

new directions

OCTOBER 1999

DISCUSSION PAPER 2

avoiding boom/bust:
macro-economic reform
for a globalised economy



BUSINESS
COUNCIL OF
AUSTRALIA



A copy of this paper and other
New Directions material is available
at www.bca.com.au/newdirections

We welcome feedback on this
discussion paper on our home page
www.bca.com.au/newdirections
or by e-mail at new.directions@bca.com.au

Published by:
Business Council of Australia
Level 16
379 Collins Street
Melbourne 3000
GPO Box 1472N
Melbourne 3001

Copyright © Business Council of Australia 1999

All rights reserved. No part of this publication can be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher.

ISBN: 0 9577085 1 3

avoiding boom/bust:
macro-economic reform
for a globalised economy

The world economy is still a very uncertain place

The Treasurer, Budget Speech, 11th May, 1999

*A key reason why growth rates differ across countries is
that macro-economic stability differs across countries*

Jonathan Temple, Oxford University, 1999

macro-economic reform for a globalised economy



Foreword

More than two decades of reform have helped to open Australia's economy – and society – to the world. The changes have delivered many great benefits: they have enhanced productivity, created wealth, and enabled our community not simply to weather the ravages of economic turmoil that have swept across our region, but to flourish.

Yet for all the gains that reform has delivered, it seems our biggest challenge – unemployment – remains. Far too many have not shared in the prosperity reform has delivered. Unemployment has only recently dipped below 8 per cent and signs are emerging that recent momentum may stall as Australia's economy slows in response to slowing world growth.

That is why we established New Directions. As we thought about the problem of unemployment, it was clear to us that any lasting solution to it must be multi-faceted. Any sustained attack on unemployment needs to do at least three things:

1. Refashion our labour market so it will better convert economic growth into jobs growth;
2. Avoid recession, or where we cannot, ameliorate its worst effects; and
3. Maintain our momentum in modernising our economy and improving productivity.

These three pillars of a sustained attack on unemployment are embodied in the three discussion papers we will be issuing in this phase of New Directions. We have already released the first discussion paper – *Rebuilding the Safety Net* – aimed at tackling poverty traps, stimulating demand for labour and doing so without undermining support for those on low incomes.

This, the second discussion paper, explores territory marked out by the second pillar set out above. Over the last 15 years we have 're-made' almost every market in Australia. Sometimes those with vested interests have objected, but the rewards are now apparent. Productivity growth has more than doubled, and the crisis of 1997-98 saw the Australian economy accelerate whilst most in the region and many countries elsewhere were in varying degrees of economic slowdown, gloom or crisis.

We have made some momentous and welcome changes to our macro-economic management over this time. We floated the Australian dollar and refashioned the financial system. We strengthened the independence of our central bank and progressively improved fiscal transparency, culminating in the *Charter of Budget Honesty*. But we have not really subjected the institutions of macro-economic management to the rigorous scrutiny to which we have subjected our micro-economic institutions. This discussion paper seeks to begin this process.

As with the previous discussion paper, this one is not a finished package of reform. Rather it seeks to inject important and new ideas on to the centre stage of policy debate in Australia. Our aim in this exercise is to encourage a constructive dialogue.

If people have other views we would encourage them to come forward with them.

As a country the problem of unemployment, the greatest of all social problems, requires of all of us innovative and fresh ideas. If you wish to contact us, you can write, or e-mail us at new.directions@bca.com.au

In establishing New Directions, we have been guided by our vision for Australia.

We want to grasp the opportunity for Australians to enjoy the world's best quality of life and standards of living, which are amongst the highest in the world.

We want jobs for all who can work, support for the disadvantaged and a fair go for everyone.

We want to be a community of Australians, united in our diversity, proud of our achievements, creating wealth and work for all.

It is a future within our grasp. We know it is not a vision that will simply appear – it is one that needs sustained effort to achieve. And the effort must come from us all. Yet the rewards make it a task worthwhile – by working together we can build a fairer, more optimistic and more prosperous, but most importantly, a more fully employed Australia.

Tony Berg
Chairman
New Directions Task Force

Contents

| | |
|---|-----------|
| Foreword | 5 |
| Executive summary | 9 |
| 1. Introduction | 13 |
| 1.1 The international context | 14 |
| 2. The costs of recession | 17 |
| 2.1 Vulnerability to global economic downturns | 18 |
| 2.2 A case for optimism | 20 |
| 2.2.1 <i>Economic maturity – a moderating effect on the economic cycle</i> | 20 |
| 2.2.2 <i>Improvements in macro-economic management</i> | 22 |
| 2.2.2.1 <i>Labour market reform</i> | 23 |
| 2.2.2.2 <i>Improved monetary and fiscal policy</i> | 23 |
| 2.2.3 <i>Remaining impediments</i> | 24 |
| 3. Enhancing Australia's macro-economic performance | 26 |
| 4. Improving labour market efficiency | 27 |
| 4.1 Short term wage flexibility | 27 |
| 4.1.1 <i>Utilising bonuses to provide short term wage flexibility</i> | 28 |
| 4.1.2 <i>Short term labour market flexibility and short term labour market efficiency</i> | 29 |
| 4.1.3 <i>Other benefits of risk sharing</i> | 31 |
| 4.2 Implementation | 35 |
| 5. Re-engineering fiscal policy | 37 |
| 5.1 Modern fiscal management: Current problems and issues | 38 |
| 5.2 Independent fiscal policy management – a more flexible taxation regime | 43 |
| 5.2.1 <i>Reducing policy 'lags'</i> | 43 |
| 5.2.2 <i>Increasing policy credibility</i> | 43 |
| 5.3 Implementing independent fiscal policy management | 45 |
| 5.3.1 <i>Coverage of fiscal discretion</i> | 45 |
| 5.3.2 <i>Extent of independence</i> | 47 |
| 5.3.3 <i>Criteria for policy management</i> | 48 |
| 5.3.4 <i>Extent of discretion</i> | 48 |
| 5.3.5 <i>Macro-economic co-ordination</i> | 48 |
| 5.4 Towards more fiscal flexibility and independence | 48 |
| 6. Savings policy and the cycle | 53 |
| 6.1 Introduction | 53 |
| 6.2 Australia's national saving | 53 |
| 6.2.1 <i>Superannuation in Australia</i> | 54 |
| 6.2.2 <i>Savings and the constraints on Australian economic and employment growth</i> | 55 |
| 6.3 Enhancing national saving | 57 |
| 6.4 Towards a more flexible superannuation system | 59 |
| 6.4.1 <i>Reduced budgetary impact</i> | 61 |
| 6.4.2 <i>Greater community acceptance</i> | 61 |
| 6.4.3 <i>Increased policy choice</i> | 61 |
| 6.4.4 <i>Next steps</i> | 62 |
| 7. Conclusion | 67 |
| Appendix | 68 |
| Bibliography | 71 |

macro-economic reform for a globalised economy

Executive summary

Since the mid-1970s, Australia has suffered three major recessions. Each has driven unemployment higher and simultaneously tested the community's resolve in facing the future with confidence.

The current international climate has improved over 1999. But imbalances in the world economy mean that we cannot rule out further instability. In plausible scenarios for the future – for instance a major correction on US stockmarkets – a major recession looms as a real possibility. Even without an international recession, Australia's trading patterns, its location and its foreign debt render it unusually susceptible to damage from the international difficulties experienced so far.

Ironically, just as difficulty and threat have loomed, the rewards for our past successes have most clearly emerged. Our improving trade, productivity, fiscal and inflation performance all helped 'inoculate' us against the contagion that infected Asia, Russia and Latin America.

Our growing economic maturity, together with reforms such as financial deregulation and tariff reform, have moderated some of the drivers of Australia's macro-economic instability.

We have also learned much from past mistakes.

Our technical understanding of macro-economic management in a world of deregulation and free capital flows has improved. Our ambitions are more modest – we no longer seek to precisely 'fine tune' growth to its optimum at all times throughout the cycle.

Perhaps more importantly, our institutions of macro-economic management have evolved. Monetary policy is now much more independent, and is seen to be so both by the community and financial markets. One economist recently described Australia's management of monetary policy as 'close to world's best practice'.

Changes throughout the 1980s, culminating in the *Charter of Budget Honesty*, have also made fiscal policy more accountable and transparent.

These developments improve our confidence that monetary and fiscal officials can judiciously exercise the discretion that will inevitably remain part of macro-economic policy.

We can build on these reforms. Already it is possible to identify new directions for reform that have the potential to further systematically improve the flexibility of the Australian economy and our institutions and tools of macro-economic management.

They include:

- **improving short term labour market efficiency**

The closer wages reflect economic conditions, the more supple the economy will be in responding to unexpected developments. Wages could be brought more closely in line with economic conditions where a component of wages is sensitive to firms' profits.

macro-economic reform for a globalised economy

More widespread profit sharing¹ would ensure that the burden of adjustment in the face of economic downturn could be shared broadly throughout the economy in the form of lower business profitability and small, short term reductions in wages, rather than through plant closures, sackings, abandoned recruitment and the resulting higher unemployment. By the same token, in the midst of good times the benefits could be rapidly diffused through the community as higher wages.

More widespread profit sharing would make profits less volatile, thus moderating the business cycle. By doing so it would lower investment risks for firms and so increase investment.

In addition it would provide employees with incentives to work harder and smarter to improve their employers' profits – and, of course, their own wages.

Increasing the use of profit sharing should not be compulsory – as it may not suit the circumstances of all workers and businesses. It is already being pursued within some firms on a voluntary basis. This trend could be intensified with government playing a facilitative and encouraging role and seeking to remove any institutional impediments that may be preventing more widespread use of profit sharing.

- **re-engineering fiscal policy**

Our fiscal policy institutions are currently less developed and – as a direct result – less effective than our monetary policy institutions. Two issues are paramount.

The first is the speed with which policy can respond to economic developments. Monetary officials can respond immediately, but spending changes often require considerable planning and co-ordination, and tax changes require parliamentary approval. These things mean that at present fiscal policy is much less capable of rapid adjustment to evolving economic conditions.

The second is the independence of policy from political influence. The stance of monetary policy is set by expert officials who consult closely with, but operate independently of, the government of the day.

New Directions examines both these issues, exploring the scope to re-engineer our institutions to increase the timeliness and independence of fiscal policy. We could legislate to permit small across the board changes in tax rates within one or more major tax areas (e.g. personal income tax, corporate tax and/or indirect tax). And we could give politically independent officials an important role in managing the fiscal stance.

This would re-engineer fiscal policy institutions along the lines of our very successful monetary policy institutions. This would broaden the base of macro-economic policy, lessening our reliance on monetary policy. In so doing it would improve our macro-economic management capabilities. It would also substantially improve policy

¹ Schemes which do not strictly relate wages to profits – such as performance pay of various kinds – will often bring about a situation in which variations in the rate of pay will correlate with firm profits. Such approaches to remuneration are accordingly within the spirit of what is discussed in this paper.



credibility – a prerequisite for policy effectiveness for a small open economy such as Australia's.

- **broadening the scope of savings policy**

To increase our savings, Australian policy mandates a gradually rising minimum compulsory contribution to superannuation.

This medium to long term objective has been embraced by the community and should be maintained. Yet we should simultaneously allow compulsory super contributions to meet short term macro-economic stabilisation objectives – for example, by allowing some short term variation in compulsory superannuation contributions.

Thus, when macro-economic policy required tightening, the requirement to contribute to superannuation could be increased. By contrast, where economic stimulus is called for, there may be occasions where temporarily lowering the superannuation contribution rate would be an appropriate instrument.

In each of these areas, New Directions does not seek to put forward a blueprint. Rather, it seeks to explore an agenda. In each case the reforms suggested are sufficiently new and sufficiently major to require much further thought before policy action is taken. The material presented here should be seen as the beginning rather than the end of a discussion about building on our past successes and learning from our failures.

The difficult international situation may offer an ideal combination of economic and political circumstances for moving in the directions identified. Increased use of bonuses might offer workers and businesses an attractive way of deferring some of the wage rises that might otherwise be appropriate until world economic growth picks up.

If growth falters in Australia it may be appropriate to ease macro-economic policy. But the key to the success and economic responsibility of any such measures would be the community's and the markets' firm expectation that they were temporary. The kinds of arrangements explored here could provide the appropriate institutional framework for such policies.

One possible measure of the benefits of macro-economic reform is to ask how much better our economy might have performed had these policies been in place over the last decade. Our modelling work suggests that these policies could have delivered higher incomes and employment growth, lower income taxes and reductions in foreign debt.

In essence, these reforms would enable us to share both the benefits of economic prosperity and the burden of economic difficulties more broadly throughout the Australian economy and community. In doing so, they would make our economy more supple, more efficient and fairer.

Based on the very conservative modelling presented in this paper, it is possible to suggest that the improvements explored here could improve Australia's management

macro-economic reform for a globalised economy

of the economic cycle over the next decade sufficiently to add approximately 170,000 more jobs to the economy than would otherwise be the case.

The level of unemployment in Australia today is unacceptable. It imposes costs that can never be recovered. It weakens us as a nation by undermining our confidence. It tears at the fabric of our society.

By working together, we can place Australia back on the path to full employment. The agenda for macro-economic reform explored in these pages can address urgent matters, discussion of which which could not be more timely. It could help avert a slowdown in Australia should the threat of one materialise. And it can help stabilise economic growth in Australia in the years and decades ahead.



Even with the best economic management, small open economies remain vulnerable. They are like small row boats on a wild open sea. Although we may not be able to predict it, the chances of eventually being broadsided by a large wave are significant no matter how well the boat is steered. Though to be sure, bad steering probably increases the chances of disaster and a leaky boat makes it inevitable, even on a relatively calm day.

Joseph Stiglitz, Senior Vice President and
Chief Economist, The World Bank, 1998.

1 Introduction

Since the mid-1970s, Australia has suffered three major recessions – each of which has driven unemployment higher and simultaneously tested the community’s resolve in facing the future with confidence.

These recessions have transformed Australia from the economy of full employment during the post-war decades to the persistently underemployed nation that Australia is today. The primary purpose of this discussion paper is to examine ways of improving Australia’s macro-economic performance so as to limit the impact – and, to the extent possible, prevent the onset – of recession in the future.

The importance of this challenge is illustrated by detailing the heavy costs borne by the community as a result of recession – in terms of lost economic prosperity, jobs and lower social wellbeing – and by noting the ways in which Australia is particularly prone to the economic cycle.

However, as this discussion paper outlines, there is a case for optimism about the future

- First, some of the drivers of macro-economic instability have moderated with growing economic maturity and economic reform. With continuing maturation and continuing reform, the drivers of instability will moderate further.
- Second, we have learned (and are continuing to learn) from our mistakes – that is, our technical management of the economic cycle has improved and we have improved the institutions which govern our management of the economic cycle
- Third, there are a variety of ways in which our institutions of macro-economic management can be further enhanced. It is these new horizons for reform that are the principal focus of this discussion paper.

The medium and long term case for optimism must, of course, be balanced against the shorter term threats which are discussed in the next section.

macro-economic reform for a globalised economy

1.1 The international context

Three years ago the international economic environment looked remarkably benign. The Japanese had been slow to sort out domestic economic problems and their economic growth had accordingly been disappointing. However, the rest of Asia continued to grow strongly. Europe was emerging vigorously from an earlier slow-down. And the United States had been growing steadily for more than five years. In the United States, full employment was being achieved without rising inflation and important internal and external economic imbalances were gradually being addressed.

Today the landscape is different. After more than a year of turmoil and crisis the economies of the region appear to be recovering. But they are smaller economies than they were. The United States remains the engine of world growth, but there are fears about how stock market revaluation might affect that growth. Other large economies remain subdued.

So far, the Australian economy's response to the crisis and its aftermath has been exemplary.

Wide-ranging reforms have made our economy more productive and more resilient to changes in the external economic environment. Micro-economic reform has made us more productive, and wholesale changes to our financial structure, and a resolution to reduce fiscal deficits in the last few years, enabled continued economic growth in the face of great international threat.

Adjustment was facilitated by a depreciation of the Australian dollar. Earlier financial reform and low corporate exposure to debt enabled the Australian economy to manage the transition without the crisis that attended similar depreciations in Asia. The floating exchange rate and high levels of financial prudence, transparency and sophistication, all of which emerged from financial deregulation in the 1980s, have made their contribution. These settings enabled Australian monetary conditions to be eased during the crisis automatically in line with market sentiment rather than through government decree. This helped maintain market confidence in Australia.

In addition, Australian economic officials managed the situation well – resisting pressure to tighten policy and indeed easing nominal interest rates as it became possible. This has been in contrast with policies which were pursued in other countries which, it can be appreciated with hindsight, exacerbated disinflationary and even deflationary market forces.

Although Australia's financial structure remains sound, the crisis has taken its toll on Australia more gradually, most particularly through reduced export demand.

Australia's continuing strong growth has given us valuable breathing space. But this should be used to focus on the problems and threats awaiting us. It should most assuredly not engender complacency. Australia has weathered the global crisis with



easier macro-economic policy conveyed largely through a devaluation of our floating exchange rate compared with its value in mid-1997. This easing and the accompanying strong growth sheltered Australia from the rising unemployment of our region. Indeed while unemployment rose in our region it fell, and has kept falling in Australia. At the same time continuing strong growth has widened the gap between Australia's appetite for imported goods and capital and our performance as an exporter and investor abroad.

Until the crisis, Australia was improving its performance on the current account.

Despite a long period of steady and relatively strong growth, the current account deficit for the year to June 1997 was 3.7 per cent of GDP. It has increased substantially since then and, as the Treasurer's forecasts suggest, will rise further. It may rise above 6 per cent of GDP for some time. This would be unhealthy if maintained over a long period, but it represents an appropriate response in current circumstances.

Maintaining high domestic growth and tolerating high current account deficits 'cushions' the effect of slower global growth on Australia and so the extent to which it feeds into unemployment in Australia.

The question is how much can we cushion the economy in this way, for how long, and for how long can we maintain the confidence of foreign investors on whose funds we must continue to draw if we are to finance external deficits? The New Directions agenda explores new means of giving Australia the kind of flexibility on this score that we need, whilst retaining the confidence of international markets.

Further, if the world demands less of the goods we produce and we are unwilling or unable to increase our foreign borrowing beyond a certain amount, there are two ways in which the resulting fall in Australian national income can be accommodated. The employed can continue to receive the incomes they would otherwise receive – in which case, other things being equal, falling national income will lead to reduced employment. Alternatively, we can all share some sacrifice in the standards of living we might otherwise expect. Again, the New Directions agenda explores options that might make more possible the latter kind of adjustment.

The ideas explored in this paper are ideas for institutional reform and re-engineering for the medium to long term. However, the difficult international situation may offer a combination of economic and political circumstances for moving in the directions identified. Increased use of bonuses might offer workers and businesses an attractive way of deferring some of the wage rises they might otherwise agree to until economic times are better. For workers, bonuses may offer a better alternative than wage rises which, though they are the same in cash terms in the short term, will not automatically rise with rising profitability. For employers with currently low profitability, bonuses offer a way of keeping faith with the workforce whilst moderating the immediate cost of wage rises in the short term.

macro-economic reform for a globalised economy

Also, at some stage it may be appropriate to ease macro-economic policy in Australia in response to economic slowdown. But the key to the success and economic responsibility of any such measures would be the firm expectation of both the community and the market that these easings were temporary.

The kinds of arrangements explored here could provide the appropriate institutional framework for such policies. Indeed, a creative response to an economic downturn, or the threat of a downturn, might provide an all too rare opportunity for their introduction.

It would be difficult to introduce more independent management of fiscal and savings policy where they were associated in the public mind with austerity. Circumstances of temporary difficulty allow the arrangements to be appreciated more truly for what they are – measures that will allow us to grow faster and indeed run looser policy when appropriate, by guaranteeing that policy will always be responsible and capable of timely response to economic developments.



2. The costs of recession

Recessions lower the long run rate of growth, and thus the capacity of the economy to increase its active workforce at any given average wage (Macfarlane, 1997; DeBelle and Vickery, 1997; Caballero and Hammour, 1996).

