour supply relative to the population, and substantially increase demands on health and aged-care. Projections by the Commission suggest that, in the absence of policy responses, this will in turn cut per capita growth rates by as much as a half. At the same time, it will create a fiscal gap rising to some 6.5 per cent of GDP, which would imply a cumulative debt burden twice as large as Australia's GDP by the middle of this century (PC 2005b).

Recent major reviews of the structural policy landscape by the Productivity Commission have revealed considerable scope to achieve a more productive and sustainable Australia by building on past reform efforts in economic infrastructure and regulation, as well as by extending reform into areas of social infrastructure and national resource management (box 2).

Box 2 The Commission's proposed reform agenda, 2005

Priorities for future reform identified in the recent Productivity Commission reports on NCP and ageing include:

- strengthening the operation of the national electricity market
- enhancing water allocation and trading regimes to better address scarcity and negative environmental impacts
- · delivering a more efficient and integrated freight transport system
- addressing uncertainty and policy fragmentation in greenhouse gas abatement policies
- improving the efficiency and effectiveness of consumer protection policies
- introducing a more targeted legislation review mechanism, while strengthening arrangements to screen any new legislative restrictions on competition
- re-energising reform in the vocational education and training area
- introducing incentives to improve labour force participation rates, especially among males
- increasing productivity in the health sector by improving flexibility, encouraging adoption of evidence-based medical practices, and enhancing coordination within and between jurisdictions
- deepening reform in other key policy areas, including industrial relations and taxation, and generally reducing regulatory burdens.

Source: PC 2005b, 2005e.

Lessons for others?

A number of features of the Australian reform story appear to resonate with other countries' reform experience. These include effective political leadership, opposition parties that were supportive of (or at least not strongly opposed to) key structural reforms, an economically literate cadre of political advisers and bureaucrats, mostly 'good timing' in terms of political or business cycles, and the emergence of coalitions in favour of reform.

If Australia has any special insights to offer from its experience of the past few decades, it is about achieving enduring reforms. Apart from the 'false start' of 1973, reforms have generally stuck, and reform programs developed under one government have largely been maintained by new governments. The tariff liberalisation program and the NCP are two important examples. Features of the Australian story that help explain its success in this respect include the institutions and implementation strategies detailed here that were devised to promote an

awareness of the benefits from reform, to help build political support, weaken resistance and promote adjustment.

Political leadership is critical to structural reform, but its influence on policy in the longer term can be ephemeral. Its most enduring legacy may well come from more fundamental actions to entrench institutions and processes that can facilitate ongoing reform beyond the life of any one government.

Gaining from trade liberalisation: reflections on Australia's experience*

It has been almost 30 years since Australians woke up to discover that their government had initiated a 25 per cent cut in manufacturers' tariffs. This dramatic event was the opening volley in the reversal of protectionism in Australia. The path of trade liberalisation since then has been neither smooth, rapid, nor consistently downhill. However, we have ended up a long way from where we started, with limited tariffs and other import restrictions in most of our traded goods sector (and low barriers to most services trade).

Unlike most other countries, Australia undertook much of this liberalisation of its own accord, outside the formal bargaining processes of the GATT or WTO. Nevertheless, it got 'credit' for its reforms in subsequent multilateral trade negotiations and, through the non-discrimination rule, benefited from the reciprocal liberalisation of the larger trading powers.

Part way into the latest Doha Round of multilateral trade negotiations, the old paradigm is shifting in significant ways. The Round itself seems to be in trouble. That is not too unusual at this stage. However, the sticking points are the same ones that have diminished the value of past Rounds (including agriculture). At the same time, and partly as a consequence of the earlier Seattle debacle, there has been an acceleration in effort devoted to the negotiation of bilateral or regional preferential arrangements.

The United States has been at the forefront of this, but we are now also seeing other traditional multilateralists like Japan, and even brand-new multilateralists like China, making similar moves, as well as other countries in Asia. This 'third wave' of preferential agreements goes well beyond barriers to merchandise trade, to include investment and various services-trade issues, as well as more contentious domestic regulation. Whether these agreements will prove to be building blocks or stumbling blocks for wider liberalisation remains hotly contested. What seems clear

(Co-authored with Tom Nankivell.)

^{*} Presentation to the Institute for International Business, Economics and Law (University of Adelaide)/Committee for Economic Development of Australia conference, 'New Horizons in Trade: The WTO Round and Australia's Free Trade Negotiations', Adelaide, 5 June 2003.

in the meantime, however, is that countries excluded from such agreements face considerable risks.

These developments bring obvious challenges, but also opportunities for Australia. The most significant of these relate to the current negotiation of a bilateral trade agreement with the United States, a new direction in Australia's own approach to liberalisation.

It is therefore timely to ask what lessons we can learn from the Australian liberalisation of the past that might help us plot the course ahead. What has been the effect of trade liberalisation on the Australian economy to date? Are there still benefits in proceeding unilaterally with reform? And what traps should we be aware of when negotiating trade deals, particularly bilateral or other preferential arrangements?

Australia's economic transformation

The liberalisation initiatives by Australian governments over the past two decades have contributed to the transformation of the Australian economy (Banks 2003a). Australia's exports and imports as a proportion of GDP are now one-third higher than they were in the mid-1970s. Domestic manufacturing based on import-replacement strategies has increasingly made way for export-oriented and globally-integrated production. Notwithstanding increased import penetration in manufacturing, the sector's real output has not decreased (although much employment has migrated to the services sector). Production and trade in services have also grown rapidly, as have commodity exports (at least prior to the current drought).

Over the 1990s, Australia's productivity growth accelerated to rates exceeding even the boom post-war years, with labour productivity growth almost doubling to over 3 per cent per year during the period 1993-94 to 2002-03. Further, Australia's growth performance was maintained despite the crisis which enveloped several of our major markets in Asia in the late-1990s, and the slowing of other OECD economies.

Australia became the fastest growing economy in the OECD during this period, and by 2001 we had climbed back from 15th to 7th highest of the 22 OECD countries, in terms of GDP per person.

Multiple benefits of trade liberalisation

While various factors, including sound macroeconomic management, played a part, research by the Commission and others suggests that the microeconomic reforms of

the last two decades have been a major contributor to the strong productivity growth, and to our economy's increased flexibility in the face of economic disturbances. Trade liberalisation has been only one element in this transformation. But it has played a pivotal role, some key aspects of which are not generally recognised.

Consumers gain

First, and most obviously, tariffs are a (distorting) tax on consumption. They inflate not only the price of imports but also the price that domestic producers can charge for competing products. Reducing or removing that tax means that, over time, consumers can buy the same quantity of goods and services for less of their income, which leaves them with more to spend on other goods and services. They typically also have access to a greater variety of products.

More competitive firms and industries also gain

Second, lower tariffs for one industry generate benefits for businesses in other industries. One reason is that the extra consumer spending power can act to lift demand for other goods and services. But more directly, lower tariffs mean lower *input* costs for many businesses. For example, every business that uses passenger motor vehicles — from taxi owners to tourist operators to Telstra — has benefited from the significant reduction in tariffs and quotas on imported vehicles over the past two decades.

Exporters have been particular beneficiaries of lower tariffs. For example, when tariffs were lowered on farm machinery, our farmers' costs declined, making them more competitive on export markets — and better able to survive in the face of declining commodity prices. Further, high tariffs had tended to prop up the Australian dollar, which in turn pushed up the price of our wares on world markets. These are some of the reasons why economists say that 'a tax on imports is a tax on exports', and explains why export growth has broadly matched the more rapid import growth in the era of trade liberalisation.

For these and other reasons, reductions in protection for particular industries can be expected to create an expansion in the production and sales of many other industries across the economy. Understanding these inter-industry ramifications has been aided in Australia by the development of economy-wide models based on input-output data. For example, the Commission's ORANI model was used in the development of the 1988 program of general reductions in protection. The modelling projected that, while there would be a contraction in some industries such as transport equipment (7 per cent), TCF (5 per cent) and chemicals (2 per cent),

price reductions and resource flows would mean that most sectors would expand. Mining output was projected to expand by 5 per cent, and output across agriculture and a number of manufacturing and service industries was also projected to expand, leading to an overall increase in employment, with real GDP rising by some \$1.2 billion.

Increased flexibility and 'dynamism'

As well as these static allocative benefits, there are dynamic gains to an economy that opens up to import competition. The precise nature and magnitude of these gains are difficult to predict beforehand, or to model mathematically, yet Australia's experience suggests that they can be pervasive.

At one level, increased import competition puts pressure on corporate managers to examine and improve their operating efficiency, product menus and pricing, as well as exposing them to international best practice. It can also help to break down old antagonisms between management and labour within the threatened industry, providing them with greater incentives to recognise their joint interests and to work cooperatively.

At a broader level, heightened competition from imports means that firms and industry organisations that might otherwise have remained complacent about entrenched work practices, and the high cost of inputs and utility services, are no longer able to contrive to pass these costs on. This in turn can generate political pressure for reform in these other sectors of the economy. Thus the reforms to anticompetitive business regulations, government business enterprises and industrial relations, culminating in the National Competition Policy, can be seen as a logical outcome of the opening of the economy to international competition.

Managers are minding their businesses

Where the government sticks to a clear agenda of reform, such as the programs of phased reductions in tariffs that commenced in the late-1980s, there is a further benefit. It sends a signal to the business community not to expect special deals, thus releasing businesses' management and financial resources for managing rather than for lobbying. Unfortunately data on resources devoted to lobbying activities are not readily available. But casual observation of the Canberra scene over the past decade confirms a diminution and rationalisation of the lobbying armoury maintained by manufacturing firms and industries for protectionist purposes and a greater focus on seeking economy-wide reforms (for example, in taxation and industrial relations).

It is important to note that many of these gains were not achieved overnight. The reallocation of production and the introduction of new processes take time, and new investments of managerial effort as well as capital are needed. Similarly, attitudes and expectations formed in the era of government preferment take time to be redirected towards self-reliance. In the meantime, there are inevitably some dislocation and adjustment costs, particularly in more vulnerable regions, and these need to be taken into account. Nevertheless, the Australian liberalisation experience has been remarkable for the smoothness of the transition.

Unilateral reform has been the main source of benefit

Australia has not been alone in reducing barriers to imports. For example, average tariff levels for manufactured goods in industrialised countries have fallen from over 40 per cent after World War II to 4 per cent today. However, unlike the liberalisation efforts of the Europeans and North Americans, most of Australia's liberalisation has been *unilateral*, undertaken voluntarily rather than in return for reciprocal concessions from other countries.

This is partly because Australia was essentially precluded from being a conventional participant in multilateral trade negotiations. For many years our main export interest, agriculture, was off-limits in the GATT, providing little scope for trade bargaining, so we were forced to think about the domestic implications of reducing our own trade barriers (and we pioneered tools of analysis, such as the 'effective rate of assistance', to help us with that).

This turned out to be an important advantage, as we were among the first countries to act on the recognition that a country gains most of all from reducing its own trade barriers, *regardless of what other countries do*.

Contrary to mercantilist notions, the main benefits of trade for a country come not from maximising export income *per se*, but rather from the improvements in domestic productivity, resource allocation and consumption that import competition brings. A country's own barriers to trade generally have a more distorting effect on the allocation of its resources and on incentives to be productive and innovative than the trade barriers of other countries.

Unfortunately, the time-honoured rituals of trade negotiation are predicated on the opposite presumption — that any domestic 'concessions' are costly and can only be countenanced as the price for gaining greater access to foreign markets. This can often lead to tortuous tactical manoeuvres that are largely self-defeating.

Foreign liberalisation can bring additional gains

This is not to argue that reductions in foreign barriers to Australia's exports cannot be an additional source of benefit. In the case of agriculture, the Commission has estimated that complete liberalisation of the protection regimes in North America, Japan and Europe would yield welfare gains to Australia of over \$US1 billion, largely through higher prices on world markets (improved terms of trade) (Dee and Hanslow 2000).

Moreover, it is obviously also true that the lower a country's trade barriers become, the larger the relative gains from foreign liberalisation.

This point was reflected in modelling conducted by the Centre for International Economics (CIE) for the Commission's recent inquiry on the automotive industry. In the automotive sector where Australia's tariffs are still relatively high, the CIE found that, of the gains that Australia would enjoy were all APEC countries to reduce their automotive tariffs to 5 per cent, Australia could accrue 90 per cent of this gain by reducing its own tariffs unilaterally. However, when considering the case of reductions in all manufacturing tariffs (most of which are already at 5 per cent in Australia), the CIE found that the main gains to Australia come from 'terms of trade' effects associated mainly with foreign liberalisation, rather than domestic resource allocation effects (CIE 2002).

This is germane to the current debate about the Australia-United States Free Trade Agreement (AUSFTA). Putting the tricky services-related issues to one side for the moment, the scope for Australia to derive further gains from liberalising its own merchandise trade barriers will have been considerably reduced once the final protection peak (TCF) has been dealt with. On the other side of the ledger, US barriers to Australian exports, particularly agriculture, are significant and their reduction might be expected to yield significant gains. (That said, it is also the case that much US agricultural assistance is in the form of domestic subsidies and price supports, which could not be changed to provide any preferential advantage to Australia.)

Non-discriminatory liberalisation has been advantageous

A further consideration, much discussed, is that moving from traditional unilateral liberalisation to a bilateral agreement opens up the possibility that domestic gains from our own liberalisation may be eroded by imports being diverted to a highercost source. Australia's traditional non-discriminatory approach to protection and its (unilateral) liberalisation has to date largely ensured that we used the lowest-cost sources of imports — as well as having the benefits of administrative simplicity and avoidance of international frictions.

Recent research by Commission staff suggests that, in practice, trade diversion may have been a more dominant consequence of many preferential trade agreements (PTAs) than previously thought (Adams et al. 2003). How significant it might be in a particular agreement will depend on the preferential margin at stake and the competitiveness of the partner. For the merchandise trade component at least, Australia's tariffs are becoming relatively low and the United States is a pretty competitive supplier of many products.

This leads to the broader question of the potential economic gains to Australia and the United States of preferential access to each others' markets. While the magnitude of the potential gains to Australia is not entirely clear, but could be significant if agriculture were fully liberalised, the potential gains to the United States are likely to be miniscule (given that we account for only 1 per cent of their trade and are a relatively open market already). Much larger gains are potentially available to the United States from its *own* liberalisation, again especially in the case of agriculture.

Attention to adjustment has been important

While trade liberalisation can generate a range of benefits across the economy, its most immediate and obvious effect is to put pressure on local, previously-protected industries. As we have seen, many businesses will be able to respond by cutting costs, innovating, lifting productivity or entering new markets. Inevitably though, some businesses will need to cut-back production or even cease operations. Such rationalisation is occurring in the TCF industry at present, where Australia's large labour-cost disadvantage means that many local firms producing standardised clothing and footwear will not survive almost regardless of the tariff regime.

However, the way in which governments unfold liberalisation can affect the extent of the risks. Governments can also help to ameliorate the adverse effects on people when change occurs. And this can affect community support for liberalisation.

In contrast, to the one-off 25 per cent tariff cut of July 1973, the programs of phased reductions in assistance that commenced in the 1980s brought more gradual and predictable change. Their announcement in advance gave businesses and their workforces time to plan their responses, and the phasing of tariff reductions resulted in incentives for continuous improvement within a more manageable rate of change. The across-the-board approach to reform also meant that businesses that came under increasing competitive pressure in their output markets were assisted by lower costs

on their inputs. And, in contrast to earlier piecemeal approaches to reform, acrossthe-board reductions also made it more difficult for individual industries to argue for exemption.

