

Economic *Roundup*

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IGR 2010: challenges and priorities for Australia

Dr Ken Henry AC
Secretary to the Treasury

Address to the Committee for Economic Development of Australia, Sydney, 14 July 2010.

Introduction

Good morning.

It is a pleasure to be with you.

CEDA is an important forum. It provides an opportunity for people from a diverse range of backgrounds and experience to come together to discuss the challenges and opportunities that Australia will face over coming decades.

I have been asked today to focus on the 2010 Intergenerational Report and some of the challenges and opportunities that are highlighted by the report.

It seems like quite a while since the IGR was released by the Treasurer. Yet it was only back in January of this year.

The report is aptly titled *Australia to 2050: future challenges*. I say aptly, because that is exactly what an IGR is about. It is about future challenges.

Identifying future challenges so that policy, across a broad range of portfolios, can be developed with a strategic eye to the needs of the future.

It is about stimulating broad public debate and ensuring the policy formulation process contemplates not just short-term considerations, but also the issues that could have substantial implications for the wellbeing of future generations of Australians.

The role of the IGR — a framing document

I think of the IGR as a framing document, a document to motivate discussions around the key challenges we will face over coming decades.

It is important to understand, however, that the IGR is an analytical tool, based on assumptions and projections. It does not forecast where we think we will be, or should be, in 40 years time.

Rather, it takes current economic and demographic trends, and current government policies and policy settings, and projects forward the implications of a continuation of those trends, policies and settings.

While many people focus on the 'point' projections contained in the report, and how they compare with previous IGR 'point' projections, it would be safer to focus on the broad path of the pressures outlined in the report. Yet it is difficult enough to base a narrative on precise numbers, far more so on plausible ranges of many numbers, so I

hope you will forgive me for what might seem like a bit of 'false precision' from time to time.

Since the first IGR in 2002, IGRs have been used as a tool for raising awareness of the challenges presented by an ageing population.

IGRs have also influenced thinking more broadly, with the 3Ps decomposition of the supply-side drivers of GDP and GDP per capita – population, participation and productivity – being used to guide government decision-making and debate across a range of policy areas.

Notably, raising labour force participation rates as a way of reducing the fiscal pressures associated with an ageing population is a proposition that has gained widespread acceptance.

The latest report has, correctly, focused on productivity growth as the key to sustained economic growth and improving GDP per capita.

Public debate also has extended to the first 'P', population; putting the size of Australia's future population and its trajectory into focus – and, more specifically, drawing attention to the challenges and opportunities that accompany a rapidly growing population.

This is something to be welcomed. Careful planning for Australia's future population – whatever its size – will be central to improving the wellbeing of Australians.

The latest report also builds on previous IGRs with a discussion of environmental challenges, sustainability and wellbeing. Importantly, it highlights how wellbeing is a multi-dimensional concept that goes beyond material living standards.

Key conclusions of the IGR

Allow me to recap for you some of the key conclusions of the 2010 IGR.

Australia's population is expected to continue to grow and age over the next 40 years.

We currently have a population of around 22 million people with about 13½ per cent of those (less than 3 million) aged 65 and older. By 2050, the population is projected to grow to nearly 36 million people with nearly 23 per cent of the population (more than 8 million) aged 65 plus. This projection is not a forecast and it is certainly not a target based on any particular policy approach. It is, instead, a projection, based on a continuation of long-run trends in fertility, mortality and net overseas migration.

Thinking about the population projections in a slightly different way, there will be only 2.7 people of working age to support each Australian aged 65 years or over by 2050, compared with 5 working age people per aged person today, and 7.5 in 1970.

Of course, this is just one way to think about dependency. For example, unpublished projections indicate that for every adult without employment – excluding fully self-funded retirees – there will be only 1.8 people in employment in 2049-50, a fall from 2 currently.

This is a modest deterioration when compared against the ratios presented in the IGR. However, regardless of how dependency is measured, an ageing population is expected to lead to a deterioration in dependency ratios, with adverse implications for economic growth.

In the IGR, long-term projections of economic growth are, as I have already noted, a function of population, participation and productivity – the 3Ps framework.

Specifically, real GDP growth per capita is a function of the proportion of the population of working age (that is, aged 15 or more), average hours worked by people of working age, and average output per hour worked.

Projections of the 3Ps are determined by demographic and economic assumptions.

The proportion of the population of working age has risen steadily over the past 40 years – from 71 per cent to 81 per cent – and is projected to rise even further over the next 40 years – to 83 per cent. But among those of working age, the proportion in the age bracket with the highest rates of labour force participation – that is, aged 15 to 64 – is set to fall substantially – from 83 per cent today to about 73 per cent in 2050. As this proportion falls, average rates of labour force participation will also fall.

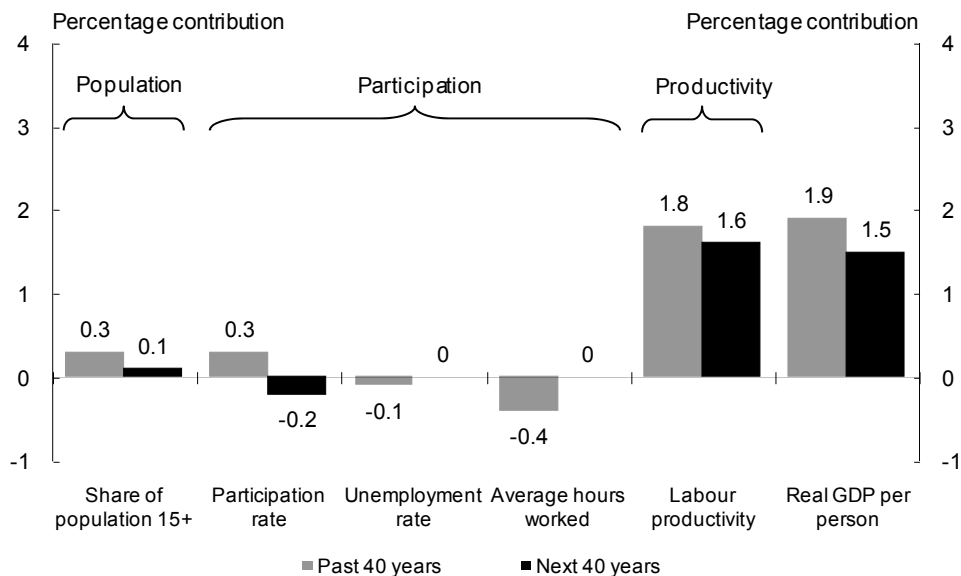
Ignoring productivity growth rates for the moment, that fall in labour force participation drives a projection of slowing rates of growth in GDP per capita.

Even with strong population growth, GDP growth will also slow. Thus, we project average annual GDP growth of 2.7 per cent over the next 40 years compared with 3.3 per cent over the previous 40 years.

Real GDP per capita is projected to average 1.5 per cent growth over the next 40 years compared with 1.9 per cent over the past 40 years.

Looking at the individual contributions of population, participation and productivity gives us a picture of what is driving past and future growth in living standards (Chart 1).

Chart 1: 3Ps of real GDP per person



Source: Treasury.

As I have noted already, over the past 40 years the proportion of the population aged 15 or more years has grown steadily. This demographic development was driven by a dramatic fall in the birth rate in the late 1960s and 1970s. Abstracting from any impact on workforce participation rates and labour productivity, this population ageing would have lifted GDP per capita by about 0.3 percentage points a year. As I have also noted already, over the next 40 years, the proportion of the population aged 15 or more is projected to continue to increase – though not as rapidly. Again abstracting from any impacts on participation and productivity, future population ageing would add about one-tenth of a percentage point to annual GDP per capita growth.

Of course, population ageing cannot really be assumed to have no consequences for workforce participation rates. Broadly, over the past 40 years the increase in the proportion of the population aged 15 or more was associated with an increasing proportion of the population being of prime working age. That is one of the reasons – though not the only reason – why past population ageing was associated with a higher average rate of workforce participation; higher rates of female participation were another reason. Looking ahead over the next 40 years, however, those of prime working age are going to fall as a proportion of the population aged 15 or more, acting as a drag on rates of workforce participation.

Thus, whereas higher rates of workforce participation added about 0.3 percentage points a year to GDP per capita growth over the past 40 years, participation rates are projected to fall over the next 40 years, subtracting about 0.2 percentage points from annual GDP per capita growth.

Over the past 40 years there were also significant, largely non-demographic, developments in respect of the unemployment rate and average hours of work which had an impact on GDP per capita growth – taken together, subtracting about one-half of a percentage point a year. Looking ahead, we see the unemployment rate coming down a little from its present cyclically high level – which will be positive for GDP per capita growth – with no change in average hours of work.

The standard IGR methodology for productivity growth is to assume that the 30-year historical average, in this case 1.6 per cent, will continue over the 40-year projection period.

In aggregate, the impacts of population and participation will be largely offsetting, leaving productivity as the major driver of future growth in real GDP per person over the next 40 years.

Assessments of fiscal sustainability usually focus on trends in government spending and revenues expressed as proportions of GDP. The projections contained in the IGR are consistent with the Government's commitment to keep the tax-to-GDP ratio below its 2007-08 level of 23.6 per cent.

The behaviour of the ratio of government spending to GDP depends upon what happens to nominal GDP per capita – thus far, we have explored what happens to real GDP per capita – and upon what happens to nominal government spending per capita. Indeed, the change in the ratio of government spending to GDP is simply the difference between the change in nominal government spending per capita and the change in nominal GDP per capita.

We are projecting that nominal government spending per capita will grow at a faster rate than nominal GDP per capita, so that over the next 40 years government spending will exceed revenue by about 2¾ per cent of GDP – excluding interest payable on additional public debt.

That is not large by international or historical standards. But that is not the point. A fiscal gap of that order points to a significant accumulation of public debt that could, at some point, prove difficult to reverse.

Challenges

Fiscal sustainability

Fiscal sustainability is a key theme of IGRs.

Near-term, budget settings can have a substantial influence on the projected path of public finances over even a long period of time.

Thus, the 2010 IGR demonstrates that by returning the budget to surplus in 2012-13 and committing to maintain a 2 per cent annual cap on real spending growth for some years, the medium-term fiscal strategy will make a significant contribution to addressing longer-term fiscal challenges.

This is not to say that, in light of the medium-term fiscal strategy, an ageing population no longer presents a threat to fiscal sustainability. Rather, what it demonstrates is that adjustments made now can reduce the need for larger adjustments later.

Over a longer time period, ageing of the population will still contribute to pressure on government spending and fiscal sustainability.

The IGR projects total spending to increase to 27.1 per cent of GDP in 2049-50, around $4\frac{3}{4}$ percentage points higher than its projected low point in 2015-16. In today's terms, that's the equivalent of adding around \$60 billion a year to government spending.

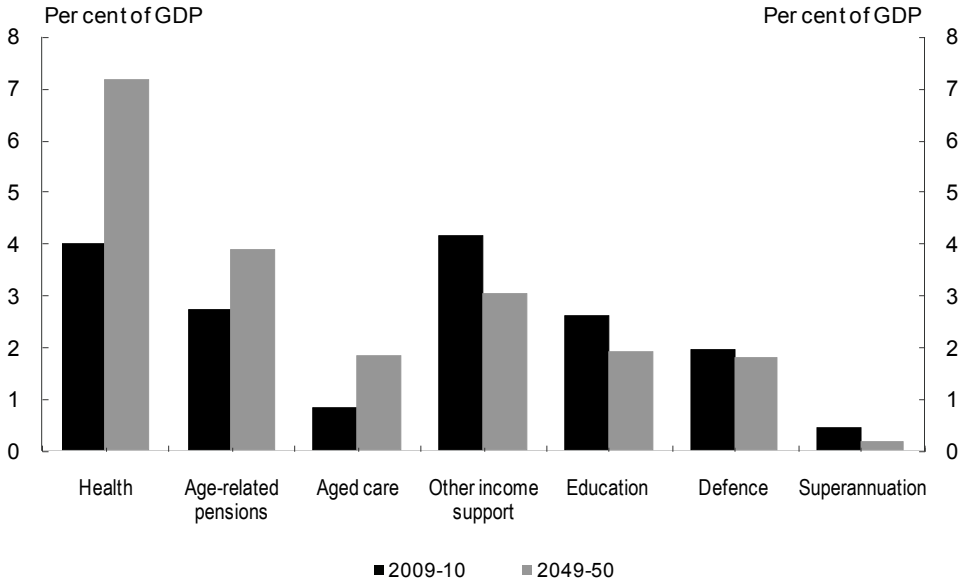
Around two-thirds of the projected increase in spending over the next 40 years is related to health; reflecting pressures from ageing, increasing community expectations and the funding of new technologies.

Growth in spending on age-related pensions (Chart 2) and aged care is also significant, both as a proportion of GDP and in real spending per person.

Currently, about a quarter of Australian Government spending is directed to health, age-related pensions and aged care. The IGR projects that Australian Government spending on these functions will increase significantly over the next 40 years, pushing their share of spending to almost one-half.

As a proportion of GDP, spending on health is projected to rise from 4.0 per cent to 7.1 per cent. Age-related pensions and aged care are projected to rise from 2.7 per cent and 0.8 per cent of GDP to 3.9 per cent and 1.8 per cent in 2049-50.

**Chart 2: Projections of Australian Government spending by category
(Per cent of GDP)**

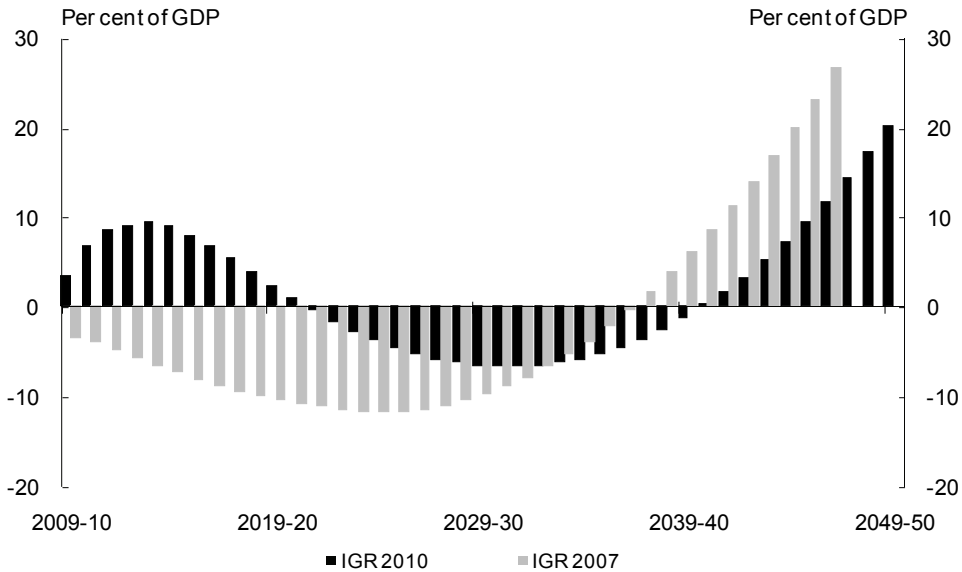


Source: Treasury.

As I have noted, excluding public debt interest, the IGR projects a fiscal gap of 2¾ per cent of GDP (or around \$30 billion in today's dollars) by 2049-50.

With a fiscal gap of this size (Chart 3), it is projected that net debt will emerge in the 2040s and grow to around 20 per cent of GDP by 2049-50.

**Chart 3: Projected path of Australian Government net debt
(Per cent of GDP)**



Source: Treasury.

Including the interest costs of rising net debt, an underlying cash deficit of 3¾ per cent of GDP is forecast by 2049-50.

Australia’s population

I have noted that the IGR projects Australia’s population to reach 36 million by 2050. I will emphasise again that this figure is a projection that reflects trends in fertility, mortality and net overseas migration. It is not a forecast. Nor is it a target.

While the population is projected to get bigger, its average rate of growth is projected to slow slightly to 1.2 per cent annually over the next 40 years, compared with the 1.4 per cent per annum experienced over the past 40 years.

Nevertheless, a population expansion of this order presents a number of challenges and opportunities for the Australian economy and society.

A key challenge will be the sustainable provision of the social and economic infrastructure needed to support a growing population, including the urban environment, transport, housing and service delivery networks.

An even greater challenge will be ensuring environmental sustainability – in which we have a poor track record, it must be said. That is not to say that population growth of this magnitude cannot be sustainable – rather, that it will test us. Certainly, it will

be important for a coordinated suite of policies to be developed across all levels of government in a carefully considered and measured manner.

I would now like to unpack a few of these key challenges and opportunities.

Cities

Australia has one of the most urbanised populations in the world. 75 per cent of the population live in cities with populations over 100,000, with capital cities currently comprising around two-thirds of the nation's population.

By 2026, an additional 4½ million people are projected to live in the capital cities and by 2056 this figure will rise to an additional 10½ million people.

These projections raise a number of questions about what our future cities will look like, where population growth will be strongest, and how our cities will function.

Answering these questions with sustainable approaches will not be easy.

Cities offer a range of 'economies of scale', or agglomeration, benefits. Indeed the IGR notes that cities require less fixed infrastructure per capita relative to rural areas because of the economies of scale that accompany infrastructure networks.

However, increasing population density can lead to congestion costs that potentially offset these benefits.

Careful planning and design of infrastructure networks, such that the agglomeration benefits of cities are harnessed and congestion costs are minimised, will be central to ensuring that our cities continue to remain liveable.

Such planning will focus on achieving a sustainably high level of investment in public infrastructure, as well as reforms to ensure existing infrastructure is more effectively utilised.

The latter will invariably require getting greater competition and better pricing in key infrastructure markets – such as water, electricity and transport networks.

Growth of our cities also will have implications for environmental sustainability and the wellbeing that is obtained from the environment.

For example, if our aim is to preserve or increase the contribution that the environment makes to wellbeing, we will need to consider how we house larger urban populations without risking further species extinction and a loss of biodiversity on the fringes of major population centres.

This will not be easy – particularly when the trend over the past two decades has been towards significantly larger houses with fewer people in them.

The establishment of Infrastructure Australia in 2008 has helped with the task of planning and designing the infrastructure networks required for the future.

The recent creation of a Major Cities Unit within Infrastructure Australia to specifically develop and implement measures to improve the sustainability, liveability and productivity of Australia's major cities is a positive step.

Housing

Planning and designing infrastructure networks to support a growing population will also need to give consideration to the housing needs of a larger population.

Planning for the housing needs of a larger population is not just about building more houses. It is also about making sure the supply-side response to increased housing demand is as efficient as possible and that it, too, occurs in a sustainable manner.

Addressing inefficiencies will be central to improving housing affordability and achieving equitable housing outcomes.

The COAG agenda for housing supply and affordability reform is focused on improving the efficiency of the housing market.

More specifically, the agenda is examining the housing supply pipeline, and government policies that affect housing – such as charges that may act as barriers to supply.

Service delivery

A larger, ageing, population will place pressure on government service delivery.

Population ageing will drive up demand for services related to seniors and aged care, while changing patterns of population settlement will have implications for the geography of services provision.

For example, new services for seniors, and especially aged care, will need to be located in particular parts of the country and most probably in the fast growing south-east corner of Queensland and the north-east of NSW.

Furthermore, demand for higher quality and a greater range of services is expected to increase in line with rising income levels, changing preferences and technological improvements.

To meet the expectations of improved service delivery in a fiscally sustainable manner, a modern service delivery network will need to be developed.

Such a network would need to use existing resources more efficiently, including through a more sophisticated utilisation of technology and information networks.

Environment

The IGR also placed a renewed focus on environmental sustainability and sustainability more broadly.

Sustainability is concerned with ensuring that the wellbeing of future generations is at least as high as that of the current generation.

The environment offers direct and indirect benefits to wellbeing. It contributes directly via the health benefits and enjoyment that it generates. Indirectly, it is an important input to production.

While the benefits offered by the environment are relatively clear in concept, individuals rarely incorporate the full environmental costs of their actions into decision making. For that reason, there is a substantial role for governments to play in ensuring that the use of the environment today – including the external impacts of non-environmental activities – does not act to reduce the wellbeing of future generations.

Equity

The last challenge I would like to touch on today concerns equity.

It is perhaps the most important challenge that we will face in coming decades. This is because many among the raft of challenges that I have outlined impact disproportionately on the more disadvantaged parts of our communities.

Notwithstanding an ageing population, GDP per capita is projected to continue to grow over the next 40 years, albeit more slowly than the previous 40 years. This means that governments will need to continue to make decisions about how the benefits obtained from a growing economy are distributed.

There is a case for ensuring that the tax and transfer system and labour market policies advantage those on the lowest private incomes, while also encouraging labour force participation.

Governments will also need to focus on increasing access in a range of areas – such as education, health, and employment opportunities.

Access to opportunity in these areas is a key dimension of wellbeing – especially because it has the potential to help reduce entrenched disadvantage across generations.

For example, we know that Australians from low socio-economic backgrounds are more likely to experience poorer education outcomes, with these outcomes tending to persist across generations.

This suggests that improved access to education can help to reduce intergenerational disadvantage.

Addressing impediments to participation in education and training is a key component of the Government's Social Inclusion Agenda.

Opportunities

As I mentioned in my opening remarks, the IGR 2010 provides an insight into some of the challenges that, if left unaddressed, could have substantial adverse implications for the wellbeing of future Australians.

Among those challenges, there are opportunities. And population growth, in particular, presents a number of opportunities. I will touch on these briefly.

Skilled immigrants can support economic growth and higher living standards by adding to the skills base of the labour force and contributing to productivity growth.

Labour force growth can also help to offset the budgetary effects of an ageing population to some extent.

And labour force growth could assist in managing structural changes that the Australian economy may experience in coming decades, such as those brought about by a sustained rise in the terms of trade.

Some elaboration of this last point might be helpful: To maximise the benefits of a higher terms of trade, the share of our factors of production allocated to the resources sectors will need to increase. A sustained increase in the size of the labour force can ameliorate the adjustment required in other sectors of the economy that would otherwise need to shrink.

Conclusion

The IGR 2010 has confirmed that population ageing will have a noticeable impact on GDP per capita growth, and on fiscal sustainability, over the coming decades.

Getting near-term budget settings right will be central to placing government finances on a sustainable long-term path. In this sense, an effective medium-term fiscal strategy will continue to play an important role in framing long-term revenue and spending decisions.

The IGR also reported that Australia's population will continue to grow strongly. A larger population will present a complex mix of long-term challenges that are multi-dimensional in their scope, and have the potential to affect the wellbeing of future generations in negative ways if not handled sensibly.

But a larger population also creates opportunities. In particular, it could – if approached properly – assist in managing some of the pressures of an ageing population by providing the skills and innovation needed to underpin continued economic growth.

It may also help to ameliorate some of the structural change likely to be associated with a sustained rise in our terms of trade.

Importantly, by confronting the challenges associated with an ageing and growing population early, and harnessing the opportunities, we can position the Australian economy on a sustainable growth path. That is to say, we can ensure that the wellbeing of future generations of Australians is at least as high as the wellbeing we enjoy today.

Thank you.

Tax reform: opportunities and challenges

Dr Ken Henry AC
Secretary to the Treasury

The following speech was the opening address to the *Australia's Future Tax System: A Post-Henry Review* conference in Sydney on 21 June 2010.

Introduction

Thank you for this opportunity to speak about the report into *Australia's Future Tax System* (AFTS).

I note that the brochure for this conference depicts a sign-post with an arrow pointing the way to Australia's Future Tax System. That is an apt depiction, as I will discuss today.

As many of you will know, one of the key features of the Review was extensive consultation – with business groups, welfare groups, trade union representatives, tax practitioner groups and academics. With respect to the last of these, the panel wanted to tap into the latest analytical thinking in tax policy and administration.

In June of last year we organised a tax policy conference that brought together leading policy thinkers from around the world. I'm pleased to see some of those same people here today. And it's good to see some new faces.

In opening this tax policy conference, I want to thank all of you for taking such a strong interest in the future of Australia's tax and transfer systems. While our review has set down some frameworks for how we think the systems should develop, there remains considerable scope for significant research and debate.