Recessions also impose significant dislocation and transition costs that cannot be recovered. These costs are not borne solely by individuals who are displaced from their jobs and seek to move on to others. A burden is also placed on the general community through welfare payments and other subsidies to job search and training, and on businesses in the form of lower productivity and higher costs while employees are being trained in new skills.

More broadly, recessions have the effect of ‘ratcheting up’ unemployment. Unemployment tends to rise with frightening speed during recessions, while the periods of recovery and growth between recessions see only very gradual progress in reducing unemployment. Experience suggests this is because firms often restructure their activities and downsize their operations during times of recession. As these firms come out of recession more productive, the tendency is for them to take on new workers only gradually.

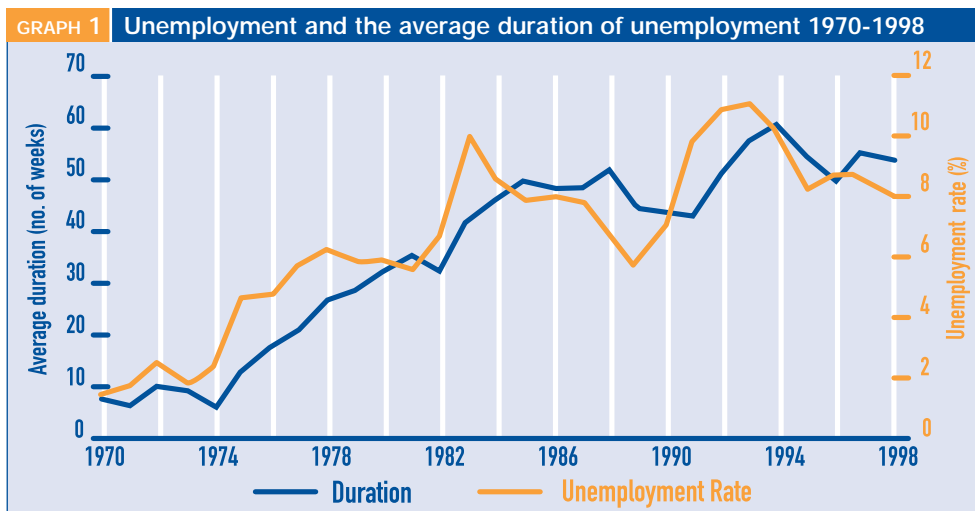
Since the mid-1970s, Australia has encountered each serious recession before – often long before – we have returned to anything resembling full employment.

In Australia, this ‘ratchet effect’ has proved particularly strong for long term unemployment. After the first months of a downturn, long term unemployment has tended to rise (as a proportion of unemployment) as unemployment itself rises. In part this is because once workers are out of the active workforce their skills and job-readiness atrophy. It is an outcome that is particularly costly, because long term unemployment is very hard to reduce without active and expensive labour market programs.

Graph 1 illustrates the role recession has played in driving unemployment in Australia. Even in the sustained recovery from 1983 to 1989, reducing unemployment proved difficult. It took seven years of strong and sustained employment growth (of around 3.5 per cent per annum) to get unemployment from over 10 per cent in 1983 back to the 1982 unemployment rate of about 6 per cent. Yet this performance involved a degree of overheating of the economy, with its own deleterious effects.

Even after unemployment had returned to its 1982 level, more long-lasting damage had been done to the labour market. The average period of unemployment rose from about eight to approximately 10 months. Today, after a similar period of economic growth – though with lower employment growth – our unemployment rate has only just begun to dip below 8 per cent and the average duration of unemployment has blown out to about a year.

macro-economic reform for a globalised economy



Understandably, major recessions are frightening affairs that test a nation's resolve. Recessions, and the dislocation and unemployment they bring, fuel insecurities.

Recessions also bring forth doom-sayers who seek a return to past verities, however impracticable such a course might be. Just as many blamed the 1975 recession on the structural adjustment associated with the tariff reductions of 1973, so the blame for the last recession and the job insecurity that has come in its wake has often been popularly associated with micro-economic reform. In fact, in both cases, the effects of recession have swamped any negative effects of structural reform (Gruen, 1975; Industry Commission, *Annual Report* 1995-96). And along with the negative effects of structural change come many benefits that militate against recession.

2.1 Vulnerability to global economic downturns

The need to improve Australia's macro-economic performance is made greater still because of our vulnerability to global economic downturns.

Since the 1970s, recessions in Australia have coincided with global economic downturns, yet they have tended to be worse than the global downturns of which they were a part.

One reason for our relatively poor performance in this regard is that Australia's economic cycle is unusually difficult to manage. (See also Phipps and Sheen, 1995.) The large share of commodities in Australia's exports makes its terms of trade more volatile than for most other OECD countries



BOX 1 What if Australia had handled its downturns better?

In only four years between the sixties and today has total employment fallen – 1974, 1982, 1991 and 1992. Imagine two alternative scenarios. In the first, instead of total employment falling in the two lowest years of employment growth – 1982 and 1991 – imagine that it had simply failed to grow. In the second, imagine in those two years that we had enjoyed the average annual employment growth over the period of 1.8 per cent.

For both scenarios, assume also that the participation rate rises in response to higher employment levels. Today's participation rate is about 63.0 per cent. First assume that the participation rate would be the maximum experienced over the period – 63.9 per cent; second extrapolate a sharp rise in participation over the period to a rate of 65.4 per cent.

The following table compares Australia's current employment position with the predicted outcome under each of these different scenarios.

TABLE 1 Employment levels under alternative scenarios of employment growth and participation²

| | Employment (000s) | Unemployment (000s) | Labour force (000s) | Unemployment rate (%) |
|--|----------------------|------------------------|------------------------|--------------------------|
| Actual (April 1999) | | | | |
| Participation – 63.0% | 8,714 | 705 | 9,419 | 7.5 |
| Scenario 1: Zero employment growth replaces negative employment growth | | | | |
| Participation – 63.9% | 9,081 | 472 | 9,553 | 4.9 |
| Participation – 65.4% | 9,081 | 696 | 9,777 | 7.1 |
| Scenario 2: Average employment growth replaces negative employment growth | | | | |
| Participation – 63.9% | 9,414 | 139 | 9,553 | 1.5 |
| Participation – 65.4% | 9,414 | 363 | 9,777 | 3.7 |

If employment growth had been zero rather than negative in 1982 and 1991, even with increased participation, unemployment would be 472,000 rather than the 705,000 it was in April. Even adjusting for a very sharp rise in participation, unemployment rates would still be below current levels – with community wealth and wellbeing greatly enhanced.

If the two worst years in the period had instead been average years, then, with a modest rise in participation, unemployment would now be around 139,000; little different to the unemployment of the 1960s. With a sharp rise in participation, Australia's unemployment would still be well below that of the United States.

The illustrative methods used here are very simple. We should not assume, for instance, that policy instruments exist that can turn the worst years into average years. Some might argue that – other things being equal – negative employment growth in one year makes it easier to take up the slack in subsequent years. If this is the case, the 'back of the envelope' calculations here could be unrealistically optimistic. On the other hand, emerging models of 'hysteresis' in the labour market suggest that 'momentum' in lowering unemployment in one period can assist in further lowering it in successive periods. In addition the first scenario above is fairly conservative.

All things considered, these counterfactuals provide important food for policy thought.

² The data in this exercise was generated by Professor Bruce Chapman of the ANU Centre for Economic Policy Research as part of a larger project which was presented at an ANU conference on population trends in October 1999.

macro-economic reform for a globalised economy

This volatility amplifies the economic cycle. When there is an international downturn, our terms of trade deteriorate – our export prices fall whilst the prices of imported manufactures and services hold their value. This is in contrast to some other countries with volatile terms of trade – for instance Japan. Japan's volatility is the mirror image of our own. For Japan, the cloud of a global economic slowdown comes with the silver lining of an improvement in its terms of trade.

Finally, Australia is a debtor nation. In part, this is because we are a young country with a growing population, and so investment opportunities within Australia outstrip our capacity to fund them from domestic savings. The resultant foreign borrowing helps maximise Australia's growth, but it does so at a cost. It exposes Australia to greater risk at times of investor nervousness and/or heightened uncertainty.

2.2 A case for optimism

Although Australia has a more difficult macro-economic management task than many other countries, there is a case for optimism about the future that is built on several foundations.

First, those features of our economy that make it prone to volatility are gradually abating. Second, poor management was a major contributor to the severity of past recessions and there is evidence our management is improving. Third, as will be discussed in the following sections of this discussion paper, a range of reforms is available that would enable Australia to improve its management of the economic cycle still further.

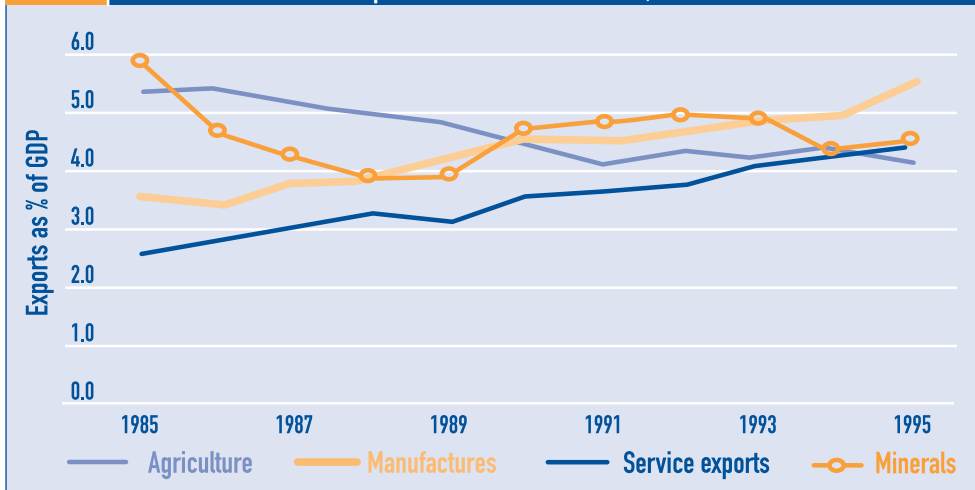
2.2.1 *Economic maturity – a moderating effect on the economic cycle*

Structural change in the Australian economy due to natural economic development and past economic reform has already helped to moderate the volatility of the Australian economy. The floating of the Australian dollar and abolition of exchange controls in December 1983 has removed one source of instability – large fluctuations in domestic monetary conditions from changes in external conditions. The recent instability of Asian currencies and the resulting crises in Asian economies – and the relative insulation of Australia from such instability – illustrates this point well.

Another factor has been trade liberalisation, which has underpinned a strong trend towards diversification away from Australia's traditional commodity export base. As the proportion of our imports and exports composed of commodities declines, our terms of trade become less volatile.

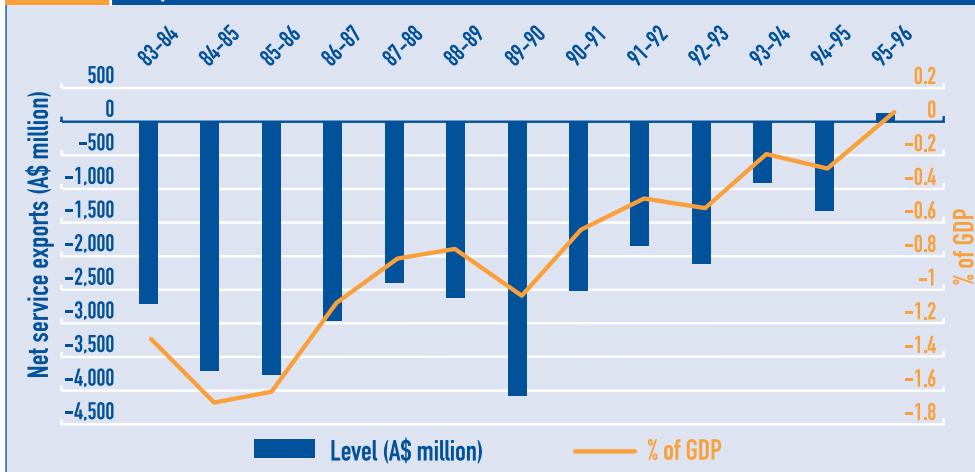
Since trade and payments liberalisation took hold in the 1980s, manufactures and service exports have grown much more strongly and steadily than commodity exports. Virtually the whole of the large increase in the export share of GDP from 1985 to 1996 was contributed by manufactures and services (see Graph 2), while strong export growth in services has driven Australia's services trade balance from a substantial deficit into surplus (see Graph 3).

GRAPH 2 Australia's sectoral exports as a share of GDP, 1985 to 1995^(a)



Source: Trade data are from UN Trade database; GDP and services data are from World Development Indicator 1997, World Bank. International Economic Databank, ANU (a) Manufactures include SITC 5, 6, 7 and 8.

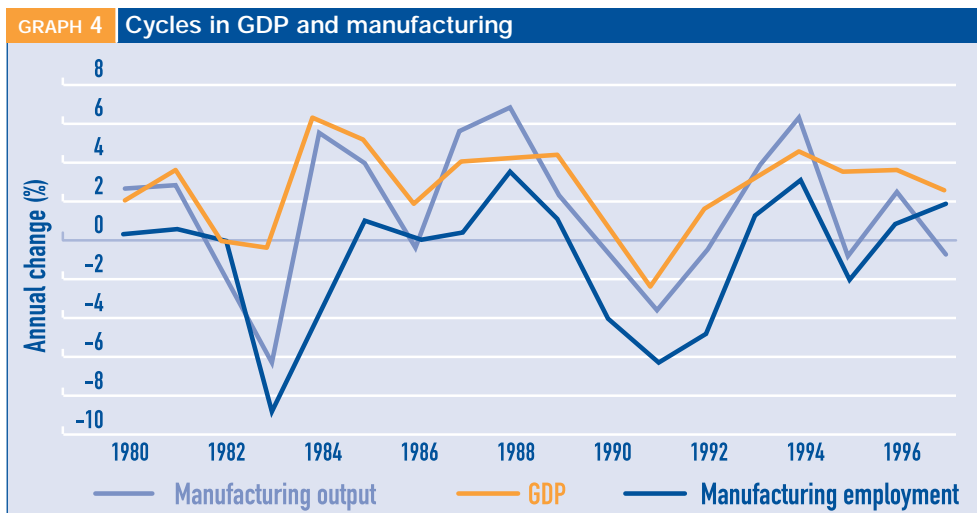
GRAPH 3 Surplus services account



Source: Asia Pacific Economics Group, 1997. Asia Pacific Profiles, 1997, FT Newsletters & Management Reports, Hong Kong

Manufacture and service export growth has also gone some way to insulating output and employment in these sectors from fluctuations in domestic demand. This effect is demonstrated by comparing the behaviour of manufacturing output and employment in the early 1980s recession with the early 1990s recession. The 1991–92 recession bit much deeper into domestic demand, and did so for longer than the recession of 1982–83, but it was associated with less sharp contractions of manufacturing output and employment (see Graph 4).

macro-economic reform for a globalised economy



Source: Asia Pacific Economics Group, 1997. Asia Pacific Profiles, 1997, FT Newsletters & Management Reports, Hong Kong

2.2.2 Improvements in macro-economic management

The inherent difficulty of stabilising economic growth in Australia has been made much worse by our own poor management.

The prelude to both the 1975-76 and the 1981-82 recessions was the toleration of real wage increases which (even at the time) were seen as far beyond the economy's capacity to pay. In both episodes, real wages rose by over 20 per cent in the two years preceding recession (Debelle and Vickery, 1998). The natural result was a sharp rise in unemployment. As these increases also came before global economic downturns, the adjustment to lower global prosperity was borne in Australia largely by those who became unemployed, rather than more broadly within the community. In periods when domestic prices and wages should have been moderating to spread the burden of adjustment to external economic downturns, Australian wages had surged and prices were rising apace.

The 1990-91 recession was sharper than it should have been because of over-reliance on monetary policy. Such economic tightening was inherently risky. Monetary policy has long and variable lags and several of the mechanisms through which tighter monetary policy works were either risky or inherently problematic in the circumstances – increasing firms' costs and depressing their investment expectations (this latter effect being very hard to predict with any precision).

Tight monetary policy also operated to increase the exchange rate. This worked against the country's longer term interests in the late 1980s, as one of the main rationales for tighter policy was the view that our current account deficit was becoming unsustainable.

Encouragingly, Australia appears to have learned from many of its past mistakes.

At the technical level, for instance, it is generally conceded that one lesson learnt from



the 1990-91 recession is that, where monetary policy is changed to influence the rate of economic growth, change should be transparent.

At a more fundamental level, our experiences have prompted an ongoing transformation of Australia's macro-economic institutions.

2.2.2.1 *Labour market reform*

After the 1981-82 recession, Australia set out on the long (and still incomplete) journey to reform its labour market institutions.

Initial reform focused on moderating aggregate real wages growth to maximise employment and to insulate the economy from the kind of wage breakout associated with the previous two recessions. First through the Accord and more recently through progressively greater labour market deregulation, substantial (though incomplete) progress has been made in this regard.

2.2.2.2 *Improved monetary and fiscal policy*

Since the last recession, the tradition of central bank independence has also matured.

In the early 1990s the Reserve Bank, seeking to consolidate the new low inflation that emerged in the wake of the deepest recession since the 1930s, began to articulate a vision of maximising economic growth subject to an inflation target of 2 to 3 per cent through the cycle. It began to assume, and to publicly commit to, independence in the conduct of monetary policy towards this end.

By the mid-1990s, there was growing confidence in the Reserve Bank's commitment to – and capacity to deliver – sustained, relatively steady monetary and economic growth and low inflation. This was encouraged by the Reserve Bank's willingness to tighten policy at signs of inflationary pressure as recovery gathered strength in late 1994 and early 1995.

There was some political debate in the 1990s about the merits of an even stronger monetary policy regime. Some argued that monetary policy should target the single policy objective of price stability (usually expressed as below 2 per cent inflation) with a legislatively protected independence for the Reserve Bank. In the event, a considerable shift to *de facto* independence and an inflation target of 2 to 3 per cent have been achieved without legislation, via an exchange of letters between the Federal Government and the Reserve Bank. The Federal Government has endorsed the Reserve Bank's target, and the Reserve Bank now talks of a tradition of independence.

The institutions of fiscal policy have become increasingly transparent. In addition to improvements in government budgeting processes of the 1980s and early 1990s, a *Charter of Budget Honesty* has been enacted. The *Charter of Budget Honesty* requires senior officials to sign off on periodic statements on the Budget outlook, making explicit the premises of the economic projections, annually and in the period preceding elections. This will improve the transparency and democratic accountability of Australian fiscal policy (see also below).

macro-economic reform for a globalised economy

2.2.3 Remaining impediments

While there have been significant improvements in macro-economic management, recent experience suggests that there remain numerous important impediments to using fiscal policy in the management of the economic cycle. This leaves an unnecessarily heavy weight on monetary policy.

Since the launch of the *One Nation* statement in 1992, it has been apparent that fiscal policy management has been subject to long lags in implementation. The recovery of 1992-93 took too long partly because of the delays experienced in implementing fiscal expansion. And just as expansion was delayed, so too was fiscal consolidation after recovery took hold. In the case of fiscal contraction, delays were experienced not only because of the nature of the organisational task involved but also because fiscal contraction – involving cuts in government spending and/or increases in the tax take – was considered unpalatable politically.

As a result, the recovery of 1992-93 became progressively the wrong recovery – one accompanied by unnecessarily large fiscal deficits. This required firmer monetary policy and so a stronger exchange rate through 1995 and 1996 than would otherwise have been necessary – slowing the natural diversification of the export base and more generally, investment in traded goods and services production. This was driven as much by the imperatives of the electoral cycle as by any misjudgement of the business cycle.

The *Charter of Budget Honesty* is a very important response to these problems. It will moderate some of the politicisation that has been a substantial source of economic instability in Australia. Nevertheless, the political incentives that have driven fiscal policy errors in the past still remain. The *Charter* is unlikely to constrain a government keen to avoid the opprobrium of cutting public expenditure or raising taxes – particularly before an election.

One forerunner of the *Charter of Budget Honesty* was the New Zealand *Fiscal Responsibility Act*. It was hoped that the *Fiscal Responsibility Act* would help tilt the balance of fiscal decision making away from the short term political considerations that had been influential in the past, and that it would facilitate a greater strategic and long term fiscal focus (Scott, 1995:3; National Commission of Audit 1996:278).