While tariffs have been declining, governments have provided other forms of assistance to industry, partly to facilitate adjustment. These have included retraining subsidies or redundancy packages for workers in some industries, and a range of budgetary measures tied to production, investment and R&D. Microeconomic reforms in other sectors have also been introduced in part to assist businesses to remain competitive against imports.

Adjustment programs that effectively facilitate rather than hinder efficient adjustment are notoriously difficult to design and implement. Their efficacy is also difficult to assess. Nevertheless in its PMV and TCF reports the Commission saw value in extending for a limited period the respective subsidy programs, conditional on achieving further reductions in tariffs (PC 2002e, 2003f). In the case of PMV this was no doubt central to the industry's acceptance of further tariff reform (the Government providing larger subsidies than the Commission had envisaged).

An informed public debate helps achieve durable reform

Australia has not been the only country to liberalise its trade unilaterally. But it has been one of a few to do so from such an entrenched protectionist base, without pressure from the IMF or World Bank, or in response to economic crisis. Moreover, unlike New Zealand, it has done so within a bicameral parliamentary system, which raises the hurdle for radical policy change.

So how did this come about? The short answer is 'with a lot of effort'! A satisfying explanation would require more time and space than I have available here. However, at the risk of oversimplification, a number of factors seem to stand out. First, I have already noted that the fact that our principal export interests were 'off limits' in the GATT negotiations was (perversely) helpful, because it meant that we were not distracted from focusing on the domestic costs of our own policies.

That domestic focus was in turn aided by theoretical and modelling developments in assessing the economy-wide impacts of trade restrictions (many of which were pioneered by Australian economists, Professor Max Corden being the pre-eminent example) and by institutional vehicles which enabled an economy-wide perspective to be brought to bear on industry-assistance decision making. Perhaps the most durable and systematic of these were the predecessors to the Productivity Commission, which in having a mandate to provide information on the wider costs of protection, were able to alert those industries who would bear the burden and act

as a public-interest counterweight to the pressure from import-competing industries. A third important ingredient was the political leadership needed to translate reformist ideas into actions, and sell them to the Australian community. This came together under the Hawke-Keating Labor Government of the mid-1980s, facilitated by the support of the Liberal Opposition.

The upshot has been a more open and well-informed debate on industry assistance issues in Australia than is evident in most other OECD countries. And, while one cannot expect *consensus*, it is apparent that most industries have come to accept that their protection was not sustainable. The relatively muted public response to the Commission's reports advocating 5 per cent tariff rates for PMV and TCF, compared to the more hostile and defensive reactions in the past, is the most recent illustration of this. Such public acceptance has no doubt been aided by accumulating evidence of the economic dividends from reform.

Trade liberalisation shouldn't mean 'open slather'

Trade liberalisation should involve policy actions which, in facilitating trade and investment flows, yield gains in national welfare. Trade liberalisation is not an end in itself. There can be valid rationales for certain measures that restrict trade in some cases and these should not be automatically surrendered under the banner of 'free trade'.

Free markets can be powerful mechanisms for promoting economic efficiency. But well-targeted government regulations or other interventions can improve on market outcomes in some cases. What needs to be demonstrated is that some form of 'market failure', or 'inequity' exists that can be addressed most efficiently by the intervention.

In the case of restrictions on merchandise trade, such rationales are hard to find. Sometimes regulations that can have the effect of restricting trade, such as technical standards and product design rules, may be warranted on safety or environmental grounds. But even in these cases, it is usually possible to achieve the underlying social or environmental objective through standards that do not discriminate between domestic and imported goods.

Some restrictions have sound rationales, but ...

However, the issues are more complicated in relation to negotiations on certain services and various 'trade-related' matters. Prominent examples include the Pharmaceutical Benefits Scheme (PBS), our quarantine laws, broadcasting content and ownership regulations, and the Foreign Investment Review Board. All these

government interventions directly or indirectly restrict inward trade or investment flows; or, in the case of the PBS scheme, reduce the profits foreign companies can make by exporting pharmaceuticals to Australia. Some of these interventions have been raised as potential targets by US trade negotiators. Yet at least some of them appear to have defensible objectives, with discrimination against imports a requirement for their successful operation.

In such cases, there is a need to assess carefully the domestic benefits and costs of the interventions before offering to 'surrender' them as part of any trade deal, whether it be a bilateral deal with the United States or other countries, or as part of multilateral negotiations in the WTO.

In some cases, it may be that the underlying objective is either not warranted or does not require the particular restriction. For example, the Commission's 2000 inquiry into broadcasting found that sector-specific restrictions on foreign ownership of media outlets were not warranted on either economic or cultural grounds (PC 2000a). Similarly, in a number of reviews the Commission has concluded that the benefits of statutory marketing arrangements are likely to be outweighed by the costs. This is because of the limited scope for Australia to influence world prices, and also because many of the potential benefits do not necessitate a regulated monopoly (Gropp, Hallam and Manion 2000; PC 2000b).

On the other hand, the Commission's broadcasting inquiry was more ambivalent about local content requirements, concluding that they should be retained pending a more systematic evaluation in the new context of the digital era (PC 2000a). Similarly, in recent reports on pharmaceutical prices and assistance arrangements to the pharmaceutical industry, the Commission found that prices for drugs under the PBS are considerably lower than would otherwise prevail, partly reflecting (countervailing) buying power, yet this did not have sufficient adverse effects on the local pharmaceutical industry to warrant compensatory assistance for manufacturers (PC 2001a, 2003b).

In the case of quarantine, there are long-standing provisions within the WTO for restrictions that have a legitimate scientific basis and all countries have arrangements in place. Australia's quarantine regulation and administration has drawn flak for being more restrictive than some judge necessary. This is a view apparently shared by the United States and the European Union. Clearly for a country like Australia, which still depends on agriculture and has much unique flora and fauna, an effective quarantine administration is particularly important. And, as some recent scares and potential threats illustrate (such as foot and mouth, fireblight and wheat virus) some degree of risk aversion would seem justified. Whether any changes to existing arrangements may nevertheless be domestically beneficial as well as trade liberalising would require careful assessment.

Looking forward

Australia has derived substantial economic benefits from the trade liberalisation which eventually followed that 'opening volley' of 30 years ago. In this period, we could demonstrate that our high import barriers imposed large costs on our domestic economy and community — and that this was so regardless of what other countries chose to do. The gains from unilateral liberalisation accordingly dominated external trade policy considerations. Moreover, apart from agriculture, our external interests were effectively secured anyway through (mostly) non-discriminatory treatment and multilaterised liberalisation by our trading partners.

At the start of this new century, while economically fortified by our past reforms, we find ourselves in a more complicated trade policy environment. Most of our own barriers to trade in goods and services are relatively low, or soon will be, whereas overseas barriers to our agricultural, services and some manufactured exports, and in some markets to investment, remain high. At the same time, there has been a shift to regional or bilateral trade agreements by our trading partners, which seem to be generating more liberalisation of trade and investment in those countries than the more inclusive but unwieldy processes of the WTO. However, unlike multilateral initiatives, these preferential arrangements pose obvious risks for Australia: by excluding us, they serve to depress our exports and terms of trade and thus our national income.

While this new environment presents new challenges and requires some new approaches, I believe that Australia's past experience in reaping gains from liberalisation continues to provide guidance for the future.

Push on with domestic reform

In particular, it would be counterproductive for Australia to hold back from further beneficial reforms simply to provide it with negotiating chips in trade negotiations. The gains from domestic reform are gains that we can plan for and can benefit from, if we implement them well, whereas those contingent on the actions of other countries are much less certain. In any case, Australia's domestic market and its remaining barriers are unlikely to be large enough to exert much negotiating leverage on our major export markets. Finally, and of particular importance in the current environment, the lower are our barriers to trade and investment generally, the less scope there is for 'diversion costs' associated with any bilateral or regional agreements that we do decide to join.

Thus it is a positive development for Australia that the Government has committed to further reductions in automotive assistance. And it is important that we also

proceed to complete tariff reform in the TCF sector. The Commission's preferred option in its inquiry position paper provides a balanced plan for achieving this, on which public hearings are currently taking place.

Bilateral negotiations may be a useful 'motivator'

A question remains, however, as to whether trade negotiations can nevertheless provide a useful motivator for Australia to undertake further, nationally beneficial reforms. For reasons already noted, the GATT/WTO had only a limited role in this respect. However the more concentrated pressure of bilateral negotiations may serve to expose issues which otherwise could not easily have been addressed.

For example, among issues identified in the context of the AUSFTA, I see no reason why we should not provide an undertaking to review our current arrangements for quarantine, government procurement, statutory marketing, antidumping, foreign investment and even the PBS. Indeed, I would be surprised if there were no ways in which we could make these arrangements work better for the benefit of the Australian community, apart from the external implications. I hasten to repeat that (most of) these are complex issues requiring careful analysis and public consultation before we could be confident about what changes may be required. Any such decisions should not be made lightly or quickly, or simply as a trade-off for potentially improved access to the US market or even to foster 'deep integration' between our economies. However, if any nationally beneficial reforms we identify could also help to secure us improved access overseas, so much the better.

It is worth noting that any reforms in most such areas would in any case need to be implemented in a non-discriminatory way. (This is most obvious in the case of quarantine regulations.) To that extent, there is a built-in safeguard against one potential source of loss in the context of a Free Trade Agreement (FTA).

While we clearly need to do our homework on any domestic reform initiatives we may undertake, we obviously also need to assess very carefully the national implications of offers made by the United States.

Modelling has limitations

The oft-quoted estimated gains from an AUSFTA are based on certain presumptions about the nature and extent of US actions. Modelling can only tell us so much and is critically influenced by the choice of parameters. It would nevertheless be useful to model the implications of different scenarios as they emerge.

General equilibrium models typically understate the gains from liberalisation because they are unable to capture adequately the dynamic benefits. However, in the case of preferential arrangements they can also partly *overstate* the gains, because they cannot model the detailed rules of origin and contingent trade remedies which may in practice impede effective market access. This is one reason why recent econometric research by Commission staff, based on actual trade and investment flows following the formation of PTAs, found much less (net) trade creation than *ex ante* general equilibrium models had predicted (Adams et al. 2003).

The devil is in the detail

As is well known, the United States has devised quite detailed (and lengthy) rules of origin in its various bilateral agreements. Apart from their complexity, they have varying restrictiveness, depending in part on the domestic 'sensitivity' of the imports. For example, at one extreme, under the 'triple transformation' rule for TCF in the North American Free Trade Agreement (NAFTA), duty free access is permitted only if clothing is sewn in a NAFTA country from fabric made in a NAFTA country from yarn spun in a NAFTA country. This can serve to distort the partner's input sourcing decisions in favour of higher-cost NAFTA suppliers, such as the United States. (This diversionary effect can occur even if the country's own import barriers are negligible.)

Similarly, unlike Australia, the United States has traditionally employed narrowly-based 'safeguard' provisions in the administration of its trade agreements, potentially enabling restrictions to be re-imposed where a local industry suffers injury. For example, this has bedevilled Canada's attempts to export timber to the United States.

Clearly, Australia will need to ensure that rules of origin and contingent protection provisions are truly consistent with further opening markets. One avenue for 'deep integration' that could usefully be pursued, therefore, would be to align rules of origin and safeguard provisions in both countries with those of the most liberal partner. At the very least, we should seek to modify the arrangements used in previous FTAs by the United States, to minimise their protectionist potential.

As one 'spoke' on the US 'hub', Australia cannot overcome through an AUSFTA the perils of bilateral and regional arrangements among our other trading partners and competitors — including other countries attached to the US hub. At the same time, some of our suppliers, like New Zealand and China, will see their exports eroded to some extent and this may adversely affect our trade relations with them.

Multilateral progress is needed

It therefore seems clear that we must redouble our efforts to ensure progress in multilateral liberalisation within the WTO and APEC and, as mentioned previously, we should push ahead in lowering our barriers generally, wherever this yields domestic gains. The alternative of seeking to do a succession of bilateral deals, is fraught with difficulty (apart from the transaction costs) and may see us entering arrangements which favour particular Australian industries at the expense of others.

One avenue within the WTO for Australia to advance its interests, as well as the interests of global trade and development, is to seek to tighten the rules relating to FTAs, in order to reduce their potential to harm third parties. Stronger and clearer provisions relating to the need for elimination of barriers to 'substantially all trade' among the members of such an agreement would seem a good starting point. And, as has been argued previously, if such deals are truly to be building blocks rather than stumbling blocks for multilateral liberalisation, it would also be desirable to require that any such arrangements are eventually made open to other WTO members on the same terms.

The nub: understanding the domestic gains

The biggest problem that we face in any shift from our traditional unilateral-multilateral approach to liberalisation towards a 'regionally'-negotiated one, is that most countries (including the United States) understand their national interest through trade policy primarily in terms of the concessions they can wrest from other countries, rather than their own liberalisation. As a relatively small market, with few 'prizes' to offer, we are at an obvious disadvantage in such a world. This has always been so, but previously we got to share the spoils of larger countries' battles through most-favoured-nation treatment under the GATT/WTO. These spillovers are not available under preferential agreements.

How do we resolve this fundamental dilemma? The answers are not obvious, but the question deserves far more attention than it has been receiving. The task is to find ways through which the gains from domestic reform by our trading partners can be better recognised in their policy formulation. While each country needs to come to terms with this in its own way, Australia's beneficial experience with trade liberalisation may provide a useful role model.

Australia's economic 'miracle'*

Australia's GDP grew by 3.5 per cent a year in the 1990s; this was faster than even the United States' lauded performance and a third greater than that achieved by the OECD as a whole. Australia's strong growth performance was seemingly unaffected by the financial crisis that gripped our Asian markets in 1997 and, later, the bursting of the dot.com bubble. The strong growth exhibited by our country in the midst of the 1997 Asian crisis led the US economist Paul Krugman to label Australia the 'miracle' economy.

According to *Websters* dictionary, 'miracle' has two meanings. The first meaning given is 'A wonder or wonderful thing; a marvel.' I would not wish to disagree with such an assessment, as you will see. However, the second meaning — which has overtaken the first in common parlance in Australia and I assume in America too — is 'an event which cannot be accounted for as produced by any of the known forces of nature.' If Krugman had intended to be taken literally in this sense (which I doubt) then I must differ.

Australia's improved economic performance, and the productivity surge that underpinned it, *has* been a wonderful thing for Australians but it also has a rational explanation. Indeed, my central message is that the main cause of our improved economic performance over the past decade has been (rational) economic reform. However, both the need and scope for economic reform in Australia have not disappeared, and indeed remain important to our future prospects.

First, let me attempt briefly to put our recent economic experience in historical perspective. In doing so, I am going to focus largely on the productivity dimension. There is of course more to the economic and social wellbeing of a nation than output growth, but in my defence I shall call on Krugman again, who has boldly observed: 'Productivity isn't everything, but in the long run it is *almost* everything' (Krugman 1992). Indeed, productivity is the mainspring of material living standards. It is a necessary condition, even if not a sufficient one, for a more prosperous society.

^{*} Address to the 'Forum on Postgraduate Economics', National Institute of Economics and Business, Australian National University, Canberra, 1 August 2003. (Co-authored with Dean Parham.)

From growth laggard to leader

Australia's productivity growth in the second half of the 20th century can be segmented into three phases: relatively fast growth in the 1950s through to the mid-1970s; a slowdown through to the early 1990s; and a strong resurgence in the decade that followed.

