

**THE FISCAL AND ECONOMIC
OUTLOOK**

**ADDRESS TO THE AUSTRALIAN BUSINESS
ECONOMISTS**

SYDNEY

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The fiscal and economic outlook

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

Capacity constraints

I want to spend much of my time today talking about the economy's capacity constraints. How close we are to these constraints, and how the economy should be expected to perform as these constraints are approached, are perhaps the most important and interesting issues confronting those of us thinking about the macroeconomy at present.

In recent months, unemployment has fallen to 5.1 per cent, its lowest rate since 1976. None of us should be surprised to see emerging signs that the economy is operating closer to its productive capacity than it has been for quite some time. These signs have shown up, for example, in various measures of capacity utilisation and a rising proportion of businesses reporting more difficulty finding suitable labour.

But in no sense should these signs that the economy is operating closer to its productive capacity be taken to mean that it is about to 'hit a wall' and stop growing. Rather, there is every prospect that we will continue to see good growth in the years ahead, provided macroeconomic policy does its job successfully – though, for a combination of structural and cyclical reasons, growth not as strong as we have seen over the past decade or so.

Chart 1, taken from the Budget, illustrates the point. It shows real growth over the current expansion, the Budget forecasts for the current year and the Budget year, 2005-06, the medium term projections for the subsequent three years, and updated Intergenerational Report (IGR) projections for the years after that.

Over the next decade, we won't grow as fast as we have over the past decade – for two reasons. Firstly, the past decade has seen the unemployment rate fall from almost 9 per cent in 1994-95 to just above 5 per cent currently. Most of that improvement would be cyclical – a consequence of a long period of relatively stable above trend growth. While we can't be sure how much lower unemployment can go on a sustainable basis, it clearly can't fall over the next decade at the rate it fell over the past one. Accordingly, the next decade will not see a repeat of the growth dividend from continually falling unemployment.

The second reason we are likely to see slower growth over the coming decade is the ageing of the population, and its effect on labour force participation. Updated IGR projections, on which Chart 1 is based, anticipate that aggregate labour force participation will reach the top of a gentle peak in 2006-07, before declining after that as the age distribution of the population gradually tilts in favour of older age groups with lower average rates of labour force participation.

We have for the first time taken this ageing effect into account in the Budget's medium-term projections – for the year 2008-09. In that year, employment growth is projected to slow to about 1¼ per cent because of gradually declining labour force participation, down from a projected 1½ per cent in 2006-07 and 2007-08.

When we combine this with a projected rate of productivity growth of 2 per cent – which is its average since the early 1990s recession – it implies a projected rate of real growth of 3¼ per cent, down from 3½ per cent which has been the rate of real growth used in successive Budgets for projection years from 1998-99 to 2007-08.

The projections in Chart 1, taken literally, would imply an average growth rate over the coming decade, 2005-06 to 2014-15, of 3.1 per cent, which is slower than the 3.9 per cent over the past decade, but still quite good growth.

It is worth noting, however, that these projections may be conservative ones. They effectively assume that the labour market has already reached its capacity constraints. That is a strong assumption, and it remains unclear how close the labour market currently is to these constraints.

Looking at the ratio of employment to population for 15+ year olds in Chart 2 confirms that the proportion of the 15+ population in employment is at historically high levels. But if we take into account the changing mix of full-timers and part-timers in the workforce, and their average hours of work, and derive a measure of average hours worked per head of the whole population of working age (15+ years), also shown in Chart 2, labour utilisation does not look so high by historical standards. Certainly, this measure of labour market tightness is not consistent with the picture of an economy having moved ever closer, over several years of growth, to ‘brick wall’ capacity constraints. To the contrary, we have been at or around present levels on a number of occasions in this cyclical expansion. And there is reason to think that labour utilisation could, perhaps, rise somewhat further from here.

The same conclusion emerges from an analysis of labour under-utilisation, as shown in Chart 3. The measure of labour under-utilisation shown in this chart shows the proportion of the available pool of potential workers that are either looking for a job, or looking to work more hours than they currently do.¹ This measure of labour under-utilisation paints the same picture as Chart 2, and suggests that the labour market is not as close to its capacity constraints as would be suggested by looking at the unemployment rate on its own.

There is a second reason to suspect that the projected real GDP growth rates in Chart 1 may underestimate the growth potential of the economy over the next decade. The projection is made on a ‘no policy change’ basis. It therefore ignores the effects of recent efforts by the Government – considerably strengthened in this year’s Budget – to re-engage with the workforce those on the Disability Support Pension and the Parenting Payment programs. Over time, these efforts should raise the labour force participation of many individuals on these programs, lifting aggregate participation outcomes.