However, as Ruth Richardson, a former New Zealand Minister of Finance, has noted (1994:10), New Zealand's fiscal responsibility legislation "places an onus on the government to be explicit about its fiscal strategy, but is neutral as to what that fiscal stance might be".

Subsequent events in New Zealand have demonstrated the ability of politicians to unwind substantial fiscal consolidation notwithstanding the constraints of fiscal transparency legislation. Stronger fiscal transparency legislation in Australia may have moderated our fiscal laxity of the mid-1990s; however, it is unlikely that it would have delivered optimal outcomes. For instance, in New Zealand it did little



to blunt the electoral appeal of political parties offering to loosen policy upon their election to office.³

A further point should be noted. The stance of fiscal policy has typically been reported – both in government documents and more generally in the popular and financial media – in cash accounted terms. This has produced problems for the rational management of fiscal policy.

For example, since the difficulties of the last recession, governments at both federal and state levels have made public commitments to reduce government debt. Such public commitments to fiscal responsibility and consolidation are welcome, but the forms in which the objectives of fiscal responsibility are couched could be more helpful.

A simple commitment to reduce debt will produce a bias in government policy against government investment. This can stall important improvements to government-owned infrastructure and generate perverse incentives for debt to be shifted to the private sector (NSW Auditor-General, 1994, Harris, 1997). Government's holding of debt needs to be balanced against its holding of assets. The distinction between gross levels of debt and levels of government net worth is particularly important where governments face decisions about how and whether to invest in certain kinds of assets.

The move toward accrual accounting culminating in this year's Budget can be used to improve this situation by clarifying fiscal policy objectives. It is currently intended that, even under accrual budgeting, "achieving underlying cash balance on average over the cycle" will be the fiscal objective. However, as a recent Treasury paper made clear, "the move to accrual accounting also provides scope to consider 'additional' fiscal measures – for example, an accrual 'net assets' objective – once experience is gained with the . . . data". (Treasury, 1999, 2, 14).

³ Following a change in the electoral system, a new coalition between the National Party and the New Zealand First Party has presided over a fall in the surplus of over 1.5 per cent of GDP or over \$NZ1 billion (OECD, Economic Surveys, New Zealand, 1998). This is partly due to changing economic circumstances in New Zealand – in particular stalling economic growth, but it also reflects the populism and fiscal expansionism of the New Zealand First Party.

macro-economic reform for a globalised economy

The art of good government is to constantly review practices to see where improvements can be made. The guiding principles should be:

- *to design systems that make it clear what the medium-term goals are;*
- *to choose goals that can be communicated easily to the public and accepted as being reasonable; and*
- *to ensure that the system is transparent, so that people can judge whether policy changes are consistent with the goals.*

Ian Macfarlane, Governor of the Reserve Bank of Australia, 1996

3 Enhancing Australia's macro-economic performance

To summarise the case for optimism so far, internationally-oriented reform has established a stronger basis for moderating cyclical fluctuations in the Australian economy. We have also learned much from past mistakes. Our technical understanding of how to manage the economic cycle in a world of deregulation and free capital flows has improved.

Our ambitions are also more modest – we no longer believe that government can quickly and precisely ‘fine tune’ growth to its optimum at all times throughout the cycle.

Perhaps more importantly, our institutions of macro-economic management have also evolved. Monetary policy is now much more independent, and it is seen to be so both by the community and the markets. Management of fiscal policy is also more accountable and transparent. These developments improve our confidence that monetary and fiscal officials can judiciously exercise the discretion that will inevitably remain part of macro-economic policy.

These have been profound improvements. Yet we can improve on them still further. We can consolidate and optimise a range of reforms already under way. And we can identify new directions for reform by appreciating continuing shortcomings in our existing institutions and recent performance.

The following sections consider a range of options for enhancing Australia's macro-economic performance. The ideas that are explored focus on improving the overall flexibility of the Australian economy and on broadening the tools of macro-economic management. These include:

- improving short term labour market efficiency;
- re-engineering fiscal policy; and
- broadening the scope of savings policy.

Recessions are the enemy of employment growth, prosperity and confidence. By improving the flexibility of the Australian economy and by further developing and improving the tools of macro-economic management, we will be better placed to increase employment and keep it high. These reforms will also enable us to share both the benefits of economic prosperity and the burden of economic difficulties more broadly throughout the Australian economy and community. In doing so, we will make our economy more supple, more efficient and fairer.



4 Improving labour market efficiency

Given current market forces, increased labour market flexibility is likely to increase the dispersion of earnings. It is for this reason that increasing flexibility in the labour market is known in some of the academic literature as the ‘diabolical trade-off’. The evidence suggests that it helps create jobs. New Zealand, the United Kingdom and the United States have all generated more jobs per head of working age population than the developed country average.

Nevertheless labour market flexibility can increase inequality of earnings (Business Council of Australia, 1999). What is ‘fair’ in this circumstance depends upon your perspective. On the one hand reducing real wages to those on lower wages looks unfair. On the other hand, if it creates jobs for those otherwise unable to find employment, it is not very ‘fair’ to impose policies that price them out of a job.

It was because of the difficulties of negotiating this trade-off that the Council’s previous discussion paper – *Rebuilding the Safety Net* – explored the prospect of reweighting the social safety net away from minimum wages towards tax and social security as we move towards greater labour market flexibility. This provides the means by which real wages in the market can fall without reducing the real disposable income of low-income families.

There is another form of labour market flexibility that has received less attention than the long run flexibility of wages and conditions. As firms and economies undergo unexpected shocks, it is often beneficial for them to vary the wages they pay their employees, both up and down. There are reasons explored below for believing that greater short term labour market flexibility could help stimulate demand for labour, particularly when it is needed most – when there is a risk of recession in Australia.

Given that this kind of labour market flexibility does not increase earnings inequality in the community, it would seem to be a very promising path to explore, for the policies on which we ought to be able to achieve most broadly based social commitment are those that help us tackle unemployment without increasing inequality.

4.1 Short term wage flexibility

While there are many benefits to be gained from labour market reform and greater wage flexibility, such changes are not a panacea. For example, it is still possible under a deregulated labour market for workers to be isolated from short term movements in national and firm income.

When there is a sharp and serious deterioration in our national income, for instance as brought about by a sudden decline in our terms of trade, it is likely that the most appropriate economic response would be a small and temporary nominal wage cut. Such a response enables the burden of the economic downturn to be shared throughout the community; businesses would still be subject to reduced profitability, and workers would bear costs in the form of lower wages. However, the burden of economic downturn would

macro-economic reform for a globalised economy

be dispersed broadly, rather than having to be borne primarily by those added to the ranks of Australia's unemployed.

Under existing arrangements, Australian employees would be very reluctant to negotiate such a nominal wage cut in the face of a short term economic downturn. However, even if our labour market institutions were very deregulated, experience suggests that such an adjustment to wages would be difficult to achieve. This is because wages are 'sticky downwards', and generally in the absence of a situation perceived as a 'crisis', a real wage reduction can generally be achieved no more rapidly than inflation reduces the real value of the amount of money in people's pay packets. Indeed, this is one of the arguments in favour of an inflation target such as Australia's – which is low rather than zero (Akerlof *et al*, 1996).

4.1.1 *Utilising bonuses to provide short term wage flexibility*

If the need for short term wage flexibility is anticipated before the event, a capacity for rapid adjustments can be built into wage setting institutions – for example, by providing that a portion of wages is paid in the form of bonuses. This type of system is widespread in countries such as Japan, Taiwan and Korea.

There are potentially significant benefits in building greater short term wage flexibility in Australia. As Scenario 1 (below) illustrates, if a greater proportion of Australian workers' pay were paid as bonuses (for example, quarterly bonuses based on firms' profitability), then a downturn in Australia's international fortunes would very quickly reflect itself in reduced wage costs, which would save jobs. Under such a system, the burden of adjustment would be shared broadly throughout the economy in the form of lower wages, rather than through plant closures, sackings and abandoned recruitment. Likewise, where Australia encountered good times, the benefits would be rapidly diffused through the community as higher wages. Profits would be less volatile and booms and busts would be moderated.

The macro-economic effects of greater short term wage flexibility are complex. There are strongly counter-cyclical effects brought about by the effect of such a system on the cost of labour and firms' incentives to hire and fire. As explained above, where firms' profits are down, they are most likely to defer recruitment and/or to sack workers. This is precisely the time when a bonus-based system will lower the cost of employment and so preserve employment in depressed firms and stimulate hiring in more prosperous firms. During times of prosperity, bonuses will act to share prosperity around, and this will reduce profits and reduce the attractiveness of employing more people. These impacts on the job market are counter-cyclical.

On the other hand, bonuses can have *pro*-cyclical effects on employees' consumption. At times of prosperity, when inflation will often be of concern, workers will receive more income and so will spend more. This can exacerbate inflation. By the same token, where there is a downturn, workers' bonuses will fall, which will reduce their spending. This will further depress demand and thus indirectly reduce the demand for labour.

The way these pro and counter-cyclical tendencies of bonuses interact is a complex theoretical question that has not received sustained attention in the economics literature. Nevertheless, all the empirical evidence set out in this section suggests that the counter-cyclical effects strongly dominate.

Thus, numerous scholars have argued that the bonus systems employed in countries such as Japan, Taiwan and Korea have played an important role in ameliorating recession over the 1970s (Weitzman and Kruse, 1991; Morton, 1998; Hashimoto, 1991).⁴ Also, the modelling that appears below incorporates both counter and pro-cyclical transmission channels through which bonuses have their effect on the economy. It too suggests that the net effects of increased short term labour market flexibility would be highly counter-cyclical.

4.1.2 *Short term labour market flexibility and short term labour market efficiency*

Contrasting the short term labour market efficiency⁵ of various countries with and without the widespread use of bonuses also suggests that there may be long term gains from introducing greater short term wage flexibility. While recognising that there are variations in statistical methodologies, the accompanying charts seek to capture the relative responsiveness of unemployment to changes in GDP for a range of countries for annual observations over the 1979-96 period.

All countries in the sample demonstrate a negative correlation between unemployment and GDP growth – illustrating the commonsense notion that unemployment rises as GDP growth falls off, and falls with sufficiently fast GDP growth.

Clearly, the further to the right the data points are, the higher the growth. The lower the data points the less unemployment rises in response to fall-offs in GDP growth. Finally, the narrower the horizontal band the data points fall into, the less volatile is unemployment, and, other things being equal, the greater the short term efficiency of the labour market.

The use of bonuses is not widespread in any of the countries examined below, although the long term labour market efficiency of the countries chosen differs markedly. For instance, the long term efficiency of the United States labour market and that of Spain differ dramatically, with the United States being the only large developed country that has not had a trend rise in its unemployment rate between the 1960s and today. By contrast, Spain's unemployment has been near 20 per cent for two decades. Australia and the United Kingdom fall between these extremes.

⁴ Jones and Pliskin (1991) also note the positive macro-economic effects of profit sharing, although they also highlight some concerns about the bases upon which these countries' superior employment performance have been attributed, at least in part, to their bonus systems.

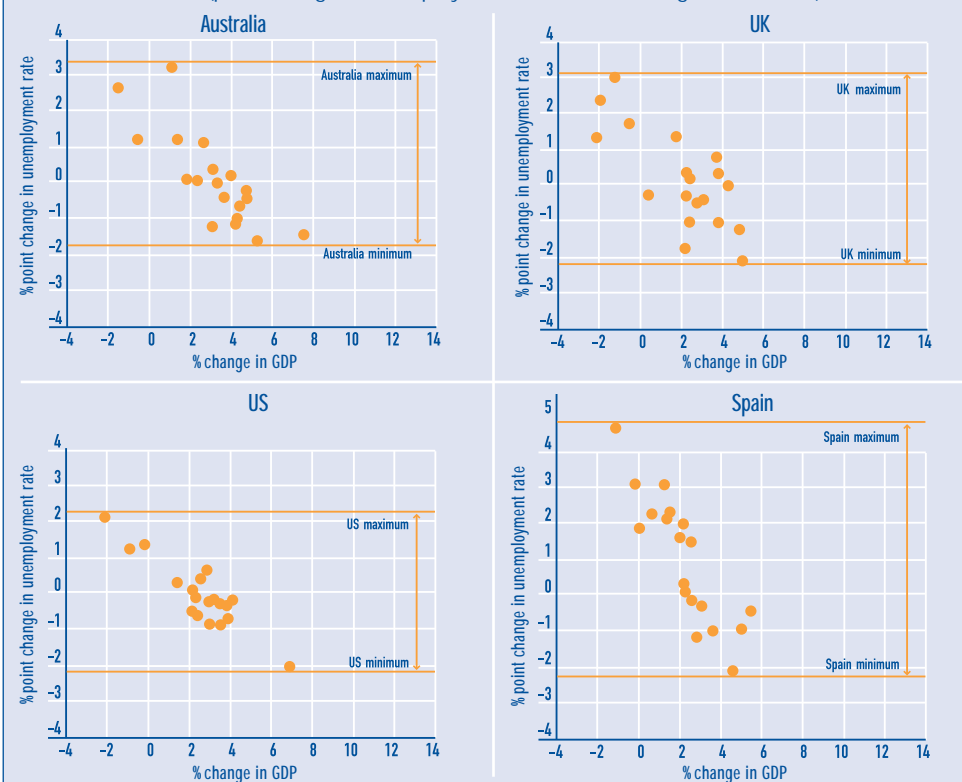
⁵ By efficiency we mean the ability of the labour market to fully employ the workforce in differing circumstances. By short term labour market efficiency is meant the economy's capacity to remain at full employment despite short term variations in economic growth. Particularly because it seems that unemployment falls more slowly than it rises, there is a particular value in having a labour market that adjusts rapidly to changing circumstances so as to minimise as much as possible the extent to which negative economic shocks are transmitted into unemployment.

macro-economic reform for a globalised economy

GRAPHS 5, 6, 7, 8

Short term labour market efficiency

(point change in unemployment rate and % change in real GDP)



Source: OECD, Main Economic Indicators and Taiwan Statistical Data Book, Council for Economic Planning and Development, Republic of China.

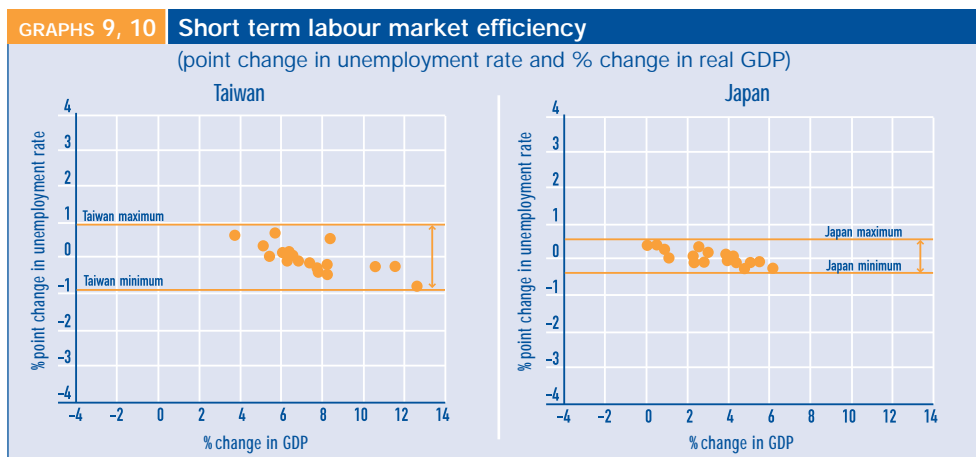
What is striking is that, despite the very stark disparity of the long term labour market efficiency of the countries chosen, they all have labour markets that are relatively inflexible and inefficient in the short term. At least by this measure, there appears to be some correlation between short term and long term efficiency, but it is only slight. Thus, the worst long term performer – Spain – is also the worst short term performer, and the best long term performer is also the best short term performer. However, in each case the divergences in the long term efficiency of the countries' labour markets is great and the divergences in short term efficiency are minor.

Japan and Taiwan provide an excellent contrast. Bonuses are commonplace in remuneration in each country. And the difference in the short term efficiency of their labour market is striking. Moreover, in addition to having very efficient labour markets in the short term, these countries appear to have very high levels of long term efficiency in their labour markets. This is particularly striking in the case of Japan.



It has suffered a dramatic slowdown in its economic growth over the 1990s. However, even today its unemployment rate appears well below that of Australia.

Of course bonuses are not the only reason for this. In the case of Japan another possible explanation is the tradition of ‘lifetime employment’. However, lifetime employment is confined to a sub-set of the economy and employment elsewhere in Japan is more flexible. Nevertheless, given the success of Japan, Korea and Taiwan at managing what looked like extremely difficult circumstances in the oil shocks of the 1970s⁶, it seems reasonable to conclude that an institutional characteristic that they all share – wide-spread bonuses in their workplace – probably made a useful contribution (and see above).



Source: OECD, Main Economic Indicators and Taiwan Statistical Data Book, Council for Economic Planning and Development, Republic of China.

4.1.3 Other benefits of risk sharing

So far we have considered the macro-economic benefits of risk sharing in the workplace. However, there are benefits at the firm level as well. Increasing the proportion of payment at risk makes manifest the commonality of interest between employee and employer. Such gain sharing can improve productivity for a wide variety of reasons:

- increased employee identification with the firm and incentives more aligned with those of the firm can improve employee focus and effort at work (Wadhwani and Wall, 1990; Kruse, 1992);
- it can reduce involuntary turnover – (a) because the need for retrenchment is less in times of economic downturn (see above), and (b) because where workers are more committed, they are more likely to perform well and therefore be unlikely to be subject to dismissal as a penalty. Although the macro-economic benefits of this have been explored above, the same phenomenon generates direct benefits for firms themselves. In both cases

⁶ These countries were more exposed to these shocks than most other countries because of the extent to which they import resources including fossil fuels.

macro-economic reform for a globalised economy

lower turnover leads to more firm specific human capital generated at lower cost (Kraft, 1991); and

- it can increase the flow of information within the organisation (Kruse, 1992).⁷

Increasing employee identification with the firm can also lower employees' tendency to leave firms. Their greater keenness to stay with the same firm can improve their preparedness to invest in 'firm-specific human capital' – i.e. skills that will improve their productivity only in the particular firm which employs them (Wadhvani and Wall, 1990; Kruse, 1992).

A substantial body of work now points to the positive relationship between profit sharing and productivity (e.g. Fitzroy and Kraft, 1987; Cable and Wilson, 1989; 1990; Wadhvani and Wall, 1990; Weitzman and Kruse, 1990; Kraft, 1991; Kruse, 1992; Jones and Kato, 1995).⁸

There is another important benefit for the firm and thus indirectly for its employees. Whether they have a formal risk management policy or not, all firms bear substantial risks. Often these risks are an immediate barrier to increased investment, rather than any lack of access to funds. Nevertheless, risk management for firms is not costless. Firms are prepared to sustain substantial costs to 'cover' risks.

They do so both to reduce the risks attached to their own operations and to avail themselves of access to investment funds from others who will only invest where risks are satisfactorily managed. Because of this, risk management and risk sharing 'adds value'. The explosive growth of the market for derivatives illustrates the critical importance of risk management to modern economies (Miller, 1992).⁹ This is a phenomenon which is a little like the opening up of new trade routes – something which 'invisibly' increases wealth by expanding the portfolio of what is possible given finite resources for investment (Bernstein, 1996).

Involving employees in risk sharing opens up a potentially rewarding new exchange between employees and employers. For just as firms are prepared to pay insurers and speculators on derivatives markets to share risks, so too they will, over time, be

⁷ Some contrary opinions have been expressed in the literature. For example, Kruse has argued that the benefits of bonuses can be attenuated by conflicts of interest between individual and group incentives. Thus, some employees have an incentive to 'free ride' on others' efforts as bonuses are determined collectively not individually (1992). Offsetting this concern, however, is that over time a co-operative bargaining solution may be achieved. Moreover, where group incentives exist, this may encourage horizontal monitoring. As such, if a co-operative solution is established it may be maintained through worker norms or by non-pecuniary sanctions from other workers (Fitzroy and Kraft, 1987; Weitzman and Kruse, 1990; Wadhvani and Wall, 1990).