No doubt, some of you will have difficulty with at least some of our recommendations – and want to engage in a deeper debate. That's okay too. But today, I thought I might say some things about the key building blocks of the review panel's framework, and provide some thoughts on the work that remains to be done.

I am going to be quite deliberate in seeking to avoid, as much as possible, any commentary on the tax policy debate playing out in the political arena here. My comments will focus on issues that one can safely assume to be some years ahead of the political process – that is to say, issues on which the academic debate has not yet had sufficient traction with policy makers.

Yet, in focussing on these particular issues, I do want to say that they are among those challenging matters that should be of growing policy interest over time.

Since the publication of the report, and the Government's initial response to it a few weeks ago, I have found myself pondering this matter – of the political traction of ideas. Many of the ideas you will find expressed in the report have their origins in academic literature that is decades old. The fact that some of those ideas have not yet found expression in the tax laws of significant numbers of countries should give all of us reason for reflection.

Of course, some of the ideas remain contested. It is difficult to find consensus views among academics, perhaps especially in the social sciences in which even the most abstract theoretical proposition will betray a normative position. And yet, in the domain of tax policy debates, achieving academic consensus is the easy part. It is much tougher to convince a wary public; tougher still cynical media. And it is virtually impossible, in Australia at least, to secure political consensus on any tax proposal other than a straightforward tax cut.

None of that would matter if tax design didn't matter. But it does. Few areas of public policy are as important to the lives of citizens.

So I would like to encourage you, over the next couple of days as you ponder 'what' ideas make sense, to give some thought also to 'how' those ideas might be implemented in democratic systems – to give some thought to how tax policy debates might contribute, in fact, to the implementation of better tax systems.

A future tax system

This review differed significantly from a number of Australian tax reform exercises of the past 25 years. The *Review of Australia's Tax System* in 1985, several reform packages in 1988 through to 1993, then *A New Tax System* (ANTS) in 1998, and the *Review of Business Taxation* in 1999, all focussed on parts of the system that were seen as undermining the ability of the tax system to generate adequate revenue fairly and efficiently and were, for that reason, identified as needing immediate attention.

Given the immediacy of the need, these reform packages were judged as successes or failures based on how many of their components were legislated more or less immediately.

On this occasion, the focus has not been on an immediate need. Instead, the review found that the key architecture of the tax and transfer system, bolstered by 25 years of reforms, serves us well. Instead, the focus has been on how best to structure the tax and transfer system out to the middle of the century. Assessments of the review's success therefore require a different metric, and a timeframe not measured in months, or even years, but perhaps decades.

A close comparator for the present review is the Asprey Review published in 1975. It made a number of recommendations for significant change that were not immediately acted upon and, in early assessments, it was judged less than successful. Time has shown those assessments to have been premature.

Asprey's recommendations received little attention from the Whitlam and Fraser Governments. But the issues it raised did not disappear. By the late 1970s, tax

avoidance arrangements were flourishing. These included highly artificial 'paper' tax avoidance, or 'bottom of the harbour', schemes.

Evidence of extreme tax avoidance contributed to public pressure for change to a tax system that came to be seen as unfair, distortionary and unnecessarily complex. Consumption and income tax bases were narrow. High rates were required to raise revenues for rapidly increasing government expenditures. Large gaps and loopholes in the law meant that those who had good financial advice could structure their income to minimise tax, further narrowing the tax base and skewing the incidence of income taxes to lower income earners.

The major reforms of the 1980s included capital gains tax, fringe benefits tax, dividend imputation and large cuts to personal and business income tax rates. The taxation of foreign source income would follow later in 1990, and the final piece of the Asprey vision, a broad based value added consumption tax, would have to wait until the launch of *A New Tax System* in 1998.

All of these reforms were stimulated by Asprey. They all sought to broaden the base and, to the extent possible, cut the statutory rates of tax.

But the Asprey report provided more than a series of recommendations. It also provided an enduring vision for tax system design.

AFTS and the Asprey Review

The final Asprey report noted that the panel members did not approach the review by looking at the existing tax law and recommending options for change. Instead, they first settled the broad outline, or vision, of the kind of tax system that should be established over time, and worked back from that to determine what changes would best support this vision.¹

The Asprey Review sought to achieve a balance between the traditional tax policy objectives of simplicity, efficiency and equity. That approach proved long lasting. Indeed, these three 'tax axioms' continue to underpin assessments of tax systems.

Today's review panel endorsed the design principles of equity, efficiency and simplicity; and added the principles of sustainability and policy consistency.²

1 Asprey, K (Chairman), Lloyd, J, Parsons, R and Wood, K 1975, *Taxation Review Committee – Full Report*, p 3, AGPS, Canberra.

2 Henry, K (Chairman), Harmer, J, Piggott, J, Ridout, H and Smith, G 2009, *Australia's Future Tax System – Report to the Treasurer*, Part 1, p 17, Commonwealth of Australia 2010.

The panel's approach to considering the future of our tax and transfer system did not focus on optimal tax system design, based on those principles. Instead, we positioned the tax and transfer system in a broader public policy context. We tried to think about how Australia's tax and transfer system could best meet the nation's opportunities and challenges over the next 40 years; opportunities and challenges that arise from:

- deepening international integration together with a re-emergence of China and India;
- frequent and rapid technological advances;
- an ageing population;
- strong growth and increasing cultural diversity of the population;
- deepening stresses between human activities and wider ecosystems; and
- pressures affecting housing affordability and urban amenity.

We came up with 138 recommendations as well as numerous findings of the need for further consideration.

Some recommendations were for immediate action, where the panel considers the need is great. And the Government has responded to some of those. Most notably, it has announced that it will introduce a comprehensive tax on resource rent, effectively replacing state based resource royalties – which the panel had concluded were the least efficient of the state taxes.

But many recommendations are for the long term – as the challenges become more pressing and the opportunities more tangible. It is some of these recommendations that I would like to talk about today.

The challenge of globalisation and company taxation

I would first like to make some comments on Australia's company income tax regime.

The challenge is the impact of increasing globalisation on our ability to continue to attract the level of investment needed to generate strong productivity growth.

As outlined in the panel's report, deepening international integration, and the shift of the centre of gravity in the world economy towards Asia, is reducing the distance between Australia and its export markets, adding considerable value to our natural resource wealth and presenting new opportunities in investment, trade and

employment. But capital is becoming increasingly mobile internationally, and the panel considered that, over time, Australia will need to respond if it is to remain an attractive place in which to invest.

Company tax rate

Given that company tax acts as a final tax on foreign equity investment, lower rates of company tax can attract marginal investments. Foreign direct investment is desirable, especially on grounds of technology transfer and knowledge spill-overs. Lower company taxes would lower the cost of corporate capital at the margin, encouraging capital-deepening in all sectors, in turn increasing labour productivity and boosting real wages.

The review panel found that Australia stands out in its relatively high reliance on company tax as a source of revenue. It recommended that Australia should aim for a 25 per cent company tax rate to place us on the lower side of average in small-to-medium OECD economies. But the review also concluded that Australia should not be at the forefront of any 'race to the bottom' in company income tax rates. The benefits of a lower rate for mobile capital need to be weighed against an enhanced incentive to shift labour income into corporate vehicles and a gratuitous benefit to less mobile investments and capital.

Company tax models

But these arguments on the rate of company tax will be obvious to most of you here today.

What was more challenging for the panel, and I hope of interest to you, is whether the architecture of company tax should change for a future, increasingly globalised, world.

The academic literature has produced several options for a business expenditure tax: the Meade Committee's R-type and R+F-type models; the US Treasury's Comprehensive Business Income Tax; and the Allowance for Corporate Equity and Allowance for Corporate Capital models.

Let me make some observations about the future of these business tax models in Australia.

The first is that the financial services sector has undergone rapid growth in the past 30 years and is now a major source of company tax revenue.³ Models which, by design, do not tax the profits of financial companies, such as the R-type and the Allowance for Corporate Capital, have obvious shortcomings.

Secondly, the empirical evidence matters. I note that a number of countries have had some experience with using an Allowance for Corporate Equity. Experience in these countries should be monitored closely.

Thirdly, the international environment matters. The immature development of business expenditure tax practice was one reason why the panel concluded that Australia's current system of company taxation should be maintained for the time being. The rules under international tax treaty conventions relating to the taxes recognised by overseas jurisdictions for crediting purposes also matter. I recall Alan Auerbach in 2006 wondering if, at a future World Trade Organisation or G-7 meeting, protestors against environmental degradation and world poverty might be joined by those frustrated by international agreements that act to prohibit sensible tax reforms.⁴

Finally, the transition path matters. Policy makers will rightly be concerned about both delivering windfalls to existing capital and creating large transitional problems for companies with high gearing ratios.

The Allowance for Corporate Equity model appears to offer the most promise.

On paper, it offers a more neutral treatment at the corporate level between debt and equity financing decisions, which has the added benefit of reducing the need for complex rules. It also provides a more neutral treatment in respect to investment decisions at the intensive margin, theoretically allowing a higher level of production than under the current company income tax system. The choice of depreciation regime – accelerated or effective life – is less relevant under an Allowance for Corporate Equity regime since any differences are reversed through adjustments to the book value of the assets.

The Allowance for Corporate Equity model also offers the most in the way of empirical evidence, with variants having been used in Croatia, Brazil, Italy, Austria, Belgium and Latvia. Also, it appears to offer the least resistance path of reform, probably being the easiest system to integrate into existing company income tax systems.

3 In 2007-08, financial and insurance services accounted for around 40 per cent of company income tax (net tax) – Australian Taxation Office 2010, *Taxation Statistics 2007-08*, Australian Taxation Office, Canberra.

4 Auerbach, A 2006, *The Future of Capital Income Taxation*, prepared for the 2006 Institute of Fiscal Studies Annual Lecture.

The obvious limitation of an Allowance for Corporate Equity is setting the imputed rate of return at the 'right' level. Getting the choice wrong would undermine much of the system's neutrality benefits.

I urge you to continue this work; not with a view to an immediate tax reform package, but to ensure that policy makers have access to the analysis and empirical evidence that will be required as the need for change heightens.

The challenge of demographic change and savings

A major consideration of the Asprey Review was to ensure greater integrity in an income tax system that offered many opportunities for tax minimisation. The recommendations regarding fringe benefits tax, capital gains tax, foreign source income, income splitting and the taxation of superannuation lump sums were all designed to protect revenue.

The present review panel did not reject the idea of maintaining a broad personal income tax base, including capital gains. But we concluded that consistent income taxation – taxing savings income the same as labour income – is not an appropriate policy goal.

Of course, if you take a good look at Australia's tax system you'll see that a strongly differentiated treatment of saving is quite an entrenched feature. For example, proceeds from so-called 'life cycle' assets, like the family home and superannuation, are either untaxed or taxed at highly concessional rates. And these assets make up more than half of total Australian household assets.⁵

Not that the current arrangements reflect application of a coherent theory about how to tax saving. Rather, the review found that real effective marginal tax rates on saving depends heavily on the asset class, the degree to which assets are leveraged, and the marginal statutory tax rate faced by the individual.

But once you move away from taxing income from savings and labour income in precisely the same way, issues arise at the 'border' between the two. The review recommended that further work be undertaken on practical means of drawing the line between capital and labour income in order both to reduce compliance costs and prevent labour income from being artificially re-characterised as capital income.

This is not a new problem. The Asprey Committee noted '... the problem of distinguishing between capital and income ... is one which has always defied easy

5 ABS cat. no. 6554.0 *Household wealth and wealth distribution*, 2005-06.

solution and because the criteria for distinguishing between the two ... can, according to circumstances, encompass such a wide variety of matters which may be relevant to its determination ... no universally infallible touchstone is possible.’⁶

The review panel recommended a 40 per cent discount to capital income received by individuals. A pure dual income tax – where capital income is taxed at a flat rate, was also considered. But the panel considered it important to sustain the overall progressivity of the personal income tax system. Challenges in the transition to a low flat rate tax, and the possibility of increased taxes faced by low income earners, were particular reasons for the panel settling on a ‘discount’ approach.

Over time a low flat rate of tax on capital income may come to look more attractive, depending upon progress with models that might facilitate income deeming, the accrual taxation of capital gains and the integration of personal income tax with a business level expenditure tax. These are areas in which further academic work can, and should, contribute significantly to a future policy debate.

The opportunity of technological developments and reducing complexity

The Asprey Review Committee acknowledged that its recommendations would come at a cost to simplicity. Words to the effect of the gains to equity and efficiency outweighing the loss to simplicity are repeated several times in its final report.

Thirty-five years later, the review panel identified the complexity of the tax and transfer system as one of the key areas that posed a challenge to the equity, efficiency and sustainability of the tax system.

But it’s also an area in which the focus on challenges and opportunities offered the panel a way forward.

We found that while delivery agencies had taken steps to improve individuals’ experience of the tax and transfer system, policy and program complexity was continuing to grow. We concluded that policy design and implementation needed to give primacy to users’ experience of the system.

The opportunity to secure this outcome is offered by developments in information and communications technology.

6 Asprey et al. 1975, *Taxation Review Committee – Full Report*, p 430, AGPS, Canberra.

Harnessing technological capacity would also allow us to introduce simpler personal tax and more responsive transfer payment arrangements. For example, some of the issues for families who have difficulty keeping up to date with reporting changes in income would be made easier by better information flow and greater use of technology. These types of changes will take time, especially because they require not only timely and accurate information flows, but also adequate protection of private information.

Reducing complexity can, in part, be addressed by better technological solutions. But they will take us only so far. Importantly, tackling complexity demands getting the underlying policy right.

From that perspective, there is still much work to be done in the area of tax and transfer interaction. The panel considered the interactions and the impact of these on participation, and we made some high level and longer term recommendations. However, more research needs to be undertaken to understand fully how the Australian system impacts on participation. While Peter Diamond and other researchers have found that a u-shaped distribution of effective rates of tax is the most efficient,⁷ more can be done in an Australian context on the optimal design of marginal tax rates and rates of income support withdrawal.

Improvements in technology also offer ways to price access to resources, such as roads, more efficiently.

As in many of the areas covered in the review, the theory on road pricing is not particularly ground breaking.

Justice Asprey could easily have picked up William Vickrey's 1963 article on transport pricing in the *American Economic Review*, which started with the proposition that 'in no other major area are pricing practices so irrational, so out of date and so conducive to waste as in urban transportation'.⁸

I made much the same point recently when I addressed the Committee for Economic Development of Australia. In 36 years, not much had changed.

Technological impediments are sometimes cited as the reason why otherwise convincing policy propositions fail. Vickrey was well aware that 'talk of direct and

7 Diamond, P 1998, 'Optimal income taxation: an example with a u-shaped pattern of optimal marginal tax rates', *American Economic Review*, vol 88, pp 83-95.

8 Vickrey, W 1963, 'Pricing in urban and suburban transport', *American Economic Review*, vol 53, no. 2, Papers and Proceedings of the Seventy-Fifth Annual Meeting of the American Economic Association (May 1963), pp 452-465.

specific charges for roadway use conjures up visions of a clutter of toll booths, an army of toll collectors, and traffic endlessly tangled up in queues'. In fact, he suggested, for example, running special meters in cars that would tick over according to 'pulses emitted from cables laid along the roadway, with the pulse rate varied according to traffic density'.⁹

Whether Vickrey's proposals were practical at the time, the absence of appropriate technology is, today, no excuse for poor pricing.

Technology is already in use that can be used to support rational pricing. We already have electronic free-flow pricing on many Australian tollways. The problem is that the prices reflected in toll schedules have little to do with making the most efficient use of the infrastructure. Obviously, a car driving on a near empty road – say at 3 o'clock in the morning – wouldn't face a toll at all if prices were set with efficiency in mind.

There is, of course, a danger in seeking out a problem to suit every technological solution available. There is a point when too much technology would make everything unnecessarily grandiose or complex. But many areas of tax and transfer policy, and not just road pricing, our policy thinking would benefit from awareness that the technological constraints on policy design are being lifted.

A national approach to tax analysis

While most of our recommendations relate to the activities of the national government in this Australian federation, the panel was struck by the inefficiency of taxes currently relied upon by State and Territory governments.

We found that narrow-based state taxes on insurance products, motor vehicles and real estate transfers are among the most inefficient taxes in Australia. Modelling undertaken for the review estimated a marginal welfare loss from stamp duty on insurance products of around 67 cents in the dollar.¹⁰

Many of you who were at last year's Tax and Transfer Policy Conference will remember Professor Richard Bird describing, somewhat colourfully, state conveyance duties as 'an absolute piece of garbage'.¹¹

9 *ibid.*

10 KPMG Econtech, produced for the Review of *Australia's Future Tax System*, found in Henry et al. 2009, *Australia's Future Tax System – Report to the Treasurer*, Part 1, p 13, Commonwealth of Australia 2010.

11 Bird, R 2009 – Address to the Australia's Future Tax Review Panel in June 2009, Melbourne Institute, University of Melbourne.

I know that I am preaching to the converted on the need for reform of some of these taxes. Even so, it's a sermon worth reprising.

One of the key concerns of the review panel was to consider the impact on the national economy of Australia's taxes, regardless of the level of government formally responsible for each tax.

Not even the wide-ranging Asprey review could go this far. Its terms of reference issued in 1972 were 'to examine and inquire into the structure and operation of the present Commonwealth taxation system'.¹²

That's not because economists and politicians back then thought that state taxes were perfect.

In Parliament, then leader of the Opposition, Mr Whitlam, asked then Treasurer Snedden whether the Inquiry would 'report on the equity and cost of other forms of taxation in Australia at present in the hands of State governments', noting that 'many State taxes absorb up to one-third of the revenue they produce in the collection thereof'.¹³

So why were state taxes not included in the Asprey review's terms of reference?

Partly because the Government did not think that it was the Commonwealth's role to conduct such an inquiry, these being matters for the States and Territories. The report also excluded state taxes on grounds of expediency. Treasurer Snedden told Parliament that he wanted to receive the report 'as quickly as [he] can get it'.¹⁴ The irony was that he didn't receive the report at all. The Taxation Review Committee signed off on its report in 1975. In a double irony, it was Prime Minister Whitlam who received the report.

Today's review has attempted to chart a course for the reform of state and territory taxes. Reforming existing taxes or introducing new ones is rarely popular – even if the economic arguments for doing so are strong. And simply abolishing Australia's most inefficient taxes would leave the States without the revenue they need to fund the services demanded of them by their citizens. Yet there is also reason to think that those taxes will prove increasingly incapable of supporting the services demanded. Something has to change.

12 Asprey et al. 1975, *Taxation Review Committee – Full Report*, p xvii, AGPS, Canberra.

13 Commonwealth, *Parliamentary Debates*, House of Representatives, 13 April 1972, 1586 (Mr Whitlam).

14 Commonwealth, *Parliamentary Debates*, House of Representatives, 13 April 1972, 1586 (Mr Snedden, Treasurer).

The economists in the room who have been cataloguing the inefficiency of many of these taxes for some time may feel some impatience. But, as with most tax reforms, change won't come without the case for reform first being accepted by the community. And that means going beyond the concerns of those who may be disadvantaged by the reform and finding compelling ways of explaining the benefits to the wellbeing of all Australians.

AFTS review going forward

In responding to the challenges of next several decades, the review panel set out to make recommendations to reform the tax system in ways that would support strong and sustainable economic growth: a system that delivers more capital per worker; encourages workforce participation; and which leads to higher entrepreneurship and skills acquisition. These have been enduring goals of academic researchers in public finance.

The review has no pretensions of having made any sort of contribution to academic research. But it does hope to have demonstrated a strong interest in that vast body of work – setting out, in the description of practical pathways, how the insights of academic researchers might be applied to immediate and future challenges of some scale.

I would hope, too, that the report leaves the curious reader with some idea of the shape of the future tax policy research that is likely to be of utility to practical people.

Few areas of policy excite as much 'real world' interest as tax. We don't need to ponder the reasons for that to understand the importance of our work – whether as theoreticians, modellers or policy developers. If this review manages to contribute, in some way, to an appreciation of the importance of 'getting it right' in tax and transfer system design, then its authors will be well satisfied.

Of course, each of us is more ambitious than that. We have sought reform. Your participation in the policy thinking and informed debate that will, over time, enhance the prospects for reform, is greatly appreciated.

Thank you.

Forecasting in the eye of the storm

Dr David Gruen and David Stephan¹

The following speech was delivered by Dr David Gruen, Executive Director (Domestic), Macroeconomic Group, to the NSW Economic Society on 4 June 2010.

¹ We are grateful to Josiah Munro for much help putting this talk together, and to Ellis Connolly, Nicholas Gruen, Steven Kennedy, Adam McKissack, Steve Morling, Marisa Purvis-Smith and particularly Matt Crooke for helpful comments. We thank Consensus Economics for permitting the use of their data for sections of the presentation. For more information on the methodology behind Consensus forecasts, please refer to: http://www.consensuseconomics.com/what_are_consensus_forecasts.htm.

Introduction

Thank you for the opportunity to speak to you this afternoon.

My topic today is macroeconomic forecasts. I have a long-standing interest in this topic, having been involved in macroeconomic forecasting for quite some time. But the topic is of particular interest at the moment, because the global economy has been through such an extraordinary period, and it is worth reviewing how macroeconomic forecasts have fared over this time.

In my talk today, I will focus primarily on forecasts for real GDP growth. I will spend some time talking about the longer-term performance of Treasury's forecasts. But I will spend most of my time looking at how both public and private sector forecasts evolved in the aftermath of the global financial crisis, and examining the performance of the forecasts presented in the 2009-10 Budget.

The year in review

But first, I think it's worth considering where we have come from. As most of you will recall, last year's Budget was prepared at a remarkable time.

The global financial system was gradually recovering from its cardiac arrest in September 2008 but the degree of risk aversion nevertheless remained high.

The IMF had recently warned that the global economy was in the midst of 'a severe recession inflicted by a massive financial crisis and acute loss of confidence'. It also cautioned that globally synchronised recessions, and those stemming from financial crises, tended to produce longer, deeper economic contractions, and slower recoveries, than usual business cycles.²

As well as the global outlook being decidedly grim, the uncertainty around the outlook was also greater than usual. The IMF estimated that the 90 per cent confidence interval around its April 2009 forecast for global growth in 2009 ranged from minus 3½ per cent to plus ½ per cent, with the risks weighted to the downside.

In Australia, substantial monetary and fiscal stimulus had been applied with unprecedented alacrity. Nevertheless, the relevant partial indicators for domestic output were extremely weak and had yet to show signs of improvement.

2 IMF World Economic Outlook, April 2009.

The available information was pointing to a significant economic contraction. The Budget forecast zero growth in 2008-09 and, in a first for a Budget, a contraction in GDP in the Budget year; that is a contraction of $\frac{1}{2}$ a per cent in 2009-10. The forecast for 2010-11 was for moderate growth of $2\frac{1}{4}$ per cent.

These forecasts implied that output would remain well below its estimated potential level at the end of the forecast period. Because of this, the medium-term assumptions were revised to incorporate an extended period of above-trend growth (two years of $4\frac{1}{2}$ per cent growth followed by four years of 4 per cent growth) to return output, gradually over time, to a level judged to be consistent with full employment.³

Upon release, there were, unsurprisingly, differing views about whether the economic growth forecasts in the Budget were about right or, alternatively, too optimistic or too pessimistic. For at least some commentators, however, the answer was clear.

The Rudd Government's budget paints an unbelievable picture of a very mild recession (only a 0.5 per cent fall in GDP next year) followed by a recovery of 2.25 per cent in the election year (2010-11) and an above-trend rate of growth of 4.5 per cent in the following year.