To interpret these trends, we need to view them in an international setting. During the worldwide productivity boom of the post-war period, Australia's productivity performance — though stronger than in earlier periods — was poor by the standards of other similarly-developed nations. In contrast, during the 1990s, when the world productivity record was patchy, Australia's performance stood out. In other words, Australia's earlier productivity boom was not remarkable by international standards, but its resurgence of the 1990s certainly was.

The early post-war decades (the 1950s and 60s) are generally referred to as a 'golden age' for growth internationally — reflecting pent-up demand, reduced constraints on supply and freer international movements of capital, people and technology. In 1950, at the dawn of that era, the United States was the world productivity leader, while Australia ranked fifth, its GDP per hour worked being around 80 per cent of the US level. As the years unfolded, the performance of the United States dropped off somewhat (as might be expected of the productivity leader) while growth in Europe and Japan accelerated in a process of productivity catch-up. Australia, meanwhile, did not even keep pace with the United States and, by 1973, its ranking had slipped to twelfth.

During the subsequent global productivity slowdown, Australia continued to perform poorly even in relative terms and, by 1990, our ranking in per capita GDP and GDP per hour had slumped to 16th. (It was in those years that Australians became conscious that they were being overtaken in the income stakes by countries in Asia that many still thought of as 'developing'.)

The 1990s turnaround

All that turned around in the 1990s. Productivity growth stepped up again in the United States, while remaining sluggish in most other OECD economies and in Asia. However in this period, as noted, Australia's productivity growth *surged*, outperforming even that of the United States.

Australia's strong (labour) productivity performance in conjunction with better, if not ideal, employment outcomes — higher employment and lower unemployment, accompanied by a stable participation rate — translated into strong growth in

average incomes. GDP per person (measured in US purchasing power parity dollars) grew by 2.5 per cent a year over the 1990s, compared with 1.7 per cent in the 1980s, and an OECD average in the 1990s of 1.7 per cent.

The result was that Australia's international ranking in per capita GDP rebounded from its low point of 16th in 1990 to 8th in 2002.

More importantly, that one percentage point boost in our growth rate translated into a substantial improvement in the average income of Australians. If we had not had the additional productivity growth in the 1990s, Australian households would have been around \$7000 worse off on average by now.

Increases in the average level of GDP per capita are one thing; how the income gains are distributed across the community is another, and arguably just as important for a society's progress.

- At the aggregate level, labour and capital have shared evenly in the income growth. Moreover, productivity gains were not simply appropriated by enterprises in higher wages and profits. The evidence is that the productivity gains in the best performing industries were predominantly passed on in the form of lower relative prices.
- At the personal and household levels, disparities in market incomes continued to widen in the 1990s. But this was largely offset by redistributions through the tax and transfer system. The distribution of disposable income remained stable or showed a modest increase in disparities depending on whose figures you use and the distribution of consumption remained constant. (But, as Melbourne Institute research reveals, these outcomes mask disturbing trends in poverty among jobless households with children, a point to which I return.)

Other considerations, apart from income and its distribution, also matter, such as social and environmental outcomes. Some commentators have recently returned to what at one time was called the 'growthmanship' debate, rightly questioning whether additional growth brings us commensurate increases in quality of life or happiness ('utility' in the jargon). That raises matters beyond the scope of this talk. I might just observe that at least we are in the relatively comfortable position of being able to debate such an issue. This is not the situation in many poorer countries. Moreover, those countries often have the greatest environmental degradation and social upheaval — and can afford to give very little attention to safety nets for their citizens.

What caused the 'miracle'?

If we take as a first approximation, therefore, Krugman's maxim that productivity 'in the long run is almost everything', it is important that we understand and learn from Australia's productivity turnaround. At this point I should perhaps make clear that while I have hitherto been talking mainly in terms of *labour* productivity, its rise has been almost wholly accounted for by increased '*multifactor* productivity'. Both grew at record rates in the 1990s, but it was the acceleration of multifactor productivity (MFP) growth (from 0.7 per cent to 1.8 per cent annually over the last two productivity cycles) that generated nearly all the action. This is significant because multifactor productivity is the more telling indicator of how effectively a nation's human *and* capital resources are being used.

Not the usual suspects

Australians have an ingrained sense of (healthy) scepticism, and the economics profession is *trained* to be sceptical. The first reaction by some to a surge in the productivity growth numbers was that the statistics were probably in error or that they were being reported in a misleading way. Successive ABS revisions and methodological improvements have not changed (indeed have strengthened) the underlying story, however, and more detailed examination of individual industry performance has generally confirmed it.

With the aggregate productivity growth numbers beginning to look unassailable, some have sought to find explanations other than policy reform. However, most of those do not stand up to scrutiny as credible *principal* causes of the turnaround. I can say that with some confidence, because of research undertaken at the Productivity Commission (Parham 2002, PC 1999c).

- First, as already noted, unlike the experience of the 1950s and 60s, Australia could not be said to have been carried along by any international productivity boom in the 1990s.
- Second, the surge in productivity cannot be dismissed as the normal result of recovery from the early 1990s recession. The improved performance has been both longer and stronger than in previous recoveries. Besides, the relevant ABS measures abstract from cyclical influences.
- Third, higher skill levels in the workforce could have pushed up productivity. But there appears to have been no significant acceleration in workforce skills in the 1990s. In fact, the evidence shows a faster increase in skills in the 1980s.
- Fourth, there have been claims that the productivity surge has been produced on the backs of workers through increased 'work intensity': increased hours of and

pace of work. Again, some compelling counter arguments have been made (for example, that productivity measures already take into account additional labour input). But the key prediction — that higher work intensity by the mid-1990s would mean that the measured improvement in productivity could not be sustained — has not been borne out. The level of productivity has not slipped back. In fact, we have had 7 or 8 years of almost continuous *further* improvements in productivity since then.

As an aside, I should clarify that the 'work intensity' issues raised in this context relate to whether productivity estimates are mismeasured or unsustainable. They should not be confused with other live issues in community debate about job security and the ability for people to make appropriate work/life choices. All I might say on those important issues is that increased productivity — through working 'smarter' — is the friend, not the enemy, of the work/life tradeoff.

• Finally, Australia has not been favoured by any special technological leap forward. Indeed, on a number of indicators such as business R&D spending, Australia is below the OECD average. Other countries, including the United States, derived some benefit from rapid advances in the *production* of information and communications technologies (ICTs) in the 1990s. Australia produces little in the way of ICTs and so we have not accessed that source of productivity gain. But what about productivity gains from *use* of ICTs? This seems relevant given that Australia moved toward the top of the ladder on the uptake of ICTs in the 1990s (second or third in the OECD on major indicators). Commission research suggests that *use* of ICTs did indeed contribute to Australia's productivity pick up, but not by much at the aggregate level—around 0.2 of a percentage point (Banks 2001, Parham et al. 2001). And even then we are left to ask: why was it that Australia moved from being slow on the technology uptake in earlier decades to a frontrunner in the 1990s?

Microeconomic reform has made the difference

The answer is in large part the same as the answer to a wider question: what were the 'home grown' factors that saw us part company with international trends — factors that had held us back in earlier decades?

Adam Smith observed that 'there is much ruin in a nation', meaning that an economy is potentially quite resilient to shocks and mismanagement. However Australian government policy throughout much of the 20th century had almost systematically, if unwittingly, undermined the economy's productive potential, by distorting price signals and protecting producers from competition. It is not

surprising that those policies took their toll. Equally, it should not be surprising that their reversal has yielded the benefits that economic theory would anticipate.

As you know, the reforms really began with the lowering of barriers to foreign competition in goods and financial markets in the 1980s. As tariff reform and takeover pressure began to bite, managers began to devote more attention to improving the performance of their business. They needed to reduce their costs and improve their flexibility to respond to mounting competitive pressures. Two major impediments to those objectives were the high costs of energy, transport and other services provided by inefficient public utility monopolies (engaged in cross subsidising households), and a centralised system for 'fixing' wages and conditions, irrespective of the diverse circumstances of individual enterprises.

Reforms in these areas followed. A presumption of competition being in the public interest found ultimate expression in the National Competition Policy—the systematic program agreed to by all Australian governments in 1995 to extend competition throughout the economy.

I should not give the impression that any of this was easily or quickly achieved. Reforming anticompetitive policy is generally a lot harder than implementing it. For one thing, producer interests (including employees) become rather attached to it and they fight hard to retain what they perceive as their entitlements. The story of economic liberalisation in Australia thus has as much to do with politics and institutions as with economics. That said, the economics profession in Australia has played an important role both in identifying necessary reforms and demonstrating the likely payoffs, and in selling reform to governments and the wider community.

Evidence of reform's effects

The liberalisation of the Australian economy has coincided with important structural and behavioural changes which are consistent with the observed step-up in productivity performance. These include:

- a sharp increase in trade intensity, with the ratio of exports and imports to GDP rising from 27 to 44 per cent since the mid-1980s
- the decline of high cost manufacturing activities and the rise of elaborately transformed manufactures (for example, while textile, clothing and footwear production has fallen in real terms by about 40 per cent since 1985, manufacturing production as a whole has risen by 40 per cent)
- the growth in enterprise agreements, involving substantial variations in previously prescribed employment conditions and work practices

• a rise in business expenditure on R&D and other indicators of innovation (in production, distribution and marketing) including, as noted previously, increased uptake of ICT.

If we trace the productivity performance of individual industries over time, we can also observe some strong linkages with earlier microeconomic reforms. These are most apparent for those industries previously dominated by public sector monopolies, following wide-ranging reforms. For example, MFP growth in electricity, gas and water jumped by 60 per cent in the 1980s, while in the 1990s MFP growth rates in transport/storage and communications doubled.

The performance of the 'traditional' sectoral contributors to aggregate productivity growth was mixed, with agriculture surging in the 1990s, whereas mining had its burst in the second half of the 1980s and slowed thereafter, and manufacturing slumped in the mid-1990s when the market aggregate was rising most strongly.

Given the focus of trade liberalisation and other reforms on manufacturing, one might have expected to see its productivity growth do better. There are a few points to note. One is that there has been much stronger *labour* productivity growth in manufacturing in the 1990s, reflecting (hi-tech) capital deepening. Second, the MFP performance generally appears to have been much greater in particular industries (whitegoods in the 1980s, automotive from the late-1990s) where trade pressure increased most. Third, we are now also seeing aggregate MFP growth rates for manufacturing accelerate; in 2000-01 and 2001-02 they recorded their highest rates for 17 years.

However, the stand-out contributors to the productivity surge of the 1990s were the wholesale trade and finance and insurance industries. At first blush this might not seem in tune with a microeconomic reform theme. But Commission research indicates that both industries achieved a significant uplift in productivity primarily through the innovative use of ICT. For example, developments like scanning and bar coding and IT-based inventory systems helped transform wholesaling from a storage-based activity to fast flow-through logistics systems. But it was the *reorganisation* of the businesses that generated the productivity gains — from reduced warehousing and handling — rather than the mere acquisition of ICT. These organisational changes were, on the one hand, prompted by competitive pressures downstream (for example, as the hard-pressed auto industry sought cost reductions all along the value chain) while, on the other hand, being facilitated by work practice changes that could not have happened under the prescriptive and inflexible arrangements of the old industrial relations regime (Johnston et al. 2000).

This is supported by recent OECD research for their 'Growth Project'. OECD researchers found that product market regulations and employment protection legislation had a negative impact on MFP growth across countries in the 1990s. They found that countries with decentralised bargaining systems and less stringent employment protection were better placed to innovate in industries characterised by multiple and rapidly-evolving technologies.

Sustaining the 'miracle'

In sum, much of the so-called 'miracle' of Australia's transformation from economic laggard to leader can be attributed to simply removing the lead from our saddlebags. Mancur Olsen likened the potential gains from such reform to finding \$100 bills on the sidewalk. Easy pickings for economists, if not for those who must implement the necessary reforms.

Indeed it could be said that the most miraculous thing about Australia's economic turnaround was that the necessary policy reforms took place at all! As a much earlier economist Vilfredo Pareto first demonstrated, the natural forces of political economy are not conducive to reforms that potentially provide diffuse benefits to the many at the concentrated cost of the few. Even from this perspective, however, it is apparent that considerable groundwork was laid over many years across different governments to create a climate of receptiveness to the need for change. Australia's proclivity for systematic inquiry and public debate in policy development has been part of this. The OECD alluded to this feature in its most recent report card on Australia's economy:

The Government's commitment to reform, its willingness to commission expert advice and to heed it, to try new solutions, and to patiently build constituencies that support further reforms, is ... something that other countries could learn from. (OECD 2003)

As I noted earlier, economists in various capacities — academics, consultants, public servants and political advisers — have been at the centre of this process and should be proud of their contributions. But I began this presentation on a hopeful note for current post-graduates and it may appear that there are no challenges left.

Reasons for seeking further improvement

Returning to the productivity window on our overall performance, it is clear that while we have been in catch-up mode internationally, there is still some catching up to do. For example, in terms of GDP per hour worked, in 2002 we were at 83 per cent of the US level, which was only slightly above where we were in 1950. Our manufacturing productivity in particular remains well below US levels.

Whether or not aspiring to US levels of productivity is realistic, the need for us to realise our productivity *potential* has not diminished. Taking Australian society and its regions as a whole, it would be difficult to argue that standards of living should not be any higher. And it seems clear that that cannot be achieved in any sustainable way without productivity growth. As the Australian National University's Professor Ross Garnaut has put it:

Effective measures to promote distributional equity make large demands on a country's fiscal resources. Economic growth is therefore a necessary underpinning of progress towards distributional equity. For these reasons, it remains likely that Australia will have all of productivity-raising economic reform, progress towards greater distributional equity and stronger economic growth, or none of them. (Garnaut 2002)

Moreover there are both external and domestic challenges to our living standards which would make it unwise to rest on our laurels.

For one thing, the ongoing external pressures of globalisation and the reforms which have unleashed the competitive strength of other countries, like China, mean that we have to continuously improve our performance.

Compounding these (positive) external challenges, is the gathering international retreat from multilateralism in trade policy and the rise of discriminatory liberalisation. To the extent that Australia is excluded from such preferential deals, we are exposed to terms of trade and income losses. However in engaging in such deals ourselves, we may be exposed to other negatives through trade diversion and increased transaction costs. In other words, in terms of our external trade policy, we potentially face a no-win situation: this sharpens our need to take any measures that can enhance unilaterally our economic performance and competitiveness.

On the domestic front, we face two looming challenges that add to the productivity imperative. One is environmental sustainability. Dealing with the legacy of (unwitting) environmental mismanagement will demand additional resources in rectification, and policy reforms which will involve adjustment costs, much of which may be concentrated in regions that are already 'doing it tough'.

Secondly, while Australia has benefited from a relatively high engagement of its population in work, the demographics of our ageing society — with a doubling of the proportion of people over 65 years of age by 2040, as people live longer and procreate less — will reduce per capita income growth for given productivity growth, while potentially raising the costs of health and other services.

So plenty of challenges lie ahead for a new generation of economists to tackle. In some areas, past reforms will provide useful guidance, and indeed there remain parts of the existing reform program that need to be completed. These include

remaining industry protection (including some contentious non-tariff issues raised in the current AUSFTA negotiations), the National Competition Policy (water reform being particularly important) and industrial relations reform.

However, there are a number of critical areas for the future which present new complexities for reformers and few 'off-the-shelf' or 'tried-and-true' solutions. These include:

- getting the best out of Australia's 'social infrastructure' health, aged-care and other community services which account for a sizeable and growing share of GDP and are key to future living standards
- raising the performance and accessibility of our education and training systems

 primary, secondary and tertiary particularly given their importance in deepening Australia's human capital, on which innovation and economic growth will increasingly depend
- raising the participation in employment of the Australian working-age population, including by reducing long-term unemployment (the major contributor to poverty) and premature 'retirement' from the workforce
- related to this, devising better mechanisms to ease social hardship, including from job losses associated with policy change, without detracting from economic performance
- devising better mechanisms for redressing and avoiding adverse environmental side-effects of economic activity.