⁸ As with most things in the discipline of economics, this 'stylised fact' that gain sharing leads to more gains to be shared is not held unanimously in the profession (see Jones and Pliskin, 1991; Morton, 1998). For example, while concluding that industries in Taiwan that commit themselves to paying regular bonuses employ more workers, more stably, Morton (1998) found that productivity growth was mainly determined by exogenous factors such as technological or market development, and was only slightly responsive to bonuses. Similarly, Fitzroy and Kraft (1987) questioned the causality of the relationship between productivity and profit sharing.

⁹ "[The growth of derivatives markets is illustrated] by data of the International Swap Dealers Association showing that the notional value of OTC derivatives grew from about \$5 trillion in 1992 to more than \$36 trillion by mid-1998." Commissioner Barbara P. Holum before the New York State Bar Association Committee on Commodities and Futures Law (at <http://www.cftc.gov/opa/speeches/holum-21.htm>)



prepared to pay employees to bear some of the risk that they would otherwise have to bear themselves, or pay for 'cover' through derivatives or insurance markets. This does not mean employees should have risks foisted upon them. They should only take on risk they freely accept in return for the expectation of higher incomes over time. Even where employees are very risk-averse, as many employees are, there are still gains to be made where employees take on very *slightly* more risk in return for higher rewards.

With the exception of highly paid executives, most employees will not wish to bear large risks. But employees' earnings represent a much larger share of the economy than profits. Accordingly, a very small taking on of risk by employees can substantially lower investor risk. This can have a considerable value, which should not be overlooked in a modern economy. Over time employees prepared to slightly increase the variability of their earnings can expect to benefit in the form of higher average remuneration over time.

The late 1980s and 90s have seen an important change in Australians' level of comfort with financial risk. The proportion of Australians investing in equities has grown explosively over this time, largely as a result of privatisation of previously government-owned assets. This illustrates Australians' confidence in their capacity to take on somewhat more risk in return for higher rewards. In addition to generating considerable gains in the wealth of those who have become owners of equity for the first time, such risk sharing by more and more Australians has lowered the cost of capital to Australia's firms and so generated jobs.

Australians need to explore the extent to which they find such a trade-off in their work attractive. It can increase their wealth over the long term – in the same way that their increased exposure to equities does. But another crucial point needs also to be borne in mind. Although receiving a greater share of wages as bonuses can increase the volatility of earnings or financial risk, there is an important way in which gain sharing lowers risk. Where it makes firms less likely to lay off workers during downturns – and the evidence presented above suggests that it does – it reduces the risk of redundancy. Bonuses may increase the risk of earnings volatility, but they will generally also reduce the risk of retrenchment. It is likely that many Australians would prefer to reduce the latter form of risk in return for some increase in the former.

macro-economic reform for a globalised economy

SCENARIO 1 Using bonuses to achieve short term wage flexibility

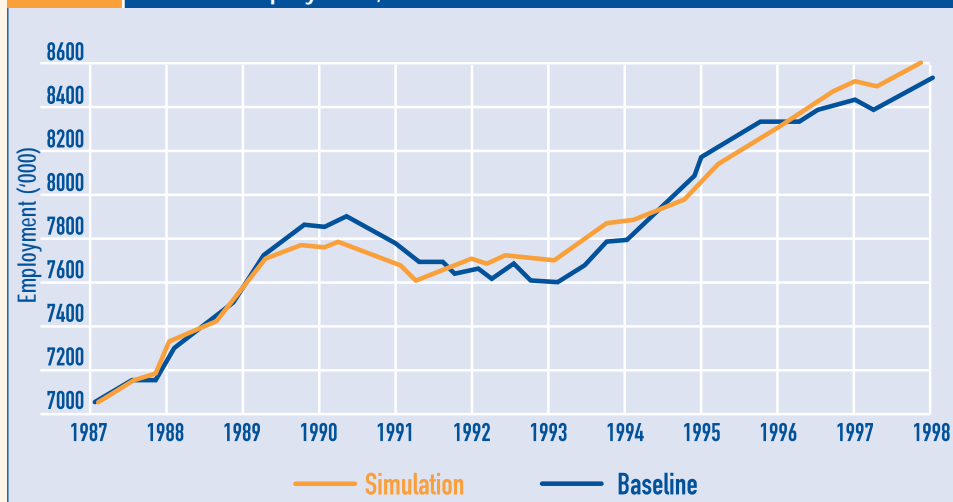
In the following simulation, the Access Economics Macro-model (AEM) was used to investigate what might have occurred had employees taken a larger share of their wages as bonuses over the last decade. It suggests that a bonus system operating at the time of the last major recession would have led to a much more moderate fall in employment than in fact took place.

Bonuses allow much more of the economy's adjustment to be taken in prices and wages rather than in output and unemployment. The simulation assumes that 10 per cent of wage payments are provided in the form of bonuses. The level of bonuses paid depends on the level of profits. In times of downturn when profits are low, nominal wages are lower because of a lower bonus payment, thus reducing the strain on the business sector. Similarly, in times of good profits, workers are rewarded with higher wages.

The discounted level of real *private consumption* provides the best proxy for economic welfare in the AEM model. Real discount rates of 2 per cent and 5 per cent are chosen for comparison. These measures show significant net benefits from adopting a system of bonus payments, with the net present value (NPV) of private consumption higher by between \$18.6 billion and \$10.0 billion, depending on discount rates chosen over the period.

Employment growth is reduced from the boom conditions of the late 1980s, with workers taking more of the benefit in higher wages – as opposed to the employment of more people. Exactly the opposite happens when it is most necessary. As the recession of the early 90s strikes, wages fall, greatly moderating the fall-off in job growth. Peak to trough employment loss in the early 90s is 98,000 – a much better result than the drop of 298,000 that actually occurred. A smooth employment path is likely to produce additional benefits. This is because fewer workers are displaced from the market and have their skills and their job networks atrophy. This means that it is

GRAPH 11 Level of employment, 1987 to 1998





easier to return to higher levels of employment in the future, as more workers' skills and networks remain intact. This effect is not captured in the AEM model.

The ability to spread wage payments over the cycle in sympathy with profits, as well as the marginal reduction in real wages over time, allows more *capital and labour* to be employed. In the long run (2007-08), the capital stock and employment are higher by 1.24 per cent and 1.69 per cent respectively. The higher capital stock feeds back into wealth, providing another boost to private consumption.

The *employment* gain equates to 163,000 more jobs by 2007-08. Some of this gain is driven by lower real wages in the out-years of the simulation that, for the purposes of this simulation, can be regarded as an artifact of the model. Nevertheless some of the drivers of higher employment in the model – e.g. higher capital stocks – are probably *underestimated*. Higher capital stocks arise from higher employment and production in the early years and this does not allow for the additional investment that would arise from the way in which bonuses would defray risk for firms and so allow them to invest at lower hurdle rates.

Further, in real life, the higher and smoother employment path would lower the NAIRU, further driving employment growth. This is not allowed for in the model.

Over the longer term domestic producers gain a competitive edge through lower domestic prices, producing a lower real exchange rate and a boost in net exports.

This improves the balance on the *external account* and Australia's *foreign debt* position, which ends up 23 per cent, or \$50 billion, below baseline (thereby increasing wealth for consumption and reducing the risk premium on long term bonds).

Over the longer term this simulation leads to reductions in *net public debt* as lower real wages reduce the government's wage bill. Within the AEM model, gains to the Budget bottom line are recycled as lower taxes on wages, which in turn lifts private consumption. The virtuous circle is well established. Other gains not modelled include:

- a more stable workforce would lower a range of costs including transaction and job search costs associated with people moving in and out of unemployment. It would also be consistent with a more secure and highly skilled workforce.
- incentives to work productively and employee identification with firm profitability would both be increased.
- with employees in effect sharing more risk with their employers, the risks attached to new projects would fall, lowering hurdle rates and increasing investment and employment.

4.2 Implementation

If Australia were to increase the use of bonuses¹⁰ within its remuneration system, the best way of moving forward would be on a voluntary basis, with government playing an encouraging and facilitating role rather than a regulatory one.

¹⁰ The economic research in this discussion paper on bonuses has focused on pure profit sharing schemes. However, it is likely that under other schemes in which employees' pay is at risk – such as performance pay – variations in the rate of pay would correlate with firm profits and so with the outcomes of a bonus scheme. It is envisaged that such schemes would be within the spirit of what is being suggested in this discussion paper.

macro-economic reform for a globalised economy

In this context, an obvious prerequisite is to open up a dialogue with employees and their representatives about the benefits that bonuses have to offer, both at the workplace and more broadly to the Australian economy. Discussion on the many implementation issues would also be required. Issues to be addressed would include questions relating to wage relativities, the form bonuses would take, the criteria by which bonus levels would be assessed and safeguards for preventing abuse. Current tax law contains certain incentives to encourage employee share ownership.¹¹ Given that there are macro-economic benefits from more widespread adoption of bonuses that cannot be fully captured by the firms or the employees who adopt greater use of bonuses, there may be a case for exploring some similar mechanism in this case.¹²

Some regulatory impediments may also require attention. For instance, the ‘no disadvantage’ test should not be interpreted as an impediment to the replacement of some remuneration with bonus based remuneration.

The best way of phasing in greater profit sharing could be to limit adjustments to base pay for inflation and instead increase bonuses. Where firms successfully negotiated such arrangements over successive periods, a substantial proportion of pay could ultimately be in the form of bonuses.

Further, it is worth exploring whether it might be possible to allow firms to meet ‘safety net’ rises mandated by the Industrial Relations Commission with bona fide bonus payments which, over the long term, could be expected to have the same or greater value as the stipulated safety net rise. For instance, where a firm generated approximately \$100 of profit per week per employee over the long term, it might propose to its workforce that, instead of paying a safety net rise of \$8 per week, it pay its employees an additional 8 per cent of its profits into the future.

In the current international circumstances and with some anticipation of a slowdown in the Australian economy, wage rises of the size that have been won in the mid-90s may become harder for employees to achieve. Firms, particularly those experiencing reduced demand, will be reluctant to maintain the previous level of real wage growth, and workers will be less able to secure this level of wage growth whilst maintaining their job security.

Bonuses may provide the means of finessing these problems by offering employers and employees an attractive way of deferring some of the wage rises that might otherwise be appropriate until economic times are better. For workers, this offers the chance to secure wage rises into the future without sacrificing job security.

¹¹ Part III Division 13A of the *Income Tax Assessment Act* (SS 139-139GG)

¹² On the other hand, it may be difficult for policy to ensure that the bonuses for which incentives are provided are bona fide. It may be possible for firms to emulate the form of bonus pay without its substance: that is, to create the appearance of pay being ‘at risk’ for the purpose of qualifying for incentives without this being in fact the case.



5 Re-engineering fiscal policy

An important theme of economic reform in the last two decades has been ensuring that necessary decisions are made by the appropriate actors in the economy.

Where high tariffs and other interventions once influenced the way in which the private sector allocated capital, today such decisions are made within a much more competitive market framework, with firms deciding where they can make the highest return. This approach – established by the beginning of the 1990s in Australia with regard to Australia's trade policy – has now been extended to the non-traded sector by the National Competition Policy.

Other decisions – for example, who to tax and how much, how much to spend and what to spend it on – remain, and will always remain, with government.

Where government retains a role in macro-economic decision making processes, there is a constant need to ensure that the institutions making these decisions are best placed and structured to carry out their desired functions.

To this end, economic reform has been about adapting Australia's government institutions and re-specifying their objectives. Thus, the current Productivity Commission, which has a wide remit to provide objective advice to governments on micro-economic reform across the whole economy, began as a much more circumscribed body – the Tariff Board. This body has had its charter progressively expanded since the mid-1970s when it became the Industries Assistance Commission, and later the Industries Commission.

Likewise the Reserve Bank has seen its objectives, functions and independence evolve over time. We have also developed entirely new institutions to meet new and changing needs. Some new institutions perform functions – such as prudential supervision – that have previously been assigned to other organisations. Others, such as the National Competition Council, have been developed to perform quite new functions.

There has been considerable institutional development of our fiscal policy institutions as well. Great strides have been made to promote fiscal transparency. Much more systematic use is now made of forward estimates of both revenue and outlays in the Budget process. Reconciliation tables are published detailing where and why Budget targets have and have not been met. And the Budget reporting of the states has been harmonised and integrated into the National Fiscal Outlook.

Increased fiscal transparency has also now been embodied in the *Charter of Budget Honesty*, which requires regular publication of information on the progress of fiscal policy and the fiscal outlook, including 'generational' accounts to be published at least every five years.

These have been considerable achievements, placing Australia at the forefront of developed countries in fiscal policy management (see e.g. *IMF, Draft Manual on Fiscal Transparency*, 1998). Improved fiscal transparency has played its part in restoring

macro-economic reform for a globalised economy

Australia to more prudent fiscal policy in the last few years. Nevertheless it seems unlikely that fiscal transparency is enough. There are reasons to believe that we can do even better than we have – that we can move from being close to ‘best practice’ to pushing the frontiers of best practice.

The next section discusses remaining problems and explores ways of addressing them. If we can embrace further beneficial change we are likely to move from being close to best practice to defining the frontiers of best practice itself.

5.1 Modern fiscal management: Current problems and issues

In contrast to our management of fiscal policy, monetary policy is capable of rapid adjustment where necessary to respond to emerging developments. The central monetary policy institution – the Reserve Bank – can adjust short term interest rates paid in the money market by entering the market to the extent necessary to establish any target short term cash rate.

The Reserve Bank is also independent of day-to-day politics.¹³ Accordingly, it can adjust the stance of monetary policy, even if doing so will have political implications for the government and non-government parties of the day.

This has enhanced the relative credibility of monetary policy, an outcome well demonstrated by comparing episodes of policy easing from this decade.

In 1992 fiscal policy easing was engineered by the government of the day in the *One Nation* Statement. In 1996, monetary policy loosening was announced by the Reserve Bank. In each case, other things being equal, policy easing would stimulate growth and so, to some extent, inflation. In such circumstances one would expect the markets to price this into long term bond yields.

There was considerable money market nervousness at government-engineered fiscal expansion in 1992, and market commentary suggested that, at least in the short term, expansion increased interest rates above the level that they otherwise would have been.

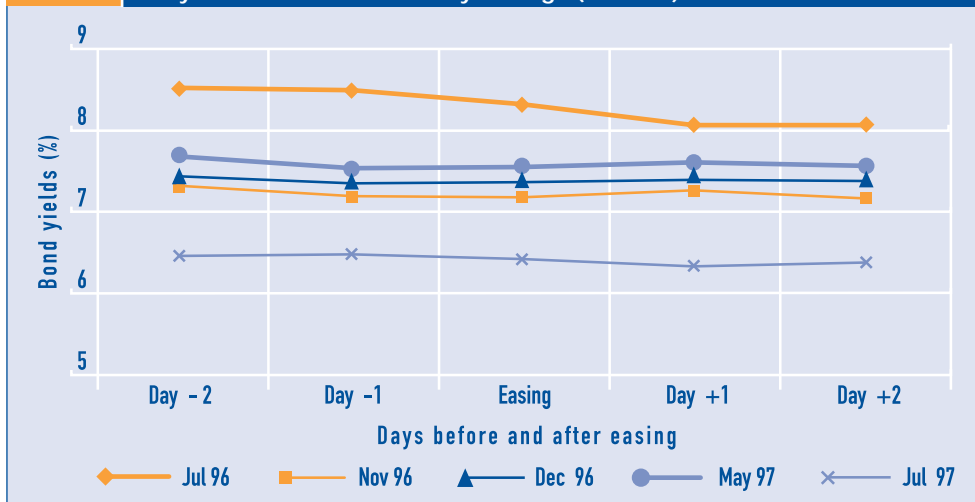
By contrast, when the Reserve Bank announced progressive easings of monetary policy in 1996, markets reacted by lowering long term interest rates in Australia – the Reserve Bank had sufficient credibility in mid-1996 not just to ease monetary policy without exacerbating inflationary expectations. At the time of change in policy stance, the markets indicated they had greater faith in the Reserve Bank than in their own perceptions before the easings. The Reserve Bank’s easing was taken as evidence that there was room in the economy for this to occur. As the Reserve Bank eased policy, long term bond yields – a measure of expected inflation into the future – actually fell (see Graph 12).¹⁴

¹³ Australia’s monetary policy institutions have been established so that the Reserve Bank has delegated authority to conduct monetary policy subject to the power of executive government to explicitly overrule the Bank with its own instructions: *Reserve Bank Act* SS 11(4), (7).

¹⁴ See also the Reserve Bank of Australia’s Deputy Governor comparing the monetary easings of 1996-7 with the monetary policy easings of the early 1990s when markets had much less faith in the Reserve Bank’s independence, Reserve Bank Bulletin, May 1999, p. 52.



GRAPH 12 Ten year bonds and monetary easings (1996-97)



Source: RBA and Bloomberg

As Alan Blinder, recently deputy of the US Federal Reserve, has commented, such a model of flexibility and independence is worthy of development in policy areas other than monetary policy management – for example in fiscal policy (Blinder, 1997). This is a view supported by both American and Australian economists, who have set out ideas for re-engineering fiscal policy around the model of monetary policy (Ball, 1996; Gruen, 1997; see also Box 2).

As discussed above, there are two important obstacles to using fiscal policy to manage the economic cycle. The first is the delay in negotiating and implementing decisions. For instance, much of the spending involved in the *One Nation* fiscal package took a considerable time to be planned and executed. Moreover, and especially where tax changes are used, it can be a lengthy and uncertain business to negotiate them through the Parliament.

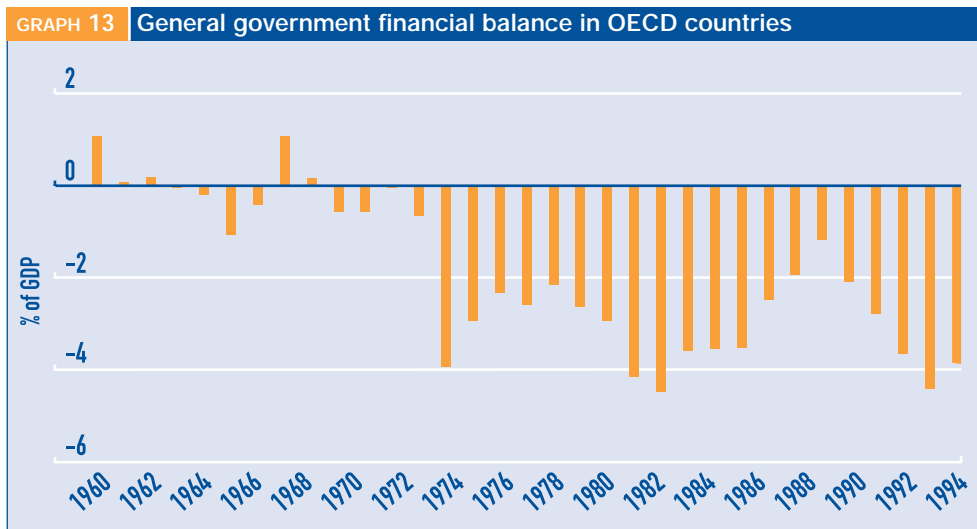
The greater the delay, the greater the risk that the spending measures do not contribute to alleviating the unwanted recession and instead contribute to the next unwanted boom. It is a striking fact that of all the discretionary fiscal expansions in the United States since World War II, all have occurred after the recession they were intended to ameliorate was technically over (Keech, 1995).

The second problem is that in a democratic country, politics influences fiscal policy in ways that detract from its effectiveness. It does so in a range of ways. Fiscal policy changes can be unduly influenced by the electoral cycle. Thus, governments tend to feel more secure tightening policy early in a parliamentary term and loosening it towards the end of the term. Sometimes this will meet the needs of the economic cycle. Often it will not. In addition, there appears to be a bias towards fiscal expansion. This is borne out both by commonsense and by experience.