Des Moore, On Line Opinion, 20 May 2009

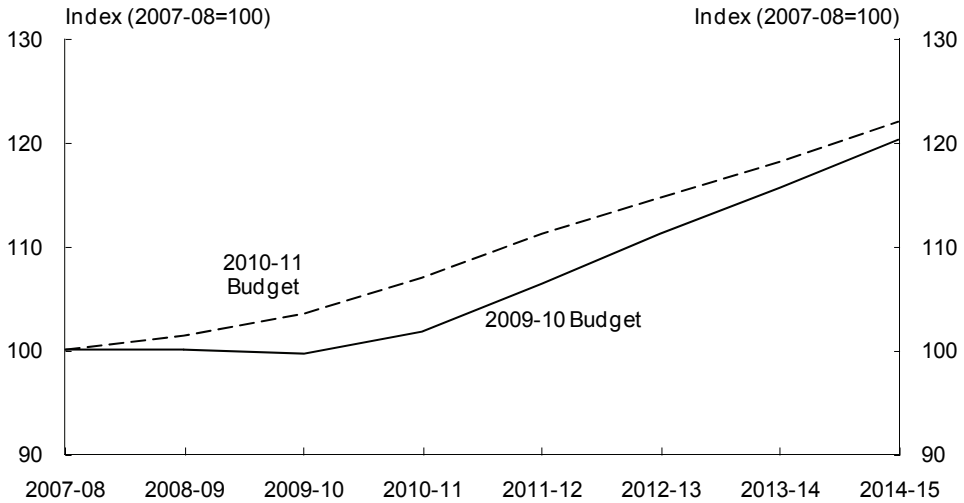
If Prime Minister Kevin Rudd genuinely believes Treasury is conservative when it forecasts economic growth of 4 per cent within two years, then it would be interesting to know his definition of optimistic. Treasury officials are not used to being laughed at on budget night but, as soon as their growth forecasts were revealed, no other reaction was possible.

John Roskam, Australian Financial Review, 15 May 2009

As events have turned out, Australian economic outcomes have been significantly better than forecast in the 2009-10 Budget. The unemployment rate, forecast to peak at $8\frac{1}{2}$ per cent in 2010-11, instead peaked at 5.8 per cent in July 2009, two months after the Budget was brought down, and now sits at 5.4 per cent (April 2010).

3 Nevertheless, the Budget forecasts implied a level of potential output beyond the Budget projection years $2\frac{1}{4}$ per cent lower than it would have been without the downturn.

Chart 1: Real GDP — Budget forecasts and projections



Source: ABS cat. no. 5206.0 and Treasury.

The more favourable outcomes and improved outlook for real GDP has led to a sizeable upgrade in the forecasts and projections for the level of real GDP in the 2010-11 Budget compared with the previous year's (Chart 1).

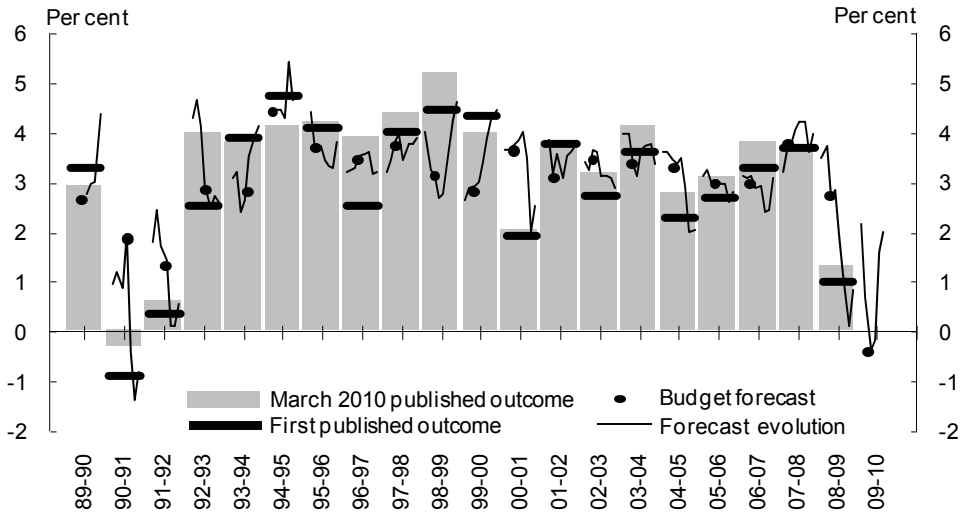
The much milder downturn has also seen Treasury return to its standard medium-term projection methodology. That is, beyond the current forecast period (beyond 2011-12), the economy is assumed to grow at trend, with unemployment at its assumed full-employment rate of 5 per cent.

Of course, nothing is assured in the forecasting business, as the events in Europe over the past few weeks amply demonstrate.

Treasury's forecasting performance

I now want to turn to Treasury's longer-term performance when forecasting real GDP growth.

Chart 2: Evolution of Treasury forecasts for real GDP growth



Note: The Budgets for the years 1989-90 to 1993-94, as well as 1996-97, were released in August of those financial years.

Source: ABS cat. no. 5206.0 and Treasury.

Chart 2 shows the evolution of Treasury's real GDP forecasts over the past two decades. The black dots show the Budget forecasts for real GDP growth for the Budget financial year. The thin black lines show how Treasury's forecasts evolved in the lead up to, and following, the Budget. The horizontal thick black lines for each year reflect the first published outcomes (upon release of the June quarter National Accounts for the relevant financial year). The grey columns reflect the latest (March quarter 2010) official estimates of growth in the relevant years.

Table 1 presents summary measures of the performance of Budget forecasts for real GDP growth. The mean error is the average outcome minus the forecast. As shown, Budget forecasts have underestimated outcomes for real GDP growth by an average of less than 0.2 of a percentage point, implying minimal bias.

Table 1: Performance of Budget forecasts for real GDP growth

	Mean Error % points	MAPE % points
Full Sample	0.19	0.93
89-90 to 98-99	0.25	0.95
99-00 to 09-10	0.13	0.91

Note: Performance is measured against the most recent estimated outcome. Since the outcome for the current year, 2009-10, is not yet known, we use the 2010-11 Budget forecast. For most financial years, Budget forecasts, which are released in May, relate to the subsequent financial year. The Budget forecasts for the years 1989-90 to 1993-94, as well as 1996-97, were however released in August and relate to the financial year that had just begun.

The mean absolute percentage error (MAPE) is a metric with which to judge the accuracy of the Budget forecasts. Over the 21-year period 1989-90 to 2009-10, the MAPE is 0.93 percentage points, implying that, on average, Budget forecasts have been within $\frac{3}{4}$ to 1 percentage point of the outcome.

Splitting the sample (roughly) in half reveals that the MAPE is slightly smaller in the most recent 11 year period. However, economic growth has been less volatile in the past decade or so, with 2008-09 the only fiscal year in the 2000s in which growth was more than one standard deviation from trend. This has helped make recent forecast errors generally smaller (Table 1).

It is the nature of forecasting that errors will be larger around turning points in the economic cycle and smaller when the economy achieves stable, near-trend growth. Indeed, for most plausible stochastic processes driving GDP growth, optimal forecasts will exhibit the property that forecast errors are larger than average when growth outcomes turn out to be well above or well below trend.

In years where the economy grew well below trend (1990-91, 1991-92 and 2008-09) the Budget forecast errors are largest; with the MAPE around two thirds larger than the full-sample average.⁴

International context for the 2009-10 Budget forecasts

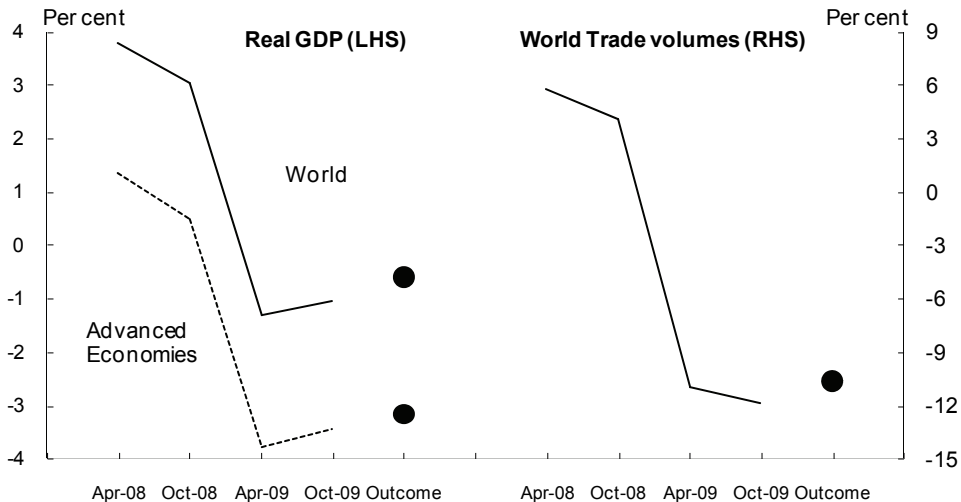
Let me now turn to the global economic outlook in the months leading up to the 2009-10 Budget.

As the global outlook deteriorated, the IMF downgraded its forecasts for 2009 global GDP growth by 4.3 percentage points between October 2008 and April 2009. Over the

4 For a more detailed analysis of Treasury’s forecasting performance over time see Ewing, Gruen and Hawkins (2005), ‘Forecasting the Macroeconomy’, Economic Roundup, Autumn 2005.

same period, it downgraded its forecasts for advanced economy growth also by 4.3 percentage points and for global trade volumes by over 15 percentage points (Chart 3).⁵

Chart 3: Evolution of IMF forecasts for GDP growth and trade volumes in 2009



Source: IMF World Economic Outlook Databases.

In line with these downgrades, Consensus forecasts for 2009 global GDP growth were cut by 3.7 percentage points (from 2.7 per cent to -1.0 per cent) between October 2008 and April 2009 (Chart 4).

Treasury's 2009 global GDP growth forecasts were reduced by 4½ percentage points over a similar period (from 3 per cent in MYEFO 2008-09 to -1½ per cent in the 2009-10 Budget).⁶

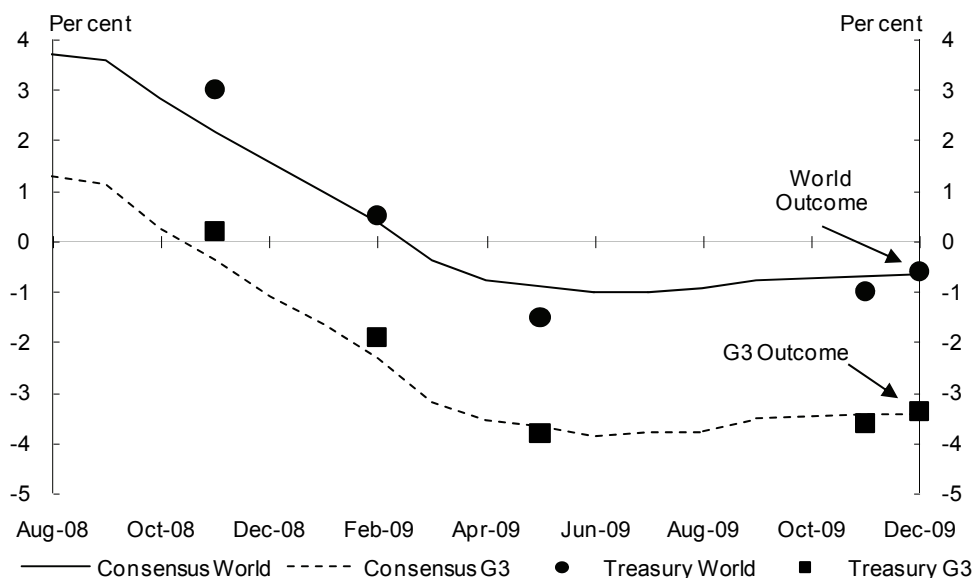
For Australian goods and services export volumes, the IMF forecast a contraction of 7 per cent in 2009, while the OECD forecast contraction of 8 per cent. Treasury's forecast was reduced, in several steps, from 6 per cent at MYEFO to -5¾ per cent at Budget.

5 The IMF's global GDP growth forecast for 2009 was downgraded from 3.0 per cent to -1.3 per cent. Advanced economies' growth was cut from 0.5 to -3.8 per cent. Its corresponding forecast for global trade volumes growth was slashed from 4.1 per cent to -11.0 per cent. The most recent IMF estimates of the outcomes for 2009 were -0.6 per cent (global), -3.2 per cent (advanced) and -10.7 per cent (trade).

6 The downgrade to global growth and trade prospects fed directly into Treasury's assumptions about major trading partner (MTP) growth. At the time of the 2008-09 MYEFO, Treasury's forecast for MTP growth in 2009 was 3.0 per cent. By the time of the 2009-10 Budget, this had been revised down to -2.0 per cent. The outcome was 0.1 per cent.

The IMF and OECD inter-country trade models are probably the best available of their type. Treasury used them to gauge the impact of the contraction in global trade on Australian export volumes. Nevertheless, the somewhat stronger export volume forecast in the Budget, compared with the forecasts of the IMF and OECD, reflected Treasury’s judgment that Australia’s relatively lighter exposure to elaborately transformed manufactures (ETMs) would support a stronger result than in other advanced economies.

Chart 4: Evolution of Consensus and Treasury forecasts for world and G3 real GDP growth in 2009



Note: G3 is the US, euro area and Japan, weighted by GDP at PPP.
 Source: Consensus Economics, Treasury and calculations using IMF country weightings.

The outperformance of non-Japan Asia

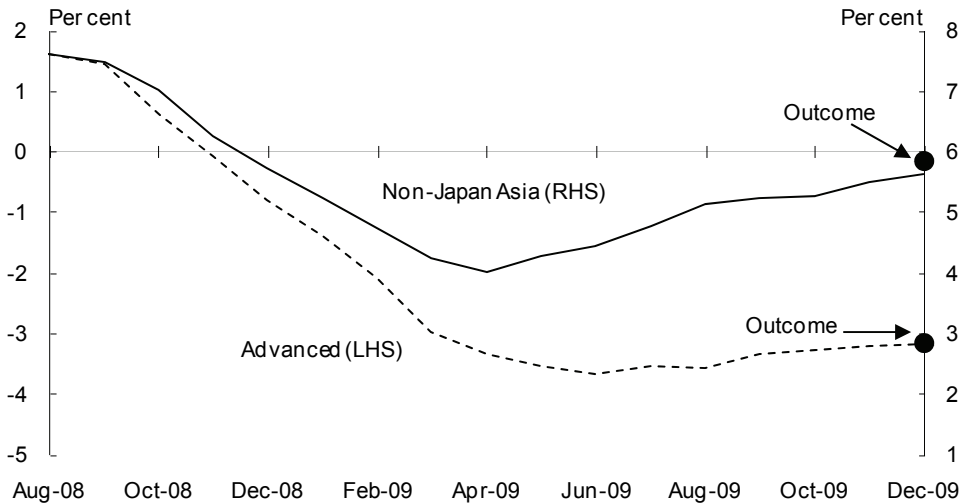
How did global events turn out relative to the forecasts?

The contraction in global growth in 2009 occurred broadly as expected in April 2009. Importantly, however, this global outcome conceals different experiences across regions.

Chart 5 shows how Consensus forecasts evolved in two groups of countries chosen to illustrate the point – non-Japan Asia (which doesn’t include Australia), and the IMF advanced economies.

By April 2009, the Consensus forecast for 2009 growth in the advanced economies was remarkably close to the eventual outcome. By contrast, the forecast for non-Japan Asia turned out to be significantly too pessimistic.

Chart 5: Evolution of Consensus forecasts for real GDP growth in 2009



Source: Consensus Economics, IMF, Ecwin and Treasury calculations.

These countries had the significant advantage that their financial systems were not impaired. But an important contributing factor to their impressive performance was also the speed and size of the macroeconomic policy response, particularly in Korea and China.

Both countries eased monetary policy aggressively. Korea cut its base rate from 5¼ per cent to 2 per cent between October 2008 and February 2009. China implemented a series of measures, including relaxing credit restrictions and reserve requirements in late 2008 – and as a result credit growth in China accelerated extremely sharply in 2009.

Both countries also announced sizeable fiscal stimulus packages in late 2008, and implemented them quickly. As a result, the amount of discretionary fiscal stimulus applied by Korea and China in 2009, as a per cent of GDP, was among the largest in the world.

The domestic context for the 2009-10 Budget forecasts

Let me return now to the domestic economy in the lead up to the 2009-10 Budget. I want to begin by discussing the nature of the incoming evidence relevant to the domestic macroeconomic forecasts.

Along with the bleak outlook for the world economy, partial indicators for the domestic economy were also worrying.

The latest comprehensive reading on the economy, the December quarter 2008 National Accounts, released in early March 2009, showed a contraction of 0.5 per cent. At the time, this was the weakest quarter – indeed the first negative quarter – since the December quarter 2000. With subsequent revisions to the National Accounts, that quarter now stands as the weakest since March 1983.

The unemployment rate had risen quite quickly from 4.1 per cent in August 2008 to 5.7 per cent in March 2009.

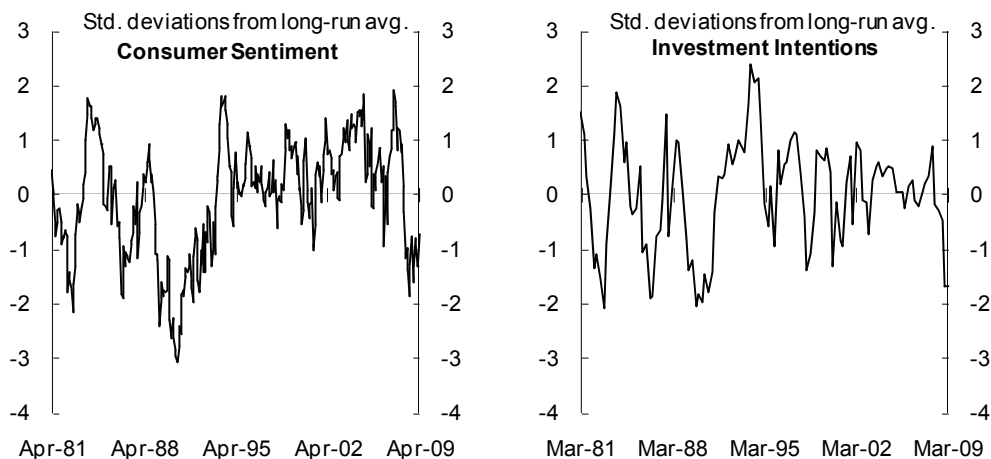
Job advertisements presaged further weakness in the labour market. In March 2009, the ANZ total job advertisements series was around 45 per cent lower through the year, the sharpest annual fall in the 10-year history of the series.

Confidence, as measured in surveys, had also plummeted. Consumer sentiment was more than one standard deviation below its long-run average, while business investment intentions were more than 1½ standard deviations below their long-run average – a level not seen since the early 1990s recession (Chart 6).

Total bank lending to business, which had been growing strongly in 2007 and early 2008, slowed extremely sharply, and stopped growing towards the end of 2008 and into 2009.

Financial wealth had fallen by a third over 2008 and share markets by around half from their peaks in late 2007.

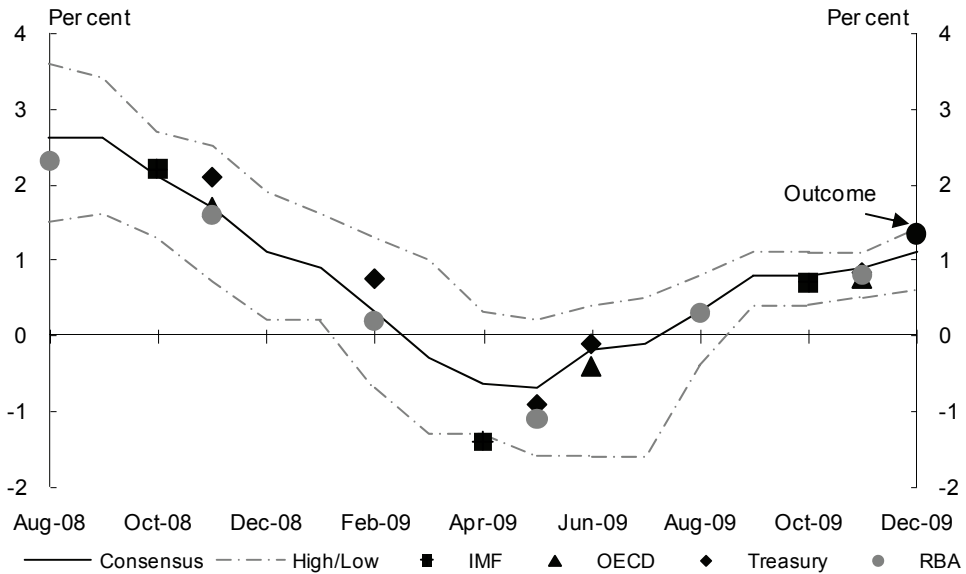
Chart 6: Consumer Sentiment and Business Investment Intentions in Australia



Source: Westpac-Melbourne Institute Survey of Consumer Sentiment and ACCI-Westpac Survey of Industrial Trends.

The Budget forecasts were not alone in their pessimism. Consensus forecasts for Australian GDP growth in 2009 were downgraded at a fairly steady rate between September 2008 and May 2009. Treasury’s forecasts remained in step with the average private sector forecast at MYEFO and UEFO, but were slightly weaker than Consensus by the time of the 2009-10 Budget.⁷ Compared with both the IMF and OECD, Treasury remained somewhat more optimistic through the middle of 2009 (Chart 7).

Chart 7: Evolution of forecasts of Australian real GDP growth in 2009



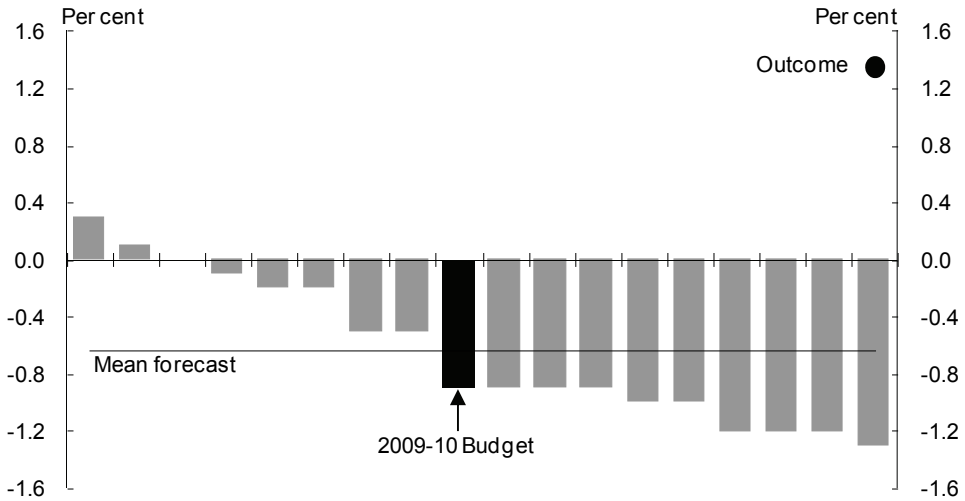
Source: ABS cat. no. 5206.0, Consensus Economics, IMF, OECD, RBA and Treasury.

By the time the Budget forecasts were finalised in April 2009, the average Consensus forecast was predicting 2009 Australian real GDP growth of around -0.6 per cent. The Budget forecast of -0.9 per cent was around the middle of the range of forecasts surveyed by Consensus in mid-April (Chart 8).⁸

⁷ Treasury forecasts for calendar year 2009 are previously unpublished.

⁸ As shown, of the 17 mostly private sector forecasters surveyed by Consensus Economics Forecasts, 8 were more optimistic than Treasury about growth in 2009; 3 had the same forecast, and 6 were more pessimistic.

Chart 8: Forecasts for Australian real GDP growth in 2009, as at April 2009



Source: Consensus Economics (survey date 14 April 2009) and Treasury (Budget, 11 May 2009).

As events turned out, of course, the economy performed significantly better than expected – although it did experience a significant slowdown. Annual growth in GDP, which had averaged 3.4 per cent over the period 2000-2007, slowed to 2.1 per cent in 2008 and 1.3 per cent in 2009.

More strikingly, the current dollar value of output was particularly weak. The fall in the terms of trade meant that nominal GDP growth through the year to September 2009 was the weakest it had been since the 1960s.

This renders the performance of the economy in real terms, together with the relative strength of the labour market, all the more remarkable.

Australian economic growth in 2009

Let me now discuss the outcome for Australian economic growth in 2009, as well as the factors responsible for the economy significantly outperforming the 2009-10 Budget forecasts.