Such areas are difficult to deal with because of the blend of social and economic objectives that arise, but they are problems for which an economist's training — in systematically analysing the role of incentives on human behaviour and the necessary tradeoffs in all policy choices — is apposite.

Industry policy for a productive Australia*

'I might tolerate theoretically the infant-industry case, but theoretical toleration is unwise; people will soon go beyond it.' (Colin Clark, from an interview with Chris Higgins, 1989)

Introduction

I am grateful to have been invited to give this address in honour of Colin Clark, one of Australia's foremost economists. Many years ago, when studying economics at Monash University, I had the pleasure of hearing some lectures from Professor Clark himself. I remember being greatly impressed by his casual references to discussions 'with Lord Keynes on the steps of the (British) Treasury'. More recently, in researching for this lecture, I found that while Clark agreed with Keynes on much, he had opposed the great man on the issue of industry protection. He saw this as Keynes' 'real blind spot'; and considered that 'he enjoyed being on the popular side' (Higgins 1989).

Clark himself was rarely on the popular side, especially in the protection debate. What's more, he was severe on his fellow academic economists who, he said, 'floated happily with the current of popular protectionist sentiment and have avoided the unpleasant task of having to educate public opinion out of its prejudices' (Clark 1962). Clark generally came to his own policy conclusions, based not just on theory, but careful statistical evidence and acute observation of the world as it was. This no doubt led him towards the end of his life to make the observation that I have chosen as the header quotation for this lecture.

This introduces a theme that for me is of wider and continuing relevance. Industry policy measures assume an important place in any government's policy armoury. But where they potentially deliver benefits to particular firms or industries, they are commonly the subject of much lobbying and self-interested claims. Moreover, where selective assistance to industry is involved, it is never costless, although the nature and incidence of the costs are often hard for the public to understand. It is therefore crucial that such policies not only have a sound rationale, but are carefully

* Colin Clark Memorial Lecture, University of Queensland, Brisbane, 6 August 2008. (Co-authored with Tom Nankivell.)

INDUSTRY POLICY

AUSTRALIA

designed and implemented in keeping with it. This lecture in honour of Colin Clark provides a timely opportunity to consider these issues.

The broadening of industry policy

Writing in the early 1960s, Colin Clark was beginning to despair at the prevailing protectionist policy for Australian manufacturing and its deleterious impacts on work incentives and economic performance. He observed:

Australia in the future — if Australia is to have a future — will have to be more competitive in every way. (Clark 1962, p. 28)

Fast forward to today and, clearly, Australia *did* have a future. Our economy also is more competitive in every way than it was then. However, if we had been making this assessment in the early 1980s, Clark's warning would have remained apposite. For it was only in that decade that the first real steps were taken to reverse the protectionist conception of industry policy that was largely responsible for Australia's secular decline in world economic rankings.

The steadfast commitment to opening Australia's markets over the subsequent 20 years or so has yielded gains much greater than conventional modelling could have projected. Reform is a process, not an event. Reducing tariffs — an umbrella sheltering inefficiencies well beyond the traded goods sector — set in train further 'behind the border' reforms that have in turn brought further substantial benefits to our economy.

In particular, under pressure from increased import competition in their output markets, businesses began to lobby for the reform of government policies and practices that were unduly increasing their production costs, as well as for alternative forms of assistance to enhance their competitiveness. This 'second wave' of reforms included measures to improve the efficiency of government utilities, changes to industrial relations to enable more flexible workplaces, and broadranging reforms to remove regulatory impediments and engender greater competition, where appropriate, throughout the economy.

At the same time, there has been an increased emphasis on industry assistance directed at overcoming market failures, notably in the area of R&D. And industry-specific assistance has increasingly been targeted at facilitating adjustment and structural change.

In sum, over the last twenty or so years there has been a move away from the previous narrow and defensive conception of industry policy. Taking its place has been a growing recognition that there is a need to get the economic environment

right for all firms, and to facilitate adjustment to market pressures rather than resisting it. As such, industry assistance has come to be recognised as just one facet of industry policy, which itself is increasingly seen as encompassing the broad range of policy-related factors that bear on the performance of industry generally.

Notwithstanding the significant reforms in this period, considerably more needs to be done. Thus we are now embarking on a 'third wave' of reform, extending beyond cost impediments, to also addressing industry's human capital needs and encompassing all jurisdictions (Banks 2008).

Industry assistance nevertheless remains substantial

Despite the reduction in tariffs, and even with many omissions in coverage, Australian Government assistance to industry was estimated by the Commission to exceed \$15 billion in 2007. State and territory assistance programs, which are less transparent, would add a few billion on top of that (PC 2008g).

In the early 1960s, when Colin Clark was raising concerns about Australia's future, tariffs accounted for virtually all the assistance received by the manufacturing industry. Today, average nominal tariff rates are about a tenth of what they were in the sixties, and tariff assistance accounts for three-quarters of measured (net) assistance to the sector. The other quarter involves various forms of budgetary assistance.

Although strictly comparable estimates are not available, measured budgetary assistance for manufacturing appears to have roughly doubled in real terms since the 1960s. Assistance tied to specific manufacturing industries and businesses has increased at a faster rate than generally available manufacturing assistance. Nevertheless, financial support has not compensated for the loss of tariff assistance, even in the textile, clothing and footwear (TCF) and passenger motor vehicle sectors, which absorb a large share (over 40 per cent) of estimated budgetary assistance to manufacturing. Moreover, more of the industry-specific assistance today is at least notionally tied to the performance of R&D or other activities, rather than simply supporting production.

New policy forces and influences

Ongoing pressures from globalisation and emerging exporters have prompted calls for new measures to provide relief against imports or other assistance.

The innovation impetus

In addition, increased recognition of the central importance of innovation to industry productivity and competitiveness has led to a renewed focus on how government can support it. The previous Government commissioned the Productivity Commission to undertake a major study, *Public Support for Science and Innovation* (PC 2007b), which included a focus on the rationale for and design of business programs. The Rudd Government has commissioned its own separate review of the national innovation system, expressing an intention, 'to ensure that business has better access to new ideas and new technologies and to bridge the divide between industry and research' (Carr 2008a).

Moreover, the current reviews of automotive and, especially, TCF assistance were designed to link into the wider review of innovation policy, with the enhancement of the innovation performance of these industries being seen as crucial to their future sustainability.

The greenhouse challenge

Greenhouse policy is another potentially significant new driver of industry assistance. A plethora of budgetary and regulatory initiatives have already been taken with the goal of reducing Australia's emissions, including energy efficiency targets and subsidies for alternative energy sources.

While the need to address the effects of global emissions is now widely accepted, some of these programs seek to achieve reductions in emissions by favouring certain industries, technologies or activities, simultaneously providing *de facto* industry assistance. This may also make it politically difficult to rationalise those schemes that are rendered redundant by a (well-designed) Emissions Trading Scheme (ETS) (PC 2008h).

Yet, as currently proposed, the ETS looks set to have its own substantial industry assistance component, with hotly debated exemptions and compensation for some industries or enterprises potentially amounting to several billion dollars. Further, some 20 per cent of the revenue from this *de facto* tax is to be set aside for the promotion of greenhouse-related R&D.

When account is taken of other policies relevant to management of the environment, such as the large subsidies provided to water users, the implicit industry assistance stemming from such policies may, in the future, dominate other measures of business support.

Ensuring a productive outcome

These emerging influences could potentially see an expansion again in support for particular industries and technologies relative to measures of more general application. It will be important to ensure that any such schemes enhance overall economic performance. Indeed, contemporary pressures and challenges — including labour shortages and capacity constraints, the need to address the effects of an ageing population, and climate change itself — have increased the imperative to ensure that any new industry support programs promote efficiency, and to terminate existing programs that do not.

How the Government responds and the sort of industry policy that emerges is of considerable importance to Australia's economic future. It is timely therefore to take stock of the principles that should guide the development and application of industry policy.

The ultimate objective must be economy-wide benefits

Devising and assessing any policy obviously requires a clear understanding of what one ultimately wishes to achieve. It is particularly important when assessing policy proposals directed at particular industries or sectors. The reason for this, of course, is that what is good for a particular part of the economy or community need not be good for other parts — and in the case of industry assistance often isn't. Tradeoffs will generally be involved and the community would want some assurance that the benefits of an industry policy initiative will exceed the costs across the economy as a whole.

Even as many people have come to accept that tariffs and other regulatory barriers to competition are not a good idea, they often do not recognise that other forms of support could be (almost) as problematic or costly. It is of course unlikely that anyone would be properly informed about this by the potential recipients, or sometimes even by those government departments most closely involved. That indeed is the original rationale for the Commission's existence.

Governments ultimately are there to serve the wider community, and need such information to do their job. Thus, for example, in its recent auto report, the Commission spelt out that current assistance to that industry placed a burden on consumers and taxpayers of \$2 billion each year; that each job thereby 'saved' costs the community some \$300 000 annually, and that there would be a net welfare gain of some \$0.5 billion each year in perpetuity (equivalent to a much larger figure in NPV terms) from halving its tariff assistance, with gains in the mining sector alone outweighing the auto industry's losses (PC 2008b).

The 'materialist fallacy'

The goal should not be to promote any particular industry or sector as an end in itself. This was what our old-style protectionist industry policy was about, which promoted manufacturing at considerable costs to our economy and community. That policy ultimately failed even on its own terms.

It is important to recognise that the manufacturing sector, though declining in relative size, is larger today than it was twenty years ago, notwithstanding significant reductions in government support. The secular decline in manufacturing's *share* of GDP is mainly due to the expansion of services; not mining.

The shift in the structure of economic activity from manufacturing (and agriculture) to services is a common phenomenon internationally. It is generally associated with economic advancement and thus to be celebrated. Meanwhile, the fact that the manufacturing sector has a smaller share of the economy in Australia than in some other OECD countries principally reflects our relatively abundant resource base.

The key point, though, is that the relative decline of manufacturing has not held back living standards in Australia. On the contrary, once we began to reduce manufacturing protection, and the burden it placed on more efficient and productive activities — within manufacturing itself, as well as other sectors — Australia's exports took off and per capita incomes have risen faster than the average for the OECD, taking us back to 6th in world rankings from 18th in the late-1980s.

Other problematic pretexts

Just as maintaining particular industries or sectors should not be an end in itself, so there are other problematic pretexts for government assistance that treat economic activities that are means to ends, as ends in themselves.

Exporting is a prime example, and currently the subject of a policy review encompassing consideration of support programs such as the Export Market Development Grants (EMDG). Exporting obviously brings benefits — and in recent years has contributed greatly to income growth in Australia flowing from rising world mineral prices. However, the production, marketing and delivery of goods and services for export all employ resources and thus have opportunity costs. For Australia to gain from any particular exporting activity, the benefit received needs to exceed the value that could have obtained by using the embodied resources to supply the domestic market. Hence it cannot be presumed that additions to exports,

particularly if induced artificially by assistance, will yield a net payoff to the community.

Sometimes assistance is seen as addressing the 'problem' of trade imbalances in particular sectors or product categories. But such imbalances are simply a manifestation of the gains from trade. We need to specialise in what we do well and import what we do not. Industry policy should complement trade policy in supporting this effective use of our scarce resources, not resist it.

In a similar vein, nor should the goal of industry policy be merely to achieve an expansion in small business, large business, jobs (in particular sectors) or even innovation. The objective should be to enhance the performance of the Australian economy, so as to enable living standards and community wellbeing to realise their potential, given the resources available and their alternative uses. What those industry policies that target particular industries, activities or groups need to demonstrate is how they can achieve this.

What policy rationales *meet* the economy-wide objective?

The key efficiency-related rationales for government intervention involve various forms of 'market failure', where private agents responding to market signals are led to make the 'wrong' investment or production decisions, detracting from economic welfare. Technically-speaking, market failure can arise where there are spillovers, public goods, information deficiencies or asymmetries, or where cognitive limitations detract from appropriate decision making. Most of these have given rise to industry policy interventions at one time or another.

Market failures are pervasive, but in order for them to become a rationale for intervention ('policy relevant') they need to be substantial and amenable to government action, without giving rise to even larger costs.

Innovation in perspective

Spillovers provide the core rationale for a major strand of industry policy directed at R&D or, more broadly, innovation. The latter is becoming the predominant focus of industry policy.

The evidence suggests that the keys to encouraging innovation are not government assistance, but rather competitive markets that provide strong incentives for firms to innovate, combined with a regulatory environment for doing business that readily allows them to do so (OECD 2007). These are precisely what the microeconomic reforms of the past two decades have been directed at. In particular, lowering tariffs

and other barriers to foreign goods and capital has not only heightened competitive pressures, it has been a conduit for greater exposure of local firms to new ideas from abroad.

It follows that, for much of the innovation that needs to take place within Australian firms, there is no market failure that needs addressing (or can sensibly be addressed), once government's regulatory failures have been rectified. This is important to emphasise, since not all government regulatory failures *have* been rectified and there is always the danger of new regulatory obstacles emerging or past reforms being reversed.

Spillovers can inhibit R&D

This is not to deny the case for some 'reinforcing' industry support for innovation based on clear market failures and, in particular, spillovers related to research activity. Often research undertaken by businesses, as well as that in universities and public sector research agencies, generates ideas that can be used, mimicked or adapted cheaply by firms or others without payment to the originator. Public support to encourage innovative activity that would not otherwise proceed because the private returns to the originator are too low, has the potential to enhance community wellbeing.

As noted, much government support is predicated on such spillovers, as well as on the need for public research to underpin public sector activities. In 2006-07, government direct and indirect support for business R&D alone amounted to nearly \$2 billion, or one quarter of measured assistance, and a further \$4 billion went to research conducted within universities and other public sector bodies.

With spillovers assuming greater significance under an innovation-policy approach to industry policy, it is important to have greater clarity about the concept than has sometimes been the case. For example, spillovers are very different from multiplier effects that simply reflect (priced) linkages between different sectors of the economy and which do not provide a justification for government support even where the beneficiaries are research-rich activities. And, as the Commission argued in its report on public support for science and innovation, the spillovers arising from research activity in universities and public sector research organisations are often likely to be higher than for business R&D, much of which involves incremental, catch-up research (PC 2007b).

A faster changing and more tangled web?

Governments will also have to confront the argument that new industry policies are required to address the changing nature of innovation and the 'new world order' brought about by globalisation and climate change.

Innovation is increasing rapidly and models of innovation are evolving. It is not clear that such changes will significantly alter the basic menu of market-failure-related industry support, but they could alter its composition. For example, industry-extension support might be focussed more heavily on helping businesses to leverage finance off intellectual property and on dealing with information asymmetries impeding the uptake of more fuel efficient technologies. There may also be a case for shifting the balance of R&D support more towards promoting collaboration and clustering/networking, rather than paying individual firms for R&D activity, most of which they would have undertaken anyway.

The growing pace and evolving nature of innovation, and its role in responding to the challenges of climate change, may also create pressures for 'enhancements' to government procurement processes. Improving procurement processes is an intrinsically worthwhile policy goal. But it can clearly be a slippery slope, if promoting innovative technology becomes a goal in itself for the procurement process, with *de facto* industry protection being a not unlikely outcome. Those of us old enough to remember the 'offsets' arrangements and their many problems and costs (IAC 1989a) would not want a case of 'back to the future'.