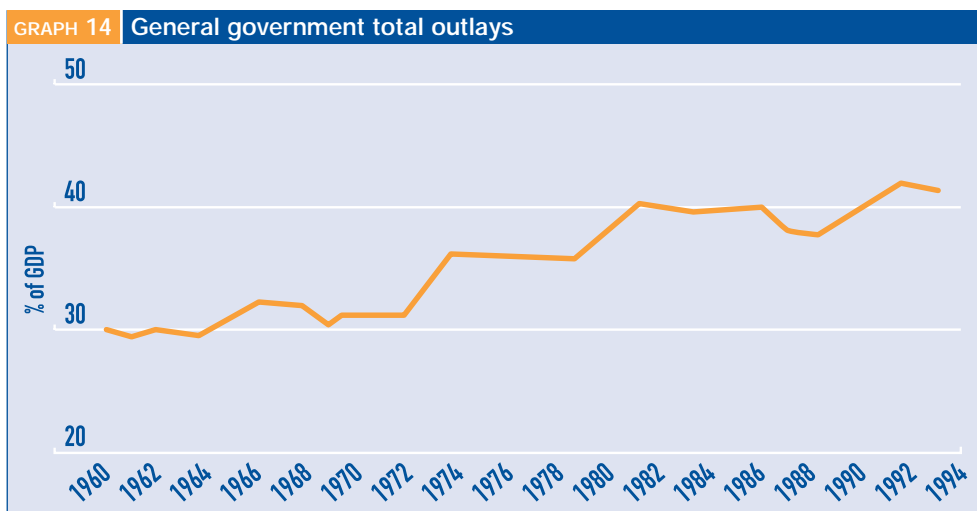
macro-economic reform for a globalised economy

As Ian Macfarlane has commented:

It is easy, and usually popular, to introduce a new benefit or to make an existing one more widely available. But it is difficult to remove existing entitlements because it is always politically unpopular, and there may be large human costs as a result of dependency. This gives a bias towards increasing current expenditure and future levels of taxation, a bias that is readily apparent from the experience of all OECD countries over the past 30 years (*Reserve Bank Bulletin*, June, 1996, pp. 10-14, at p. 12).



Source: RBA using OECD data.



Source: RBA using OECD data.



Indeed, as the size of government has risen over the last generation, a ‘funding gap’ has emerged. Governments have been keener to spend than to tax. Only in the last few years has the Australian Government moved vigorously to bridge this funding gap. There were more than six years of strong and steady growth before the Budget was moved into surplus. And while the Government is to be congratulated on the very substantial political achievement of restoring the Budget to fiscal prudence, as Olekalns has commented, “Although the surplus is expected to increase [after 1998-1999], by historical standards it remains a fairly modest proportion of GDP” (1998, p. 67).

These pressures have compromised the efficacy of using fiscal policy. They have prevented it from being used expeditiously in the short term, and the threat of a growing fiscal gap has left markets progressively more suspicious of funding fiscal deficits. This matters because:

- it raises the cost of running deficits even where they may be appropriate in the short term;
- it places stronger constraints on fiscal policy than would be warranted where governments showed greater fiscal discipline and prudence; and
- where the community and markets suspect that fiscal expansion is not temporary, their response will offset and in some circumstances even outweigh the expansionary potential of fiscal expansion (Olekalns, 1998).

The *Charter of Budget Honesty*’s requirement for regular reporting of the fiscal outlook mobilises the power of transparency to reduce the scope for short term political influences to derail fiscal policy. It also seeks to impose a discipline on temporary fiscal expansion to ensure that it is in fact temporary. Thus clause 9 (1) (f) of the *Charter* requires governments to “specify fiscal policy actions taken or to be taken by the government that are temporary in nature, adopted for the purpose of moderating cyclical fluctuations in economic activity, and indicate the process for their reversal”.

Nevertheless, there are plenty of episodes in Australian democratic history when governments have run higher deficits than they should have. Even though they did not face the full rigours of fiscal transparency legislation, a good deal of their fiscal irresponsibility was transparent to the community. In other words fiscal transparency legislation may help, but there are likely to be times in the future when it is not sufficient.

If this is the case it seems necessary to explore means by which further disciplines might be brought to bear on governments. The next section sets out a possible regime for delivering this. The regime that is set out is an ‘ideal’ regime. It is ambitious and would be difficult to achieve quickly. For this reason the section that follows it is equally important. We need to consider how we might move in the right direction. In this regard there are two issues – building a ‘buffer’ in the tax system which is capable of being used as a means of short term fiscal management, and building some degree of independence into how it is used.

macro-economic reform for a globalised economy

The first of these measures would be helpful in its own right, and should be pursued for its own sake. It is only when its existence becomes a real possibility that the issue of the independence of its use becomes an important practical issue to consider.

BOX 2 Professor Lawrence Ball on inflation, monetary and fiscal policy

Today, policy makers control inflation by shifting interest rates and exchange rates. Under my proposal, they would also shift taxes or government spending. This would improve things for two reasons.

First, fiscal policy affects the economy more quickly than monetary policy. Using fiscal policy would allow policy makers to offset macro-economic shocks with a shorter time lag. As a result, both inflation and output would be more stable.

Monetary policy is notorious for the “long and variable lags” in its effects, to use Milton Friedman’s famous phrase. We can understand these lags by reviewing the channels through which policy affects the economy. When the Reserve Bank raises interest rates, firms delay or cancel investment projects, and consumers buy fewer houses and cars. And higher interest rates lead to higher exchange rates. A higher exchange rate makes domestic goods more expensive relative to foreign goods, reducing net exports. Lower spending on investment and exports eventually drags down overall spending in the economy, and inflation slows.

Higher interest rates and exchange rates are always successful, eventually, at bringing down inflation. But this process can take a long time. Economists are not sure exactly how long it takes for monetary policy to affect spending. But a rough estimate is a year. If the Reserve Bank tightens policy in late 1996, the strongest effects on spending will be felt in late 1997. It will take even longer for inflation to fall, because it takes time for lower spending to convince firms to moderate their price increases. This process may take another year.

There are some lags in the effects of fiscal policy. In particular, while fiscal policy affects spending quickly, there is still the lag between changes in spending and changes in inflation. But, overall, fiscal policy can control inflation more quickly than monetary policy. If policy makers used their fiscal tools, they would not need to forecast as far ahead, and they would make fewer mistakes. And mistakes could be corrected more quickly.

Shorter time lags are the first major advantage of using fiscal policy as a macro-economic tool. There is a second advantage which is equally important. Monetary policy is an awkward tool not only because it works slowly, but also because its effects are spread unevenly across the economy. The entire economy benefits from the Reserve Bank’s policy of controlling inflation. But the costs of this policy fall disproportionately on certain sectors. With more active fiscal policy, the costs would be shared more equally.



5.2 Independent fiscal policy management – a more flexible taxation regime

One alternative for developing greater flexibility and independence in the management of fiscal policy is to give statutorily-appointed fiscal officials some responsibility to make small across the board adjustments to tax rates within one or more major tax areas (e.g. personal income tax, corporate tax and/or indirect tax).

Such an arrangement would remodel fiscal policy management along the lines of contemporary monetary policy institutions in two important ways. It would give to fiscal policy a single instrument – a small across the board tax change – capable of adjustment at short notice, by which the stance of fiscal policy could be adjusted in response to economic developments. Secondly, it would be possible to engineer into these arrangements any desired degree of insulation from the political government of the day. The advantages of such a system are considerable.

5.2.1 *Reducing policy 'lags'*

It would, in the first instance, help address the 'internal lags' associated with fiscal policy. Certainly the arrangements explored here could have improved the conduct of macro-economic policy in the mid-1990s by consolidating fiscal policy substantially faster and so allowing monetary policy to take less of the burden of tightening.

5.2.2 *Increasing policy credibility*

More flexible and independent taxation arrangements would also substantially improve policy credibility.

In a world of free capital flows, credibility has become a fundamental precondition for policy effectiveness. It is crucial that markets have confidence in the capacity of Australian investment opportunities to provide good returns. Even if we improve our savings performance, we will remain an importer of foreign capital for the foreseeable future because Australia's abundant investment opportunities considerably outstrip our capacity to fund them.

In the context of fiscal policy, it is also essential that global financial markets have confidence in Australian governments' ability to maintain and service their borrowings.

Where budget deficits are run, market confidence is undermined.

This is not because governments have insufficient net worth to sustain the borrowing in the short to medium term. Even where the Victorian Government ran loose fiscal policy for far too long, most of its debt was capable of being offset by asset sales.

However, markets take a dim view of fiscal laxity long before governments actually encounter difficulty meeting their financial obligations. This is not simply because markets focus on the future. It is also because fiscal laxity today is frequently taken as evidence that fiscal irresponsibility is becoming endemic in the political system itself.

macro-economic reform for a globalised economy

BOX 3 The politics of independent fiscal policy

The essential nature of tax setting would remain unchanged by the ideas being explored here. That is, the *relative* level of different taxes – what was taxed, at what rate and with what concessions – would all be determined by politics and ultimately by whatever legislation was passed by Parliament. Thus, political parties would continue to make such tax promises as they considered appropriate to specific groups or to the community as a whole. However, the politics of taxation would change subtly – and very likely for the better.

Contemporary monetary policy institutions do not stop political parties from promising that they will keep interest rates low. However, political parties addressing this issue must now argue that they will deliver the *economic preconditions* of low interest rates. The political contest has shifted away from unexplained and irresponsible promises towards a focus on how particular parties can create the economic circumstances that will deliver the desired outcomes.

Something similar would occur with fiscal policy under the arrangements explored in this section. Political parties seeking to convince voters that theirs would be a low tax regime would need to focus on the credible means by which this could be brought about *consistent with fiscal prudence*. This provides a way of introducing into a democratic policy system an appropriate premium for fiscal responsibility and market credibility.

Markets will be most accommodating of fiscal deficits where it is evident that they are temporary, or being used to underpin investment. Investors' decisions about the interest rate at which they are prepared to lend to governments will be more generous in these circumstances than if they consider fiscal expansion reflects a growing culture of fiscal irresponsibility and government indebtedness – in short, a culture of living beyond one's means.

The proposed arrangements would reassure markets that fiscal discipline is vigilant, ongoing and supported by independent institutions. As such, markets would be more willing to fund the fiscal expansions that are desirable from time to time, and also to fund investment where this is appropriate. In a world of free flows of capital, fiscal discipline and strong institutional guarantees of discipline become the foundation for flexibility.

BOX 4 Democracy and an independent fiscal stance

It might be argued that the arrangements for more independent fiscal policy would be less democratic than existing arrangements. However, there is little in the ideas being explored in this section for which there are not precedents elsewhere in our framework of government. A wide range of government bodies and authorities in our society are distanced from – but still ultimately accountable to – representative democratic institutions.

The ideas explored here would be incapable of implementation – and nor should they be capable of implementation – without democratic sanction. That is, they must be legislated. The degree of independence given to any government policy-making body is itself ultimately legislated by Parliament and so accountable to the people. In this sense, as Ian Macfarlane, Governor of the Reserve Bank, has argued, the issue of ‘independence’ is best seen as “a discussion about the optimal degree of delegation, including the circumstances in which the delegation could be withdrawn” (1996).

Beyond the fact that that it could deliver better performance, fewer and milder recessions, and lower unemployment, the philosophical justification for fiscal policy independence is analogous to the philosophical justification for independent monetary policy. In some areas, direct or even representational democracy can prejudice the interests of those without a vote (the young and subsequent generations). To some extent, those managing independent institutions such as the Reserve Bank do so not only on behalf of today’s voters, but also on behalf of future voters. Debasing the currency with inflation and/or running up unduly high levels of government debt prejudices the interests of subsequent generations and in so doing demonstrates the case for some degree of delegation from representative democracy.

5.3 Implementing independent fiscal policy management

Adopting a more independent approach to fiscal policy management – particularly with a proposal to introduce a more flexible taxation regime – would require decisions about institutional arrangements.

5.3.1 Coverage of fiscal discretion

It would be necessary to decide over what range of taxes the regime would apply. Here it is not possible to be definitive and the following discussion explores a range of possibilities. One model would involve applying the discretion to raise or lower taxes across the board to federal income taxes (i.e. personal income tax and company tax).

This is best explained with an example. Imagine for the sake of illustration that all personal income above a threshold and all corporate income is taxed at 30 per cent. Legislation could be passed specifying that all tax rates were now the tax rates specified in earlier taxation legislation *multiplied by a taxation parameter*.

macro-economic reform for a globalised economy

The taxation parameter would initially be set at 1. Accordingly, there would be no immediate change in tax rates. Once such a system was established, a change in the fiscal parameter could be accommodated within a few pay days for those paying withholding taxes such as PAYE, and could be accounted for on a *pro-rata* basis by others where immediate changes were inconvenient. Table 2 illustrates how moving within a narrow band of plus or minus 3 per cent for the fiscal parameter could nevertheless result in the capacity to ‘swing’ the fiscal stance by nearly \$6 billion in response to changing circumstances.

TABLE 2 Tax rates and the fiscal parameter

| Parameter value | Tax rate on income below threshold (%) | Tax rate on income above threshold | Company tax rate (%) | Change in revenue (approx) |
|-----------------|--|------------------------------------|----------------------|----------------------------|
| 0.97 | 0.0 | 29.1 | 29.1 | -\$3 bn |
| 0.98 | 0.0 | 29.4 | 29.4 | -\$2 bn |
| 0.99 | 0.0 | 29.7 | 29.7 | -\$1 bn |
| 1 | 0.0 | 30.0 | 30.0 | 0 |
| 1.01 | 0.0 | 30.3 | 30.3 | +\$1 bn |
| 1.02 | 0.0 | 30.6 | 30.6 | +\$2 bn |
| 1.03 | 0.0 | 30.9 | 30.9 | +\$3 bn |

It would be possible to include indirect taxes in this mix, but the disadvantages probably outweigh the advantages. The advantage is that the base over which taxes are varied is so broad that the amount they have to be changed is minimised.

On the other hand, fiscal policy tightening will generally be implemented with the intent of reducing inflation and/or inflationary expectations. In such circumstances, increases in indirect taxes raise prices in the economy and so are inflationary in the short run. This problem is also evident in the case of monetary policy – a fact highlighted while mortgage interest rates were included in the consumer price index. As policy is tightened, inflation rises as a result of the price effect of tightening. In both instances, this means there is an unfortunate lag between policy tightening and the desired result of reduced inflation. Other problems with the model set out above would be that including small variations in the GST would violate the Government’s pledge not to increase the rate without the support of all the states. Also, it is likely that small changes in the GST rate for all those paying GST would involve higher transaction costs than changing other taxes.

Likewise, whether or not corporate taxation should be subjected to short term discretionary changes also involves trade-offs. On the one hand it would somewhat increase financial planning uncertainty for firms. On the other hand the contribution that more flexible fiscal policy could make to stabilise the economy could outweigh any impact arising from such an increase in uncertainty.



Another option for introducing flexibility into personal income tax payments would be to allow the lowest marginal tax rate to vary. (This is currently at 20 per cent and will fall to 17 per cent under the Government's new tax system.) Such a system would maximise the extent to which fiscal changes were reflected in expenditure patterns, as those on lower incomes have a lower propensity to save. On the other hand, it might be perceived as unfair compared with across the board tax changes, as it imposes a disproportionately higher risk burden on those with lower incomes.

A compromise between the two approaches would be to vary the Medicare levy by an appropriate amount to manage the fiscal stance. A 1.5 per cent the levy currently raises a little under \$4 – 4.5 billion per annum. It follows that moving the rate between zero and 3 per cent would create a 'buffer' of nearly \$9 billion. Coupled with some similar degree of flexibility in corporate income tax, this approach may offer the best mix of equity and administrative simplicity. Adjustments could be made to tax rates within a few weeks through the PAYE system. At the end of each year a figure for the size of the levy would be calculated as the time weighted average of the rates at which it was set throughout the year. Thus during a year in which six months were spent with the levy at 1.5 per cent and six months were spent at 2 per cent, the levy would be 1.75 per cent of income earned through the year. The PAYE system would target this figure through the year. Any small discrepancies would be addressed through end of year tax returns.

5.3.2 *Extent of independence*

How independent should the fiscal authority be in determining the stance of fiscal policy? In principle one can identify a spectrum of choice. The current arrangements might be described as transparent non-independence. There is some independent scrutiny of fiscal policy, but control of fiscal policy is directly in the hands of the executive (as constrained by the need to get any necessary changes in legislation through the Parliament).

The next step towards independence would be to have an independent agency provide transparent reports and advice to government about fiscal policy, which is itself empowered to vary taxes within some pre-legislated band. This is broadly similar to the old legislation governing the changing of tariff rates, which required that rates not be changed without government receiving advice from an independent agency such as the Industry Commission.

The next level of independence would involve arrangements similar to current Australian monetary policy institutions, with the independent authority setting its stance of policy subject to any public and transparent contrary direction from government. It is possible to envisage greater levels of independence, although once substantial independence is reached it is not clear that more independence will always be better.¹⁵

¹⁵ The stance of fiscal policy could be set by an independent authority that could not be directly overruled by the executive government (although, of course, it would be capable of being dismantled at any time by Parliamentary repeal of the relevant legislation).

macro-economic reform for a globalised economy

5.3.3 *Criteria for policy management*

To delegate management of the fiscal stance effectively it would be necessary for enacting legislation to specify the fiscal goals the authority should pursue. The setting of such objectives would need to be carefully thought through. Fiscal policy would need to retain its objective of making the appropriate contribution to national savings over the long term. Short and medium term fiscal policy moves would have to be consistent with the long term objectives.

Budgeting should preserve or enhance government net worth over the cycle – although of course opinions will differ as to where the economy is in the cycle at any one time.

5.3.4 *Extent of discretion*

In introducing change such as that set out here, it might well be appropriate to constrain within fairly narrow bands the fiscal discretion being delegated. This would reassure the community that change would be incremental rather than revolutionary. It may well be that a very large part of the gains from the change can be delivered at the same time as operating the system within tight constraints.

Table 2 illustrates a scenario in which substantial constraints are placed on the discretion of the fiscal authority. It can vary taxes by just 2 per cent up or down (or 0.2 and 0.6 percentage points where tax rates are 10 per cent and 30 per cent respectively). Nevertheless, this can generate fiscal discretion of about twice that exercised in the last substantial fiscal expansion (although less than the fiscal contraction delivered in the first Costello Budget). As the community became more comfortable with the arrangements, the discretion could be expanded as appropriate.

5.3.5 *Macro-economic co-ordination*

Fiscal policy needs to be co-ordinated with monetary policy, and this must be taken into account in any institutional reform. One alternative explored by Ball (1996) is that an independent ‘macro-economic policy committee’ be established that would have the power to vary tax rates and to direct the Reserve Bank. Membership of the committee would include both the Secretary to the Treasury and the Governor of the Reserve Bank.

Another possibility would be for the Reserve Bank (with its professional expertise appropriately augmented) to exercise the discretions inherent in the proposal.

5.4 *Towards more fiscal flexibility and independence*

Greater flexibility and independence in macro-economic management through a flexible taxation regime has the potential to deliver substantial benefits (see Scenario 2 below). However, the change explored here is of a sweeping and systematic nature. It will accordingly take time both to define the precise details of the best possible arrangements and to make progress towards them. The ideas explored here would be easy to misrepresent for political purposes, and accordingly attention must be paid to



the way in which the community would perceive the policy.

It would be unfortunate and quite misleading if the idea were associated in the public mind with austerity as the arrangements explored create a new institutional framework for managing the fiscal stance but themselves are neutral about it. For this reason, the most opportune time to begin to develop a variable 'buffer' in Australian tax rates capable of delivering fiscal flexibility would be when taxes were being cut in any event. This tends to happen every few years in Australia as governments return the proceeds of 'fiscal drag' to the electorate as nominal tax cuts.

In such circumstances it will be possible for a government to cut personal tax rates by an amount it considers to be well within the bounds required by prudence. At the same time it could offer further tax cuts that are deliberately offered as a variable 'buffer' and earmarked to be paid and/or taken away as appropriate. This would create fiscal flexibility but would not of itself increase the degree of fiscal independence. Fiscal independence might actually make the flexibility more attractive. Thus, the public might be more disposed to accept small movements in their tax rates (as they do with changes in interest rates) if they are seen to be strongly influenced by an independent and expert body.