Chart 9 shows contributions to real year-average GDP growth in 2009 by expenditure component. To aid understanding, imports – which of course do not contribute anything to GDP – have been netted off against each of the relevant expenditure components. The contribution from the change in inventories is also netted off.⁹

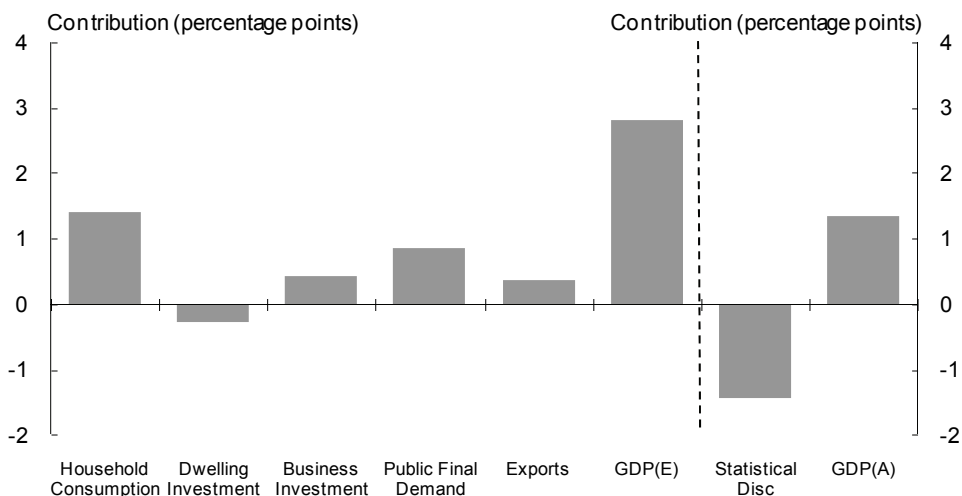
This treatment provides a clearer picture of the extent to which each of the components contributed to the GDP outcome.

Household consumption made by far the largest contribution (1.4 percentage points) to real GDP growth in 2009. Public final demand made the second largest contribution (0.9 percentage points). Next came business investment (0.4 percentage points) and exports (0.4 percentage points), while dwelling investment detracted 0.3 percentage points from GDP growth.¹⁰

9 The contribution from ownership transfer costs (0.1 of a percentage point) needs to be included for the contributions to sum to GDP(E). The major import categories are assigned to expenditure components as follows. *Consumption goods imports* are assigned to household consumption. *Capital goods imports* and *intermediate and other merchandise goods imports* are assigned to private investment and public investment according to their relative shares of total investment, although there are some exceptions – for instance, the civil aircraft component of capital goods imports is allocated to business investment and the fuels and lubricants component of intermediate goods imports is allocated equally between household consumption and business investment. *Non-monetary gold imports* are assigned to exports, given that the bulk of these imports are exported after undergoing some form of processing. *Services imports* are apportioned between household consumption and business investment in proportion to the relative shares of consumption and investment services in total services imports. The contribution from the change in inventories is also netted off household consumption, business investment and public investment in proportion to their import shares.

10 To labour the point, all the estimates are derived after adjusting for imports and inventories. Note also that about 30 per cent of the Building the Education Revolution program expenditure and about 20 per cent of the Social and Defence Housing program expenditure is classified by the ABS as private spending. That is, some parts of the fiscal stimulus programs have directly increased new private business investment (for non-public schools) and new dwelling investment (some social housing is built and owned by the private sector), rather than contributing to public final demand.

Chart 9: Contributions to Australian real GDP growth in 2009

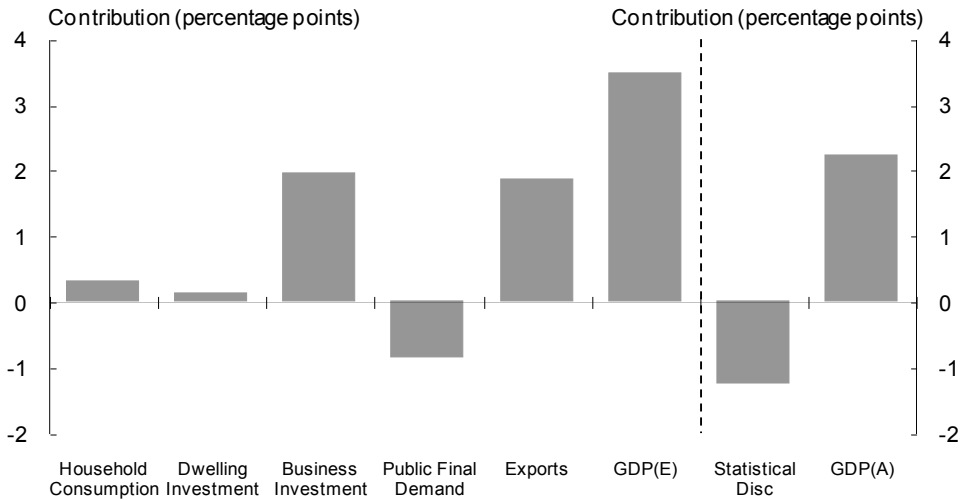


Source: ABS cat. no. 5206.0 and Treasury. The contribution from ownership transfer costs to GDP(E) is not shown. Contributions are adjusted for imports and inventories (see footnote).

In preparing its forecasts, Treasury also primarily adopts an expenditure decomposition of GDP. Chart 10 details the contribution of each expenditure component to the real GDP growth forecast error in 2009 (that is, the outcome minus the 2009-10 Budget forecast), again after adjusting for the contributions of imports and inventories.

As Chart 10 reveals, business investment and exports contributed significantly to the forecast error. This is not, however, because either component made a particularly large contribution to the *outcome* for real GDP growth (see Chart 9). Instead, it is because the 2009-10 Budget forecasts for these two categories were particularly weak, and the outcomes turned out significantly better than forecast.

Chart 10: Contributions to 2009-10 Budget forecast error for real GDP growth in 2009



Source: ABS cat. no. 5206.0 and Treasury. The contribution from ownership transfer costs to GDP(E) is not shown. Contributions are adjusted for imports and inventories (see footnote).

Considerable downward judgment was applied to the Budget forecast for business investment. This judgement was applied partly on the basis of the very weak domestic indicators at hand. At the time, bank lending to businesses was slowing sharply, business surveys were uniformly pessimistic, and Treasury's business liaison program indicated that businesses were planning to reduce capital expenditure significantly.¹¹

The forecast for business investment was also influenced by the weak forecast for global growth at the time. The forecast weakness in exports and commodity prices was expected to act as a drag on business investment.

There are two main reasons why business investment *contributed* to 2009 real GDP growth, rather than *detracting* sharply from growth, as forecast in the 2009-10 Budget.

The first reason is the stronger-than-expected growth performance in non-Japan Asia, particularly China. And the second reason is the general strength of the domestic economy, where activity and confidence were supported by monetary and fiscal stimulus.

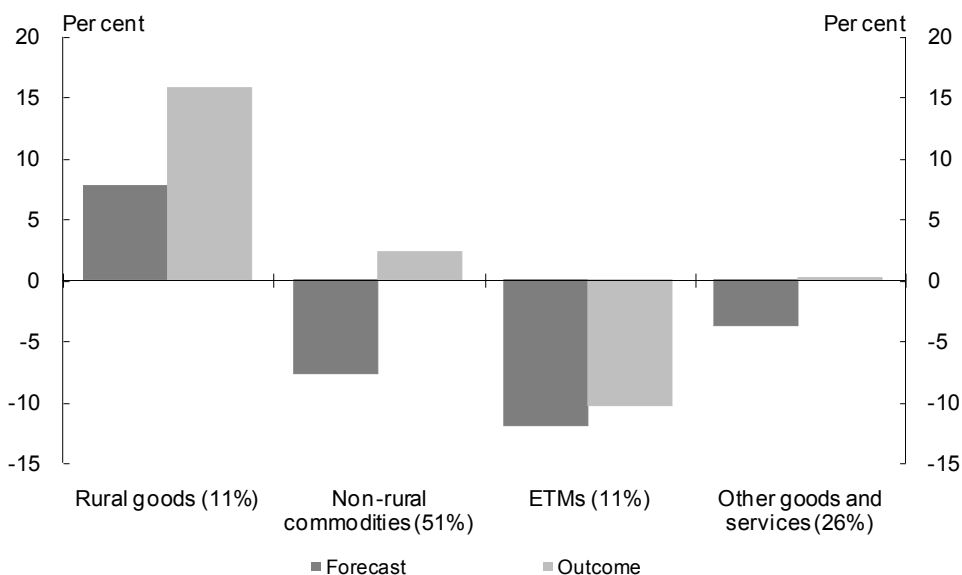
In particular, the Small Business and General Business Tax Break appears to have brought forward into 2009 significantly more business investment than was expected at Budget.

¹¹ *Economic Roundup*, Issue 1, 2009.

Turning to export volumes, we have seen earlier that both domestic and international forecasters were close to their most pessimistic around the time the Budget forecasts were being finalised. The forecasts for export volumes were significantly influenced by these global expectations and expert views on the scale of the downturn.

As events turned out, April 2009 forecasts of the scale of the contraction in the *global* economy and *global* trade were close to the mark. Australia did not experience such a significant fall in export volumes, however. Instead, Australian export volumes rose by 1.5 per cent in 2009.

Chart 11: Export volumes — Budget forecasts and outcomes for 2009



Note: Numbers in parentheses show each sector's share of total goods and services export values. These detailed Treasury export volume forecasts for 2009 are previously unpublished.
 Source: ABS cat. no. 5302.0 and Treasury.

Relative to the 2009-10 Budget forecasts, both non-rural and rural commodity exports performed significantly better than expected (Chart 11).

Non-rural commodity export volumes exceeded forecasts by a significant margin, although their growth of 2.2 per cent contributed only 0.2 of a percentage point to 2009 GDP growth.

This better-than-expected outcome largely reflected the strength of non-Japan Asia, particularly China. Chinese economic activity shifted into more commodity-intensive sectors, particularly infrastructure spending associated with the Chinese government's stimulus packages. There was also substitution away from Chinese domestic production to imports as lower commodity prices resulted in the closure of some relatively high-cost Chinese production.

At the same time, better-than-expected rainfall led to a stronger recovery in rural commodity exports, which posted growth of over 15 per cent, and contributed 0.3 of a percentage point to 2009 GDP growth.¹²

On the other hand, the anticipated contraction in exports of ETMs was broadly realised. The volume of ETM exports fell by around 10 per cent, in line both with the fall in global trade volumes, and the Budget forecast.

The role of macroeconomic stimulus

One of the themes in the discussion thus far has been the role of macroeconomic stimulus in supporting economic growth in 2009. While the stimulus was explicitly factored into Treasury's (and others') forecasts, it is also a contributing factor to the Budget forecast errors.

Treasury estimates that domestic discretionary fiscal stimulus contributed about 2 percentage points to real GDP growth in 2009. This implies that real GDP would have contracted by about 0.7 per cent without fiscal stimulus.

These estimates include a significant contribution from public final demand (Chart 9). The contribution from public final demand is, however, smaller than was anticipated in the 2009-10 Budget (Chart 10), mainly due to some delays in spending. This has been offset by larger contributions from other elements of the stimulus packages. The cash payments between December 2008 and May 2009 – targeted to households more likely to spend them – appear to have provided a somewhat larger boost to household consumption spending than anticipated at Budget. And, as noted above, the business tax breaks appear to have brought forward into 2009 more business investment than was anticipated.

Treasury's estimates of the contribution of fiscal stimulus to real GDP growth are derived using fiscal multipliers that we judge to be conservative (see Gruen, 2009, for more extensive discussion).

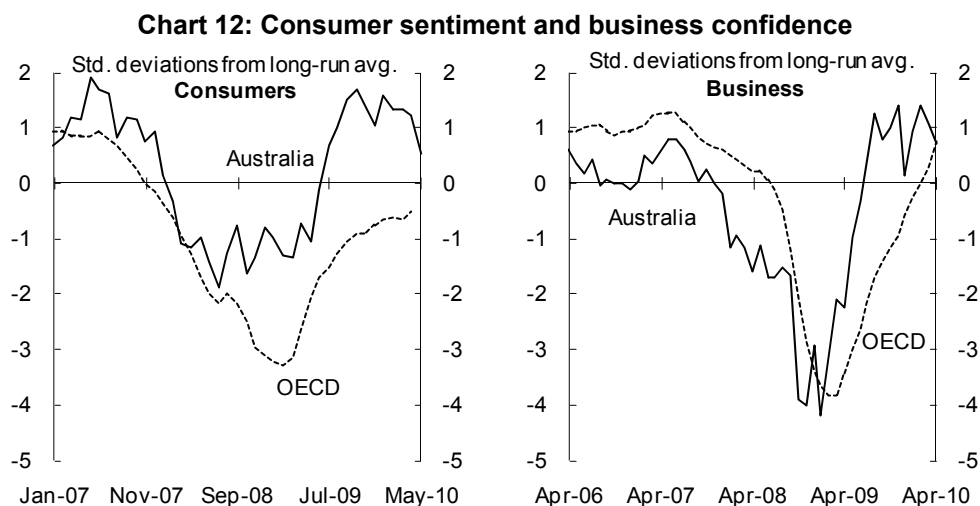
Given the substantial risk aversion, heightened uncertainty and low levels of confidence at the time, I think that adopting conservative assumptions for the fiscal multipliers was a reasonable thing to do.

As events have turned out, one reason the actual fiscal multipliers are probably larger than they were assumed to be is that they take insufficient account of the favourable

12 At Budget, non-rural commodity exports were expected to detract 0.8 percentage points from 2009 real GDP growth, while rural exports were expected to contribute 0.2 percentage points.

feedback loop that expansionary macroeconomic policy – both monetary and fiscal – appears to have generated. Macroeconomic policy appears to have been large enough and quick enough to convince consumers and businesses that the domestic slowdown would be relatively mild. This, in turn, led consumers and businesses to continue to spend, and led businesses to cut workers' hours rather than laying them off which, in turn, helped the economic slowdown to be relatively mild.

The rapid turnaround in sentiment that accompanied the growing realisation that the downturn would be mild is shown in Chart 12, which compares Australian sentiment indicators with those in the OECD.



Note: For consumer confidence, the Australian series is the Westpac-Melbourne Institute Index of Consumer Sentiment and the OECD series is the OECD-total consumer confidence measure. For business confidence, the corresponding series are the NAB Monthly Business Survey and the OECD-total business (manufacturing) confidence measure.

To be most successful in limiting the severity of the downturn, the macroeconomic policy response had to be quick. For monetary policy, the official cash rate was cut with unprecedented speed – by $3\frac{3}{4}$ percentage points from early October 2008 to early February 2009.

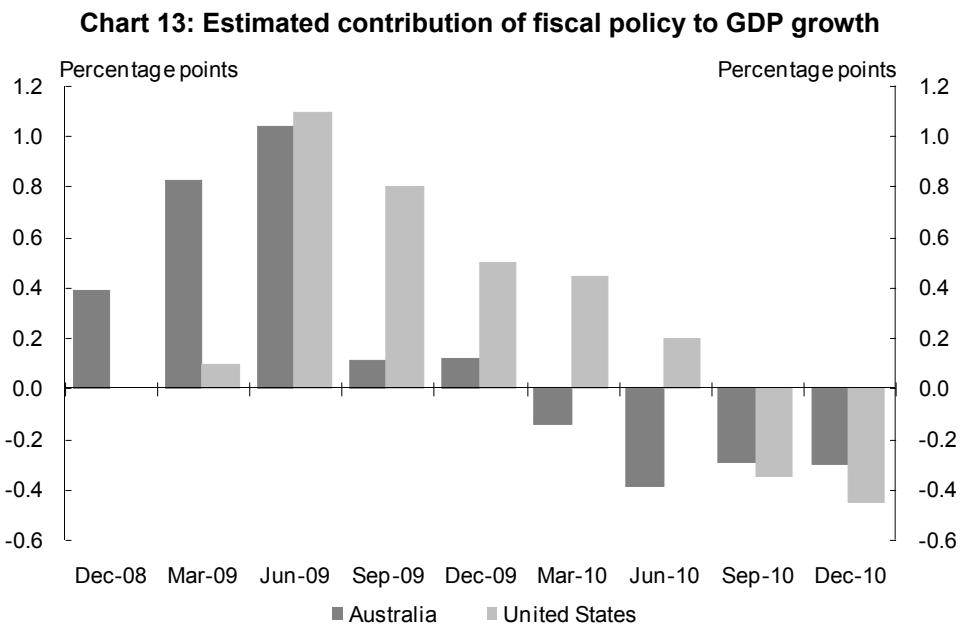
For fiscal policy, a comparison with the US discretionary fiscal response in the aftermath of the collapse of Lehman Brothers in mid September 2008 provides a revealing demonstration of the timeliness of the Australian response.

In the United States, the 2008 Presidential election occurred at a critical time; a time when it would have been desirable to have been developing and implementing fiscal stimulus – as a comparison with the timing of the Australian fiscal packages makes clear.

The first Australian package (the \$10.4 billion Economic Security Strategy) was announced in mid October 2008, a few weeks before the US Presidential election, with the first cash transfers to households distributed in early December.

The largest Australian package (the \$42 billion Nation Building and Jobs Plan) was announced on February 3, 2009, two weeks after President Obama’s inauguration, and implemented rapidly thereafter.

By contrast, the post-Lehman US fiscal stimulus package, the US\$787 billion American Recovery and Reinvestment Act was signed into law on February 17, 2009, and had minimal estimated impact on US economic growth until the June quarter, 2009 (Chart 13).



Source: ABS cat. no.5206.0 and Treasury, Congressional Budget Office, 2010.

Conclusion

Making forecasts, particularly about the future, is a difficult task at the best of times. The task becomes all the more difficult when the global economy is in the midst of the largest synchronised downturn since the Second World War.

By April 2009, the global forecasting community had formed a pretty accurate assessment of the scale of the 2009 economic downturn in the advanced economies. Their assessment of economic prospects in non-Japan Asia, however, turned out to be overly pessimistic. Rapid and substantial easing of both monetary and fiscal policy, particularly in Korea and China, turned out to be more successful in stimulating growth, both in their own economies and in their close trading partners, than had earlier been expected.

In Australia, the 2009-10 Budget forecasts were put together at a time when both domestic and international forecasters were close to their most pessimistic – and thankfully economic outcomes have turned out significantly better than expected at that time.

Business investment and exports contributed significantly to the 2009-10 Budget forecast errors for 2009 real GDP growth. This was not, however, because either component made a particularly large contribution to the outcome for real GDP growth, but rather because the 2009-10 Budget forecasts for these two components were particularly weak.

Household consumption (adjusted for imports and inventories) made by far the largest contribution to real GDP growth in 2009, followed by public final demand, business investment and exports, while dwelling investment detracted slightly from growth.

From a broader perspective, the Australian economy benefited from the sound state of the financial system and from financial institutions' continued capacity to borrow in international capital markets, supported by the Government guarantee. Australia also benefited directly from the commodity-intensive nature of the Chinese government's stimulus packages, and from the rapid and substantial easing of domestic monetary and fiscal policy, without which Australia would have suffered a significant recession in 2009.

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Estimating the structural budget balance of the Australian Government

Tony McDonald, Yong Hong Yan, Blake Ford and David Stephan¹

This paper develops estimates of the structural budget balance of the Australian Government. It describes the methodology and assumptions used in developing these estimates, includes sensitivity analysis, and explains why these estimates differ from those produced by the IMF and OECD.

1 The authors are from Macroeconomic Group, the Australian Treasury. This article has benefited from comments and suggestions provided by David Gruen, Damien White, John Clark, Steve Morling, Adam McKissack, Phil Garton, Jin Liu, and Shane Brittle. The views in this article are those of the authors and not necessarily those of the Australian Treasury.

Introduction

The Australian Government's medium-term fiscal strategy includes a commitment to achieve budget surpluses on average over the medium term. Further, the *Charter of Budget Honesty Act 1998* requires the Government to publish a fiscal strategy statement that, among other things, explains key fiscal measures against which fiscal policy will be set and assessed.

In this context, it would clearly be desirable to have a definitive measure of the Australian Government's budget adjusting for the economic cycle, separating movements in the budget position between cyclical and structural components. The importance of such measures includes that the appropriate fiscal policy response to structural and cyclical shifts in the budget position is likely to be different (For a fuller discussion on this point, see Chalk, 2002; Mercereau and Razhkov, 2006; Price, Joumard, Andre and Minegishi, 2008.)

Even if a definitive measure could be found, it would only cover one aspect of an assessment of fiscal sustainability. The state of the Government's balance sheet, including the level of contingent liabilities and other risks, and the outlook for long term economic growth are also important elements of fiscal sustainability.

In practice, there are a range of approaches to obtain these estimates, the results of which can vary markedly. Typically, such measures involve considerable complexity and uncertainty (Ford, 2005). There is therefore a need to exercise caution in the interpretation of structural budget balance measures. In particular, excessive reliance on point estimates should be avoided.

The 2009-10 Budget included estimates of the structural budget balance of the Australian Government in the context of a broader analysis of fiscal sustainability. This paper updates these estimates and describes the methodology and assumptions used in their development. The main way our estimates differ from most other approaches is that they adjust for movements in Australia's terms of trade and for cyclical variations in capital gains taxes.

The paper starts by outlining the major steps involved in structural budget balance measures and explaining the methodology adopted for each of these steps for our structural budget balance measure. It then examines the key drivers of movements in the measure over time, and analyses the sensitivity of the measure to key assumptions, such as the terms of trade and the level of productivity. The paper concludes by comparing the estimates with those produced by the IMF and OECD, and explaining the key factors driving the differences between them.

Steps in calculating structural budget balance measures

While a variety of approaches have been developed to decompose government revenue and expenditure into cyclical and structural components, the most common broad approach is that outlined by Giorno, Richardson, Roseveare and van den Noord (1995) and van den Noord (2000). Under this approach, the structural component is determined residually, as the budget balance adjusted for the estimated impact of cyclical factors. The components of the budget position are assumed to be additive: that is, by assumption movements in the budget balance are either cyclical or structural. That is:

$$\text{Actual Budget Balance} = \text{Structural Component} + \text{Cyclical Component}$$

The impact of cyclical factors on the budget is determined by comparing an estimated 'structural' or potential level of nominal GDP with its actual or projected level, and then multiplying this difference by estimated elasticities for the revenue and expenditure components of the budget affected by cyclical factors.² That is:

$$\text{Cyclical Component} = [\text{Nominal GDP} - \text{Structural GDP}] \times \text{Relevant Elasticities}$$

Within this common broad approach, a number of assumptions are required to generate a structural budget balance estimate. Box 1 outlines the methods used by the IMF and OECD to calculate structural budget balances. As there are a number of different approaches to the steps involved in the calculation of structural budget balances, estimates can vary significantly, have a wide margin of error and require careful interpretation (Ford, 2005). Just as measures of the structural or potential level of output are subject to significant revision, so too are structural budget balance estimates that rely on those measures (Gruen, Robinson and Stone, 2005; Price, Joumard, Andre and Minegishi, 2008).

It is therefore important for the proper interpretation of estimates of the structural budget balance that their methodology, assumptions and limitations are set out clearly. The following sections set out the key steps involved in the calculation of our estimates of the structural budget balance.

² The forecasts and projections for GDP in this paper are as set out in the 2010 *Pre-election Economic and Fiscal Outlook*.

Box 1: IMF and OECD structural budget balance methodologies

The IMF and OECD regularly publish updated estimates of structural budget balances for a range of countries. Both the IMF (De Masi, 1997; Hagemann, 1999; Fedelino, Ivanova and Horton, 2009) and OECD (Giorno, Richardson, Roseveare and van den Noord, 1995; Sukyer, 1999; Girouard and Andre, 2005) have published papers explaining their methodology in detail. This Box summarises these methodologies.

Both the IMF and OECD start by estimating an economy's potential output. For most countries this is done using a two-factor constant returns-to-scale Cobb-Douglas production function. Potential output is calculated as the level of output consistent with an economy's stock of capital and 'non-accelerating inflation rate of unemployment' (NAIRU).