The environment-innovation interface

The growing intersection of environmental policy and innovation/industry policy has great political appeal, but can lead to confusion about ends and means. It is important to separate genuine rationales for government intervention from convenient environmental pretexts for supporting particular industries or activities. For example, the implementation of an effective ETS would generate a market-based price for carbon emissions that should render many pre-existing emission-reduction schemes redundant. Stripped of this environmental rationale, schemes such as the Mandatory Renewable Energy Target would simply become very costly industry support vehicles (PC 2008h).

That said, the emerging price signals may not bring forth sufficient innovation in adaptive or low emissions technologies due to spillovers or other market failures. This may warrant supplementary measures. However, such measures would need to take account of the (extensive) existing support for R&D and be targeted at areas where market failures are likely to loom large — such as in basic or strategic

research, rather than commercialisation of existing technologies or in picking green technology 'winners'. For example, the \$500 million Green Car Innovation Fund would be unlikely to yield significant innovation or greenhouse benefits if it were all allocated on a similar basis to the first \$35 million instalment (PC 2008b).

Other rationales

Industry policy has traditionally also had some justification on 'second best' grounds, in compensating industry for excessive costs or other impediments to their performance associated with various government policies. Indeed, tariff policy itself commenced as a rough *quid pro quo* for regulation that raised the unit costs of labour (not only through higher arbitrated wages, but also constraints on work arrangements).

Second best rationales are harder to find these days than in the past, following the extensive reforms under the National Competition Policy and successive waves of industrial relations reforms since the late-1980s. Moreover, as Australia's microeconomic reform record demonstrates, distortions are generally best tackled directly, rather than being compensated for. There is also the problem of designing effective policies on second-best grounds that would be effective.

One aspect of today's policy environment does appear to provide a genuine rationale for industry policy intervention on 'second best' grounds. Specifically, the asymmetry in the treatment of profits and losses under Australia's corporate tax system can inhibit relatively risky investments, at some cost to the economy. Since it does not seem feasible to address this problem through ('first best') changes to tax law without significant risk of abuse, alternative assistance arrangements may be justifiable (PC 2007b).

A more active ongoing rationale for certain industry policy measures is distributional. Such considerations most obviously arise in cases where government decisions lead to a loss of pre-existing 'property rights', where an element of compensation may be called for. The assistance arrangements put in place for dairy farmers, following the abolition of quotas as part of the deregulation of their industry in 2000, are a case in point.

But again, reminding us of Colin Clark's insight, we find this theoretical justification being pushed to the limits. Thus, in the context of the current debate about ETS, there is the prospect that some more highly emission-intensive businesses will in some way be compensated for the impacts on their profitability and shareholder value. 'Sovereign risk' considerations are clearly relevant where major policy changes come out of the blue. But the prospect that government action

might one day be taken to address greenhouse gas emissions is hardly news — the Commission conducted the first inquiry into the costs and benefits of doing this, in the lead-up to the 'Rio Earth Summit' almost two decades ago (IC 1991). Moreover, depending on how such compensation is paid, it could delay the adjustments in economic activity that the ETS is designed to drive.

The bigger issue that lies behind this, though, is the extent and timing of action by Australia to tax greenhouse emissions. There is much to be said for starting with very low effective prices for carbon until major global emitters also take action (PC 2008h), but to signal to business that future prices are likely to climb steeply. This would provide clear guidance for businesses making long-lived investment decisions, reduce adjustment costs and smooth the distributional implications. It would also provide a transition period in which government can learn about the most effective institutional approaches without posing too many risks for business.

Ensuring a payoff: policy design and review are crucial

Having a sound rationale is a necessary condition for industry policy interventions to yield a net payoff for the economy. But it is not a sufficient condition. Intervention brings its own costs and problems, which need to be taken into account in making a judgement about what specific policy approaches should be followed.

I used the term 'judgement', because even the most rigorous policy evaluation won't always provide a definitive answer. Lack of certainty about the exact outcome should not preclude some policy experimentation, provided there is a subsequent (robust) review of the outcomes.

That said, once in place, policy measures that deliver assistance to particular industries or activities can create *de facto* entitlements, with pressures for their retention that can be politically difficult to overcome. This can be seen in the ETS debate, where the renewable energy industry is strongly advocating the maintenance of direct support measures even under effective economy-wide pricing of carbon.

The difficulty in reversing policy measures is exacerbated by the understandable reticence of governments to 'admit' that a new policy has not produced the hoped-for outcomes. This is no doubt partly a reflection of the keenness of political opponents and the media to label such outcomes as 'failures'. A more constructive approach would recognise that some policy experiments of this type are worthwhile.

Some key design features

That said, there are a number of features that are central to effective industry policy design which, if met, would significantly limit the risk of policy misfires (PC 2008g, 2007c).

The most fundamental is the need to target measures at the problem. It is surprising how often this does not happen. Even where there is a genuine rationale for intervention, policy measures often fail to achieve a positive result because either the problem is poorly defined, or the measure does not adequately address it, or both.

Where a program is targeted at increasing a particular activity — such as R&D, investment, staff training or the use of energy-saving technologies — another critical hurdle for program designers is to ensure that the scheme really does add to the total amount of the targeted activity that is undertaken, rather than simply transferring public funds to the businesses for little or no public benefit.

The risk here is that some firms will receive assistance for things that, on commercial grounds, they would have done anyway. This has been a well known problem with the basic R&D tax concession (PC 2007b). But there are other documented instances. For example:

- around half of the subsidies for R&D and value-added activity under the (former) Pharmaceutical Industry Investment Program were estimated to have represented a 'free lunch' for the recipients (PC 2003b)
- two thirds of EMDG recipients surveyed by the Centre for International Economics indicated that the scheme had little or no influence on their export marketing (CIE 2005).

Of course, some payments for things that would have happened anyway are inevitable. The challenge is to design schemes in a way that achieves a sufficient rate of inducement to yield a net social benefit, remembering that this also can give rise to additional costs through increased program complexity and monitoring of firms.

Properly reviewing the outcomes

Withholding policy initiatives in the face of any uncertainty would amount to policy paralysis. However, the fact that a degree of uncertainty is inevitable, and that circumstances will often change over time, make it imperative that industry-policy initiatives are periodically reviewed. In practice, this has not been seen as an

integral feature of industry policy (or, indeed, of most policy areas). Reviews tend to be partial, spasmodic and often not very rigorous.

They are not assisted where the rationale for action or the program's goals have not been well specified. Programs should make explicit provision at the outset for progressive evaluation and review, including ensuring that the data needed for assessment purposes are generated as a by-product of the programs, if not otherwise attainable.

For reviews of major programs, with significant distributional and efficiency implications, it is highly desirable that those conducting the review (including their secretariats) be independent of the program administrator and key stakeholders.

Summing up

Australia's approach to industry policy has evolved considerably from the protectionist regime that so concerned Colin Clark, and our economic performance has been much the better for it. With strong pressures emerging for new industry policy initiatives, it is important that these too undergo rigorous evaluation. As the Minister for Innovation has observed:

It's easy to assemble a shopping list of initiatives ... but not quite so easy to produce a program of support which is both affordable and internally coherent. (Carr 2008b)

Translating this insight into good policy requires governments to be active in areas where there are genuine market failures that intervention has good prospects of correcting. It requires careful attention to the design of programs up front, and evaluation after the fact. And it requires that governments rebuff any claims for assistance that, while couched as being in the interests of the economy or environment, result principally in transfers from taxpayers to the recipients, with little or no public benefit. These requirements can be technically demanding and politically challenging. But they are integral to achieving the productivity performance that this country must aspire to if it is to meet the challenges that lie ahead.

Riding the third wave: some challenges in national reform*

'The National Reform Agenda is aimed at further raising living standards and improving services, by lifting the nation's productivity and workforce participation over the next decade' (COAG 2006).

Introduction

Australia's economic performance over the past decade and a half is an undoubted success story. While in more recent years this owed much to external events — notably China's economic take-off, and the (related) pick-up in our terms of trade — the reversal of our fortunes predates this. Described for rhetorical effect as an 'economic miracle' by the MIT's Paul Krugman, it is now generally recognised as the deliberate outcome of a program of economic reforms, which gathered pace from the early-1980s.

The microeconomic reform process essentially began with (unilateral) reductions in import protection and barriers to foreign capital. But the consequent competitive pressures on Australian firms soon shifted attention to the policy-related domestic impediments to their performance. From this, a second wave of 'behind the border' reforms began in the late-1980s, focussed on improving the efficiency of public utility services and the flexibility of labour markets. This culminated in the National Competition Policy (NCP) in the 1990s, with recognition that the imperative of forging a national market required a more coordinated approach to promoting competition across jurisdictions (Banks 2005).

The NCP was a landmark reform initiative, involving an unprecedented degree of cooperation across our federation over a decade. It brought substantial benefits which are still being felt. But any tendency toward complacency (or reform fatigue), has been overtaken by the realisation that Australia faces major further challenges to its hard won prosperity in the years ahead, not least the ageing of our population. Accordingly, a 'third wave' of national reform has been agreed to by COAG. While

benefited from contributions by several colleagues.

^{*} Presented to the opening plenary session of the Melbourne Institute Economic and Social Outlook Conference, 'New Agenda for Prosperity', Melbourne, 27 March 2008. This speech

partly directed at completing unfinished business from the earlier reform programs, the new National Reform Agenda (NRA) pushes the boundaries of national reform to encompass the drivers of workforce participation and productivity. Its emphasis on human capital development is a natural and necessary extension of Australia's reform efforts, going to the heart of what is required to meet the challenges of an ageing population. But while the potential gains are great, the challenges facing policy in a number of key areas are also substantial and will require sustained effort.

Lifting productivity and participation

Population ageing will significantly reduce workforce participation and per capita income growth. At the same time, it will push up health and aged-care expenditures, creating major fiscal pressures for governments. While this demographically driven scenario will unfold progressively over the next half century, its influence is already occurring.

Given the demographic causes, some have advocated demographic solutions. But neither pro-natalist nor pro-migration policies can realistically make much difference. For example, the recent increase in fertility rates in Australia (from 1.7 to 1.8) will yield only a marginal reduction in aged dependency over the next 40 years and will actually raise *total* dependency (children take a long time to grow up). Feasible additions to this rate could do little more. In any case, fertility is notoriously hard to influence through public policy. Commission research suggests that the recent increase in the fertility rate is mainly attributable to increased prosperity and the fact that older women are catching up on their previously postponed births. In contrast, the 'baby bonus' is likely to have been a much weaker 'aphrodisiac', affecting the timing of some births more than their ultimate number (Lattimore and Pobke 2008).

Similarly, feasible *increases* in migration (from what is already an historically high intake) can have only minor affects on the age structure of the population. The main reason for this is that migrants age too.

Participation and productivity are the key objects of policy directed at meeting the economic challenges that lie ahead. Both are amenable to policy influence and they provide a dual focus for COAG's NRA.

Labour force participation: keeping it up

Increasing the participation of Australians in the labour force is not an end in itself. Policies directed at raising participation are only worth having when they yield

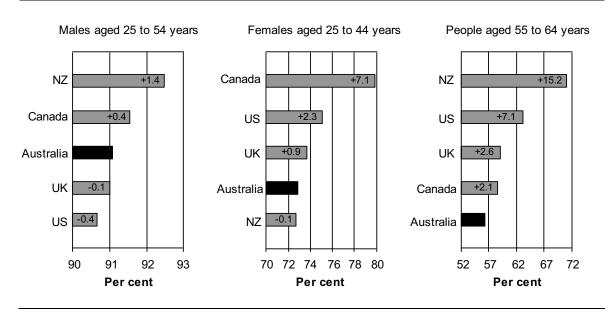
benefits to society that exceed the costs. Determining this is not always straightforward. For one thing, people value leisure. Further, many are involved in caring for family members or in volunteering. Policy directed at raising participation needs to focus on the reasons why it may be lower than it should be, taking into account peoples' innate preferences and potential societal spillovers.

Scope to do better

The fact is that Australia's overall participation rate is higher today than ever. This has been due to the increased participation of women; male participation has fallen significantly over time.

While Australia's aggregate participation rate is above the OECD average, it is relatively low for some key age groups: particularly men and women aged 55 to 64 years, and women in the 25 to 44 ('child bearing') age bracket (figure 1). A significant gap in participation rates, relative to countries we regard as broadly comparable to our own, is indicative of scope to do better. As noted, whether that scope is real or not depends on the causes, and the costs and benefits of specific policy initiatives to address them.

Figure 1 Australia's participation rates are lower in key age groups
Differences between countries in selected participation rates, 2005



There are five broad areas for potential policy attention. Two of these — education and training, and health policy — relate not only to personal development and wellbeing, but also to the inherent contribution of people to the workforce. A third relates to the incentives they face to seek employment and perform well in a job. A

fourth is the capacity of workplaces to employ people in ways that fit with their abilities and the needs of the firm. And a final one is support systems for helping people into work, where such assistance is needed.

Most of these are encompassed by the NRA. The Commission's analysis of the options suggests that work incentives — particularly those related to the interaction between the tax and welfare systems, and retirement income provisions — are likely to be the most influential (PC 2006b).

Large potential gains from the NRA

There are three reform streams within the NRA: a *competition* stream, directed at enhancing the operations and efficiency of infrastructure markets; a *regulatory* reform stream, focussed on reducing 'redtape' burdens on business; and a *human capital* stream, which is aimed at enhancing workforce participation and productivity, through policies that improve health and education outcomes and reduce disincentives for work.

The Commission's modelling and other analysis in its recent report for COAG suggest that the benefits from reforms in the areas identified are potentially large, and at least as great as those from the NCP (table 1) (PC 2006b).

Table 1 Potential 'outer envelope' GDP gains from the NRA

| | \$billion | Per cent of GDP |
|-----------------------------|-----------|-----------------|
| Competition stream | 4 | 0.5 |
| Red tape reduction | 13 | 1.33 |
| Health service productivity | 4 | 0.5 |
| Workforce participation | 60 | 6 |
| Workforce productivity | 25 | 3 |

The greatest projected benefits related to the potential economy-wide impacts of reforms directed at enhancing human capital. The Commission found that there was potential to increase labour force participation by up to five percentage points over the next 25 years — potentially offsetting the projected impacts of population ageing — while workforce productivity could be raised by up to 2 per cent.

The impacts of participation and productivity on GDP appear to dominate those from the other reform streams. However, as the Commission emphasized in its report, the human capital numbers are not comparable with those from the other reform streams. Apart from the longer time frames involved, they exclude the

(potentially large) program costs that may be called for, and they are far more speculative and exploratory in the methodologies used (PC 2006b).

The policy challenges are becoming more apparent now as COAG focuses more clearly on specific policy areas, with seven Working Groups having explicit work agendas and timeframes. In what follows, I focus on some key issues in each area.

Health and aged care

Health and aged care are arguably the most challenging areas for national reform. While our health system does not perform at all badly by international standards it is experiencing growing problems. Not least among these are rising costs, falling accessibility, and workforce shortages. The cost pressures and capacity constraints will soon be compounded by population ageing, with total health spending projected to rise from 10 to around 18 per cent of GDP over the next four decades.

In its 2005 review of the NCP and emerging reform priorities, the Productivity Commission argued that there was an urgent need for nationally coordinated reform (PC 2005e). The agenda we identified included financing issues (including the roles and responsibilities of the states and the Commonwealth), coordination of care (including informal care and aged care), the interface between the public and private sectors, the balance between prevention and treatment, and information management.