A possible circumstance in which progress might be made would be a situation where a temporary fiscal stimulus was considered appropriate, as was the case in 1992. Any such action in these circumstances could be improved where action was taken at the time of the fiscal stimulus to entrench community and market expectations that this easing was temporary. The kinds of arrangements explored here could provide the appropriate institutional framework for such policies.

In addition to making progress toward the goal by seizing the opportunities which present themselves as suggested above, medium-term goal setting would help focus policy makers on generating and seizing the necessary opportunities. We have made good progress in this way in other areas where substantial change must take place over a sustained period of time, such as increasing compulsory superannuation contributions. Thus, just as governments have adopted long range targets for superannuation, we should set ourselves such a target for the establishment of a tax buffer capable of delivering sufficient flexibility. We might for instance adopt a policy of having a tax buffer of 0.5 per cent of GDP by 2005 and 1 per cent by 2010. With company tax changes already announced taken into account, the tax cuts involved in the Government's new tax system involve revenue reductions of about 1.5 per cent of GDP.

macro-economic reform for a globalised economy

BOX 5 Tax cuts and medium term goal setting

In releasing the last New Zealand Budget, the New Zealand Government announced that it intended to cut taxes in the future. However it did not specify the precise cost or nature of those tax cuts because they were intended to be delivered more than two years in the future.

The Government announced instead its intention to "assess the scope for further tax reductions" in the light of a range of considerations. It indicated that it would be prepared to fund the tax cuts from reduced spending on new policy initiatives, ongoing savings, tax rationalisation and "reductions in projected operating surpluses, if subsequent fiscal projections indicate larger operating surpluses in the medium term and more rapid progress towards the net debt objective".

Such a commitment is not unlike the mechanism being proposed above, namely the announcement of tax cuts which are contingent upon certain circumstances being met which vouchsafe their appropriateness.

Source: «<http://www.budget99.govt.nz>»

Nevertheless, without a degree of community and indeed bipartisan understanding, if not support, the reforms could easily be misrepresented and fall foul of political point-scoring. In such circumstances, one way to move forward would be a public inquiry with the possible arrangements being worked through by a group of respected experts and leaders. They could consider public submissions and have access to high quality technical advice.

The Hilmer and Wallis reforms – each of which involved wide-ranging and systematic reform – set the benchmark in this regard. Each involved both a public inquiry and a substantial public report exploring the issues and making recommendations. Each proposed sweeping institutional change and each subsequently received substantial bipartisan political support.



SCENARIO 2 Better fiscal policy adjustment

It is clear in hindsight, and was clear to many commentators at the time, that fiscal policy required tightening in 1994. As events unfolded, fiscal policy was eventually tightened in 1996. However, the delay meant that fiscal policy was tightened more rapidly than would otherwise have been necessary.

In this simulation, we re-run fiscal history by taking half of the fiscal tightening in the August 1996 Budget and assume it took place in the May 1994 Budget. The remainder of the tightening is left in the 1996 Budget.

This was achieved in the simulation by:

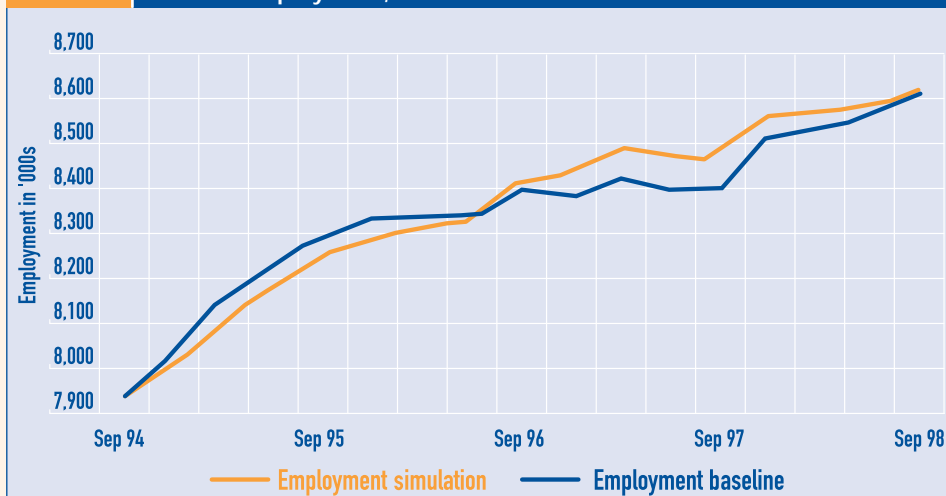
- cutting \$1.7 billion from government consumption spending in 1994-95;
- cutting unemployment-related transfers and other transfers by \$1.6 billion;
- reducing government employment by 10,000 people (saving the Government some \$300 million in wage costs); and
- making equivalent and offsetting moves in 1996-97.

The cuts in transfers directly reduce private consumption spending in 1994-95 and 1994-96, while the cuts to government consumption spending also reduce demand at that time.

An attendant accelerator effect knocks some of the strength from business investment, but dwelling investment benefits from the reductions in short term interest rates in 1994-95 and 1995-96.

These arise for three reasons – reduced demand pressures both directly eat into the inflation rate, and also lower actual demand relative to trend demand at that time. Similarly, unemployment rates rise relative to the NAIRU, also reducing pressures for interest rate rises.

GRAPH 15 Level of employment, 1994 to 1998



macro-economic reform for a globalised economy

The model provides some offsets to these 'Keynesian' negatives even in the short run. Most notably, the economy sucks in less imports. Even so, GDP falls by 0.71 per cent relative to the baseline in 1994-95. (This almost exactly matches the extra fiscal tightening of 0.78 per cent of GDP in that year.)

The less stringent tightening in 1996-97 sees consumer spending move above baseline rather than below, and the same is true of business investment, employment, prices and wages, and interest and exchange rates.

The simulation produces unambiguously better results for the economy. Non-farm GDP (A) grows by 4.8 per cent in 1994-95 and 3.8 per cent in 1996-97 compared with 5.5 per cent and 2.5 per cent respectively in the baseline – an outcome that produces smoother growth and, because of that, more growth (see Graph 9).

The discounted level of real private consumption provides the best proxy for economic welfare in the AEM model. Real discount rates of 2 per cent and 5 per cent are chosen for comparison. These measures show net benefits from the use of 'smoother' fiscal policy in 1994-95 and 1996-97. The net present value (NPV) of private consumption in the years to 1997-98 is higher by \$0.72 billion and \$0.59 billion, at discount rates of 2 per cent and 5 per cent respectively.

Relative to the baseline, employment averages a net gain of 8,200 people in the years to 1997-98 (as seen in the graph above). As discussed previously, the gains are likely to be substantially greater than this.



6 Savings policy and the cycle

6.1 Introduction

Does Australia have a savings problem? While this is a matter of some controversy, there are reasons for believing that the gap between Australia's appetite for investment funds and its savings may be inhibiting our growth and so our capacity to generate jobs.

Our system of social security, together with the public provision of social services such as health and education, tends to depress Australia's savings. These policies have tended to depress *public* savings because they have made very heavy demands on public expenditure. The provision of transfer payments to those considered to be in need and the provision of social services such as health and education make up well over half the Commonwealth Budget. But as Chapter Five has discussed, governments have been loath to fully match the growth in expenditure of these programs with increases in tax.

The existence of the social safety net tends to reduce household savings by diminishing the incentives Australians have to save. As there are free or heavily subsidised government education and health services, and benefits for unemployment, sickness, single parental responsibilities and for old age and infirmity, private incentives to save and so to prepare for such eventualities are substantially reduced.

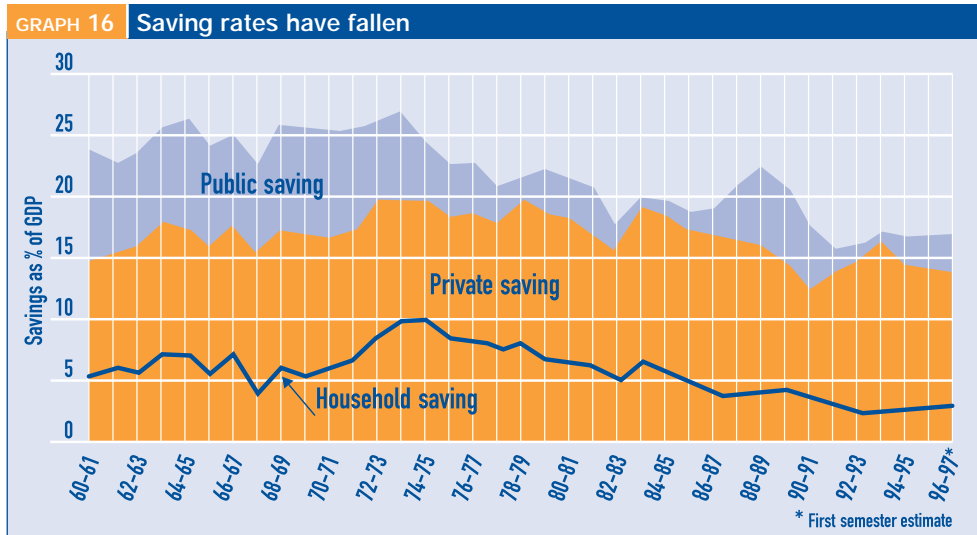
This is not to argue against the existence of the social safety net, which enjoys the support of most Australians and receives bipartisan political support. To the contrary, an essential part of a responsible commitment to the safety net is a commitment to address the problems to which the existence of the safety net can give rise.

6.2 Australia's national saving

Both Australia's public and household savings rates have fallen dramatically since the 1970s (see Graph 16). In particular, many consider that the decline in national saving rates has constrained Australia's economic growth (Fitzgerald, 1996: 7-8, 26-27). And given the aspirations of Australia's workforce for continuing rises in their real wages and living standards, a constraint on economic growth is a constraint on our capacity to generate the jobs necessary to achieve full employment.

It is partly in recognition of these problems that Australia has introduced compulsory superannuation.

macro-economic reform for a globalised economy



Source: Asia Pacific Economics Group, 1997. Asia Pacific Profiles, 1997, FT Newsletters & Management Reports, Hong Kong

6.2.1 Superannuation in Australia

While there is an ongoing debate surrounding the overall impact of government incentives for private saving, for many decades it has been policy in Australia to offer special incentives to those prepared to save through the vehicle of superannuation.

In recent years, the Australian superannuation system has become much more broadly based in the community with the advent of compulsory superannuation. Under this policy, 7 per cent of Australian employees' wages are now dedicated to superannuation, and this is set to rise to 9 per cent by 2002-03. The basic framework of rising levels of compulsory savings is a bipartisan one, although the major parties have differed about a range of matters including the extent of future increases in compulsory superannuation and the means by which these increases will be brought about.

| Table 3 Superannuation coverage, 1996-97 | |
|--|-----------------------------|
| | Superannuation coverage (%) |
| New South Wales | 90.8 |
| Victoria | 92.6 |
| Queensland | 89.9 |
| South Australia | 92.4 |
| Western Australia | 91.4 |
| Tasmania | 92.6 |
| Northern Territory | 90.9 |
| Australian Capital Territory | 94.1 |
| AUSTRALIA | 91.4 |

Source: ABS (1998)

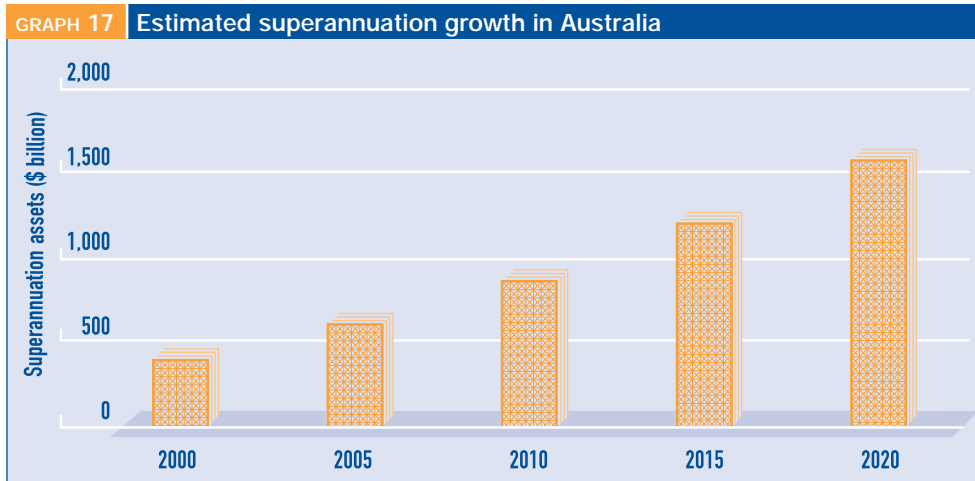


As a result of this policy of compulsory superannuation, superannuation in Australia enjoys significant coverage (see Table 3), there are a considerable number of superannuation providers in the marketplace (see Table 4) and superannuation appears to be widely accepted within the community.

| Table 4 Superannuation by type of fund | | | |
|--|---------------------------|--------------------------|---------------------------|
| Type of fund | Total assets (\$ billion) | No. of funds (June 1997) | No. of accounts (million) |
| Corporate | 64.6 | 4,060 | 1.3 |
| Industry | 23.2 | 117 | 5.4 |
| Public sector | 77.8 | 83 | 2.8 |
| Retail (including RSAs) | 86.6 | 388 | 8.2 |
| Excluded | 41.3 | 155,702 | 0.3 |
| Balance of statutory funds | 49.7 | n.a. | n.a. |
| Total assets | 343.2 | 160,350 | 18 |

Source: ISC (1998)

Approximately \$396.8 billion is expected to be held in superannuation assets in Australia by June 2000, and this is estimated to rise to \$1581.1 billion by 2020 (see Graph 17).



Source: Rothman (1998)

6.2.2 Savings and the constraints on Australian economic and employment growth

Within the context of a national savings debate there is an ongoing discussion regarding the relationship between national saving and Australia's current account.

Ultimately, the current account of the balance of payments, and therefore the rate of change in net external liabilities, depends on the relationship between domestic savings and investment. The large decline in the savings share of GDP since the early 1970s has been a significant factor in the emergence of high current account deficits at modest levels of investment.

macro-economic reform for a globalised economy

As such, inadequate levels of savings can increase Australia's exposure to external shocks, particularly as markets, politicians and the general public have been sensitised to the current account deficit as a measure of external constraint.

However, as Harper (1996:21) points out, increasing savings does not *necessarily* reduce the current account deficit. If rising investment were to bring about an even greater increase in national investment, our current account deficit would obviously rise.

As Fitzgerald (1996:27) notes, while it is possible for increases in national investment to exceed the increase in national saving in certain periods, the more typical finding is for less than a one-for-one relationship. As a result, over time, the expectation is that, if savings are increased, investment can be expected to rise by less, thus leading to a lower current account deficit as well as to higher growth and higher living standards in the future as a result of increased investment.

Nevertheless, even if increased savings did produce increased investment to the point where the current account deficit did not fall or actually increased, as Harper (1996:22) argues, providing the investment produced satisfactory returns, it would be worth having regardless of the resultant effect on the current account deficit.

... even if the current account deficit were to rise, the investment would be private ('consenting adults') and would eventually bring higher levels of national saving (and a lower external debt) in its train.

In recent years, there has also been some debate about the apparent correlation between high rates of savings and high growth rates and in particular which causes which.¹⁶

There is a clear correlation between national saving and investment (Feldstein & Horioka, 1980; Fitzgerald, 1993; Feldstein, 1995; Fitzgerald, 1996). Fitzgerald (1996:26-27) argues forcefully that this relationship is both bi-directional and dependent upon the time frame in which the relationship is considered. During a transitional period, moving to a higher growth rate will feed back into an increase in the saving rate over whatever level it would otherwise have been. Over the medium to longer term, the predominant causality will be from saving to investment.

Others such as Harding (1996:18) have questioned the strength of the causal link by which increased national saving results in increased investment (see also World Bank, 1993). Certainly the less national investment responds to increases in national saving the more increased national savings will ease the current account constraint.

As noted in the 1998-99 Federal Budget, the process of fiscal consolidation at both the federal and state levels has seen a marked decline in the public sector's call on national saving in recent years (Commonwealth, 1998:8-11). Lifting public saving will generally have a positive effect on national saving, although the extent to which

¹⁶ It is likely that this correlation would be less in evidence since global financial problems emerged in Asia in 1997. A number of countries involved in the Asian crisis had high savings rates and high growth rates in the years before the crisis. They have subsequently experienced sharp declines in economic output. Furthermore, Japan has stagnated throughout the 90s despite – and some economists would argue partly because of – very high savings rates.

national saving will increase depends in part upon the measures used to raise public saving – that is, tax increases and/or spending cuts.

As Fitzgerald explains (1996:11):

Tax increases and spending cuts ... [are] not equivalent: the latter will have greater effect on national saving, because there will be a smaller offsetting change in private saving in response.

While public dis-saving has been arrested recently in Australia, the level of private saving is expected to decline in the short term. In part, this is due to households and firms maintaining spending at desired levels in the face of slower income growth resulting from weaker export returns (Commonwealth, 1998:9). (The corollary of this is a rising current account deficit.)

Demographics will become somewhat more favourable for national savings over the next decade or so with a rise in the proportion of the population in age groups which historically have been high savers and a decline in younger, low-saving age cohorts. Low inflation may also stimulate greater savings, although we have had low inflation for most of the 1990s with relatively little effect. The increase in the Superannuation Guarantee to 9 per cent of qualifying employee earnings by 2002-03, is estimated to add around 2.1 percentage points to private saving as a share of GDP over the next decade (Commonwealth, 1998:11). Clearly, compulsory superannuation is an effective tool in increasing private savings.

6.3 Enhancing national saving

Together with the public sector fiscal consolidation of the recent past, the proposals for more flexible and independent fiscal policy management explored in Chapter Five can help ensure that the progress we have made to date is ‘locked in’ to the future long term outlook. At the same time they will provide a mechanism to enable fiscal policy to once again be available to help manage the economic cycle.

There is also a healthy case for the provision of direct government incentives to encourage private saving. A primary objective of such incentives is to ensure that, where they can, people provide for the exigencies of life through their own saving rather than by drawing on community-funded support. By providing incentives to encourage private saving, it is hoped that households will finance increased savings with reductions in consumption or increases in labour supply.¹⁷

Clearly, policies that provide incentives for particular types of investment holdings can directly influence the investments in which private saving is held. In Australia, this effect is clearly illustrated by our heavy investment in housing stock (Fitzgerald, 1996:8-9) and, more recently, by the growth in superannuation assets (see Graph 17) both of which have received relatively favourable tax treatment.¹⁸

¹⁷ When people are forced to make superannuation contributions, they may do less saving through other vehicles – such as paying off their houses. However, liquidity constraints and the fact that people treat different savings vehicles differently, means that mandating savings in superannuation is likely to increase total savings. There will be some offsetting dis-saving in other savings vehicles, but it will be partial. See Harding (1996:19).

¹⁸ This comment is subject to some observations about the generosity of current taxation concessions for superannuation discussed below.

Somewhat more contentious, however, is the effect that such policies have on the overall level of private saving, and more generally on the level of national saving (Liebfritz *et al*, 1997:110). Considerable empirical evidence suggests that providing public incentives for specific forms of private saving can result in a net increase in private saving (Engelhardt, 1996; see also Bernheim, 1996).

On the other hand this support is not yet universal (Engen *et al*, 1994; Engen *et al*, 1996; see also Bernheim, 1996). As Fitzgerald (1996:28) has noted, more evidence is still required on the extent to which incentives to hold savings in certain favoured assets reduce savings held in other types of assets.

More broadly, while there is relatively strong support for the positive net effect that saving incentives will have on private saving (Feldstein, 1995; Fitzgerald, 1996; Engelhardt, 1996), it has been questioned whether the cost of providing such incentives could, in certain circumstances, outweigh any increase in private saving (Harper, 1996:22-23; see also Engen *et al*, 1994; Engen *et al*, 1996).¹⁹

In Australia, there is already considerable dispute as to the actual cost of providing saving incentives. The Federal Treasury argues that superannuation currently receives significant tax concessions (\$5,770 million in 1994-95 and \$8,315 million in 1995-96). However, these estimates are based on treating superannuation contributions as cash in the hand of the member, even though a member might not receive the benefit of the contributions for some decades.