The next step is estimating the cyclical component of revenues and expenditures and subtracting this from the totals. Both the IMF and OECD measures identify the cyclical component of budget aggregates by estimating the responsiveness of actual revenue and expenditure to deviations from the economy's potential level of output.

Both methods estimate the cyclical component of revenue using elasticities for major tax revenue heads drawn from the OECD's Economic Outlook Database. These elasticities are calculated for four tax categories: personal, corporate, indirect and social security contributions. While both measures draw on the same primary source for these elasticities, the OECD individually adjusts revenue for each major tax item whereas the IMF uses an aggregate elasticity that reflects the weighted share of each tax category in total revenue (Ford 2005).

Both measures assume that unemployment benefits are the only cyclical component of expenditures. The IMF and OECD both assume a proportionate change in unemployment benefits when the unemployment rate deviates from the NAIRU. However, while the IMF assumes a unitary elasticity of unemployment benefits with respect to the gap between the unemployment rate and the NAIRU, the OECD econometrically estimates this relationship for each country.

Finally, Structural Budget Balance estimates are then calculated by subtracting the cyclically adjusted expenditure from cyclically adjusted revenue.

Calculation of structural level of GDP

The structural level of GDP in the model is derived using a deterministic trend, similar to that adopted by the European Commission (Roger and Ongena, 1995). This approach involves making explicit assumptions about the key components of the structural level of GDP.

The structural level of nominal GDP is derived by combining a structural level of real GDP with a structural GDP deflator. The assumptions underpinning these estimates are outlined in the following sections.

Calculation of structural level of GDP: real GDP

The structural level of real GDP is derived from assumptions of the key underlying components. Real GDP can be decomposed into labour productivity (real GDP per hour worked) and total hours worked in the economy. In turn, the total hours worked in the economy is the product of the working age population, the participation rate, the employment rate and average hours worked per employee (Treasury, 2000; Henry, 2001). That is:

$$\text{Real GDP} = \text{Labour Productivity} \times \text{Total Hours Worked}$$

$$\text{Labour Productivity} = \text{Real GDP per Hour Worked}$$

$$\text{Total Hours Worked} = \text{Working Age Population} \times \text{Participation Rate} \times (1 - \text{Unemployment Rate}) \times \text{Average Hours Worked.}$$

The approach adopted in relation to each of these components of real GDP is outlined below.

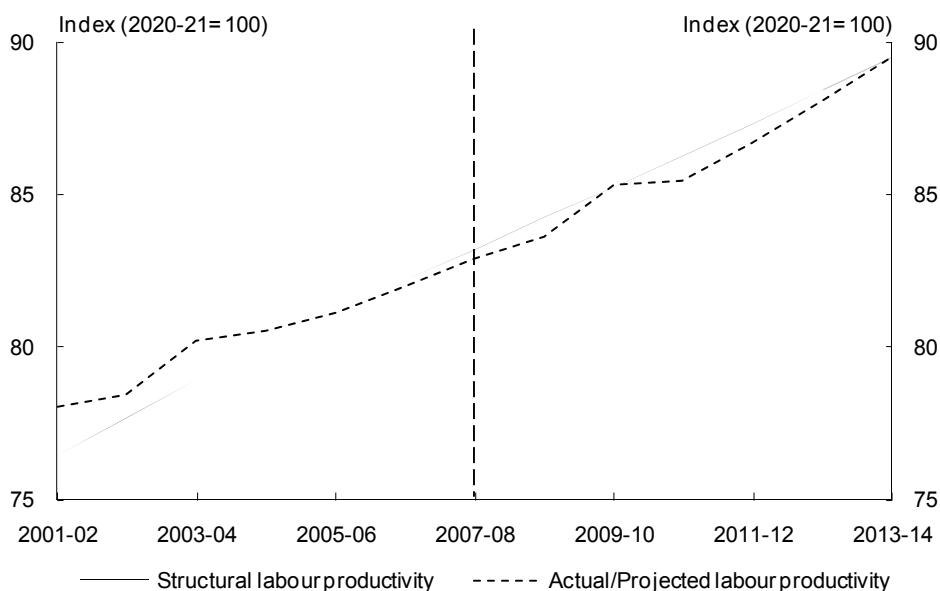
Labour productivity

The medium term projections assume that labour productivity will grow at its 30 year average of 1.6 per cent per annum.

This naturally gives rise to the problem of choosing a 'starting point': at what level should the base structural level of productivity be set to which this growth rate is applied? More broadly, it is a reflection of the difficulty in assessing the potential output. The approach adopted was to assume that the structural level of labour productivity equalled the trend level derived from a Hodrick-Prescott filter, with any variation from this trend assumed to reflect cyclical factors. The level of labour productivity from the H-P filtered trend and from the medium-term projections are equal in 2013-14, from which time both are assumed to grow at 1.6 per cent per annum.

The resultant structural productivity level compared with the actual or projected level of labour productivity is presented at Chart 1 below.

Chart 1: Structural productivity assumption



Source: ABS cat. no. 5204.0 and Treasury.

Working Age Population

The calculation of the structural level of real GDP assumes that the Working Age Population (defined as the population aged 15 and over) is not affected by cyclical factors. Therefore, the structural level of the Working Age Population is assumed to be equal to its actual level in history and the projections outlined in the medium-term fiscal projections.

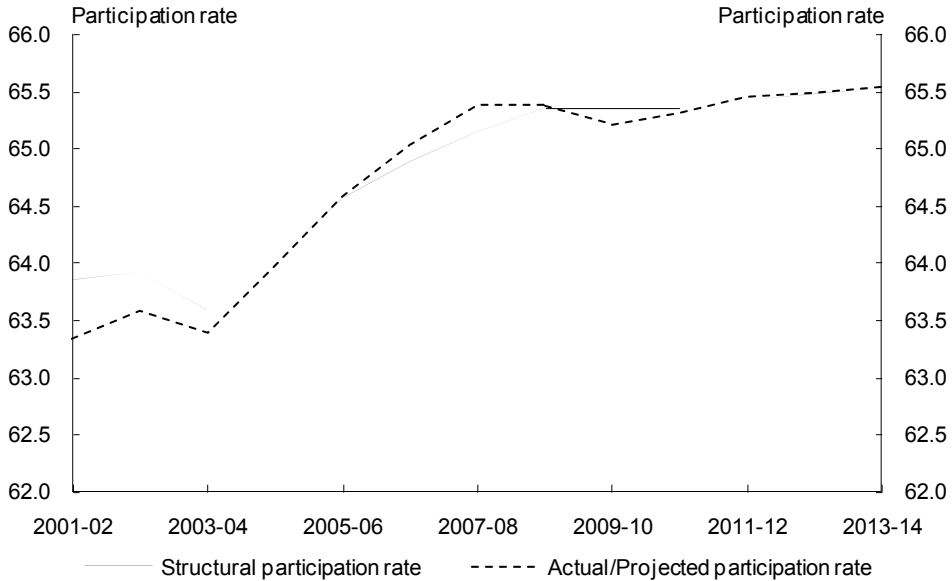
While there is likely to be some degree of cyclicity in the net overseas migration component of Working Age Population, this is hard to separate from (larger) structural changes over time. That said, further work into this issue could prove to be a useful extension of this model.

Participation rate

The economic projections underpinning the medium-term fiscal estimates take into account the impact of demographic trends on the participation rate, particularly the impact of the 'baby boom' generation shifting out of the 'peak' participation age groups over time. These trends are structural in nature, and are therefore allowed for in the structural budget balance model.

When the unemployment rate is rising, some workers are assumed to leave the labour force, and vice versa. The medium-term model also takes into account these encouraged/discouraged worker effects on the participation rate. The structural participation rate is the actual/projected participation rate less the encouraged worker effect.

Chart 2: Structural participation rate assumption



Source: ABS cat. no. 6202.0 and Treasury.

Unemployment rate

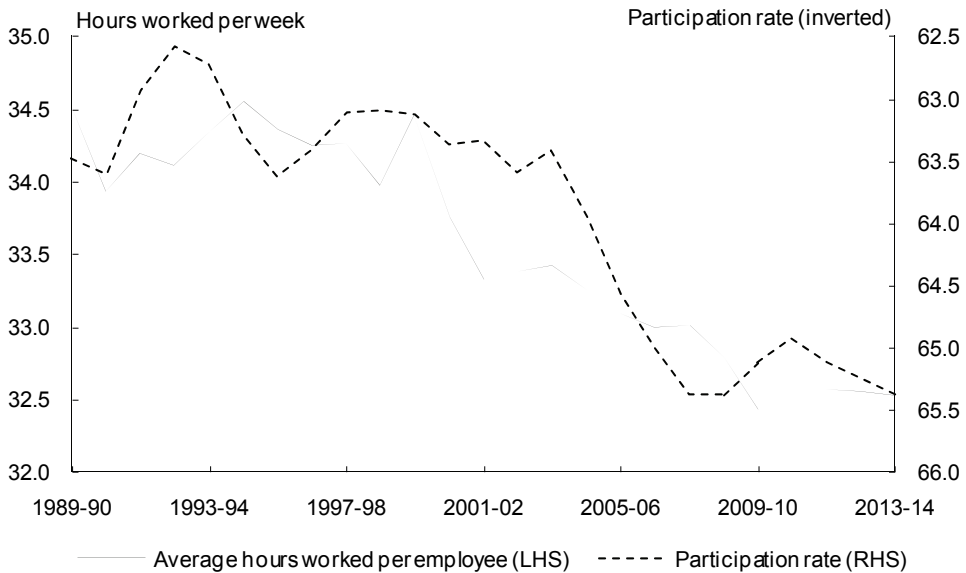
The structural real GDP assumes a constant unemployment rate of 5 per cent over the period. This is consistent with the assumed level of the non-accelerating inflation rate of unemployment (NAIRU) in the economic projections underpinning the medium-term fiscal projections.

Hours worked per employee

The average level of hours worked per employee has changed over time, reflecting a combination of structural and cyclical factors.

A key structural influence over recent decades has been the trend for increased workforce participation of women, who are more likely to work part time (Chart 3). Much of the decline in hours worked over this period is explained by the increase in the participation rate.

Chart 3: Hours worked per employee

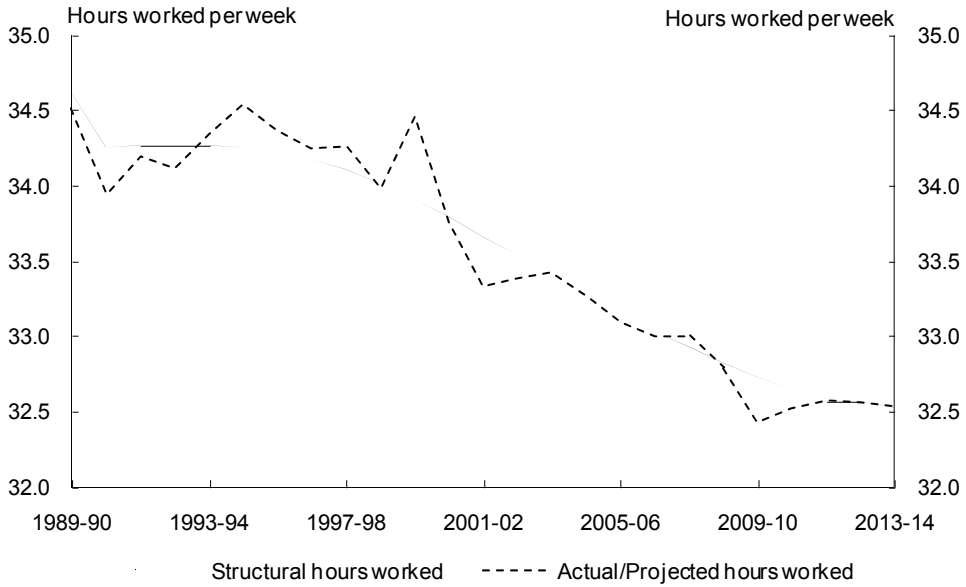


Source: ABS cat. no. 6203.0 and 6202.0.

It is likely that there is also a cyclical element in the average hours worked per employee. In particular, average hours worked per employee is likely to fall in a recession, as employers faced with falling demand seek to retain staff by reducing the hours of their full time employees.

In practice, it is difficult to separate any cyclical factors affecting average hours worked per employee from these structural changes. The approach adopted was to assume the structural level of hours worked per employee equalled the trend level derived from a Hodrick-Prescott filter, with any variation from this trend assumed to reflect cyclical factors (Chart 4).

Chart 4: Structural level of hours worked

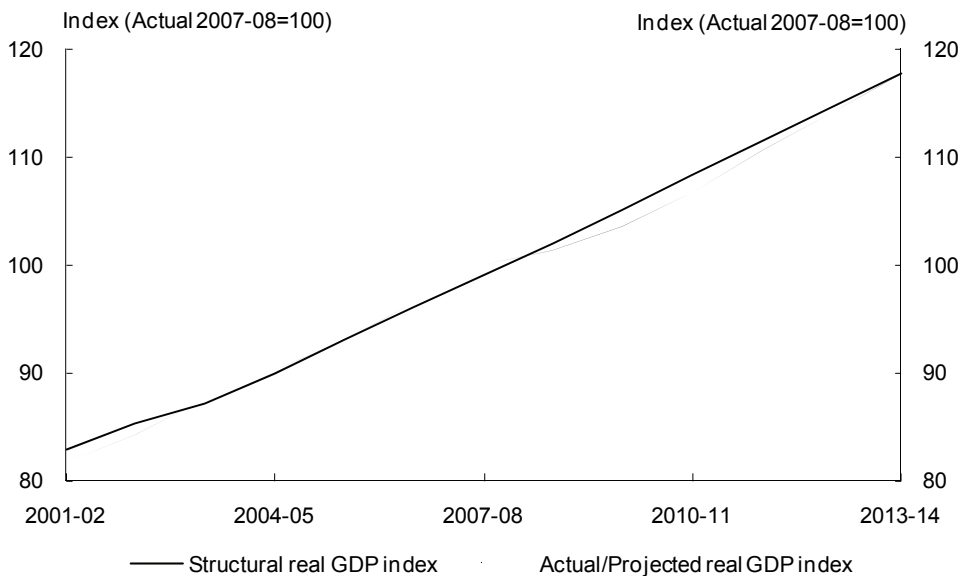


Source: ABS cat. no. 6203.0 and Treasury.

Structural real GDP

An estimate of the structural level of real GDP is then derived from the assumptions outlined above. Chart 5 compares the resultant structural and actual or projected level of real GDP.

Chart 5: Structural and actual/projected real GDP



Source: ABS cat. no. 5204.0 and Treasury.

Calculation of structural level of GDP: GDP deflator

Movements in the GDP deflator can be explained largely by movements in the terms of trade and the Gross National Expenditure (GNE) deflator.³

Terms of trade

Movements in the terms of trade can have a sizeable impact on real incomes and tax revenues. The very substantial movements in Australia's terms of trade over time mean that it is particularly important to account for this aspect in estimates of the structural budget balance (Turner, 2006). That said, it is not straightforward, even in hindsight, to determine the extent to which movements in the terms of trade are cyclical rather than structural.

The medium term projections in the 2009-10 Budget assumed that the terms of trade would decline by around 15 per cent over a ten year period from 2013-14 to approximately the same level as their average in the *Australia's Low Pollution Future* report (Australian Government, 2008). That report attributed this decline to the lagged supply response by commodity producers to the significant increase in demand for commodities over recent years. Reflecting the substantial increase in the terms of trade since the 2009-10 Budget, the latest medium term projections assume that the terms of trade will decline to the same level, but that the adjustment will take place over a longer time period. A plausible alternative approach would be to assume that continuing strength of demand from China's and India's urbanisation (Liu and McDonald, 2010) combined with the significant share of ICT goods in Australia's imports (Gruen, 2001) would merit a higher structural level of the terms of trade.

The structural budget balance model assumes a constant structural terms of trade equal to this level. However, this assumption implies that there has been a structural improvement in Australia's terms of trade over the course of the past decade.⁴

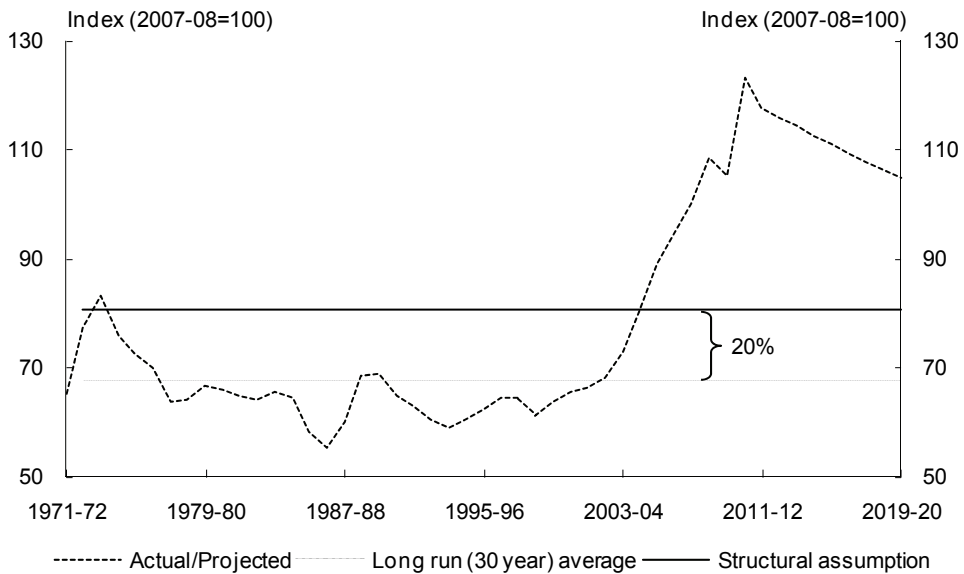
Australia's terms of trade increased significantly over the past decade, with the expected peak in 2010-11 around 80 per cent above its long-run (30 year) average to 2007-08 (Chart 6). The assumed structural level of Australia's terms of trade remains around 20 per cent above its long-run (30 year) average. The structural budget balance

3 Movements in the GDP deflator can also be affected by shifts in export and import weights over time and the non-additivity of chain volume estimates in history.

4 BP and LS models developed by Bai and Perron (1998, 2003) and Lee and Strazicich (2003) were used to test the structural breaks in Australia's terms of trade. The identification of structural breaks, and their timing, is sensitive to the test and sample period used. Using an annual sample period of 50 years (1960-61 to 2009-10) the LS test indicates a negative structural break in 1975-76 and a positive structural break in 2001-02, while the BP test does not capture any breaks of significance. The authors would like to thank Jin Liu for her guidance in the application of these tests.

estimates therefore assume that around a quarter of the increase in Australia’s terms of trade is structural rather than cyclical.

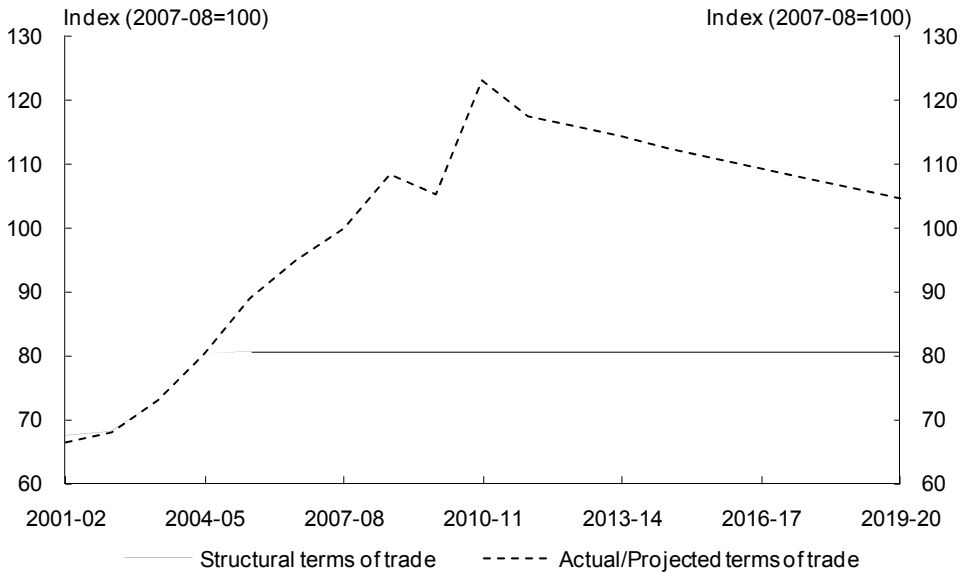
Chart 6: Australia’s terms of trade



Source: ABS cat. no. 5204.0 and Treasury.

Australia’s terms of trade at the start of the period of analysis (2001-02) were a little below the long-run (30 year) average to 2007-08 (Chart 6). The structural terms of trade in the model is modified for the assumed structural improvement in Australia’s terms of trade by assuming that over this transition period (from 2001-02) the structural level equalled the actual level until the latter reaches (and exceeds) the medium term assumption (in 2005-06), from which point the structural level of the terms of trade assumption is assumed to be constant (Chart 7).

Chart 7: Structural and actual/projected terms of trade



Source: ABS cat. no. 5204.0 and Treasury.

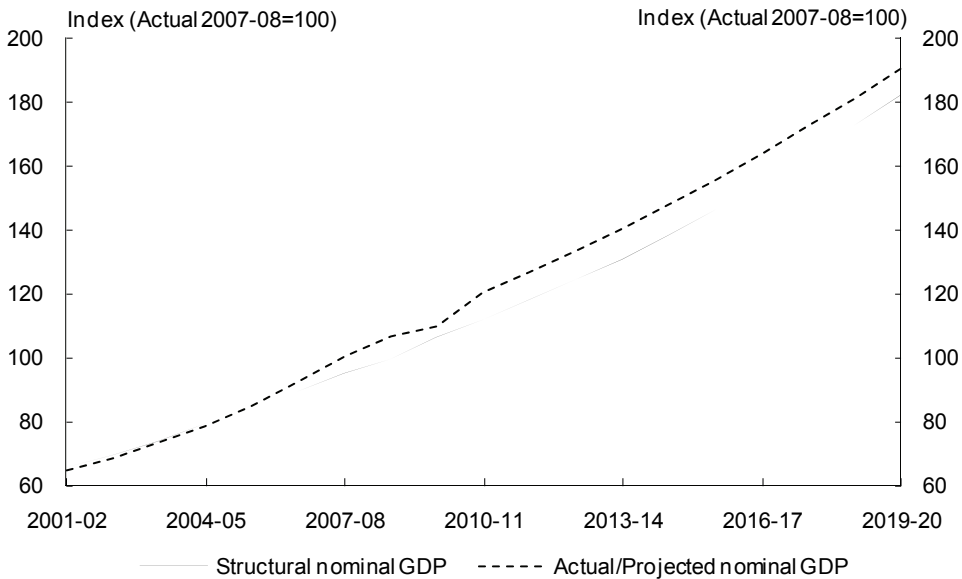
GNE deflator

The structural GNE deflator is assumed to grow at a rate of 2½ per cent per annum. The level of the GNE deflator when the economy was most recently at the assumed NAIRU (ie 2005-06) is assumed to equal the structural GNE deflator. The structural GNE deflator in other years is determined by discounting (or inflating) this level by the assumed GNE deflator growth rate.

Summary: Structural nominal GDP v actual nominal GDP

An estimate of the structural level of the GDP deflator is derived from the terms of trade and GNE assumptions outlined above. The combination of the structural GDP deflator and structural real GDP provides the implied structural nominal GDP level required to calculate the structural budget balance. Chart 8 compares the resultant structural and the actual or projected level of nominal GDP.

Chart 8: Structural and actual/projected nominal GDP



Source: ABS cat. no. 5204.0 and Treasury.

Calculation of cyclical component

The calculation of the cyclical component of the budget involves assessing the impact of the difference between the level of structural GDP and the actual/projected level of GDP on those aspects of the budget affected by the economic cycle. There are three parts to the cyclical component in the Budget structural budget balance estimates: Tax revenue, Capital Gains Tax (CGT) revenue, and unemployment benefit payments.