While the Commission's recommendation for a major independent public review of the health system as a whole was not taken up, a number of the issues were subsequently included in COAG's NRA.

Prevention better than cure?

Particular emphasis has rightly been placed on health promotion and disease prevention activities. These focus on seven chronic diseases accounting for around 80 per cent of the total disease expenditure burden.

The challenge for policy makers is to determine how, and by how much, the personal impacts and productivity losses resulting from chronic diseases could be reduced or avoided by better health policies. The Commission's early analysis indicates that we should not underestimate the difficulties of producing benefits that materially exceed the costs of intervention (PC 2006b).

For example, COAG's nominated priority, type 2 diabetes, is closely linked to obesity, as are cardiovascular and other chronic diseases. Targeting the growing

incidence of obesity therefore has obvious attractions. However, the causes of obesity are difficult to remedy, being intimately connected with modern lifestyles as well as genetic makeup and other individual circumstances. Studies repeatedly reveal the difficulty for many people of maintaining weight loss. Moreover the costs of information campaigns and other strategies can be substantial.

The critical need is for hard-headed analysis of the effectiveness of specific interventions, as well as a willingness to experiment with new approaches, including pilot testing.

Just do it?

In contrast, there are some health issues where policy solutions seem clear, having benefitted from detailed reviews, but progress has been impeded by political pressures. Two which stand out are health-workforce arrangements and aged-care funding.

The first is bedevilled, among other problems, by a silo mentality and protection of professional territory. What is needed is a culture of teamwork and innovation in scopes of practice and models of care, and the institutional structures to support it. The Productivity Commission's review for COAG strongly argued for national accreditation and registration boards that span the professions (PC 2005a). Despite resistance from the AMA and after some delay, it is pleasing to see that COAG is now pushing on with establishing these — an important step.

As currently structured, the aged-care system is not well equipped to deal with an ageing society. The key lies in the reform of funding/charging arrangements. In particular, there is a strong case for unbundling accommodation from care costs. Personal care also needs to be delivered on an entitlement basis, with targeted subsidies, rather than through provider-based funding.

Human capital development

The second COAG Working Group is primarily focused on education and training or, in economists' jargon, the development of 'human capital'.

This has traditionally been a relative strength for Australia, but there is considerable scope for improvement. For example, in the core skill areas of literacy and numeracy, average schooling outcomes for Australia exceed OECD averages, but there is a relatively long tail of poor achievement, with one-third of 15 year olds rated below international benchmarks.

COAG's goals in this area primarily focus on young people, which is appropriate. There is abundant evidence that literacy and numeracy skills are influential in the extent to which children complete school and go on to higher study or well paid employment.

Teachers are instrumental

Much policy effort and resourcing over the years has been directed at reducing classroom sizes. But the evidence suggests that this has not yielded significantly better outcomes. The key to better learning is quality teaching and teachers, but this has arguably been the most neglected area of education policy.

It is fair to say that contemporary society values teachers less than did any previous generation. Taking the economist's measure of value, female teachers' pay fell from 114 per cent to 103 per cent of non-teachers' pay between 1983 and 2003 and male teachers' pay fell from 108 per cent to 91 per cent of non-teacher pay (Leigh and Ryan 2008). Widening income disparities can be expected eventually to have an effect, both on the average quality of those entering the profession and on how their contribution is perceived by the public.

Recent evidence shows that, unlike other professions, there appears to be no relationship between the aptitude of teachers and their pay — which is exactly what you would expect in a system characterised by uniform salary schedules. These problems are compounded within government schools in some jurisdictions by restrictions on the ability of principals to appoint the best person for a particular vacancy. Schools must be the only part of the public sector where merit-based appointments are constrained, despite their particular importance in this field.

Progress is being made in some of these areas in individual jurisdictions. COAG's new education Working Group is ideally placed to initiate an assessment of what approaches to Australia's education workforce would best meet future needs.

Climate change and water

The Working Group on Climate Change and Water is concerned with the two 'sustainability' issues that loom largest for the future wellbeing of Australians. While related, they pose quite different policy challenges for governments. In the case of climate change, the problem is global; Australia is a relatively small contributor, and our rate of contribution has generally reflected efficient use of abundant fossil fuels. In the case of water, the problem is domestic, and largely the result of our inefficient management of an increasingly scarce resource.

A cost-effective climate change policy

The objectives of the COAG Working Group are to 'ensure an effective national response to climate change' based on a national Emissions Trading Scheme (ETS) and nationally consistent complementary measures. The move to a national approach is of fundamental importance. The emergence in its absence of a multiplicity of measures was a growing source of cost in its own right. The focus on a regime based on a market price for carbon is also essential, to ensure that any emission reduction target can be achieved at least cost.

The facts are that any abatement action by Australia will be more costly than that by most other developed economies. That simply reflects the reality that the structure of our economy has been shaped by the abundant availability of low-cost fossil fuels. Our total contribution to global emissions is very small (around 1.4 per cent). That means that a negative cost-benefit outcome for Australia is assured unless the major emitting countries ultimately take comparable actions. It underlines the need for our mitigation actions to be carefully designed and implemented to avoid incurring unnecessary costs.

This is the biggest regulatory challenge Australia has ever faced. There is the potential for poor regulatory design to generate costs at least as great as the economic impact of raising energy prices. This puts a particularly high premium on good regulatory process. While Australia could be said to have an impressive track record overall in policy development, our performance has not been so good in the more practical art of regulation making. One of the main deficiencies has been lack of understanding of the compliance burdens of regulation on business. These could loom very large here.

What 'complementary' measures?

The great advantage of a national ETS is that it should in principle enable the market to price allowable carbon emissions such that abatement occurs in least-cost ways. However, to be successful in this, there will need to be some rationalisation of the many and varied schemes previously devised to reduce (net) emissions in the absence of such a price signal. Many of these will make no additional contribution to abatement, but simply reshuffle the existing contribution and raise its costs. This task is on the Working Group's agenda.

A preliminary assessment by the Productivity Commission has identified a range of programs deserving particularly close scrutiny. One of the more significant ones is the Mandatory Renewable Energy Target (MRET). An MRET has been in place since 2000, with the Australian Government planning to increase the target nearly

five-fold, so that 20 per cent of electricity would be drawn from renewable sources by 2020. In replacing multiple state-based regimes, it will lower the overall costs of such an approach to emissions reduction. However, it would effectively cut across an ETS and impede its ability to deliver least-cost abatement through carbon pricing. While it would be unlikely to achieve extra abatement, it would constrain the choice of abatement options (which could potentially cost billions of dollars) and reduce the incentive to use other new low-emission technologies (PC 2008h). The apparent special status accorded the MRET needs to be rethought.

A more promising area for complementary policies is in programs to support R&D. Knowledge spillovers are likely to be particularly marked in this area and thus enterprises may require more support. There is a balance to be struck between technology-neutral support and support aimed at areas in which Australia has strategic interests, due to our energy resources and existing industries.

Water, water everywhere?

COAG's objective of 'sustainable water use across Australia' is best interpreted as achieving outcomes that maximise the net benefits to society from this country's water resources over generations.

Underpricing and over allocation of water resources have encouraged excessive demand and a system ill-equipped to deal with emerging scarcity. The best solution to scarcity is a market. Prices revealed in well-functioning markets can provide a coordinating role to achieve an efficient allocation of water among competing uses. They can also provide signals to guide investment in water supply augmentation.

Reforms to create water markets began in rural areas. While there were some earlier state-based initiatives, the need for a scheme embracing the Southern Murray Darling Basin, and the jurisdictions that draw water from it, became obvious. The issue has rested with COAG since 1994. Progress has occurred, but slowly. The 'market' remains fragmented and distorted by constraints on trade, excessive transactions costs, and incomplete arrangements for environmental allocations. The move towards a single governance arrangement is fundamentally important to resolving these problems.

From country to city

In contrast to developments in rural areas, markets do not exist for water in our cities. Most capital cities and urban centres have for several years dealt with lower catchment rainfall by imposing severe restrictions on use. The hidden cost of these

restrictions for many households outweighs the charges they actually pay for the water they use, and nationally could amount to billions of dollars a year (PC 2008f).

Introducing market mechanisms for urban water has the potential to generate substantial efficiency gains, both through enabling available water to reach the most valuable uses and providing better signals to investors about the need to augment water storage capacity or develop other sources.

Equity or ethical issues are often seen as problems when the question of pricing water is raised. However, price structures or rebates can deal with the need to ensure that all households can afford basic needs.

In moving to more efficient water markets, there are two issues that require attention. One is the dominance among water utilities of old style vertically integrated monopolies. Structural changes to enhance commercial pressures and promote competition, including through third-party access to networks, offer the prospect of significant efficiency gains.

A second untapped opportunity to get better outcomes, at least for some cities, is to breach the artificial divide that exists between urban and rural water systems. Some 60–70 per cent of Australia's water is consumed by agriculture; only 10 per cent by households. Even small diversions could make a significant difference to urban supplies.

Efficient national infrastructure

Efficient economic infrastructure is clearly fundamental to Australia's economic performance. Over the past two decades, the performance of much of our infrastructure has greatly improved. This was achieved mainly through reforms that introduced commercial disciplines and competitive incentives to a sector that had long been dominated by inefficient statutory monopolies.

The Productivity Commission's 2005 Review of NCP found that prices of infrastructure services had generally fallen significantly, at least where that was needed, and had been rebalanced to more closely reflect (lower) costs (PC 2005e). We estimated that the observed productivity gains during the reform period had boosted Australia's GDP by around 2.5 per cent.

However, the Commission also identified considerably more that needed to be done, including to achieve more competitive, nationally integrated markets in energy, transport and water (as well as, within the Commonwealth domain, telecommunications and broadcasting). These have become subject to ongoing

attention by COAG under the NRA. In addition, since the federal election, particular focus has been placed, via the relevant Working Groups, on the goal of improving the coordination and streamlining of infrastructure planning and investment processes, and undertaking a national audit of infrastructure. A new Infrastructure Australia Council has been created to assist in this.

Better evaluation of public investments is needed

Assessing the adequacy of national infrastructure, particularly in a forward-looking context, is a very complex undertaking. The intention is to help guide priority-setting for public infrastructure investments, but there would still be the need for detailed cost-benefit analysis of particular projects. Such analysis has typically not been done well in the past.

Periodic audits of the regulatory and, for public infrastructure, governance arrangements within which infrastructure investment and management decisions have been made could prove particularly useful. The Commission's annual review of the financial performance of government enterprises has found that the aggregate return on their assets has slowly improved, but over half of GTEs still do not earn a commercial rate of return (PC 2007a).

In an across-the-board review of GTE governance arrangements, the Commission detected many ongoing deficiencies, including a lack of clarity (and even transparency) in corporate objectives, a need for greater independence of boards and generally greater accountability. When it comes to investment decision making, problems include undue political influence, ill-defined or unfunded non-commercial obligations, constraints on pricing and restrictions on borrowing (PC 2005c).

Private provision requires balanced regulation

This underlines the importance of periodically testing the case for public ownership of infrastructure assets. Private ownership and control avoid many of the incentive and governance problems that bedevil public assets, and only private ownership involves the additional discipline of competition from within the capital market. By the same token, private owners tend to be single-minded about making profits, and this has meant that in areas where market power or equity issues loom large, governments have regulated heavily to keep prices down.

Price regulation almost inevitably becomes rate-of-return regulation, which can undermine incentives for productive efficiency and innovation. In the end, the regulator effectively becomes the arbiter of new investment. Concern that

regulatory truncation of 'above-normal' returns was diminishing incentives to invest in long-lived assets, was at the heart of a number of recent Commission reviews of competition regulation of infrastructure introduced under the NCP. While some changes have been made as a consequence, it has been raised again as a key contributor to the export bottleneck problems experienced over the past few years (Exports and Infrastructure Taskforce 2005).

Reform of road freight infrastructure is a priority

The Commission's analysis suggests that some of the largest gains from further reform are likely to come from achieving more efficient provision and charging for land freight infrastructure (PC 2006e). Efficient freight is especially important for Australia, given its dispersed population and production centres.

Road infrastructure is likely to continue to be largely provided by government, given its public-good features, but there is a need to get a closer relationship between user charges and usage costs, and a better basis for investment, both of which are subject to heavy political influence.

The challenge is to find solutions that yield unambiguous gains and would achieve community acceptance. To this end, the Commission recommended COAG adopt a carefully sequenced approach in progressing towards direct location-based charging, with each step preceded by detailed examination of costs, benefits and distributional impacts. This was largely adopted by COAG and is now on the agenda of the Business Regulation and Competition Working Group.

Enhancing business regulation and competition

The first waves of microeconomic reforms were directed at reforming anticompetitive regulations that assisted some businesses at the expense of others. With considerable progress in that area, the emerging priority is to reform regulation that is unnecessarily costly to *all* businesses.

In its 2006 report *Rethinking Regulation*, the Regulation Taskforce found that much regulation suffered from unclear or questionable objectives, lack of targeting, excessive paperwork requirements, undue prescription and complexities, and inconsistency, overlap and duplication, particularly across jurisdictions (Regulation Taskforce 2006).

Harmonising 'hot spots' is challenging

Many of the worst inter-jurisdictural problem areas have now been picked up by COAG as 'hotspots' for priority action. For most, there is a strong case for achieving at least harmonisation, if not national uniformity.

For many of these regulations, the potential benefits of harmonisation from the perspective of a particular state or territory may not appear sufficiently large to offset the loss of sovereignty over issues that can involve local sensitivities. The fact that the Australian Government is willing to provide reform-contingent transfers to the states may therefore represent the best chance yet for a break through.

That said, it will be important that a strong case is made for any proposed national standard, demonstrating a national payoff from reform. National uniformity or harmonisation is only worth having if it involves the best rules, not merely the lowest common denominator.

Of all the regulatory 'hotspots', perhaps the hottest from a business perspective is occupational health and safety and this will be the litmus test for whether moves for regulatory harmonisation can be successful generally.

Addressing the causes of bad regulation

Bad regulation — regulation which is ineffective or for which the costs are excessive — has proven easier to make than reform. The problems are deep-seated and need to be tackled on a number of fronts. However the absolute priority is to improve the processes and institutions responsible for making regulation in the first place.

COAG has made a useful start in agreeing to some 'best-practice regulation reforms'. However, concrete commitments need to be made to strengthen the obligations on policy makers and regulators, and to ensure that regulatory proposals satisfy those requirements. For example, the Australian Government now requires that regulatory proposals with non-trivial impacts on business include an estimate of those impacts. It has also mandated that a regulatory proposal which fails to meet the Government's 'best-practice' requirements cannot proceed unless the Prime Minister grants an exemption (in which case a 'post-implementation review' is required within one to two years). Such requirements need to be extended to all jurisdictions.

Competition still needs support

In the specific area of competition, NRA has a significant role in completing and extending the agenda of the NCP. As noted, this includes further refinements to procompetition regulation of infrastructure markets. There is also unfinished business from the NCP's review of anticompetitive regulation. Many of the gaps or deficiencies in that program — which required a public interest case to be made for retaining such regulations — have involved considerable political sensitivity. Examples include remaining statutory monopoly controls over exports, and regulatory constraints on competition in such small business heartland areas as pharmacies, newsagencies and taxis.

The states and territories provide billions of dollars in assistance to industry. The extent to which the costs and benefits of the assistance programs have been scrutinised varies. From a COAG perspective, there is a particular need to review progress in reducing subsidies and tax exemptions designed to influence enterprises to locate in particular jurisdictions. These 'bidding wars' generally involve negative sum outcomes for Australia as a whole. Moreover, in the few instances where programs have been properly reviewed, most have been found to yield little or no benefit even to the 'winning' jurisdiction itself.