By contrast, in work sponsored by the superannuation industry, Access Economics (1998) argues that a reasonable alternative approach to measuring the cost of providing saving incentives for superannuation would be to do so against the benchmark of tax due when benefits are paid (that is, when the member of a superannuation fund may actually spend that money). On this basis, Access Economics argues that superannuation has been overtaxed since 1994-95, even before accounting for the savings arising from reduced social security expenditures.

This dispute over the cost of providing incentives to superannuation in Australia highlights a more general issue – that is, that any discussion of national saving needs to be taken in the broader context of Australia's taxation system.

As Fitzgerald (1996), Harper (1996) and Harding (1996) have all noted, our current tax system is heavily skewed towards taxing income rather than consumption, which imposes negative incentives on national saving. Incorporated in this system are high levels of taxation on the returns to saving, and in particular returns on certain investments such as interest-bearing deposits.

In an economic sense, a 'first best' approach to improving national saving would shift the emphasis of taxation away from income and towards consumption. To the extent that public incentives do increase national saving, a number of benefits will potentially flow.

By increasing private saving, we will add to the pool of Australian capital. Even where international capital is highly mobile, the evidence suggests that a substantial proportion

¹⁹ Harding (1996:18-19) also noted the potential impact of public incentives to saving on human capital accumulation.



of increased Australian savings will be available to Australian businesses (Barro *et al*, 1995; Fitzgerald, 1996; Leibfritz *et al*, 1997). This increase in the supply of domestic funds will tend to reduce the extent to which we must call on the savings of others; thus, it will lower the cost of capital in Australia. This will make Australian business more competitive and so able to invest and employ more people.

The existing level of compulsory super savings, and the prospect of their rising in the future creates an opportunity which would not otherwise be available. This is discussed in the next section.

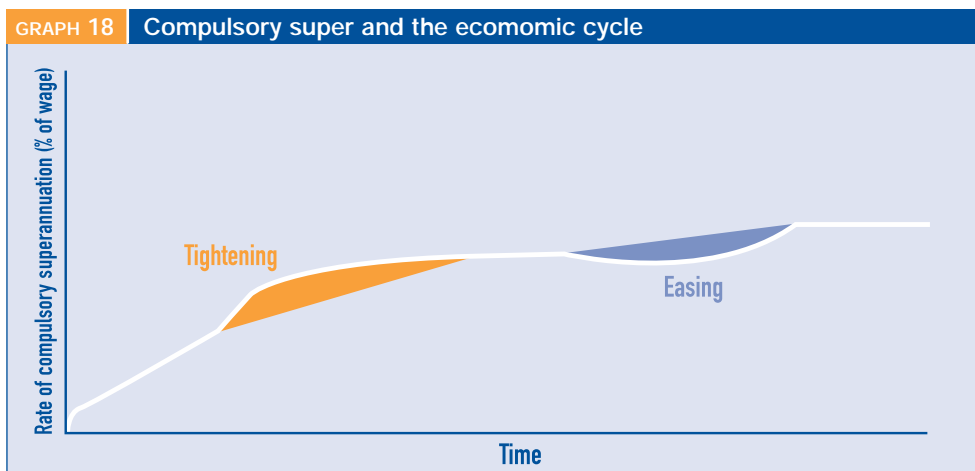
6.4 Towards a more flexible superannuation system

Currently there is a medium to long term Australian policy objective to increase the pool of superannuation savings, and to do so by way of increasing compulsory contributions to superannuation.

Once we have achieved our objective of increasing Australia's savings to the extent appropriate using compulsory superannuation, we will have built a policy institution that is capable of lending itself not just to medium to long term management of our household savings rate – and individuals' retirement income savings. It can influence those variables in the short as well as the medium to long term. It will accordingly be a potent tool of macro-economic management.

Thus, once levels of compulsory superannuation have reached a level considered appropriate for Australia's longer term savings and retirement income needs, we should contemplate the possibility of some short term variation in compulsory superannuation contributions. Thus, when macro-economic policy required tightening, the requirement to contribute to superannuation could be increased. By contrast, where economic stimulus is called for, there may be occasions where temporarily lowering the superannuation contribution rate would be the most efficient instrument (see Graph 18).

Of course changes in monetary and fiscal policy would continue to be the more usual



macro-economic reform for a globalised economy

instruments where macro-economic management were concerned, but there would be occasions when changes to compulsory superannuation would be an appropriate adjunct to these policy tools. The historical circumstances which are ‘re-run’ in Scenario 3 provide an example of a situation in which temporary changes in compulsory superannuation would have provided a very useful addition to the traditional tools of macro-economic policy. On occasion, Singapore has used its compulsory savings vehicle, the Central Provident Fund,²⁰ in addition to traditional instruments of macro-economic management, with some success.

As will be seen from Box 6 below, if we were to use superannuation in the future as part of our armoury in macro-economic management, there are better and worse ways of doing it. Accordingly, even if we do not move to use compulsory superannuation in this way in the immediate future, we should be keeping it in mind as we proceed to build compulsory superannuation in Australia. If we do we will ensure that we evolve the institutions of compulsory superannuation to more fully accommodate the possibilities that compulsory superannuation holds for the future.

Box 6 Adapting the incidence of super to better manage the cycle

Currently the legal obligation to pay superannuation for employees falls on employers. Whether over time the employer actually pays the superannuation levy or whether employees bear its ‘economic incidence’ through lower wages is unclear. Nevertheless, disguising the true cost of superannuation by requiring employers to bear its legal incidence has eased the political course of increasing compulsory superannuation contributions.

While this is an effective political strategy to gradually increase the compulsory superannuation rate, to work as an instrument of short term macro-economic management, it would be appropriate for *temporary* changes in compulsory superannuation contributions to be reflected in employees’ take-home pay rather than in employer costs. This is because changing the stance of macro-economic policy through incremental changes to employer labour costs is likely to have long and unpredictable lags (in the same way that this is the case with changes in the stance of monetary policy), and thus higher risks in managing the economic cycle, than changes in employees’ take-home pay.

Phasing towards a system in which superannuation contributions are reflected in employees’ take-home pay should be readily achievable. It would be relatively simple to account for all existing compulsory superannuation contributions from the employer as a payment by the firm to the employee that is then compulsorily paid into superannuation by the employee, just as the employer pays PAYE tax on behalf of the employee today. The practical arrangements by which the employer is responsible for making actual payments need not change. Nevertheless, it would be necessary to make some consequential changes to taxation arrangements to minimise the differences in tax liabilities under the two approaches.

²⁰ It should be noted that the levels of compulsory saving in Singapore under its Central Provident Fund are much greater than levels of compulsory savings in Australia. This is certainly true today, but, so extreme is Singapore’s commitment to compulsory saving that it is also likely to remain true under any conceivable increase in compulsory saving in Australia.



A tightening or easing of superannuation policy would have macro-economic effects similar to increases or decreases in income tax. However, there would be some important differences.

6.4.1 *Reduced budgetary impact*

Changes in the level of compulsory superannuation would enable the management of aggregate demand in the economy with minimal budgetary changes for governments. This could offer some advantages over fiscal policy changes, particularly where they were subject to the lags that are often associated with changes in fiscal policy, particularly on the expenditure side (see Chapter Five above).

6.4.2 *Greater community acceptance*

A further important consideration is that many in the community have a more positive attitude to superannuation contributions – which are seen to ultimately directly benefit the contributor – than they have to tax payments.

As such, there may be circumstances where the community will be more prepared to accept macro-economic tightening via increased superannuation contributions than via increased taxes. It is likely that, where a reduction in consumption is required, individuals would prefer to defer their personal spending rather than sacrifice it to government revenue.

6.4.3 *Increased policy choice*

Enabling superannuation to be used as a macro-economic management tool would also provide decision makers with increased policy choice.

In the last monetary and fiscal contraction of the early 90s, it is clear with the benefit of hindsight – and some were arguing with only the benefit of foresight – that less weight should have been placed on monetary policy (with its unpredictable and undesirable effects on firm investment and competitiveness).

An alternative approach could have involved temporarily increasing people's compulsory superannuation contributions ahead of the predetermined medium-term schedule.

This would have meant that different objectives – increasing the superannuation contribution in the medium term and managing the economy in the short term – could have complemented each other. Increases in compulsory superannuation which were due to occur in the future could have been brought forward in a way that would have improved macro-economic management. Likewise, when it became possible to ease – at about the time interest rates were reduced in the early 90s – the level of compulsory superannuation contributions could have returned to their long term schedule (see Scenario 3).

macro-economic reform for a globalised economy

6.4.4 *Next steps*

As compulsory superannuation will continue rising over at least the next few years, it is unlikely that temporary variations in the level of compulsory superannuation should allow it to fall for any substantial period of time below the gradually rising pre-set schedule it is on at present. Scenario 3 below explores a scenario in which temporary changes in the rate of contribution were allowed to change to increase superannuation contributions ahead of their pre-set schedule. The scenario illustrates how such a course could have substantially improved macro-economic management to moderate the last 'boom-bust' cycle.

In principle however, it would also be possible to move faster even where the initial discretionary short term change in compulsory superannuation was an easing. Thus it would be possible in principle to lower the compulsory superannuation contribution to ease macro-economic conditions should slowing in Australia's rate of growth require it. At the same time the longer term commitment to continue to raise superannuation contributions would remain. Indeed, the long term commitment might be fortified with a commitment to continue to increase compulsory superannuation beyond the 9 per cent to which we are currently committed.

Nevertheless in the current circumstances with foreign liabilities growing substantially faster than our economy as a whole, we should err on the side of caution when it comes to easing compulsory savings policy.

**Scenario 3 Using superannuation as a macro-economic management tool**

Imagine if the proposed tools had been available to policy makers at the time when compulsory superannuation was first introduced – in the late 1980s.

Towards the end of the 1980s policy makers became concerned that the economy was overheating and that Australia's import bill was leading to a blowout in Australia's current account. The fear was that, without policy action to moderate the level of demand and activity in the Australian economy, Australia's external position would rapidly become unsustainable. However fiscal policy was relatively tight.

In these circumstances policy makers used the one lever they felt remained available to them at short notice – monetary policy. Monetary policy was tightened considerably. After a prolonged period with interest rates around 20 per cent the economy went into severe recession. The recession graphically illustrated the difficulty of leaning too heavily on monetary policy to moderate demand.

In hindsight one can say that the *degree* of restraint imposed on the economy was misjudged. However, so also was the *kind* of constraint that monetary policy provided. For a major channel through which higher interest rates affect demand is a higher exchange rate. This means that imports become cheaper in Australian dollars and Australian exports become more expensive in their destination markets. In addition, higher interest rates raised the cost of capital to business. Accordingly, although higher interest rates helped moderate demand (in the event, far too much), they also delayed action on Australia's current account deficit. Investment in Australia's traded goods and services was hampered, because:

- domestic demand was weakening;
- the cost of capital was rising; and
- Australian goods were competing at an \$A disadvantage against goods produced in foreign markets.

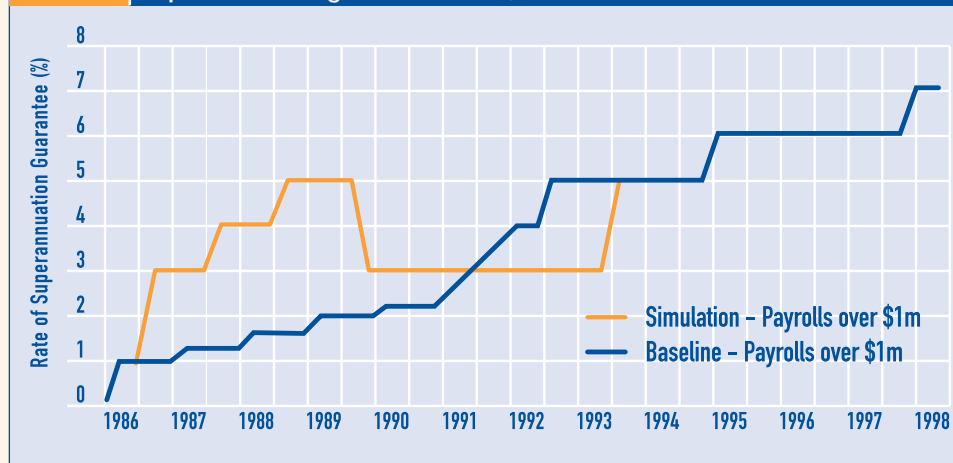
In this scenario, a counterfactual historical experiment is performed by changing the policy mix over this period. Instead of tightening monetary policy to the degree it was tightened, the introduction of compulsory superannuation is accelerated. In fact it took from June 1987 to June 1992 for the SGC to be raised from 1 per cent to 5 per cent. In this scenario, the SGC is increased from 1 to 5 per cent more rapidly – the task being accelerated in the late 1980s in line with the contemporary policy objective of constraining demand.

There are strong equilibrating assumptions in the model, which mean that large deviations from the actual path that history took have a tendency to wash out over time. This is particularly the case for unemployment. Over the long run, unemployment returns to its 'natural rate', which was set for these scenarios at 8 per cent.^(a) Nevertheless, the changes to policy make a qualitative difference.

macro-economic reform for a globalised economy

Initially, this scenario sees an increase in SGC rates from March 1987 over and above actual increases at that time in order to moderate demand.^(b) Rates are progressively increased to 5 per cent for employers with payrolls over \$1 million, and 3 per cent for employers with payrolls under \$1 million by March 1989. From June 1990, rates are then reduced to 3 per cent and 2 per cent respectively, and remain at this level (below what they actually were in history) until March 1994, in order to provide a stimulus to the economy over this time (see Graph 19).

GRAPH 19 Superannuation guarantee rates, 1987 to 2008



Due to the contractionary effect of the increases in compulsory superannuation, policy makers reduce their reliance on high interest rates in the late 1980s and early 1990s. Bill rates are held at their December quarter 1988 level (of 13.75 per cent) for the two years to December quarter 1990.

Would a more flexible superannuation policy have been beneficial for Australia? As a result of the SGC changes, less of the higher wages of the 1980s are consumed, helping to constrain the boom.^(c) The resulting reduction in employees' consumption spending discourages *business investment* via a short term accelerator effect. Domestic demand is weakened, and this moderates *inflation* and the boom conditions of the late 1980s.

These effects are outweighed by the effect of *lower interest rates* (both nominal and real) which SGC tightening makes possible from 1988-89. The combined effect of the measures actually accentuates the boom of the late 1980s. (With 'hindsight' the counterfactual interest rates could have been chosen to further moderate the cycle. They could have done so by following the actual path of history more closely. However, doing so would have lowered growth in the model over the long term. Accordingly, the parameter values chosen set interest rates to maximise sustainable growth. This still leaves other instruments – e.g. fiscal, superannuation and bonuses – to smooth the economic cycle.)

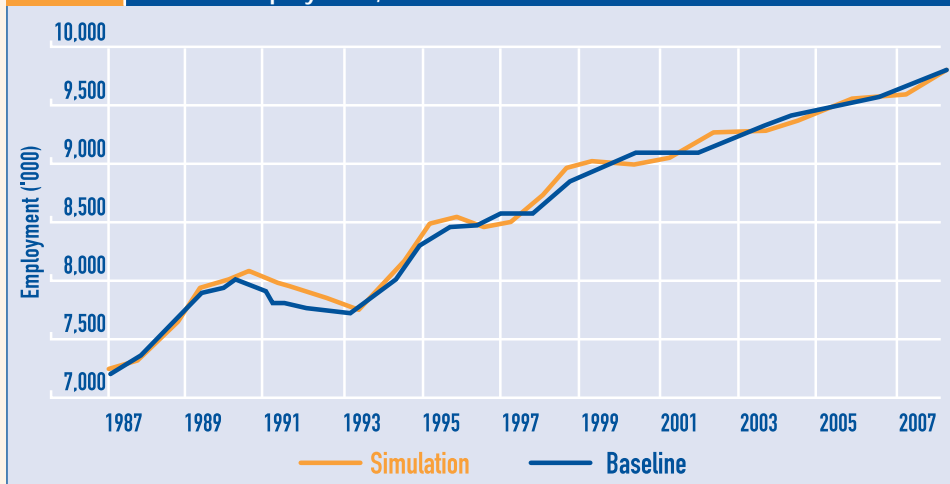


The employment peak in the simulation at September 1990 is 48,000 higher than the actual employment peak.

While the boom is bigger, this scenario also considerably moderates the recession. Through Australia's worst performing years of 1990-91 and 1991-92, *consumption, investment, exports, GDP and employment are all higher, with employment levels higher by 154,000 in 1991-92*. Lower interest rates see Australia's *nominal and real exchange rates* fall up to 1990-91, providing a competitive boost to the tradeables sector. Private consumption is also in part boosted by the increase in workers' take-home pay, as this scenario has a flexible SGC, which was reduced in June 1990 in order to boost demand.

Graph 20 shows that this scenario produces a higher employment peak in the early 1990s. It then moderates the fall in employment in 1991 and 1992. However, even allowing for lower interest rates and a flexible SGC, employment still falls to a similar trough in March 1993. Over the longer term employment starts to fall below its baseline level but on average there is a benefit. On average, to 1997-98 employment is 44,000 higher, while on average over the long run employment is 25,000 higher.

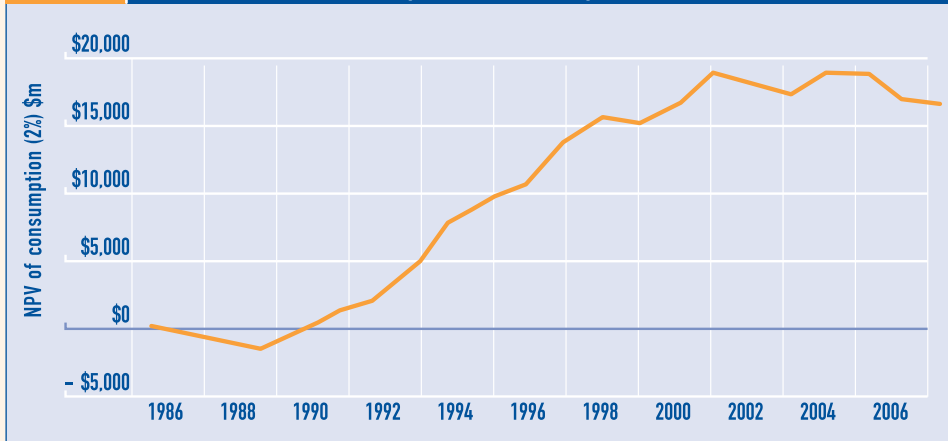
GRAPH 20 Level of employment, 1987 to 2008



The discounted level of *real private consumption* provides the best proxy for economic welfare in the AEM model. Discount rates of 2 per cent and 5 per cent are chosen for comparison. These measures show significant net benefits would have accrued from a flexible SGC with lower interest rates, with the net present value of private consumption higher by \$22.8 billion and \$16.7 billion respectively over the long run. The cumulative NPV of private consumption is shown in Graph 21 as a deviation from the baseline scenario. Following the path of consumption benefit, there is a general benefit to *employment, the capital stock* and GDP over the forecast horizon.

macro-economic reform for a globalised economy

GRAPH 21 Cumulative NPV of real private consumption, 1987 to 2008



- (a) The best proxy for economic welfare in the AEM model is the discounted level of real private consumption. This measures the monetary benefit, or additional purchasing power, which accrues to the domestic population. Real private consumption in the AEM model is related to both current income and to wealth. Changes to real wages or employment will both have an impact on current income, and therefore on consumption. In the longer run, policies that add to wealth will also produce a higher permanent level of private consumption.

Real private consumption is a better proxy for welfare – and so the success or otherwise of policies over the longer term in the AEM model – than employment or unemployment. This is because in order to ensure the model's stability, the model operates with a fixed NAIRU or 'natural rate' of unemployment. In the long run this means that employment gains in the AEM model are only ever modest, as they can only arise from an increase in the participation rate.