Tax adjustment

Tax revenue is closely correlated with movements in nominal GDP. The cyclical adjustment for the effect of the economic cycle on tax revenue is derived by taking the product of the difference between the structural and actual level of GDP, the tax share of GDP and an aggregate elasticity of tax revenue to GDP. That is:

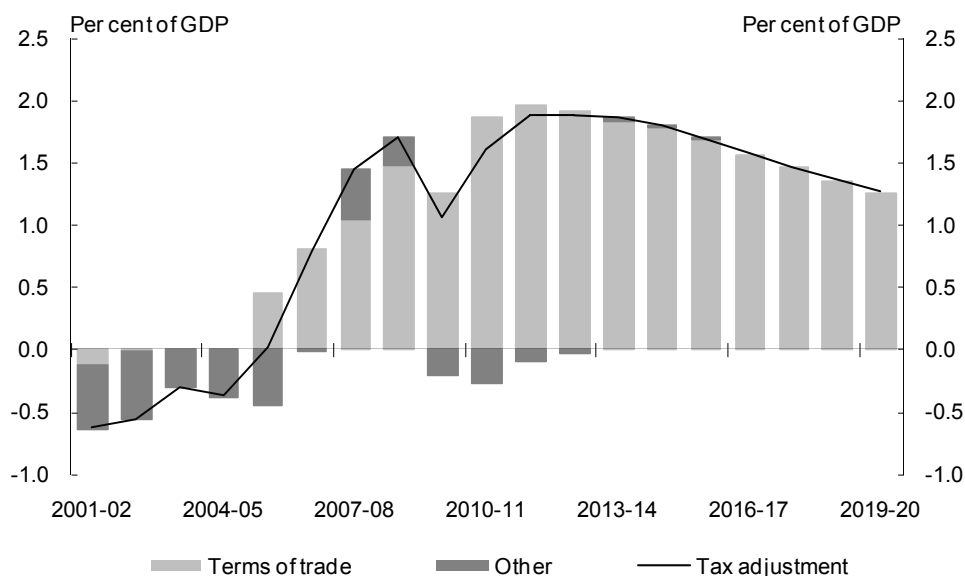
$$\text{Cyclical Component of Tax} = [\text{Actual GDP} - \text{Structural GDP}] \times \text{Tax Share} \times \text{Tax elasticity}$$

Given the separate adjustment for CGT revenue (explained below), the tax share in this calculation excludes CGT revenue. The aggregate tax elasticity of $1\frac{1}{4}$ is consistent with the historical average elasticity. As the structural level of GDP is derived at the aggregate level, the tax adjustment is also done at an aggregate level rather than the level of disaggregation presented in the Budget papers. An adjustment is also made to

reflect the lags from changes in economic conditions to tax revenue. Around 80 per cent of the impact is assumed to occur in the year of the change, with around 20 per cent in the following year.

Chart 9 presents the composition of the estimate of the cyclical component of tax (excluding capital gains tax). At the start of the period of analysis the structural terms of trade is assumed to equal the actual terms of trade, and therefore does not contribute to the cyclical component of tax revenue. However, with the actual terms of trade exceeding the assumed structural level from 2005-06 to the end of the period of analysis, it is responsible for the bulk of the cyclical component of tax revenue.

Chart 9: Composition of cyclical component of tax

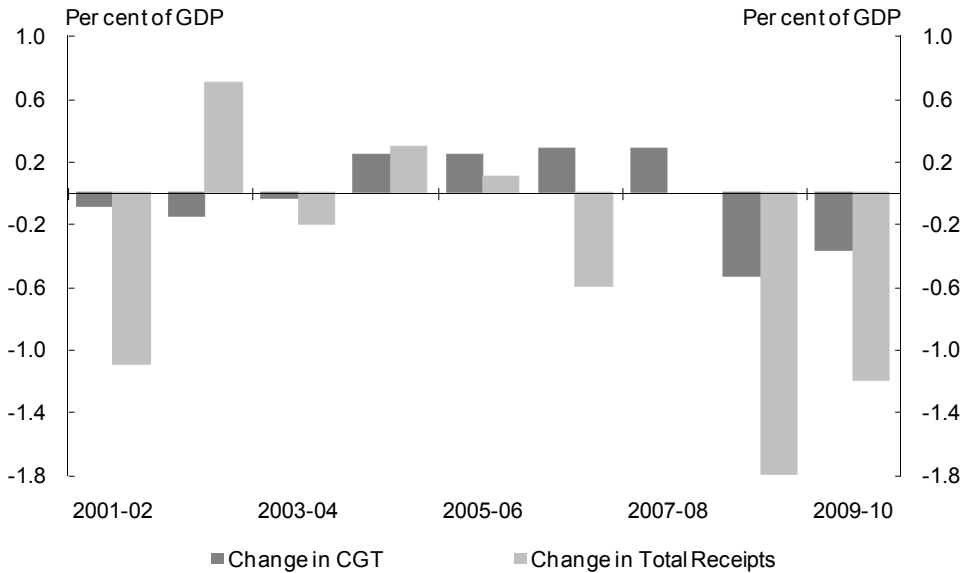


Source: Treasury.

CGT adjustment

CGT revenue is a function of both the movement in the price of taxable assets and the timing of their realisation. As such, there is not a clear relationship between CGT revenue and nominal GDP. Nevertheless, CGT revenue is clearly a source of significant variation in the budget balance over the economic cycle. While CGT revenue is a relatively small component of overall revenue, it is an important contributor to the change in revenue over the past decade (Chart 10).

Chart 10: Annual change in CGT and Total Receipts



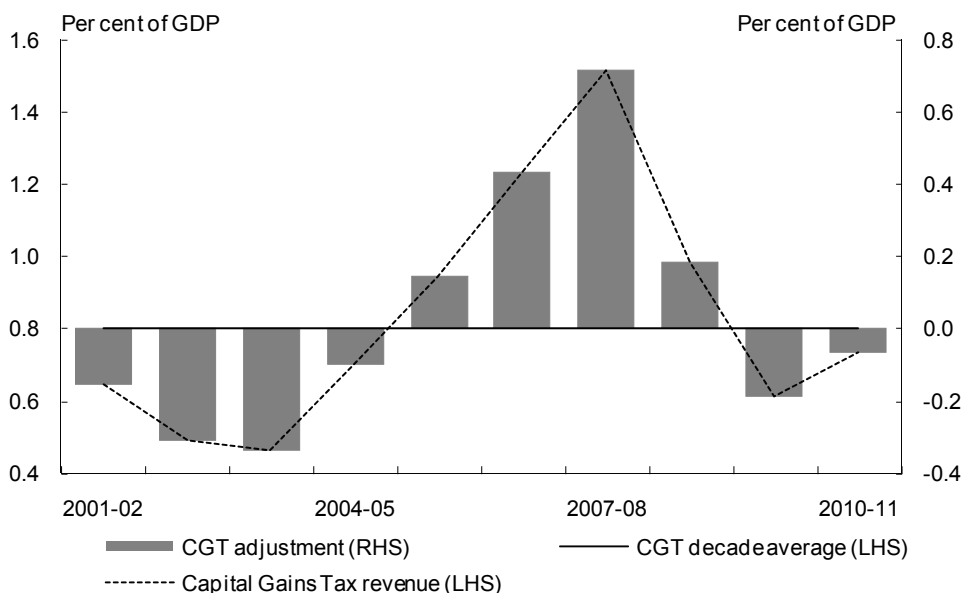
Source: Treasury.

It is clearly important to adjust for fluctuations in CGT revenue. However, given the indirect relationship between nominal GDP and CGT revenue, the approach adopted was to assume a structural level of CGT equivalent to its decade average as a share of GDP.⁵ If actual CGT revenue exceeds the decade average, the excess is taken off the budget balance to obtain the structural budget balance, and vice versa (Chart 11). That is:

$$\text{Cyclical component of CGT} = \text{Actual CGT} - \text{Decade Average}$$

5 Due to significant changes to capital gains tax arrangements in 1999-00, for the first decade of the estimation period, the decade average of 0.8 per cent of GDP reflects the average of the period 2001-02 to 2010-11. From 2011-12, a rolling decade average is used.

Chart 11: Structural and actual/projected CGT revenue



Source: Treasury.

UBR adjustment

The only component of expenditure that is adjusted for the impact of the economic cycle is the change in the number of unemployment benefit recipients (UBRs) due to variations in the number of unemployed people.⁶ The UBR adjustment is derived by multiplying the difference between the actual/projected number of unemployed people and that implied by the NAIRU by the average income support payment to UBRs. That is:

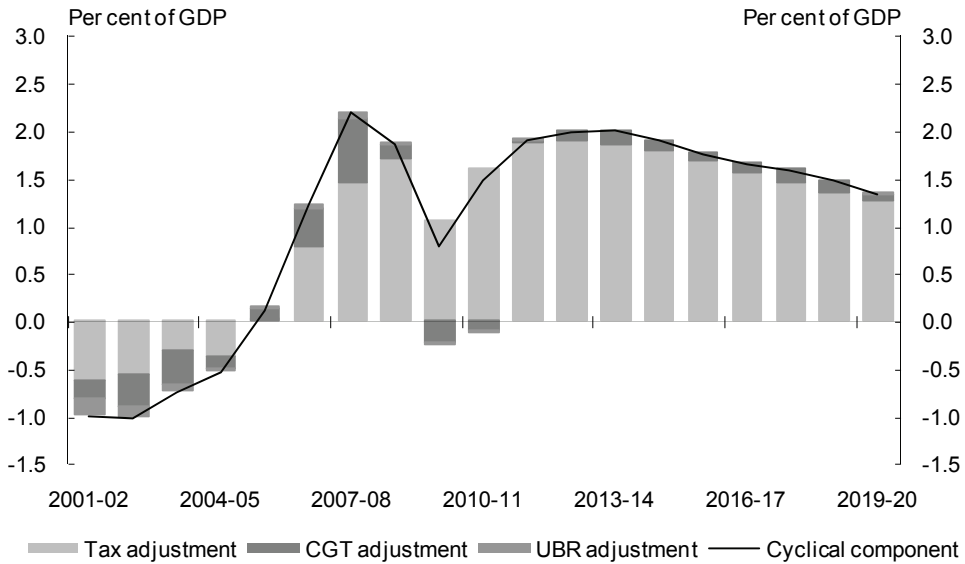
$$\text{UBR Adjustment} = [\text{Actual unemployed persons} - \text{structural unemployed persons}] \times \text{Average UBR payment}$$

Summary

The contributions of the components of the cyclical adjustment are outlined in Chart 12.

6 The ABS estimate of the number of unemployed differs conceptually in several ways from the number of recipients of unemployment income support benefits. It is possible to be in receipt of unemployment benefits and not measured as unemployed by the ABS, or alternatively to be unemployed as measured by the ABS and not in receipt of unemployment benefits. Nevertheless, the two series have moved broadly in line over time (ABS, 2009).

Chart 12: Composition of the cyclical component of the Budget



Source: Treasury.

The tax adjustment makes the dominant contribution to the cyclical component of the budget balance, adding around 1¾ per cent of GDP to the budget balance in 2008-09, with most of this adjustment reflecting the strength of the terms of trade in that year. The tax adjustment falls significantly in 2009-10, coinciding with the significant decline in the terms of trade, along with the effects of the economic slowdown on employment and productivity, before returning to around 1¾ per cent of GDP by 2010-11.

The CGT adjustment is the next most important contribution to the cyclical component of the budget balance, adding ¾ per cent of GDP to the budget balance in 2007-08, before turning around to detract ¼ per cent from the budget balance in 2009-10, reflecting the sharp decline in asset prices associated with the Global Financial Crisis.

The UBR adjustment adds a small amount to the budget balance in 2007-08 when the unemployment rate averaged 4.2 per cent, before detracting slightly from the budget balance in 2009-10, with little impact in subsequent years as the unemployment rate is assumed to return to the NAIRU.

Calculation of structural budget balance

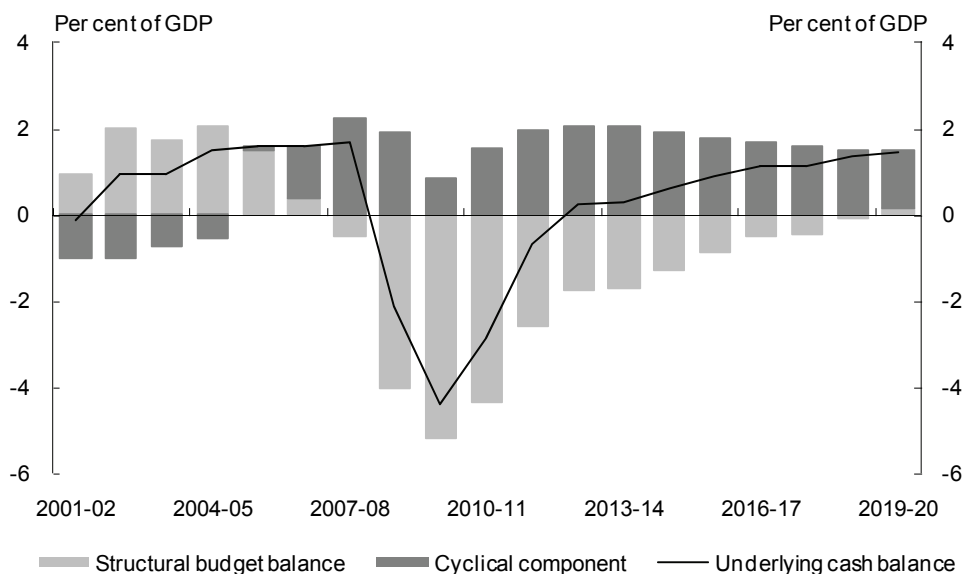
As noted above, the movements in the budget balance are assumed to be either cyclical or structural. So the calculation of the cyclical component of the budget balance, combined with the actual or forecast level of the budget balance, yields the structural budget balance estimate. That is:

$$\text{Structural Budget Balance} = \text{Actual Budget Balance} - \text{Cyclical Component}$$

The above terms are expressed in terms of a percentage of GDP.⁷

The contributions of the structural and cyclical components of the budget balance are outlined in Chart 13.

Chart 13: Cyclical and structural components of the budget balance



Source: Treasury.

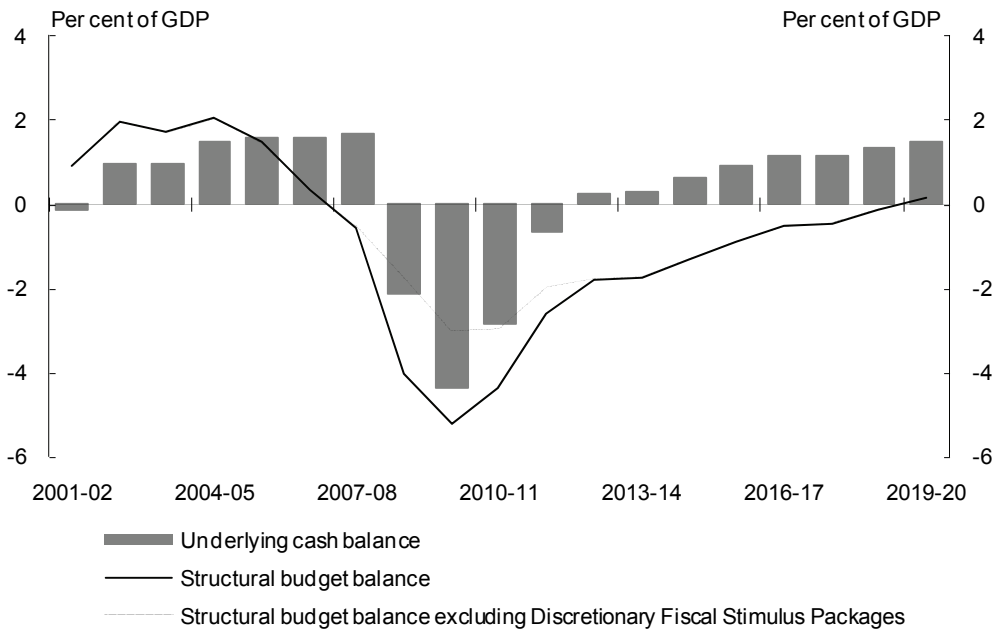
Based on these estimates, the structural budget balance deteriorated from 2004-05, moving to a structural deficit of around ½ per cent of GDP in 2007-08 before declining to around 5¼ per cent in 2009-10 reflecting the effects of the discretionary fiscal stimulus measures in response to the Global Financial Crisis and the impact of further personal income tax cuts.

Although it is clearly appropriate to include the effect of discretionary fiscal stimulus measures in the structural budget balance, it is also analytically useful to separate the effect of these measures (both as they are introduced and expire) from the other factors driving the structural budget balance. As illustrated in Chart 14, abstracting from fiscal

⁷ The structural budget balance estimates presented in this paper are expressed as a percentage of actual/projected GDP, enabling a clear comparison with official fiscal forecasts and projections. While it is probably conceptually more correct to express structural budget balance estimates as a proportion of structural GDP, in practice this makes little difference to the size of the estimates.

stimulus measures, the structural budget deficit peaks at around 3 per cent of GDP in 2009-10.⁸

Chart 14: Structural budget balance



Source: Treasury.

The structural budget deficit narrows over following years reflecting the incorporation in the medium-term fiscal projections of the Government’s fiscal strategy commitments to limit growth in real spending as the economy recovers, and ‘bank’ improvement in tax receipts associated with the economic recovery.

Sensitivity analysis of structural budget balance

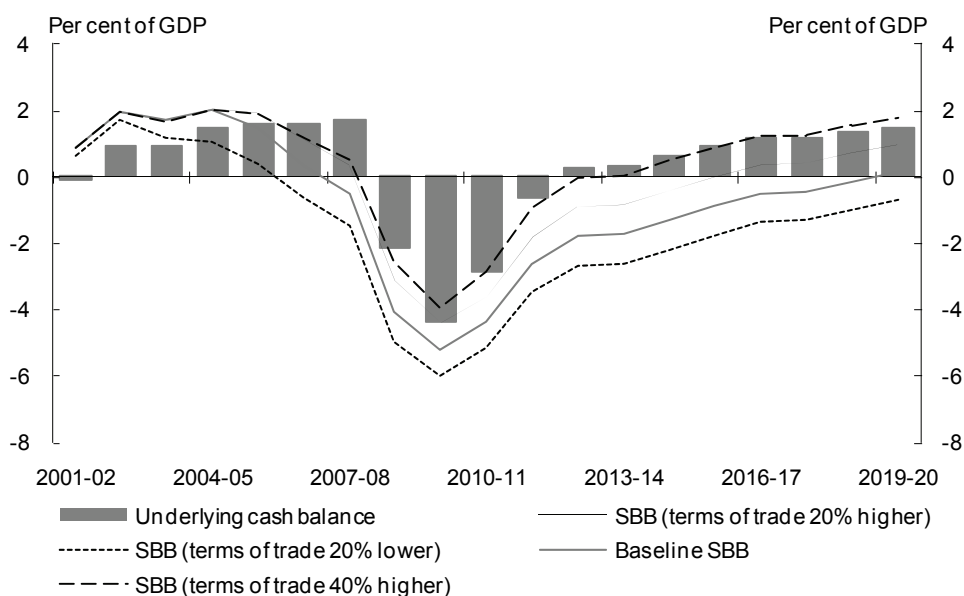
As noted earlier, estimates of the structural budget balance are highly sensitive to a range of assumptions. Alternative assumptions and approaches can result in significantly different estimates of the structural budget balance. In some cases, they can also shift the shape of movements in the structural budget balance over time.

Of particular importance in an Australian context are assumptions about the terms of trade. Chart 15 provides estimates of the structural budget balance using plausible alternative assumptions for the level of the terms of trade: 20 per cent higher or lower

⁸ This calculation simply adjusts the structural budget balance for the direct impact on the budget of the stimulus measures. It does not incorporate the indirect impact on the budget of the estimated economic effect of the fiscal stimulus measures.

than the baseline assumption. These alternative assumptions result in an improvement or deterioration of around 1 per cent of GDP in the structural budget balance estimates for most of the period of examination. As noted earlier, the terms of trade has risen significantly since the baseline assumption was adopted in the 2009-10 Budget. To reflect this, and the high degree of uncertainty around the structural level of the terms of trade, Chart 15 also provides estimates of the structural budget balance using the more extreme, but still possible, assumption that the structural terms of trade is 40 per cent higher than the baseline assumption used in this paper.⁹

Chart 15: Structural budget balance: Alternative terms of trade assumptions

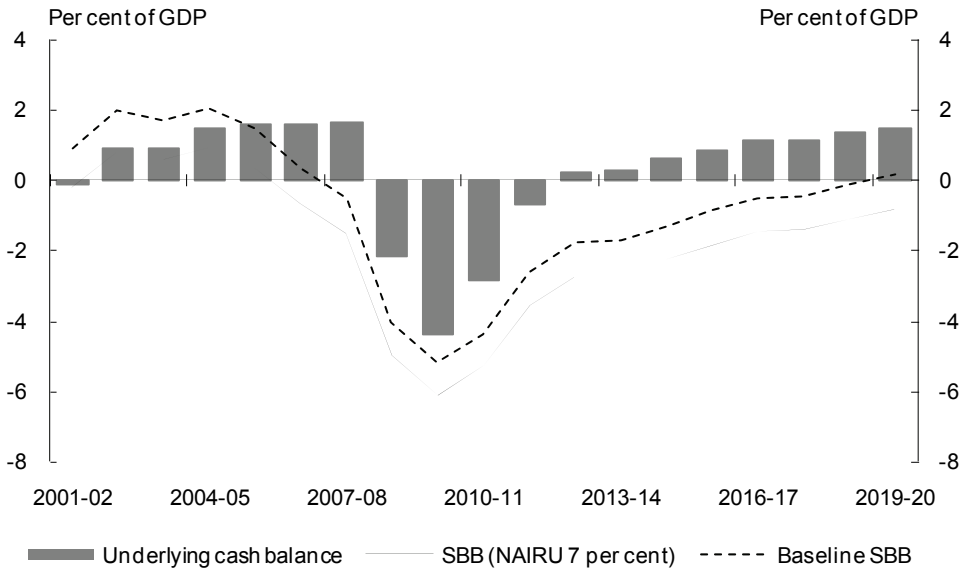


Source: Treasury.

The assumption for the structural level of the unemployment rate (the NAIRU) can also have a significant impact on the structural budget balance measure. For example, were the NAIRU assumed to be equal to the 30 year average of the unemployment rate of around 7 per cent (instead of 5 per cent) the structural budget deficit would be around 1 per cent of GDP larger over the estimation period (Chart 16).

9 A terms of trade 20 per cent lower than the baseline assumption is around 5 per cent below the long-run average (30 years to 2007-08) or a little over half of the forecast peak in 2010-11. As noted earlier, the baseline assumption for the terms of trade is around 20 per cent above the long-run average, or around two-thirds of the 2010-11 peak. A terms of trade 20 per cent above the baseline is more than 40 per cent above the long-run average or nearly 80 per cent of the 2010-11 peak. Terms of trade 40 per cent above the baseline is around two-thirds higher than the long-run average and less than 10 per cent below the expected 2010-11 peak.

Chart 16: Structural budget balance: Alternative NAIRU assumption

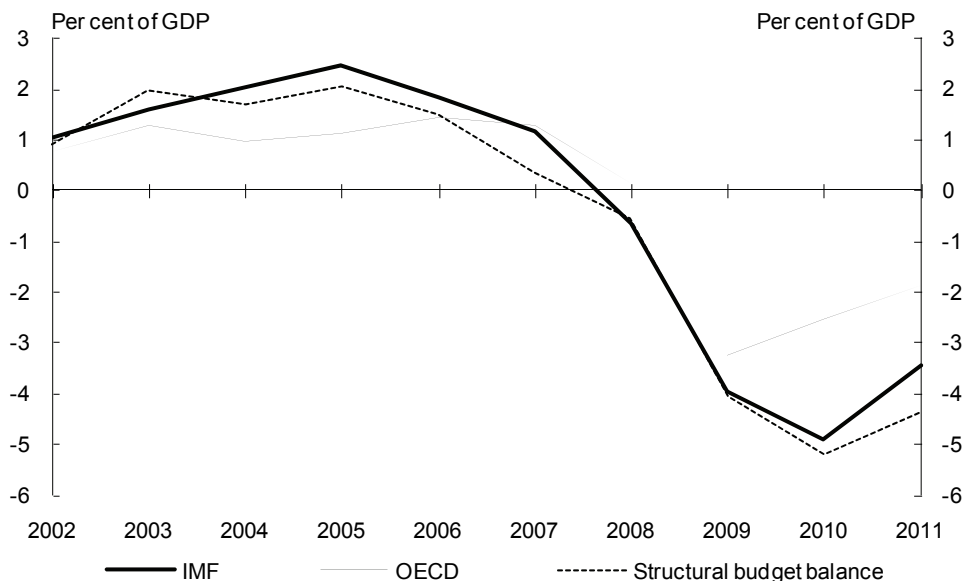


Source: Treasury.