Understanding the economy-wide implications

The opportunity cost of helping particular firms or industries to operate at higher levels of activity looms largest when the economy is stretched to capacity. A job gained or retained in an industry as a result of government assistance is a job lost to another, particularly in an environment of labour shortages.

Economy-wide (general equilibrium (GE)) modelling is a powerful tool for analysing the impacts of policy changes across the economy, but it has limitations and cannot encompass all the forces at work. In the past, GE modelling has found net gains to the economy from reducing tariffs, but it has generally underestimated those gains. For example, the Commission's 2002 review of automotive assistance found that steadily reducing tariffs had provided a major spur to innovation, yielding productivity gains that the industry itself had not anticipated (PC 2002e).

Accordingly, there is merit in the government's review of innovation policy being undertaken concurrently with the automotive and TCF reviews. It should help reinforce the message that any change to the established assistance regimes for these industries should be directed at enhancing the scope for innovation, not weakening the competitive incentives that help motivate it.

The strong link between competition and innovation is underpinned by the reality that (technological) R&D is only a small part of the total innovation that occurs within industry. That said, R&D can be relatively costly, and incentives for firms to undertake it can be weakened by the difficulty of withholding its fruits from market rivals. Government support can help address this 'market failure'. However, as the Commission's recent report *Public Support for Science and Innovation* showed, such support needs to be carefully designed and targeted, with robust analysis of its cost effectiveness in generating (additional) social benefits (PC 2007b).

Further candidates for review?

Current resource constraints within our economy, and pressures on government budgets, strengthen the case for undertaking reviews of other industry assistance programs. In 2006-07, Commonwealth assistance to industry monitored by the Commission totalled nearly \$16 billion, with budgetary assistance amounting to some \$6.5 billion (PC 2008g). While a proportion of this will represent a good investment by the community, some of it will not.

In deciding which programs to examine, relevant criteria include whether:

- areas receive relatively high assistance, or involve multiple measures offering scope for rationalisation
- programs appear to lack a strong rationale or were devised without robust analysis
- a review has not been undertaken for some time, or market circumstances appear to have changed (or previous recommendations for reform failed to be implemented).

Some candidates for early review could include defence procurement, drought assistance, biofuels subsidies and assistance for tourism. Given the complexity of the issues and the various interests involved, such reviews should be independent and properly resourced, with adequate opportunity for public participation and terms of reference that give priority to analysing the economy-wide implications of specific assistance measures.

Two other important COAG Working Groups

The final two COAG Working Groups — on housing and Indigenous reform — are outside the boundaries of the previously agreed NRA. But both deal with issues that are central to the wellbeing of Australians, with outcomes dependent on federal-state cooperation.

Accessible and affordable housing

In the case of housing affordability, there are two challenges that stand out, based on the analysis in our 2004 report on First Home Ownership (PC 2004a). Both are fundamental to affordability outcomes, but have been seen as politically too hot to handle.

- The first is the zoning and heritage laws that stop sufficient dwellings being built in the inner urban areas where people increasingly want to live.
- The second major influence is Commonwealth taxation, particularly income tax provisions that favour housing, and the concessional arrangements for capital gains taxation that were introduced in 1999.

While affordability problems are significant, for many people the main impact is to defer entry into home ownership, rather than preclude it entirely. Arguably, the more important social problem relates to the adequacy of accommodation for people on low incomes who will never own a home and have trouble affording rental accommodation. Again, the key to identifying policy interventions in this area that can make a difference is to understand potential ramifications in the wider market. This is not easy, but it would be helped by a more rigorous approach to reviewing existing programs.

Indigenous policy

The most extreme housing policy failures apply to Indigenous housing. Overcrowding in Indigenous households is much greater than anything observed in non-Indigenous Australia. This is a major policy issue. As the Commission's work for COAG's Government Services Review shows, poor housing conditions contribute to several facets of disadvantage and disfunctionality in Indigenous communities, including bad health, poor school performance and family violence (SCRGSP 2007). It is therefore encouraging that this has become a priority area for policy attention both at the Commonwealth level and within COAG. But much greater attention also needs to be given to the specific housing needs of Indigenous people — by actually involving them — as well as to the adequacy of related infrastructure services.

This is a particular manifestation of a much greater failure in Indigenous policy over the years. Despite the good intentions of successive governments, much Indigenous policy has not met even the most rudimentary tests of good public policy. Programs have lacked clear rationales and objectives, have been designed without effectively consulting those affected and, perhaps most damning of all, have not been properly reviewed to gauge their effectiveness. The result is that after three decades of policy experimentation, we have very little knowledge today about which of the myriad of programs worked best or why. Rectifying this — bringing a sustained evidence-based approach — is the most important challenge we face in seeking to realise COAG's aspiration to close the gap for Indigenous people.

Moving forward

It emerges that while the potential pay-offs to Australia from embarking on a new wave of national reform are large, there are also some major challenges in devising reforms that will yield the anticipated benefits. If anything, the challenges are greater than under the NCP, because of the additional complexities and uncertainties that confront policy development in the human capital area — where there is potentially most at stake.

The difficulties under the NRA were also initially made greater than under the NCP because of some compromises and deficiencies in the governance and other arrangements. However a number of these problems are currently being addressed.

One important development is that financial transfers from the Commonwealth to the states and territories, analogous to the NCP's 'competition payments', are being put back on the table. The payments had an influence disproportionate to their magnitude in encouraging states and territories to adopt an ambitious reform agenda under the NCP, and are likely to prove an equally good investment under the NRA.

Another positive feature is the strengthening of COAG oversight of the various reform steams, with Working Groups involving central-agency representation reporting on a quarterly cycle.

The introduction of three-monthly meetings for COAG is an important signal about the role that it intends to play, and stands in marked contrast to previous arrangements. It should enable closer monitoring of progress and provide a better basis for maintaining momentum. The main downside would be if a 'need for speed' began to take precedence over marshalling evidence and rigorously testing policy proposals where this is needed.

A key challenge for the NRA will be to ensure that reforms are actually implemented as agreed. In the past, it has often been difficult to achieve this, or at least to keep reforms intact over time. Under the NCP, the National Competition Council played a crucial role in monitoring reform implementation and advising on the related competition payments. Indeed this was integral to the overall success of the reform program. A similar role is envisaged for the COAG Reform Council. To

be fully effective, it would need independence and adequate resourcing, as well as a clear mandate.

As a final observation, the benefits of the NRA will take a long time to be fully realised. In the meantime, governments will need to be willing to bear not only its financial costs, but also the political heat that major reform often generates. This is not assisted by short electoral cycles, which mean that more pain than gain will generally occur within a government's term. The move to four year fixed terms has ameliorated this at the state level. Now could be a propitious time to seek a similar change at the federal level.

Back to the future: restoring Australia's productivity growth*

The theme of this conference, 'Restoring Prosperity after the Crisis', has a similar policy message to the previous conference in this series, some eighteen months ago, but in rather different circumstances. That such a turnaround — from boom to bust to incipient recovery — could have occurred in such a short space of time is remarkable, if not unprecedented. But we have witnessed much else that has been unprecedented in this period, including the degree of commonality internationally in governments' fiscal and monetary responses to the crisis and in their pro-active interventions in financial markets.

Australia's own policy response has itself been unprecedented, involving a reversal of our budget surplus on a scale and speed never experienced before, with a fiscal stimulus amounting to 5.5 per cent of GDP, the third largest in the OECD. And we have been in new territory in the extent and nature of the stimulus spending, involving two rounds of lump-sum cash payments to households, targeted additional subsidies for first home purchases and home insulation, and two rounds of infrastructure spending.

Together with historically low interest rates and still buoyant demand for mineral exports from China (itself a consequence of fiscal pump-priming) Australia's economy has weathered the storm very well thus far and many Australians are already contemplating recovery. Whether it is realised remains to be seen, as our economic fortunes do not depend on us alone. It will be important, for example, that China's demand remains strong and (not unrelated) that the US economy regains strength in the months ahead.

Just as 'moving ahead of the curve' was seen as important to the success of our demand stabilisation policies, timely policy interventions to enhance the performance of the economy's supply-side will also be needed to underpin a sustainable recovery and growth in the longer term.

^{*} Presentation to the Melbourne Institute Economic and Social Outlook Conference, 'The Road to Recovery', 5 November 2009. This speech draws on PC 2009a and 2009e.

The recent unprecedented fiscal expansion and associated debt add to the pre-existing imperatives for higher productivity growth arising from demographic ageing, increasing globalisation and the costs of achieving greenhouse gas abatement and other sustainability goals. Productivity growth can help service the debt now accumulating from fiscal deficits, as well as offset the effects on incomes of withdrawal of stimulus spending.

Causes of the productivity slump

Australia's recent productivity growth record does not, at face value, look encouraging. Following the dizzy heights attained in the 1990s, the MFP growth rate dropped back to its historical average of 1.1 per cent in the next cycle to 2003-04 — which was not surprising — but has averaged small *negative* growth in the current incomplete cycle, which has been a surprise.

Given the importance of productivity growth to living standards, it has also been of widespread concern, prompting calls for policy actions to remedy it. This is fine, indeed important, but any such policy actions need to be informed by a close analysis of the causes of the decline.

Commission research to this end suggests that in fact much of the decline resulted from specific developments in three industries (PC 2009e). The most significant has been the impact on measured productivity in the mining sector of a lagged production response to the major capital investments needed to satisfy booming export demand, as well as some depletion in deposits. At the same time, agricultural productivity has suffered from drought, and the utilities sector has seen major capital investments coinciding with reduced output growth, reflecting in part demand management initiatives.

Once the influence of these events is removed from the estimates, MFP growth actually rises above trend in the last complete cycle and changes from -0.2 per cent to 0.7 per cent in the current period. Some 70 per cent of the decline since 2003-04 is accordingly accounted for by the unusual developments in these sectors.

That still leaves 30 per cent unaccounted for. However, it seems plausible that general capacity constraints throughout the economy over that period may have played a key role here. With buoyant demand and tight labour markets, efforts are likely to have been made to satisfy demand even at the expense of increased input costs, as long as additional profits could be made.

The lesson from a comparison of the 1990s and 2000s is that while productivity is obviously important to our economic future, it was not a driver of the high income

growth in the most recent period. Indeed, it was partly a casualty of Australia's economic success.

With current policy discussions in mind, what should also be noted is that Australia's productivity slump was not caused by any lack of spending on education and training, R&D or even infrastructure — important though these may be in the long term. Indeed, infrastructure spending had increased significantly and, when adjusted for differences in industry structure, Australia's expenditure on R&D has remained near the top of the OECD.

In seeking policy guidance from our productivity history, the story of the 1990s boom is more instructive (Banks 2003a; PC 1999c). This new 'golden era' of productivity was preceded by a series of microeconomic reforms which, on the one hand, increased the incentives for enterprises to perform well by removing barriers to competition, while on the other, enhancing their capacity to respond to these market pressures through more flexible, enterprise-based work arrangements and lower prices for existing infrastructure services.

Post-crisis priorities

COAG's current Reform Agenda encompasses some unfinished business in these areas, as well as a new focus on reforms to enhance human capital development — thereby increasing the participation and productivity of labour in the years ahead. Taken together, COAG's agenda and that of the Australian Government, cover a lot of territory. In the current economic setting, there would seem to be particular merit in prioritisation. The 'sweet spot' for policy effort in the next few years is likely to be those reform areas which (a) can bring productivity gains in the short term, underpinning economic recovery, while (b) achieving this at little or no cost to the budget.

From this perspective, there are three policy areas that deserve particular attention: industry assistance, regulatory reform, and infrastructure. All three have regulatory dimensions and all present reform opportunities that could be implemented quickly (to borrow the metaphor, all are 'shovel ready').

It could also be said that these reform areas contain few surprises. Reforms have been stymied in the past through political resistance. However, one would hope that such resistance may be more easily overcome under crisis (or even post-crisis) conditions, as the old saying about 'not wasting a crisis' would have it.

Remove or reform 'unproductive' industry assistance

The policy response in most countries to an economic crisis has traditionally involved some government assistance to selected industries. This is perhaps politically inevitable. Its form and duration, however, are crucial to its impacts, both in the short term (on the market) and longer term (on productivity).

As is well known, escalation of assistance to trade-exposed industries in the 1930s was a contributor to the length and ultimate severity of the Great Depression. Empirical studies suggest that protectionism explains over 40 per cent of the drop in world trade in that period. This is one lesson that hopefully has been well learnt. The OECD warned in late-2008 that 'keeping markets open will ... be an essential condition for recovery and long-term growth' (OECD 2008). And the G-20 communiqué from November 2008 stated: ' ... within the next 12 months, we will refrain from raising new barriers to investment or to trade in goods and services' (G-20 2009).

Nevertheless, in the past year the WTO has reported a rise in trade-restricting measures, outnumbering trade liberalising initiatives by at least two to one (WTO 2009). Unlike the 1930s, however, the scope for a broad protectionist break-out today is contained by a web of WTO rules and reciprocal agreements. Accordingly, most of the trade-related assistance actions have been temporary measures that are 'within the rules', or in areas where rules are either not present or not binding.

The net impact to date on global protection levels is not known, but the apparent early bottoming of the hitherto vertiginous drop in world trade volumes — in contrast to the pattern in the 1930s — suggests that the increase has been modest overall.

That is just as well, because Commission modelling suggests that even if countries chose to exploit only the 'head room' available to them within WTO tariff bindings, world trade would fall by around 8 per cent, with world output (and incomes) declining overall by some A\$1 trillion (PC 2009a).

With unemployment levels continuing to rise in many countries, domestic political pressures to provide such assistance can be expected to increase. Keeping the potential costs in the public's mind will be an important political responsibility if we are to build on the incipient recovery. History tells us that the discipline of individual G-20 countries will be crucial to their collective ability to hold the line.

One area where such discipline — in the absence of effective WTO coverage — has been lacking, is government procurement policies that discriminate against foreign supplies. At least 15 countries have imposed such measures over the past year.

Regrettably, Australia is among them. The New South Wales Government recently introduced a price preference of up to 25 per cent for locally-supplied goods and services. Other states have previously implemented similar, though less protectionist, measures. As the Commission observed in its Annual Report:

Such policies not only risk reducing the value of government spending for taxpayers, but also provide a poor demonstration effect internationally, and are a liability when seeking to encourage other countries to reduce protection. (PC 2009a, p. 13)

A second focus for industry assistance initiatives worldwide in the past year has been that long-standing recipient, the automotive industry. Consistent with WTO rules, governments have generally not increased tariffs — indeed some, including Australia, have maintained planned reductions. Instead, many have provided subsidies in various guises. As all economists know, however, a given tariff can be replaced by a subsidy with equivalent protective effect. The impact on production, trade and global welfare is much the same.

The assistance to car assemblers announced by the Australian Government in November 2008 as part of its stimulus package, was reportedly the second largest among OECD countries, in per capita terms. While much of the \$6.2 billion for producers leveraged off recommendations made by the Bracks review (2008), which pre-dated the Global Financial Crisis (GFC), top-ups to the Automotive Competitiveness Investment Scheme and the Green Car Innovation Fund were provided to help the industry cope with expected additional market difficulties. Removing these top-ups in what are now less threatening market circumstances, would yield a budgetary saving of at least \$1.7 billion.

Government assistance to selected industries generally makes for poor 'crisis policy', because it comes at the cost of penalising unassisted activities. The net impact on jobs is hard to discern even in the short term. Recessionary forces are typically economy-wide and generally cannot be neutralised by industry-specific measures.