While in the short run economic gains may accrue through higher employment, in the longer term wages are bid up until the level of unemployment reverts to the NAIRU. In the longer term the gains translate into higher real wages. However, while the labour market gains vary between gains to employment in the short run and gains to real wages in the long run, both these sorts of gains translate into higher income and higher private consumption, our preferred measure of welfare.

- (b) The actual SGC did not come into operation until mid-1992. However, the spread of award based superannuation dates back to the 1986 National Wage Case, when compulsory superannuation was introduced in the form of Productivity Award Superannuation (PAS). The modelling links the latter through to the introduction of the SGC.
- (c) A threshold issue is the extent to which the actual cost of the SGC falls on employees even though the legal incidence of it falls on employers. The model used here assumes that a rising SGC suppresses wage growth so that, within a year, an increase in SGC is, in effect, paid by employees rather than employers. (This is consistent with the actual mechanism explored above whereby employees become liable for temporary changes in the SGC rates.)
- The other threshold issue is the extent to which super contributions made under the SGC arrangements are offset by reductions in voluntary super or other forms of saving. The model used here assumes that an addition to the SGC is only one third offset via reductions to other savings, as a first round effect. The eventual increase in savings is determined within the model after taking into account the incidence of the SGC on wages and hence changes in disposable income and consumption.



7 Conclusion

This discussion paper has explored a series of reforms that could improve the stability of the Australian economy and provide policy makers with more flexible and effective macro-economic management tools. These reforms will help prevent recession. They will also ensure that the benefits of economic prosperity are shared, and that the burden of any economic downturns are dispersed more broadly and so more fairly across the community.

Australia has a great deal to be proud of in its economic performance over the past decade and a half. While it is always possible to point to things we could have done better, there have been profound improvements in economic policy in almost every area. Our inflation and productivity growth performances have gone from being among the worst to being among the best in the developed world.

The same might be said of our performance in the area of monetary policy. In the area of fiscal policy the past two decades have seen us generally running government deficits of substantial magnitude. Australian governments are expected to run surpluses for the foreseeable future. And, as recent elections at both state and federal levels indicate, balanced or surplus budgets over the economic cycle now have bipartisan support.

Over the past two decades we have rebuilt our social safety net so that it has made a major contribution to making Australia a fairer society. In the opinion of the World Bank it offers a combination of comprehensive support and cost effectiveness which is amongst the best in the world. As suggested in the first discussion paper, despite our successes, and despite the relative success compared with many other countries – particularly European countries – there is plenty still to do in this area.

Our achievements stood us in very good stead during the turmoil that has engulfed international financial markets. And we have managed the economy since the financial crisis struck with great skill. The agenda for macro-economic reform explored in this discussion paper gives us the chance of building on these successes. They maximise our chance of institutionalising good macro-economic performance. The positive development of the ideas in these papers would place Australian macro-economic policy not just amongst those countries at ‘best practice’: they would place us in the vanguard as leaders at the frontier of best practice.

The point of all this is, of course, that despite our good performance for the best part of the 1990s we have yet to conquer unemployment. The ideas explored in this paper will not deliver full employment on their own. It will take more than that to overcome the legacy of two decades of Australian underemployment.

But just as other policies will be needed to achieve full employment, so those policies cannot restore full employment if we continue to experience savage recessions at least once a decade. The policies explored here could give us the best chance we are likely to have of avoiding recessions in the decades ahead or, failing that, of ensuring that they are as mild as it is possible to make them.

Nothing less will be acceptable if we are to achieve the Business Council’s vision for a fair, prosperous and fully employed Australia.

macro-economic reform for a globalised economy

Appendix

Scenario 4 Re-running the past with the tools of the future

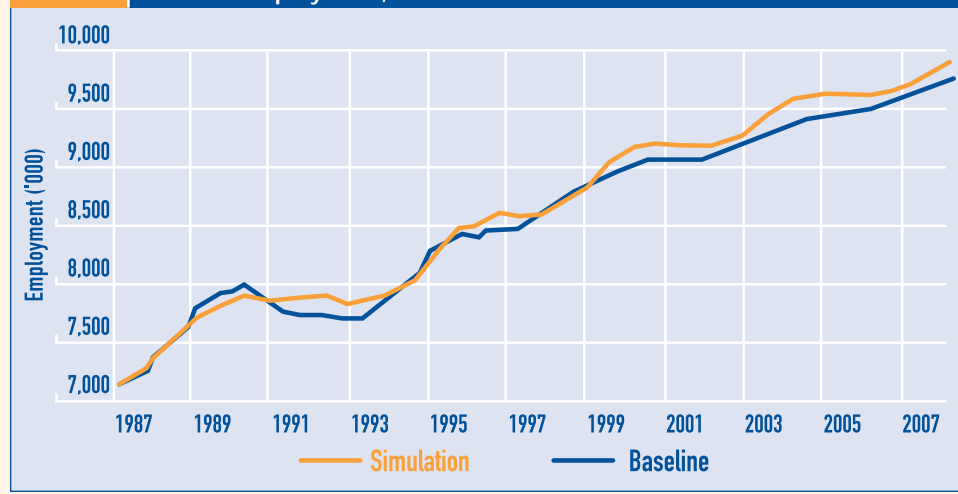
In this appendix, we assume that all the policy tools outlined in this discussion paper were available to Australian policy makers in the past decade and a half. Combining the three previous scenarios, we see an economy where:

- interest rates were lower in the late 1980s, because the SGC was increased;
- wages were sensitive to profits, cutting back growth in jobs and business investment in the late 1980s but allowing more investment and jobs in the recession of the early 1990s; and
- the rollback in the Federal Budget deficit in the mid-1990s commenced earlier and was smoother than actually occurred.

The proxy for welfare, the discounted level of real *private consumption*, shows a high benefit arising from this scenario. The NPV of private consumption in the years to 1997-98 is higher by \$12.5 billion and \$9.3 billion, at real discount rates of 2 per cent and 5 per cent respectively. Across the full horizon, the NPV gains shoot up to \$41.5 billion (at 2 per cent) and \$26.6 billion (at 5 per cent), indicating large long run benefits from smarter policy.

Private consumption gets an early benefit from higher nominal *wages* and from lower interest rates – even though increases in the SGC moderate this effect by deferring consumption. The higher wages produce a reduction in *employment* against the baseline that feeds into reduced private consumption from 1988-89 to 1990-91 – the only years private consumption is below the baseline.

GRAPH 22 Level of Employment, 1987 to 2008





Wage restraint in the early 1990s combines with higher profits and investment due to the smoother path of interest rates to bring employment back above baseline. Some 170,000 more jobs exist in 1991-92. Thereafter, employment and private consumption stay above baseline for the rest of the forecast horizon.

The simulation produces lower *interest rates* in the late 1980s. These then revert above baseline in 1991-92 and 1992-93 because the simulated economy is not quite so comatose and so does not need such a large reduction in rates to keep output moving. The fiscal smoothing from 1994-95 again allows interest rates to be lowered earlier than was actually the case. Thereafter through the forecast horizon interest rates follow a four-year cycle generated within the model but are below baseline on average more than they are above. Higher prices (driven initially by higher wages in the late 1980s) mean that *real interest rates* also remain lower for much of the period.

The benefits of more flexible and lower real wages and a smoother path of interest rates can be seen in gains to *employment* and the *capital stock*. In the long run, employment is 2.2 per cent higher, equating to 212,000 jobs, and the capital stock is 1.7 per cent higher.

Lower interest rates and higher prices combine to produce reductions in both the *real and nominal exchange rates*. This helps the competitiveness of the tradeables sector. Despite that, imports also rise over the longer term because of the stronger domestic economy. However, the export rise is larger, leaving an improved trade balance and foreign debt position. In the long run, Australia's foreign debt is \$34 billion lower. The stronger economy gives governments the ability to *lower income tax* that sustains further private consumption.

As well as providing the macro-economic benefits discussed above, this scenario also creates a smoother job path. Graph 22 shows lower employment in the late 1980s, but higher employment come the early 1990s. The drop in employment from the peak to trough over this time is 122,000 in the simulation – much smoother than the fall of 298,000 that actually occurred.

As interest rates are lower in the late 1980s, they substantially offset the employment-suppressing effect of increased bonuses in that period. Thus there is a higher employment peak than in the pure bonuses scenario. This in turn results in the early-1990s recession employment falling from a higher level – and so by more – than it does in the pure bonuses scenario.

Note that the 'combined scenario' is a simple combination of the three previous scenarios. Were all the policy instruments available to policy makers over the period, the likelihood is that further improvements could have been made. At critical times in the counterfactual history it would have been possible to improve performance further

macro-economic reform for a globalised economy

by setting the policy parameters with an appreciation of their interaction so as to optimise the overall effect.

Even so, the combined scenario still produces more jobs and more economic growth, both in the medium and long run, than any of the scenarios on their own.

As indicated in comments on the first counterfactual scenario, this modelling does not capture any of the gains that may be available from improved incentives from bonus schemes and from the avoidance of any 'hysteresis' effects in the labour market.

Should hysteresis exist in the labour market, there are additional gains from avoiding rises in unemployment because it is so hard to lower unemployment once it has risen. Some modelling work was done which indicated that, with relatively mild hysteresis, the gains are increased by about 10 per cent over those reported here.

Bibliography

Australian Bureau of Statistics (ABS), 1998, Cat. No. 6348.0, Labour Costs.

Access Economics, 1998, 'The Cost of Superannuation Tax Concessions: Estimates Prepared by Access Economics', a Paper prepared on behalf of the Association of Superannuation Funds of Australia, The Financial Planners Association of Australia, The Australian Stock Exchange and The Investment and Financial Services Association.

Akerlof, G. A., Dickens, W. T. and Perry, G. L., 1996, 'The Macro-Economics of Low Inflation', *Brookings Papers on Economic Activity*, 1, pp. 1-76.

Ball, L., 1996, 'A Proposal for the Next Macro-Economic Reform', Victoria University of Wellington Foundation, Wellington (mimeo), 11 November.

Barro, R., Mankiw, N. & Sala-I-Martin, X., 1995, 'Capital Mobility in Neoclassical Models of Growth', *American Economic Review*, 85 (1) pp. 103-115.

Business Council of Australia, 1999, *Rebuilding the Safety Net*, Melbourne.

Bernheim, B. Douglas, 1996, 'Rethinking Saving Incentives', Stanford University Department of Economics, Working Papers No. 96009.

Bernstein, P. L., 1996, *Against the Gods*, John Wiley and Sons, NY.

Blinder, A. 'Is Government too Political', *Foreign Affairs*, November/December, 1997, pp.115-126, at p. 126.

Caballero, R. and Hammour M., 1996, 'On the Timing and Efficiency of Creative Destruction', *Quarterly Journal of Economics*, 11 (3), pp. 805-852.

Cable, J. & Wilson, N., 1989, 'Profit-Sharing and Productivity: An Analysis of UK Engineering Firms', *Economic Journal*, 99, pp. 366-375.

Cable, J. & Wilson, N., 1990, 'Profit-Sharing and Productivity: Some Further Evidence', *Economic Journal*, 100, pp. 550-555.

Commonwealth Government, 1998, 1998/99 *Budget Paper No. 1 – Budget Statement No. 3*, AGPS, Canberra.

Debelle G. & Vickery, J., 1997, 'Is the Phillips Curve a Curve? Some Evidence and Policy Implications for Australia', Reserve Bank of Australia, Research Discussion Paper No. 9706.

Debelle G. & Vickery, J., 1998, 'The Macro-Economics of Australian Unemployment', Unemployment and the Australian Labour Market Conference, Reserve Bank of Australia & Centre for Economic Policy Research, Sydney, June, pp. 235-265.

Engelhardt, G., 1996, 'Tax Subsidies and Household Savings: Evidence from Canada', *Quarterly Journal of Economics*, 111 (4) pp. 1237-68.

Engen, E., Gale, G. and Scholz, J., 1994, 'Do Saving Incentives Work?', *Brookings Papers on Economic Activity*, 1, pp. 85-179.

Engen, E., Gale, G. and Scholz, J., 1996, 'The Illusory Effects of Saving Incentives on Saving', *Journal of Economic Perspectives*, 10 (4), pp. 113-38.

macro-economic reform for a globalised economy

- Feldstein, M. & Horioka, C., 1980, 'Domestic Saving and International Capital Flows', *Economic Journal*, 90, pp. 314-329.
- Feldstein, M., 1995, 'The Effects of Tax-Based Saving Incentives on Government Revenue and National Saving', *Quarterly Journal of Economics*, 110 (2) pp. 475-94.
- Fitzgerald, V., 1993, 'National Saving: A Report to the Treasurer', AGPS, Canberra
- Fitzgerald, V., 1996, 'Public Policy and National Saving', *Agenda*, 3 (1) pp. 3-30.
- Fitzroy, F. & Kraft, K., 1987, 'Co-operation, Productivity and Profit Sharing', *Quarterly Journal of Economics*, 101 (1), pp. 23-36.
- Gruen, F.H., 1975. 'The 25 per cent Tariff Cut: Was it a Mistake', *Australian Quarterly*, Vol. 47, No 2, June, pp. 7-20.
- Gruen, N. 1997, 'Making Fiscal Policy Flexibly Independent of Government', *Agenda*, Volume 4, No. 3 pp. 297-307.
- Harding, A., 1996, 'Emerging Trends In Income Inequality in Australia: 1982 to 1993/94', Address to Australian Population Association 8th National Conference, December.
- Harding, D., 1996, 'Comment', pp. 17-20, in Fitzgerald, V., 'Public Policy and National Saving', *Agenda*, 3 (1) pp. 3-30.
- Harper, I., 1996, 'Comment', pp. 21-24, in Fitzgerald, V., 'Public Policy and National Saving', *Agenda*, 3 (1) pp. 3-30.
- Harris, A., 1997, 'Privatisation: The Role of Public Sector Auditors', seminar given to the Economic Society of Australia, New South Wales Branch, 5 February.
- Hashimoto, M., 1991, 'Employment and Wage Systems in Japan', in Blinder, A. (ed.) *Paying for Productivity: A Look at the Evidence*, (The Brookings Institution: Washington, D.C.), pp. 245-295.
- International Monetary Fund, Draft Manual on Fiscal Transparency, 1998, (<http://www.imf.org/external/np/fad/trans/manual/>)
- Jones, D. & Kato, T., 1995, 'The Productivity Effects of Employee Stock-Ownership Plans and Bonuses: Evidence from Japanese Panel Data', *American Economic Review*, 85 (3), pp. 391-414.
- Jones, D. & Pliskin, J., 1991, 'The Effects of Worker Participation, Employee Ownership, and Profit-Sharing on Economic Performance: A Partial Review', in Russell, R. & Veljko, R. (eds.), *International Handbook of Participation in Organizations: For the Study of Organizational Democracy, Co-operation, and Self-Management*, Oxford University Press: London, pp. 43-63.
- Keech, W., 1995, *Economic Politics: The Costs of Democracy*, Cambridge University Press, Cambridge.
- Kraft, K., 1991, 'The Incentive Effects of Dismissals, Efficiency Wages, Piece-Rates and Profit-Sharing', *Review of Economics and Statistics*, 73 (3), pp. 451-459.
- Kruse, D. (1992) 'Profit Sharing and Productivity: Micro-economic Evidence from the United States', *Economic Journal*, 101, pp. 24-36.



- Leibfritz, W., Thornton, J. & Bibbee, A., 1997, 'Taxation and Economic Performance', *OECD Economics Department Working Papers No. 176*, Paris.
- Macfarlane, I., 1996, 'Making Monetary Policy: Perceptions and Reality', Paper presented to 25th Conference of Economists, Canberra, 25th September.
- Macfarlane, I., 1997, 'Monetary Policy, Growth and Unemployment', *Reserve Bank of Australia Bulletin*, June, pp. 1-8.
- Miller, 1992. Merton, H. 'Financial Innovation: Achievements and Prospects.' *Journal of Applied Corporate Finance*, Vol. 4, No. 4, Winter.
- Morton, P., 1998, 'Annual Bonuses, Employment and Productivity Change in Taiwan's Manufacturing Sector', *Journal of Economic Behavior & Organization*, 37, pp. 481-507.
- National Commission of Audit: Report to the Commonwealth Government (1996), AGPS, June <http://www.dofa.gov.au/pubs/ncoa/coaintro.htm>
- NSW Auditor-General, 1994, *Private Participation in the Provision of Public Infrastructure*, Auditor-General's Office, Sydney.
- Olekalns, 1998. 'The Macro-Economic Implications of Current Fiscal Policy', *Australian Economic Review*, No. 31 no. 1, pp. 66-72.
- Phipps, A.J. & Sheen, J.R., 1995, 'Macro-Economic Policy and Employment Growth in Australia', *Australian Economic Review*, 1st quarter, pp. 86-104.
- Richardson, R., 1994, 'Comment on the Fiscal Responsibility Bill', *Public Sector* 17 (1): 10-11.
- Rothman, G., 1988, 'Projections of Key Aggregates for Australia's Aged: Government Outlays, Financial Assets and Incomes', Paper for The Sixth Colloquium of Superannuation Researchers, University of Melbourne, July 1998.
- Scott, G., 1995, 'New Zealand's Fiscal Responsibility Act', *Agenda* (2), pp. 3-16.
- Temple, J., 1999, 'The New Growth Evidence', *Journal of Economic Literature*, Volume 37, March, pp. 112-156
- Treasury, 1999, *Fiscal Policy under accrual budgeting, Information Paper*, Commonwealth Treasury, Canberra.
- Wadhvani, S. & Wall, M., 1990, 'The Effects of Profit-Sharing on Employment, Wages, Stock Returns and Productivity: Evidence from UK Micro-Data', *Economic Journal*, 100, pp. 1-17.
- Weitzman, M. & Kruse, D., 1990, 'Profit Sharing and Productivity', in Blinder, A. (ed.), *Paying for Productivity: A Look at the Evidence*, (The Brookings Institution: Washington, D.C.), pp. 95-141.
- World Bank, 1993, *The East Asian Miracle*, Oxford University Press, New York.

Acknowledgments

Professor Bruce Chapman and Tony Salvage of the Centre for Economic Policy Research at the Australian National University provided research input to Box 1 and Chapter Four. Chris Richardson and David Rumbens from Access Economics provided the simulations presented elsewhere in the discussion paper. Bruce Cohen provided research and editorial assistance. David Harrison and Lori Evans assisted with editing and proof reading. Brett Kiteley of Stroke Pty Ltd provided the design, layout and publication management. Nicholas Gruen was the principal author and director of the project.

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

Figure 1. The effect of the concentration of the *Agrobacterium* strain on the transformation efficiency of *Agrobacterium* strain 101. The concentration of the *Agrobacterium* strain 101 was varied from 10 to 1000 cells per μ l. The transformation efficiency was determined by the number of transformants per μ l of the *Agrobacterium* strain 101. The data were expressed as the mean \pm SD of three independent experiments.

100



100

Figure 1. The effect of the number of trials on the mean accuracy of the responses ($n = 10$) as a function of the number of items ($n = 8$). Error bars represent standard error.

Figure 1. The effect of the number of trials on the number of correct responses. The number of correct responses was significantly higher than the number of incorrect responses in all cases. Error bars represent the standard error of the mean.

[illegible][illegible]

Figure 1. The effect of the number of trials on the mean accuracy of the responses ($n = 10$) as a function of the number of trials per condition ($n = 10$). The error bars represent the standard error of the mean.

10. *Journal of the American Academy of Religion*, 46 (1978), 1–22.

10. *Journal of the American Academy of Religion*, 46 (1978), 1–22.

[illegible]

10. *Journal of the American Academy of Religion*, 47 (1979), 1–22.

Figure 6. The effect of the number of iterations on the accuracy of the proposed algorithm. The results are averaged over 10 trials.

[illegible][illegible]



THE BUSINESS COUNCIL *vision*

We want to grasp the opportunity
for all Australians to enjoy the world's
best quality of life and standards of
living which are amongst the highest
in the world.

We want jobs for all who can work,
support for the disadvantaged
and a fair go for everyone.

We want to be a community of
Australians, united in our diversity,
proud of our achievements
creating wealth and work for all.



BUSINESS
COUNCIL OF
AUSTRALIA