Comparison of results with IMF/OECD

The structural budget balance estimates developed here are calculated using a different approach from that used by the IMF and OECD. Chart 17 compares our estimates with those of the IMF and OECD. It shows that while all three estimates are similar at the start of the period, our estimate is consistently below those of the IMF and OECD in the second half of the past decade with the gap widening over time.

Chart 17: Structural budget balance comparison



(a) IMF and OECD estimates are calendar year. Our estimates end at 2010-11.

Source: IMF *World Economic Outlook* April 2010, OECD *Economic Outlook* 87 and Treasury.

The remainder of this section analyses four factors behind the differences in these estimates.

- base for the Actual/Projected budget balance;
- adjustment for terms of trade;
- adjustment for CGT; and
- different methodologies for calculation of structural real GDP.

Base for the actual/projected budget balance

One source of variation between the IMF, OECD and our structural budget balance measures is the actual or projected budget balance used in the calculation. There are four key reasons for this divergence:

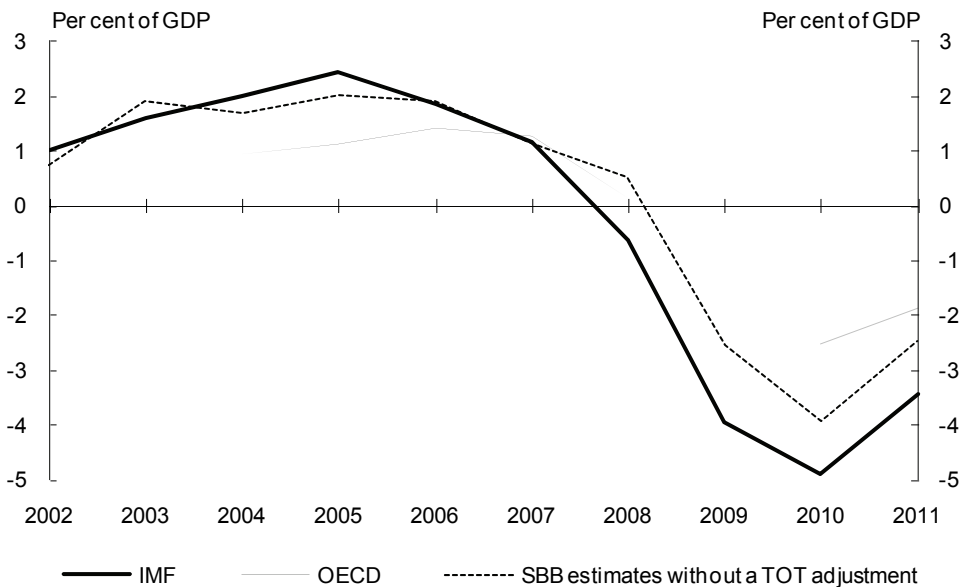
1. IMF and OECD calculations are at the General Government level, and therefore include State Government budget balance estimates as well as the Australian Government. The calculations presented here include Australian Government budget balance data only.
2. The OECD and IMF estimates are produced on a calendar year basis, while ours are based on the Australian financial year (that is, the year ending 30 June).

3. The OECD and IMF estimates use the underlying primary budget balance, while ours use the underlying cash balance measure.
4. The estimates of the budget balance are produced at slightly different times and therefore incorporate different information about the state of the economy and the fiscal decisions of the Government. The IMF estimates were published in the *World Economic Outlook* in April 2010 (before the 2010-11 Budget), while the latest OECD estimates were published in the *Economic Outlook* released in June 2010, post-Budget. As noted earlier, our estimates are based on the state of the economy, and economic forecasts, from the *Pre-Election Economic and Fiscal Outlook*, published in July 2010.

Adjustment for terms of trade

Another source of variation between the IMF, OECD and our structural budget balance measures is that the IMF and OECD measures do not include the impact of the terms of trade on the government's fiscal position. Chart 18 compares the IMF and OECD measures with our measure excluding adjustments for variations in the terms of trade. It shows that our estimate is broadly in line with those of the IMF and OECD over the course of the decade. Taken together, Charts 17 and 18 show that the allowance for the impact of the terms of trade on the government's fiscal position is a key difference between our estimates and those of the IMF and OECD.

Chart 18: Structural budget balance comparison without terms of trade



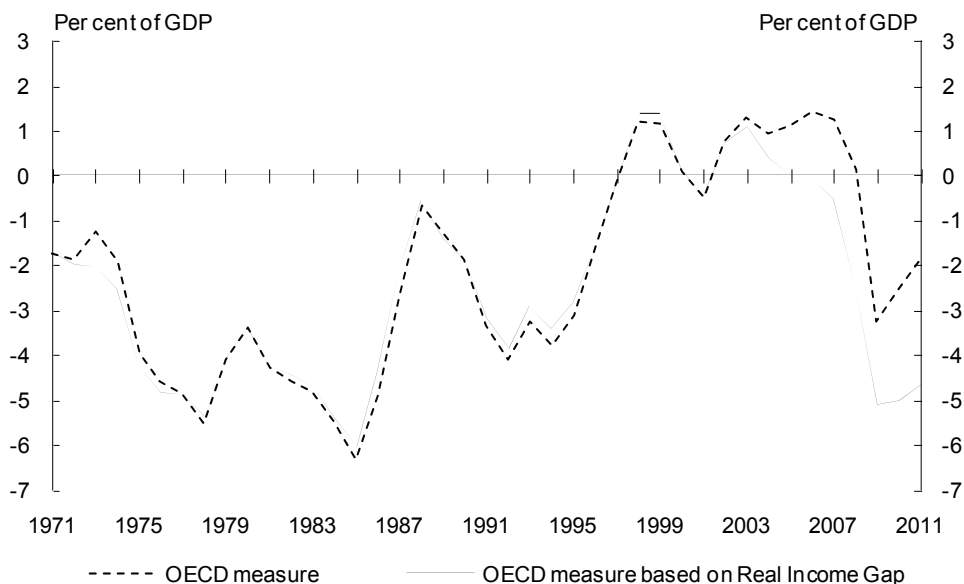
(a) IMF and OECD estimates are calendar year. Our estimates end at 2010-11.

Source: IMF *World Economic Outlook* April 2010, OECD *Economic Outlook* 87 and Treasury.

Generally the OECD uses the output gap, the difference between actual and potential output, to adjust for cyclical components of the Budget. The OECD has developed an alternative method based on the ‘real income gap’ rather than the output gap. This method allows for movements in commodity prices, which can have a significant impact on output and tax revenues in commodity exporting countries like Australia (Turner 2006). It augments the OECD output gap calculation with a term for the deviation of the terms of trade from their long-run level.

Updated estimates based on the OECD real income gap approach are shown in Chart 19. As in Turner (2006), the equilibrium terms of trade is set at its long-run average. For most of the period of these estimates, the two measures move broadly in-line. However, the significant improvement in the terms of trade lowers the measure based on the real income gap, as a greater proportion of revenue is considered to be cyclical.

Chart 19: Structural budget balance: OECD measures

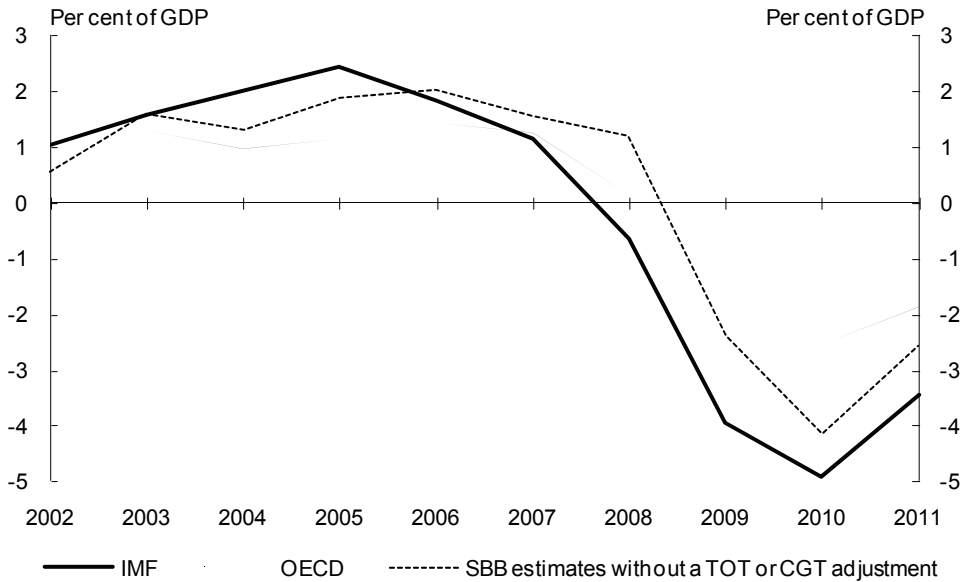


Source: Treasury update of Turner (2006), OECD *Economic Outlook* 87.

Adjustment for CGT variation

The IMF and OECD measures do not explicitly adjust for the volatility of Australia’s CGT revenue, treating it in the same manner as other tax revenue. Chart 20 compares the IMF and OECD measures with what our estimates would have been if no adjustment was made for either CGT volatility or variations in Australia’s terms of trade. It shows that our estimate was broadly in line with those of the IMF and OECD over the course of the decade.

Chart 20: Structural budget balance comparison without terms of trade or CGT



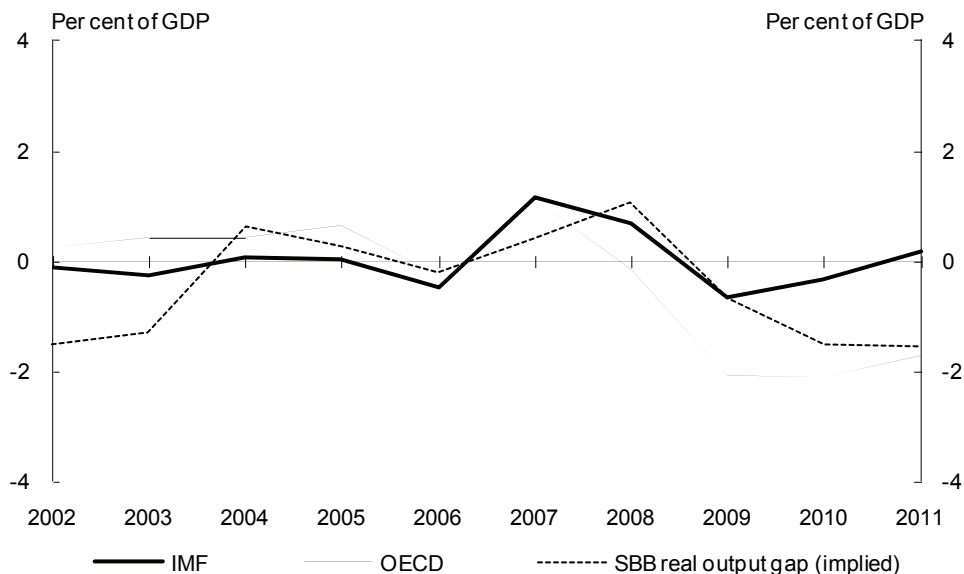
(a) IMF and OECD estimates are calendar year. Our estimates end at 2010-11.
 Source: IMF *World Economic Outlook* April 2010, OECD *Economic Outlook* 87 and Treasury.

Impact of different structural real GDP methodologies

Another source of potential variation between the OECD and IMF and our structural budget balance measures is in different methodologies and assumptions used in calculating real GDP. One way of testing this is to compare the real output gap (the difference between structural and actual real GDP) of the different measures with the implied output gap in our structural budget balance measure. As estimates of the output gap can be subject to significant revision, care is needed to compare estimates made at around the same time (Gruen, Robinson and Stone, 2005).

The implied output gap in our measure does not appear to be systematically higher or lower than the OECD or IMF measures (Chart 21). This implies that our structural budget balance estimate would not be systematically biased relative to those of the IMF and OECD due to different structural real GDP methodologies or assumptions.

Chart 21: Real output gap comparison



(a) IMF and OECD estimates are calendar year. Our estimates end at 2010-11.

Source: Treasury, IMF *World Economic Outlook* April 2010, OECD *Economic Outlook* No 87.

Conclusion

Estimates of the structural budget balance can make an important contribution to the assessment of the sustainability of the budget position.

This paper has outlined the methodology and assumptions underpinning the structural budget balance estimates.

By taking account of the fiscal effect of cyclical variations in the terms of trade and capital gains tax, this paper presents a different picture of the underlying strength of the government’s fiscal position over the past decade.

In particular, the estimates suggest that the structural budget balance deteriorated as the terms of trade cyclically boosted revenue from 2004-05. From 2008-09 the estimates are also affected by the fiscal impact of temporary fiscal stimulus measures. However, the estimates suggest that by the end of the forward estimates period, once the fiscal impact of temporary fiscal stimulus has been unwound, the budget will still be in structural deficit. The subsequent improvement in the structural budget balance to surplus by the end of the next decade highlights both the importance of the Government’s medium term fiscal targets and the substantial level of fiscal discipline that will be required to meet them.

The paper also highlights the range of plausible approaches and assumptions that could have a material effect on estimates the structural budget balance. This highlights the importance of being mindful of the limitations of these measures when interpreting their results.

In particular, the estimates in this paper are heavily influenced by assumptions around the equilibrium terms of trade – that is, the extent to which improvements in the terms of trade over the decade are structural rather than cyclical. Alternative assumptions about the equilibrium terms of trade result in significantly different structural budget balance estimates. This cautions against excessive reliance on point estimates of the structural budget balance derived by any particular approach, including those presented here. Rather, these estimates are best considered as one input into a broad assessment of fiscal sustainability.

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Key themes from Treasury's Business Liaison Program

As part of Treasury's Business Liaison Program, staff met with 21 businesses and industry associations in three cities during August 2010.

The domestic outlook is increasingly robust with improvements evident in most sectors. Strong external demand continues to drive prices and investment in the mining sector. There are also positive signs in the automotive sector as private buyer sales moderate the impact of slower business demand.

While the outlook has steadied in the residential property sector, the broader construction industry is feeling the effects of the transition from stimulus to private sector demand. The retail recovery continues to lag other sectors, despite buoyant consumer confidence and solid sales volumes.

Treasury greatly appreciates the commitment of time and effort by the organisations that participate in the program.

Trading conditions

The resources sector continues to be the strongest part of the economy, with contacts bullish on demand from China, and expecting to see demand from India ramp up. However, there is some caution about the near term global outlook given the withdrawal of stimulus in China, and uncertainty due to sovereign debt concerns in Europe. That said, this has not had a significant impact on planned investment.

The automotive industry has weathered a shallower downturn than expected and private buyers are returning to the market, replacing waning business demand from the wind-down of the business tax incentives.

The residential property outlook is steady as construction commences on projects already in the pipeline. Residential property investment also remains resilient to increased interest rates, particularly smaller homes and units. While the pipeline is expected to continue to support construction activity through 2011, land availability will affect future growth.

Industrial construction has performed consistently and better than anticipated during the downturn, although land availability is a constraint on development. The transition to private activity as stimulus winds down is a more immediate concern across the non-residential construction sector.

While there are pockets of optimism in the retail sector, discounting continues. Despite buoyant consumer confidence, a strong labour market and lower fuel prices the outlook remains uncertain as interest rates return to more normal levels. The wind-down of the business tax break has meant falling computer sales, although there are signs that sales of durables are holding up.

Business credit and investment

Many contacts have no trouble accessing credit and, for most, funding costs are back to around pre-crisis levels. However, others are concerned that non-price rationing of bank loans is occurring, deterring some investment.

A shortage of funds is still affecting construction projects, although conditions have improved. The impact is uneven, with large developers able to draw on internal funding sources, while smaller developers are still having trouble accessing finance with financiers requiring larger up-front deposits.

On the retail front, credit is still tight, although larger retailers are developing major projects and funding is not an issue.

Mining projects already underway are on track; for others activity is starting to ramp up after some delay to projects around the globe due to the GFC.

Capacity issues

While some mining businesses are operating at capacity due to strong demand, expansion will see increased capacity coming on line from 2011. Current projects are on schedule, although projects in the pipeline could be affected by infrastructure and labour constraints. Improving the coordination of infrastructure development may help to address over- and under-capacity in key elements of the supply chain.

Employment and skills

Skills shortages in some mining professions appear to be returning to levels prior to the GFC, with a growing requirement for recruiting staff from overseas. The availability of skilled labour and cost pressures are also leading to the overseas fabrication of large plant components that can be imported and installed.

Some businesses in the retail sector took measures such as wage freezes and a reduction in hours to retain their staff during the GFC.

Commodities

Some mining companies indicated that there is the possibility of a fall in commodity prices as global supply ramps up. There is evidence of some oversupply globally in LNG – although demand is expected to be strong over the longer term – and increased competition in the supply of thermal coal.

Prices and wages

While the GFC took some heat out of wages growth, wages growth looks to be strengthening in some sectors – particularly the mining sector – but remains muted in other sectors, such as the retail sector.

Some retailers have lowered their margins, although others are more reluctant to join the 'discount war'. Overall, retail prices are expected to remain affected by discounting in the near term.

Other issues

Some businesses and organisations are concerned about competition regulation, but also differences in state government regulation and delays in planning processes.

Joseph Lyons: the Tasmanian treasurer

John Hawkins¹

'Honest Joe' Lyons (far left in the picture below), was premier of Tasmania before moving to federal parliament and serving as an acting treasurer for Labor during the Great Depression. He clashed with Theodore and others and left the party. He then became a conservative treasurer and prime minister as the Australian economy gradually emerged from the depression. He was known for his consensual but orthodox approach.



Source: National Library of Australia.

1 The author formerly worked in the Domestic Economy Division, the Australian Treasury. The views in this article are those of the author and not necessarily those of the Australian Treasury.

Introduction

Joseph Aloysius Lyons was the only treasurer (and prime minister) from Tasmania. As the Tasmanian minister for education in his thirties, Lyons fell in love with Enid Burnell, a teenage trainee teacher. They married in 1915 when she was seventeen and he was thirty-five.² The marriage remained a love match all their lives.³ Indeed, until recently the only published biography of Lyons was called 'a political love story'; White (1987). After Lyons' death Enid was herself elected to the federal parliament and became the first female cabinet member. They had eleven children (another baby died), pictured on the previous page.

Lyons was amiable and popular, a 'kindly, compassionate man'.⁴ 'Everyone liked Joe Lyons' when he was first a federal minister.⁵ His resemblance to a cheerful koala was a cartoonist's delight. His typist recalled 'a pretty shrewd judge of people ... extraordinarily tolerant' but, as befitted a former teacher, with a 'horror of split infinitives'.⁶ A pacifist who abhorred violence, he opposed capital punishment.⁷ He not only opposed conscription, but did not take place in wartime recruitment (so it is perhaps fortunate that he did not face leadership during a world war).

His stance on economic issues became increasingly conservative over his career. He has been described as 'a subdued radical ... searching for a 'third way' between capitalism and socialism'.⁸ Early in his political career he was involved with a

2 A very young Errol Flynn was a pageboy; Lyons, E (1949, p 14).

3 They were also a good intellectual match. While they were courting, Joe gave Enid a copy of a book by Sydney and Beatrice Webb; White (1987, p 61). Joe consulted Enid about his major political decisions, even to the extent of coming out of the middle of cabinet meetings to ring her, according to his typist; notes by Crisp, National Library of Australia MS 5243/20/232.

4 Reid (1980, p 359). Frank Green (1959, p 37), a teenage friend who later worked with him in Canberra as Clerk of the House, recalls his 'friendly warmth, courtesy and kindness'. Among his political contemporaries, Menzies (1967, p 122) refers to his 'well recognised sincerity and genial courtesy'. Bruce, is less effusive; 'he was a delightful person. He couldn't run a government but he could win elections'; Edwards (1965, p 208). Lyons' biographer Hart (1967, p 4) calls him 'warm and gregarious'. Lyons' private secretary referred to him as 'utterly without 'side', completely modest'; Douglas (1939, p 14). *Time* magazine introduced him to an international audience as 'honest, naïve, likeable' (8 July 1935).

5 Clark (1987, p 231).

6 Crisp papers, NLA MS 5243/20/211.

7 His wife Enid (1965, p 53) recalls 'he had sympathy for every living creature. He was the very gentlest of men'. But Scullin and his other Labor colleagues may not agree with Dame Enid's assessment that 'loyalty was inherent in every fibre of his being'; Lyons, E (1965, p 272).

8 Bird (2009, p 41). Enid Lyons (1965, p 145) describes how by the late 1920s 'his early dreams of socialism were tempered now by awareness of the danger to individual freedom that lay within it'.

discussion group of Fabian hue⁹, in 1909 he referred to himself as a 'socialist' and in 1921 declared 'the capitalist system had failed'¹⁰. He never however revealed any deep knowledge of or strong support for Marxism and opposed the Labor Party's adoption of the socialist objective in 1921.¹¹

Lyons was regarded as intelligent if not always intellectually penetrating or decisive. His biographer comments 'there is no evidence of a consciously analytical development of an intellectually coherent and consistent framework of ideas'.¹²

Lyons repeatedly said 'I know little about finance'.¹³ He said his knowledge of economics had been 'much over-rated'.¹⁴ His son recalls him saying he 'knew nothing' of it – and so always sought advice of those who did.¹⁵ At times he almost seemed to make a virtue of this: 'I have spoken, not as a financial genius, not as one who has any visionary scheme ... we must do what the ordinary citizen would do in similar circumstances'.¹⁶

Enid defends him however against claims that he was academically illiterate; 'he had read extensively. In sociology and political economy, his imagination was captured and his thoughts stimulated by John Stuart Mill, Ruskin, Bellamy and Henry George, among others'.¹⁷ She also refers to his discussions before and after entering parliament with prominent Tasmanian economists such as Giblin, Copland and Brigden.

An earlier prime minister, SM Bruce once said that the three requirements for the post were having 'a hide like a rhinoceros, an overwhelming ambition and a mighty good conceit of himself' and that Joe Lyons had none of them, a view Joe's wife endorsed.¹⁸

9 Coleman, Cornish and Hagger (2006, p 14).

10 *Hobart World*, 14 March 1921, p 4.

11 Hart (1967, p 4), Lyons, B (2008, p 65), Lyons, E (1949, p 20).

12 Hart (1967, p 4). He also comments '... he had intellectual limitations, largely due to inadequate schooling: Lyons realised this and always took any available opportunities to learn from men of greater experience or knowledge ...'; Hart (1965, p 33). His keenness to consult those with financial experience is also stressed by his son in Lyons, B (2008, p 64).

13 Notable examples include his speech leaving the Labor Party (*Hansard*, 13 March 1931, p 238) and at an earlier testimonial dinner (*Burnie Advocate*, 9 January 1931, p 2).

14 Cited by Hart (1967, p 82).

15 Personal conversation with Brendan Lyons, 2008. James Guy, who moved with Lyons from the Tasmanian to the federal parliament, and from Labor to the conservatives, expressed a similar view; letter to P Hart, 3 May 1965, *Hart Papers*, National Library of Australia, MS 9410, folder 3.

16 *Hansard*, 13 March 1931, p 238.

17 Lyons, E (1972, p iii).

18 Lyons, E (1965, p 193 and 1972, p 71). Enid and Joe's son Brendan believes that 'certainly Lyons had none of those characteristics but nevertheless succeeded. Bruce, ironically, had all of them in abundance and failed'; Lyons, B (2008, p 210).