The main exception to this general rule, especially in the short-term, is the finance sector, given the contagion risks any major failures pose for the whole of the 'real' economy — as the unfolding of the GFC itself has demonstrated. Support for financial markets and institutions has been a strong feature of most governments' responses to the crisis. This has included guarantees of liabilities, the purchasing of illiquid assets (or accepting them as loan security) and equity contributions to troubled institutions. This support appears to have played an effective stabilisation role, and may have foreshortened the drawn-out recovery phase that typically characterises recessions originating in financial markets (IMF 2009).

That said, if maintained, some measures could inhibit desirable competition and innovation, and encourage undue risk-taking through moral hazard. For this reason, the Australian Government has designed its mechanisms of support to be temporary. However, withdrawing industry support — which is always difficult — could prove particularly challenging for the finance sector.

As the Commission has noted in various reports, there is also considerable scope to rationalise industry assistance that predates the crisis. The Commission's most recent estimate of total industry assistance at the Commonwealth level alone amounts to over \$17 billion in gross terms, of which some \$8.3 billion comprises budget expenditures. Much of this has not been reviewed regularly to determine whether it is generating net benefits to the community. On the basis of those reviews that the Commission itself has conducted, however, it seems likely that a substantial proportion could be withdrawn to positive effect both on the budget and on the economy (PC 2008g, 2009f).

In addition, Australian governments intend to spend some \$23 billion to 2011-12 on programs to reduce carbon emissions, much of which takes the form of assistance to selected industries and technologies. The potential environmental payoff from such assistance is unclear, and the costs of achieving abatement benefits appear excessive in some cases. With the advent of the economy-wide pricing of carbon through the Carbon Pollution Reduction Scheme (CPRS), it will be important to rationalise this assistance. However, by then a sense of entitlement may have taken hold, and investments undertaken, which could make withdrawal difficult.

Remove regulatory burdens and avoid adding new ones

Regulatory reform is a key strand of the National Reform Agenda. In the current circumstances, it has the added attraction that it can enhance productivity — by reducing business costs and constraints, and improving production incentives — while involving little fiscal cost. Indeed, in many cases it will yield fiscal dividends.

Two dimensions of regulatory reform assume importance currently: one is removing existing burdens and distortions; the other is avoiding adding to these unduly through new regulations. The latter also raises more fundamental issues to do with the regulation-making process itself.

The first two waves of structural reform in Australia focussed on regulatory impediments to competition, both in the private and public sectors of the economy, which contributed to the surge in productivity growth in the 1990s. However notwithstanding two decades of effort, various anticompetitive regulations remain. These are all well known (PC 2005e). They remain in place not because they have

been found to be justified in the public interest — on the contrary, most studies have found their efficiency costs to be unwarranted — but rather because of the political clout of their beneficiaries over the years.

A second category of identified regulatory reforms that could be expedited to assist with economic recovery is 'redtape' — business compliance burdens that exceed what is necessary to meet legitimate regulatory objectives. They were a 'sleeper' for many years, accumulating even as major advances were being made on the competition front. The Regulation Taskforce (2006) estimated in 2007 that they could be adding \$8 billion to the costs of doing business, the removal of which, the Commission estimated subsequently, could boost GDP by nearly \$12 billion (PC 2006b).

Repositories of 'reforms-in-waiting' at the Commonwealth level, include those in the Productivity Commission's series of reports surveying redtape burdens, including most recently, in important areas of social and economic infrastructure (PC 2009b). The Regulation Taskforce's initial wide-ranging stocktake, which preceded these, also still contains some recommendations waiting to be implemented.

Equally, while there is now a commendable focus on advancing reforms to some 27 regulatory 'hot spots' that add to the costs of doing business across jurisdictions, no reforms (other than wine labelling!) have yet been implemented. Less than half are on track for completion within the original timeframes. Nevertheless, it should be noted that these include such important areas as trade licencing, health workforce registration/accreditation, consumer policy, standard business reporting, and upstream petroleum regulation. Given the long history of resistance to reform in those areas, the progress that is being made is to be applauded. The challenge is to use the common imperative now facing all governments, to progress all the reforms within a time frame that can assist economic recovery.

Minimising new burdens

Under the heading of 'avoiding unnecessary new regulatory burdens', which could compromise economic recovery and inhibit productivity growth in the long term, are three contentious areas of regulation that will need close attention: industrial relations, carbon emissions reduction and financial markets. All three have pervasive effects throughout the economy and all inevitably require tradeoffs to be made between competing objectives, of which economic efficiency and productivity impacts are only one. Getting the balance right will be crucial both in the short and long terms.

In the case of industrial relations, legitimate concerns for workers' rights need to be balanced against the flexibility that firms need to implement the organisational changes and other innovations on which productivity growth ultimately depends. It will be important for industry performance and employment alike that enterprises preserve the ability to engage effectively with their employees, so as to implement work arrangements that best meet commercial imperatives. As the economy evolves, different firms and industries will face divergent pressures and needs that are not amenable to the enforcement of common conditions.

In relation to carbon emissions reduction, Australia faces regulatory challenges on an unprecedented scale. Abstracting from the (important) questions of initial scheme design and timing, it will be crucial to monitor CPRS implementation in a way that enables timely adjustments to the framework in the light of experience; and secondly, to rationalise the myriad of other regulatory measures directed at the same objective — which will serve mainly to raise the costs of emission reduction. Foremost among these, is the new 20 per cent National Renewable Energy Target.

The third area where we need to be careful to get the balance right in any new regulation is the finance sector. Regulatory failings in the United States were clearly implicated in the global financial crisis. While Australia did not share those failings — on the contrary — there is considerable pressure for us to impose 'stricter' regulation. There is much at stake in getting this right. Financial regulation needs to steer a course between the risks and costs of financial instability — and its potential contagion effects on the real economy — and the risks and costs of stultifying competition, innovation and ultimately the productivity of this key sector — and the adverse economy-wide impacts that these too would have.

Financial flows are the life blood of the economy. Prior to the liberalisation of financial markets in the 1980s, the system could be said to have been very 'safe', but credit was costly, hard to get and poorly allocated. The relaxation of credit controls and barriers to competition drove major innovations and cost reductions that boosted economic growth. Any response to the recent excesses and poor risk management in the United States should not overlook these benefits.

To illustrate the possible impacts of 'excessive' re-regulation among OECD countries, the Commission conducted some simulations using the GTAP model of the world economy (PC 2009a), which suggest that for every 1 per cent decline in the productivity of financial services, and 1 per cent rise in its cost, global output would be 0.5 per cent lower than otherwise (equivalent to \$350 billion).

This underlines the importance of ensuring that any changes to the regulation of financial markets and institutions are made only with the benefit of a careful

analysis of the problems being targeted and the likely costs and benefits of alternative options for addressing them. There is a particular danger in making changes to specific parts of the regulatory framework unless the likely ramifications on the system as a whole can be tested. There is no substitute for public consultation as a means of avoiding unintended consequences.

Good processes for testing the need for regulation and formulating it are going to be especially important in the fiscally constrained circumstances that lie ahead. There will be stronger pressure to resort to regulatory means of achieving policy goals that might otherwise be best pursued through budgetary measures. Are our regulatory assessment processes up to this challenge? It is still not clear that they are.

Rethinking infrastructure

Government spending on infrastructure has begun to acquire the status of a 'cure all' in the public consciousness. Before the financial crisis, it was seen as the key to reversing Australia's productivity slump. Once the crisis hit, it was seen as a key mechanism for stimulating employment. In reality, infrastructure spending is not and cannot be a panacea in either setting.

It is well known that major projects are not a good counter-cyclical spending vehicle because of their long lead times. Of course, as the IMF's Olivier Blanchard has observed, if sound projects had already been identified and were ready to go, this problem would be mitigated. But that was not the case in Australia, nor in most other countries. Instead, priority was given to many smaller scale, so-called 'shovel ready' projects, and the pre-existing processes for identifying beneficial larger scale projects were accelerated. Further impetus to government spending in the latter area was gained from reports of the drying up of private capital as the GFC took hold.

One of the attractions of public infrastructure spending for macro stimulus purposes, is that it involves once-off budgetary outlays, rather than recurrent expenditures. But it still has long-term economic effects (PC 2008e, 2009a). Projects that are well selected, with high benefit-cost ratios, should yield social returns that more than cover the financing costs over time — with a 'win, win' for the short and long terms. However, poorly conceived or executed infrastructure investments can impose a double burden on the community: with future generations having to service higher debts from incomes that are lower than they would otherwise be.

Indeed, it could be argued that any stimulatory spending on economic or social infrastructure that did not yield a net benefit would be inferior on efficiency (national productivity) grounds, to giving the money to households for discretionary

spending. At least such payments are likely to end up being directed to valued goods and services (even if not all domestic in origin) at prices that reflect costs.

Scope to further modify existing plans?

One consideration, much debated, is how much scope there may be to recalibrate or defer existing spending plans in order to pursue a bigger productivity bang for the taxpayer's buck.

Among the infrastructure spending that is primarily stimulus-based, the main potential candidate is the school buildings program. This was designed to provide a relatively early boost to employment across the community, given ready access to school land and its dispersed location. A need for speed was met through a degree of uniformity in the type and construction of buildings permitted, rather than potentially drawn-out identification of projects attuned to the particular needs of each school community. Might there be more scope now to change tack? It would at least seem worthwhile to consider whether changes could be made wherever clear educational benefits could be demonstrated, such that any transaction costs of change would be worth incurring.

A second potential source of productivity gain, now that some of the pressure is off, are those larger scale 'nation-building' infrastructure proposals that were brought forward and selected without the opportunity to conduct adequate cost-benefit analysis (PC 2009a). It would be desirable to delay the progression of such projects, until this can be remedied.

There are two 'urban myths' about cost-benefit analysis (CBA) that appear to be gaining currency. One is that they need to be kept confidential because of commercially sensitive material. This conflates CBA with a competitive bidding process. An effective CBA can be conducted (and made public) in advance of seeking tenders. Once the tender is chosen it can be refined and made public again without disclosing commercial-in-confidence details. Taxpayers deserve to know on what basis their money is being spent and external scrutiny provides a useful discipline on the decision makers' calculations. The second myth is that CBAs cannot be conducted where there are non-financial costs or benefits (like environmental impacts). Such impacts will be implicitly valued anyway. CBA merely requires that those valuation judgements be transparently tested.

Removing impediments to private investment

While it is clearly important to ensure that publicly-funded infrastructure is well designed, and allocated where it can yield the highest social return, public spending is only a fraction of private spending and will face considerable budgetary constraints in the years ahead. A key issue, therefore, both for the short and long terms, is how to facilitate greater private investment in infrastructure and help ensure that it is efficiently allocated.

There is an established agenda of reforms here that have strong empirical support and could be implemented in the near term — without incurring any public expenditure.

- One is regulatory overreach that discourages and distorts private investment. One major example identified a few years ago in the Commission's airports inquiry is the need to legislate to bring back an adequate regulatory threshold for successful third party access to major infrastructure investments (PC 2006c).
- Another is the need to rationalise or simplify the complex, multi-tiered approval processes for major projects. For example, the Commission has estimated that, in the case of upstream oil and gas projects, delays can cut billions of dollars from the NPV of major projects (PC 2009d).

Getting more out of the 'stock'

While the flow of new investments in infrastructure is important to future productivity, even more important is the efficient utilization of the existing *stock*. Much of this is in the public domain (for example, water, transport and energy) and there is a further well-established agenda of productivity-enhancing reforms awaiting implementation (BCA 2009; PC 2005e, 2006b, 2007a, 2008a, 2008e). Two of the more important areas, which are not unrelated, involve deficiencies in the *governance* of government infrastructure businesses (including lack of independence, accountability and proper project assessment processes) and secondly, deficiencies in the *pricing of* infrastructure services.

These have been much discussed. I would just re-emphasise that without appropriate governance and pricing of public infrastructure services, existing assets cannot be used efficiently and new investments will often be mis-timed and poorly directed. Many Australians are having to cope with the consequences of this everyday in the water shortages and traffic congestion that detract from the liveability of our cities, with electricity black/brown-outs becoming more common. These problems underline the reality that infrastructure is not an end in itself, but a means of enhancing the wellbeing of the community. Policy makers need to act on

the recognition that better outcomes cannot be achieved through government spending alone.

Other reform imperatives for future productivity growth

Reforms in the above three areas have been singled out because they would yield early productivity dividends without calling on scarce budgetary resources.

However, they represent only a sub-set of the wider suite of important reform areas under COAG's national reform agenda (PC 2006b, 2009a, 2009e). A crucial element for the long term is the 'human capital' agenda. As the name implies, this encompasses potential reforms to improve the population's health and skill levels, which are pathways to a more productive and participative workforce, as well as improved wellbeing. While, as the Commission has shown, this ultimately holds the promise of national welfare gains at least as great as those from the previous, competition-related waves of reform, realising much of it will take time and require higher levels of public investment. The scope for such expenditure has been reduced by the stimulus spending and the new challenge of restoring budgetary balance.

Even such tight fiscal constraints should not preclude spending on human capital investments with high net social returns, provided they are indeed genuinely high returns. However, this ups the ante on conducting rigorous assessments and trials before introducing any programs. Australia's record to date, like that of many other countries, does not inspire confidence. On the basis of many *ex post* evaluations, the eminent American sociologist, Peter Rossi, coined an 'Iron Law' that 'the expected value of any net impact assessment of any large scale social program is zero' (Rossi 1987). This should give us pause.

The fact is that human services already constitute a large proportion of the total outlays of governments in Australia, with health and education alone accounting for one-third (or some 15 per cent of GDP). How effectively is this money being spent? The answer is that we do not really know for sure, but there are a variety of indications of scope for productivity and efficiency gains that would not detract from service quality. One source of these is the annual Blue Book, commissioned by COAG precisely for this purpose, which reveals significant disparities in performance across jurisdictions for many human service areas (SCRGSP 2009). In its report on the National Reform Agenda, the Commission found potential to increase the productivity of health services that would alone translate to a \$4 billion gain in GDP (PC 2006b).

The goal in striving for more cost-effective service delivery is not merely to achieve existing service levels at lower cost, but to improve both, thereby achieving better outcomes for the community and for the economy.

A further important issue for productivity going forward is the degree of 'churn' in taxation and transfers to households. The conception of what constitutes 'welfare' has changed over time to be far more encompassing of the population and its needs than anyone might have imagined at the dawn of the system. The taxation raised to support subsequent transfers back to households imposes productivity costs of its own, with recent estimates suggesting deadweight losses from taxation of \$40–60 billion annually (excluding administrative and compliance costs) (Robson 2005). For every extra dollar in tax that is levied, there is a real resource cost of up to \$1.30.

It is therefore both timely and appropriate that parallel reviews are underway of the welfare and tax systems. The only regret is that the latter has not been given scope to consider making better use of the Goods and Services Tax (GST). Changes in the coverage and rate of the GST, as part of a wider package of tax reforms, could see us getting closer to the ideal of broadly-based taxation at relatively low overall rates and creating few distortions in economic activity.

In sum

Australia's economy has once again proven highly resilient in the face of major global pressures. However the demand stabilisation measures to achieve that have left a fiscal legacy that will present additional policy challenges in the years ahead. Reforms that can reduce business costs and improve organisational flexibility and capability are needed to support recovery and generate additional productivity gains. Policy actions in this area over the past two decades have held us in good stead, but they will not be enough. Having grappled successfully with the major challenges of the past year, we now need to re-focus on a productivity agenda for prosperity into the future.