Lyons' career before politics

Joe Lyons was born in Stanley, Tasmania on 15 September 1879, of Irish ancestry, and grew to be a staunch Catholic. He attended the local convent school, and was a keen student.¹⁹ After his father gambled away the family's savings on the 1887 Melbourne Cup, Lyons had to find work. He had a number of jobs, including as a printer's devil (the same job as former treasurers Chris Watson and William Higgs). He became a teacher and in 1907 was sent to Hobart to attend Teacher Training College. He was then sent all over the state, generally to small village schools, before gaining a post in Launceston in 1908. One of his postings was to the Carmichael Lyne estate, where the owner's brother, William Lyne (who went on to serve as federal treasurer) would visit and talk to Lyons, fuelling his interest in politics. In 1906 Lyons joined the Tasmanian Workers' Political League.

Premier and treasurer of Tasmania

In 1909 Lyons resigned as a teacher and stood for the state seat of Wilmot. Lyons supported the Labor programme, which included radical measures such as breaking up large estates. Although untrained in finance, he took an early interest in financial matters, serving on the Standing Committee on Public Accounts. His diligence was rewarded by appointment as deputy leader of the parliamentary Labor Party.

The election of a Labor government in April 1914 saw Lyons become treasurer, as well as deputy premier and minister for education and railways. However, the government had only a precarious hold on the lower house and faced an obstructive upper house. He represented Tasmania at the Premiers' Conference in Sydney in 1915, which doubled as a honeymoon with Enid.

After a bitter conscription referendum campaign and a split in the Labor Party, the government was defeated and Lyons became leader of the opposition in November 1916. He stood unsuccessfully for the federal seat of Darwin in 1919. A car accident put his life at risk, and left him lame in one leg.

In October 1923 Lyons became premier and treasurer and held both posts until 1928. He was a cautious premier and state treasurer, who brought the budget from deficit to surplus through application of financial orthodoxy. His bipartisan style, willingness to consult with business and the priority he accorded to improving the state's public finances, attracted criticism from Labor hardliners, but the conservative Legislative Council rejected Lyons' more progressive legislation.

19 'Fairly droolin' with the schoolin' according to one relative; Lyons, E (1965, p 53).

Federal parliament and acting treasurer

Lyons rejected suggestions he stand at the 1928 federal election. But after Labor narrowly lost the 1928 state election, and at Scullin's request, Lyons successfully contested the federal equivalent of his state seat of Wilmot at the snap poll of 1929.²⁰ He was immediately brought into cabinet as Postmaster-General. He was reportedly disappointed not to be made treasurer²¹, given his experience, but Scullin preferred Theodore, who was also a former premier and state treasurer. Lyons later recalled that on joining cabinet he 'took very little part in the affairs of the party or government, confining my activities to the administration ... of my department'.²²

When Theodore stepped down due to corruption charges dating back to his time as Queensland premier, Scullin took over as treasurer with Lyons as assistant treasurer. In August 1930 Scullin left for the Imperial Conference in London for over four months, leaving Fenton as acting prime minister and Lyons as acting treasurer from 25 August 1930 to 10 January 1931.

While 'the tragedy of the Great Depression moved him profoundly', Lyons believed the 'prime duty of government was to restore confidence by sound administration and financial stability'.²³ In this Lyons was far more conservative than many of his Labor colleagues. 'He could pursue minor reforms with a genuine anxiety to be helpful ... [but] reverted immediately to strict orthodoxy whenever serious difficulties arose'.²⁴

Lyons described Keynes as 'one of the most distinguished economists in the world', and Enid had said Lyons was interested in Keynesian theory. But it did not overcome his fiscal orthodoxy.²⁵ He apparently believed the Australian economy was too small for such experimentation.²⁶ Lyons' family experience had led him to avoid personal debt, and by analogy he wanted to avoid national debt.²⁷

20 Hector McFie, a Tasmanian MLC, claims that Ted Theodore personally guaranteed Lyons' salary should he be defeated at the election; letter to P Hart 3 June 1964, *Hart papers*, National Library of Australia, MS 9410, folder 1.

21 White (1987, p 109).

22 *Hansard*, 13 March 1931, p 230.

23 Menzies (1967, pp 121-2).

24 Denning (1937, p 34).

25 In November 1930 Lyons received many letters and telegrams of support for his orthodox stand, which he kept for the rest of his life; *Lyons Papers*, National Library of Australia, MS 4851, folder 2.

26 Bird (2008, p 31). Lyons is cited as asking 'even if they are right, how can we lead the world?' in Lloyd (1984, p 50).

27 Personal conversation with Brendan Lyons, 2008.

Despite being advised by Giblin that a deflationary policy would be 'a fatal mistake'²⁸, Lyons took a plan (prepared by Treasury) to caucus which included government spending cuts, a 10 per cent cut in wages, and a supertax on property income. Caucus preferred the Theodore-Gibbons plan which did not include cuts in government spending.²⁹ Lyons brought down a supplementary budget on 5 November 1930 with some modest revenue and expenditure adjustments to reduce the widening deficit and moved in caucus to make the government's policy 'free exchange rates, stabilisation of internal prices by monetary control, reduction of interest rates and provision of credits for industry, and that every effort shall be made by the government to induce the Commonwealth Bank to carry out such policy'.³⁰ An amendment seconded by Theodore sought to direct the Commonwealth Bank to create sufficient credit to finance the government and provide for £20 million for works programmes, and was carried 26-14.³¹ A few days later Fenton read to caucus a letter from Scullin apparently supporting Lyons' position.³² This was not sufficient, however, to sway caucus, with Curtin and Anstey moving that the Government should continue to push the Commonwealth Bank. Even more alarming to Lyons was their proposal to postpone for a year redemption of some Commonwealth bonds, which he viewed as tantamount to repudiation.

Lyons attended the meeting which adopted the Melbourne Plan of orthodox measures. Sir Otto Niemeyer, the Bank of England adviser despatched to Australia, described Fenton and Lyons (using a somewhat mixed metaphor) as 'entirely at sea ... like a couple of rabbits popping their heads out of the hole'.³³

Lyons may have hoped to become treasurer when Scullin returned from London in January 1931.³⁴ Instead Scullin persuaded caucus to reinstate Theodore. Lyons felt this

28 Giblin to Lyons, 4 September 1930, in *Lyons Papers*, MS 4851, folder 14.

29 See Table 1 in the essay in this series on Theodore for a comparison of the competing plans; Hawkins (2010, p 103).

30 *Caucus Minutes*, 28 October 1930; Weller (1975, p 391).

31 *Caucus Minutes*, 30 October 1930; Weller (1975, p 395).

32 *Caucus Minutes*, 6 November 1930; Weller (1975, p 396).

33 Niemeyer (1930, p 268).

34 Whittington (1972, p 69) suggests Lyons had wanted the position, and this was a large part of the reason for his resignation from Labor. Lyons said he suggested Scullin keep the post himself (*Hansard* 13 March 1931, p 236; *Sydney Morning Herald*, 30 January 1931, p 11), but that he had a better claim than Theodore; Lloyd (1984, pp 81-2). A less charitable interpretation is that Lyons saw his road to the Lodge blocked by Theodore in a Labor government; Hughes, C (1976, p 82). Lyons claimed 'I did not desire to be treasurer. I know my limitations'; *Hansard*, 13 March 1931, p 236. Lyons' son Brendan recalls his mother saying that Lyons had not wanted the post, which is also reported by Enid's biographer, Henderson (2008a, p 151) and ALP historian McMullin (1991, p 169). Scullin's biographer Robertson (1974, p 302) claims 'Lyons was quite anxious to relinquish Treasury burdens'. Scullin said Lyons was 'relieved of the Treasuryship at his own request'; *Burnie Advocate*,

was inappropriate as Theodore had not yet been cleared of corruption charges.³⁵ Lyons (along with Fenton) resigned from the cabinet and then in March 1931 left the Labor Party itself after voting against Theodore's proposal for a fiduciary notes issue.

Lyons has long been on more friendly terms with the conservative side of politics than was usual for Labor members. He found the Federal Parliamentary Labor Party uncongenial and had little affinity with the machine politics practised in Sydney and Melbourne.³⁶ When opposition leader John Latham called for a unity government to fight the depression in December 1930, Lyons had been sympathetic to the idea but caucus rejected it.³⁷

Prime minister and treasurer

Lyons and his fellow Labor defectors joined with the Nationalists to form the United Australia Party (UAP).³⁸ He led the party to a decisive victory at the December 1931 election and clear wins in 1934 and 1937, in no small measure due to his personal popularity and ability to adopt radio, film and air travel for campaigning.³⁹

Lyons purportedly offered Chifley the treasurership if he also left Labor but Chifley declined.⁴⁰ Lyons took the post himself, at least in part 'to give the public the impression that 'Honest Joe' was safeguarding their savings'.⁴¹ He saw nothing unusual in this as he had been both premier and treasurer in Tasmania.⁴² He appointed Bruce, a former prime minister and treasurer, as assistant treasurer from January to June 1932. One interpretation for this was that as the election had 'centred on finance and honesty ... Lyons determined to take personal responsibility for its implementation'.⁴³ Another view was that Lyons took the title to reassure the public as Bruce was 'having to live down his reputation for reckless expansion'.⁴⁴ Bruce himself

23 January 1931. At the time Lyons said 'it will be a distinct relief to be out of office, as the strain has been constant and severe'; *Sydney Morning Herald*, 30 January 1931, p 11. Lyons' claim is however weakened by the fact that he subsequently chose to keep these burdens in addition to being prime minister not many months later even though the return of Bruce to parliament gave him an obviously qualified candidate for the treasurer's post. White (1987) regards the evidence as ambiguous.

35 *Hansard*, 13 March 1931, p 229.

36 Hart and Lloyd (1986); Henderson (2004, p 931).

37 Henderson (2008a, p 152).

38 Bird (2009, p 48) suggests Lyons may have regretted leaving Labor after it adopted the conservative 'Premiers Plan' in July 1931 but by then there was no way back.

39 Henderson (2008b, p 171).

40 Lyons, E (1972, p 97); Lyons, B (2008, p 135).

41 Hart (1967, p 245).

42 Personal conversation with Brendan Lyons, 2008.

43 Lyons, B (2008, p 163).

44 This was the view of Giblin cited by Millmow (2010, p 119).

said he had to 'hold Lyons' hand'⁴⁵ and 'more or less from the background steered him'.⁴⁶

Schedvin (1970, p 316) paints the following picture of Lyons as treasurer: 'Lyons was an unexceptional treasurer. He possessed what in polite circles was described as a 'good grasp' of financial matters and an ability to present a difficult argument cogently, but he lacked Theodore's incisive clarity. His thinking on financial and economic matters was barren of originality and there is almost nothing one can point to in the Lyons period in the form of new or improved organisation for the administration of the economy.'⁴⁷

When Bruce left for London, much of the Treasury work was done by assistant ministers Walter Massy-Greene and then Richard Casey.⁴⁸ Lyons appointed Casey as treasurer in October 1935, making Lyons the first prime minister since 1910 not to hold a portfolio.

The secretary of Treasury was Harry Sheehan but Lyons also often sought advice from the gloomy assistant secretary Stuart 'Sunshine' McFarlane.⁴⁹ Treasury at this time was still dominated by accountants and clerks. Treasury enhanced its influence under Lyons. He wrote to his ministers; 'I would be glad if Ministers would be good enough to submit all such proposals [involving expenditure] to the Treasury before they take the form of submissions to Cabinet'.⁵⁰

The Depression led to an increased role for Treasury, in part at the expense of state treasuries, through the growth in importance of the Loan Council.⁵¹ In April 1932 Western Australia voted to secede. Partly in response, but also reflecting his experience as a treasurer of a small 'claimant' state, Lyons hastened his plans to establish the Commonwealth Grants Commission.⁵²

45 Edwards (1965, p 208). Bruce ranked third in cabinet seniority.

46 Cited by Hazlehurst (1979, p 155).

47 Schedvin (1970, p 316).

48 From October 1933 to October 1934, Senator Harry Lawson also contributed as assistant minister (Treasury).

49 White (1987, p 137). Treasury (2001, p 35) describes Sheehan as 'the Commonwealth's chief adviser on economic matters during the depression'.

50 Cited by Weller (2007, p 55).

51 Schedvin (1970, p 375).

52 Lyons, B (2008, p 167).

The Commonwealth Bank also played an important role. Lyons said of its chair, 'no man played a greater part than Sir Robert Gibson in the rehabilitation of the Commonwealth'.⁵³

Among Lyons' close friends and advisors were Kingsley Henderson, a businessman and architect, and Staniforth Ricketson, a stock broker whom he had known since his Tasmanian days. Both men had been members of the group of Melbourne identities who had been involved in persuading Lyons to leave the Labor party.⁵⁴ There have been suggestions that they exerted considerable influence on Lyons.⁵⁵

Lyons was a lonely man as prime minister, cut off from his former Labor colleagues and lacking a strong affinity with many of his former opponents who were now his UAP colleagues. Country Party leader, and former treasurer, Earle Page's more friendly attitude, and role as both policy and medical adviser, gave him considerable influence over Lyons.⁵⁶

In January 1932, a Premiers' Conference led to the establishment of a committee headed by Adelaide businessman Wallace Bruce, and driven by the economists Giblin, Melville, Mills and Shann, to examine policies to fight unemployment.⁵⁷ It recommended devaluation, cuts in real wages, reductions in tariffs, smaller budget deficits and a limited expansion of state spending on relief projects, but rejected proposals for significant increases in public works. In some ways it was 'a reprise of the Premiers' Plan'.⁵⁸ In June the premiers agreed to cut deficits by cutting pensions. Asked to comment, Keynes said that he 'sympathised intensely with the general method of approach' but put more emphasis on public works than wage cuts or

53 Cited by Millmow (2010).

54 Balderstone (1983, p 258); Hart (1967, p 52). Other members of the 'Temple Court Group' were then Victorian MP Robert Menzies, businessman (and former adviser to Treasury and treasurers) Sir John Higgins, businessman Charles Norris and retired journalist Ambrose Pratt; Murray and White (1988, p 318); Hart (1967, pp 87-9). The Group had originally formed to support a December 1930 loan conversion campaign; Hart (1970, p 44).

55 Former Clerk of the House, and a friend of Lyons since his teenage years, Frank Green claims that as prime minister Lyons reported cabinet decisions to them and sometimes their influence had such decisions reversed; letter to Lyons' biographer Philip Hart, 10 February 1964, *Hart papers*, National Library of Australia MS 9410, folder 1.

56 As a Labor renegade, a catholic and not having served in the war, he did not have a lot in common with most of the other UAP members. Page was 'shrewd enough to be both respectful and matey towards Lyons, as well as being a medical adviser'; journalist George Baker, letter to P Hart, *Hart Papers*, NLA, MS 9410, folder 1. Support for this view also comes from Page's private secretary Ulrich Ellis, letter to Hart, MS 9410, folder 2.

57 The other member was George Stanley Colman (a Melbourne businessman). Copland was also appointed but was overseas for much of the investigation. Their report estimates that real per capita income had fallen by around a quarter from 1926-27 to 1930-31.

58 Millmow (2010, p 129).

devaluation.⁵⁹ Lyons and Bruce initially welcomed the report but then cooled at the idea of trying to force Gibson to devalue. Melville (1971, 1993) regarded the decision to reject the recommendation to devalue as having slowed the recovery. In responding to the report Lyons announced the formation of federal and state Employment Councils 'to ensure that the fullest and most immediate investigation of ways whereby unemployment can be relieved should take place.'

Arguably Australia was the first country to emerge from the depression and Roosevelt asked Lyons how it was done.⁶⁰ Lyons consistently stressed the role of an export recovery in dealing with unemployment, ignoring the over 100,000 men who had been employed on public works in the 1920s.⁶¹

Lyons' first budget speech in September 1932 referred to national income falling from £650 million to £450 million.⁶² He placed the budget in the context of the Premiers' Plan and said it represented the 'path of financial rectitude'.⁶³ He referred to a survey of company profits which suggested tax revenue would fall. The budget restricted maternity allowances, cut public servants' wages and pensions.

In his second budget speech, Lyons lamented 'the condition of the world is one of uncertainty, doubt and confusion'.⁶⁴ He emphasised the importance of rolling over maturing debt in London, for which Bruce was now responsible as resident minister. However, some domestic recovery allowed some tax cuts and the restoration of some cuts to public servant salaries. He called the budget the 'reward which the Australian people have earned by the sacrifices they have made'.⁶⁵ Further tax cuts were given in the 1934 budget in response to the 'remarkable improvement in the Australian economic situation'.⁶⁶

After losing seats in the 1934 election, Lyons needed to form a coalition with the Country Party, whose leader Earle Page became minister for commerce and deputy prime minister. But unlike the coalition with Bruce, Page either did not demand or could not persuade Lyons to give him the treasurer's job.

In the 1934 election campaign, in part due to rural pressure, Lyons agreed to establish a Royal Commission on Banking. He appointed Ben Chifley as a member as 'both his

59 Keynes (1932, p 94). On the latter point, Keynes advised '...expand bank credit and stimulate capital expenditure as much as courage and prudence will allow.'

60 Personal conversation with Brendan Lyons, 2008.

61 Schedvin (1970, p 317).

62 *Hansard*, 1 September 1932, p 86.

63 *Hansard*, 1 September 1932, p 86.

64 *Hansard*, 4 October 1933, p 3201.

65 *Hansard*, 4 October 1933, p 3223.

66 *Hansard*, 24 July 1934, p 594.

knowledge of finance and the analytical habit of his mind fitted him admirably for such a task'.⁶⁷ It reported in 1937.

As far back as his first budget speech in 1932, Lyons had foreshadowed a 'contributory system of old age pension'.⁶⁸ In 1935 a cabinet subcommittee was appointed to investigate it. At the 1937 election, Lyons promised to introduce a national insurance scheme, combining elements of health insurance and superannuation. The legislation passed through parliament in 1938, but employers opposed it. Concerns were expressed about administrative difficulties and defence came to be seen as a greater priority. Lyons reportedly emerged from the cabinet room in tears when the final decision was taken to abandon it.⁶⁹

Lyons established a committee of Giblin, Melville and Wilson in December 1938, initially in the Defence Department, which with the addition of Brigden, Copland and Coombs became known as the Financial and Economic Committee or 'F&E'. It has been suggested that Lyons put aside earlier differences and asked Theodore to return to Australia in March 1939 to coordinate defence preparations or an economic policy coordinating body, but Lyons was dead before it could be arranged.⁷⁰

The Lyons Government established the Australian Broadcasting Commission and introduced some early conservation legislation. But most judgements were that Lyons was leading a very unadventurous government.⁷¹ Joe and Enid travelled to London in 1935 for George V's Golden Jubilee and trade negotiations, being away for six months.⁷² They were in London again in 1937 for the coronation of George VI.

The portents of a second world war, and pressure from political rivals caused Lyons immense stress. In early 1939 he unsuccessfully tried to get Bruce to return as prime minister. His health continued to deteriorate, and he died of a heart attack on 7 April 1939 at the age of sixty, a few days short of eclipsing Hughes' record of the then longest-serving prime minister. It was said 'few men who have held high office have been as sincerely and widely mourned'.⁷³

67 Lyons, E (1972, pp 97-80).

68 *Hansard*, 1 September 1932, p 104.

69 Reid (1980, p 359).

70 Calwell (1972, p 69); *Sydney Morning Herald*, 5 September 1945. The F&E lobbied Lyons in 1939 for Theodore to co-ordinate economic policy on the Committee's advice; Maddock and Penny (1983, p 30).

71 As an editorial put it, 'Few governments have derived so much self-satisfaction from doing so little'; *The Age* 30 July 1945, cited by Hart (1967, p 236).

72 The UAP's rising star, Robert Menzies, was also on board the ship. His diary entries suggest he was one of the passengers whom Enid regarded as 'dreadful snobs'; White (1987, p 153).

73 Buchanan (1940, p 24).

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What's new on the Treasury website

The Treasury's website, www.treasury.gov.au, includes past issues of the *Economic Roundup*. Some of the other items posted on the website since the previous issue of *Roundup* that may be of interest to readers are listed in the following section.

Working Papers

Reconsidering the link between fiscal policy and interest rates in Australia

Yong Hong Yan and Shane Brittle

<http://www.treasury.gov.au/contentitem.asp?NavId=049&ContentID=1869>

This paper examines the empirical relationship between government debt and the real interest margin between Australian and US 10-year government bond yields. Results for the period 1990 to 2009 suggest that Australian general government net debt has no impact on the short run real interest margin, and has only a small effect in the long run. Further, the estimates suggest that movements in US general government net debt have a considerably larger effect than Australian general government net debt – implying that US influences take greater prominence in explaining the real interest margin.

Monetary and exchange rate policy issues in Pacific island countries

Richard Wood

<http://www.treasury.gov.au/contentitem.asp?NavId=049&ContentID=1871>

This paper reviews the recent application of monetary and exchange rate policies for Papua New Guinea, Fiji, the Solomon Islands, Samoa, Tonga and Vanuatu. This paper concludes that greater downward exchange rate flexibility could have avoided a loss of competitiveness and currency overvaluation which would have worked to protect exports.

Publications

Pre-Election Economic and Fiscal Outlook 2010

<http://www.treasury.gov.au/contentitem.asp?NavId=035&ContentID=1858>

The purpose of the Pre-Election Economic and Fiscal Outlook report (PEFO) is to provide updated information on the economic and fiscal outlook.

The information in the report takes into account, to the fullest extent possible, all

Government decisions made before the issue of the writs and all other circumstances that may have a material effect on the fiscal and economic outlook.

Parliamentary progress of tax bills

<http://www.treasury.gov.au/contentitem.asp?NavId=006&ContentID=974>

This document outlines the progress of Bills being considered by Parliament.

Speeches

Macroeconomic policy challenges: Dilemmas for the new Australian Government

<http://www.treasury.gov.au/contentitem.asp?NavId=008&ContentID=1867>

This address, entitled 'Macroeconomic policy challenges: Dilemmas for the new Australian Government', was delivered by Dr Ken Henry, Secretary to the Treasury, to the Melbourne Institute of Public Economics on Tuesday 14 September 2010.

Measuring what we do or doing what we measure: Challenges for Australia

<http://www.treasury.gov.au/contentitem.asp?NavId=008&ContentID=1868>

This address, entitled 'Measuring what we do or doing what we measure: Challenges for Australia', was delivered by Dr Ken Henry, Secretary to the Treasury, to the National Statistics Conference 2010 on Thursday 16 September 2010.

Measuring progress: From theory to practice

<http://www.treasury.gov.au/contentitem.asp?NavId=008&ContentID=1872>

This address, entitled 'Measuring progress: From theory to practice', was delivered by Dr David Gruen, Executive Director (Domestic), Macroeconomic Group, to the National Statistics Conference 2010 on Thursday 16 September 2010.

Sources of economic data

The following table provides sources for key economic data. Australian Bureau of Statistics (ABS) data can be obtained over the internet at <http://www.abs.gov.au>. The Reserve Bank of Australia information is available at <http://www.rba.gov.au>. Similarly, OECD information is available at <http://www.oecd.org>. Information on individual economies is also available via the IMF at <http://www.imf.org>.

International economy

Output, current account balance, interest rates and consumer price inflation	OECD Main Economic Indicators
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National accounts

Components of GDP, contributions to change in GDP	ABS cat. no. 5206.0
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Incomes, costs and prices

Real household income	ABS cat. nos. 5204.0 and 5206.0
Wages, labour costs and company income	ABS cat. nos. 5204.0, 5206.0, 5676.0 and 6345.0
Prices	ABS cat. nos. 6401.0 and 5206.0
Labour market	ABS cat. no. 6202.0

External sector

Australia's current account, external liabilities and income flows	ABS cat. nos. 5368.0, 5302.0 and 5206.0
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Past editions of *Economic Roundup*

A full index to articles published in *Economic Roundup* was included in the Spring 2006 edition. Details of articles published in recent editions are listed below:

Issue 2, 2010

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The value of the environment
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China: growth, urbanisation and mineral resource demand
Tax expenditure considerations for owner-occupied housing
Disparities in average rates of company tax across industries
Key themes from Treasury's Business Liaison Program
James Scullin: depression treasurer

Issue 1, 2010

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