¹ To be more precise, the measure shown in Chart 3 includes the unemployed; part-timers looking for more hours of work; and those who would like to work more hours but did not actively look for work or were unavailable for work in the reference week. The measure is calculated on an ‘hours’ basis so that someone looking for, say, five extra hours of work a week, contributes proportionately less to the measure than someone looking for a full-time job.

Whether or not the projections shown in Chart 1 err on the conservative side, the general point I want to make is that once capacity constraints are reached, the economy should still grow at its potential rate – a little above 3 per cent a year over the next decade – without necessarily igniting inflationary pressures. And it is the job of macroeconomic policy to ensure that the economy doesn't stray too far from this path of potential growth.

Let me now examine the issue of capacity constraints from an alternative perspective. This perspective relies on some important insights of my colleague in the Treasury, David Gruen.

Chart 4 shows growth in GDP – that is, growth in the economy's production of goods and services – and realised domestic final demand since 1980.

I want to focus particularly on the past three years, from the December quarter 2001 (shown as the heavy dotted vertical line in Chart 4 and subsequent charts) to the December quarter 2004, because it has been such an extraordinary period. As Chart 4 shows, the past three years is the *only* extended period in the past quarter-century when realised domestic final demand growth has continuously and significantly outpaced growth in the economy's output as measured by GDP.

Since I'm going to talk about these aggregates in some detail, a brief refresher course on a few National Accounting concepts is in order. Domestic final demand is the sum of household consumption, government spending and private investment. As estimated by the Australian Statistician, it is an *ex post*, or realised, concept. That is, it purports to show actual historical outcomes. Adding the change in inventories to domestic final demand gives us gross national expenditure (GNE). Then adding net exports to GNE gives us GDP – the economy's production of goods and services.

Now some numbers. Over the three years to the December quarter 2004, domestic final demand grew at an average annual rate of 5.6 per cent, GNE at 5.4 per cent and GDP at 3.1 per cent. So it is clear from these numbers that the big gap between growth in domestic demand and GDP is not explained by changes in inventories – instead the big story is that there have been large and sustained net export detractions from GDP growth.

Well, these are the estimated outcomes. But what are they really telling us about demand and supply conditions, and therefore about price pressures that may or may not emerge, in the Australian economy? In what I'm about to take you through it will be important that you keep in mind the distinction between actual (i.e., *ex post*) outcomes and the underlying (*ex ante*) demand and supply conditions that produce them. To illustrate, suppose we were to observe that the quantity of lamb actually being sold in Australia is lower this year than last. Would this be because the demand curve has shifted to the left or because the supply curve has shifted to the left? The observation is consistent with both of these explanations. But, clearly, if you are somebody who has a concern for lamb prices it is very important to know which of the two explanations is the more likely.

Back to the Australian macro economy. Many have interpreted Chart 4 as confirmation that *ex ante* (or planned) domestic demand has been running up against – indeed, running beyond – supply capacity over several years. That is, the aggregate

demand curve has been moving to the right at a considerably faster pace than the aggregate supply curve. Capacity constraints or domestic supply bottlenecks, so the argument goes, explain why GDP has been unable to keep up with domestic final demand. For nearly seven years now, domestic demand has been boosted by higher incomes from rising terms of trade, due principally to rising export prices. And the fact that export volumes have not responded to these better prices is strong evidence of the economy having run into capacity constraints – or so the story goes.

Some go further and argue that macroeconomic policy should be tightened to ensure that domestic demand does not continue to grow faster than supply and thereby generate inflationary pressures. A number of commentators have argued that the Government should have tightened fiscal policy – or allowed fiscal policy to tighten automatically² – in last week’s Budget to off-set the stimulus to domestic demand coming from stronger export prices; in particular, it has been argued that the Government should have allowed the tax to GDP ratio to rise to impart such a contractionary effect.

Undoubtedly, there are some supply bottlenecks currently hampering export growth – the prominent example of Queensland’s Dalrymple Bay comes to mind. And it is also undoubtedly true that industries operating at high levels of capacity, such as mining, are finding it difficult to employ sufficient numbers of suitably qualified people – this is, after all, partly a consequence of success in bring the unemployment rate down to generational lows. But does this mean that planned, or *ex ante*, domestic demand for Australian product is outstripping its supply?

Well, not necessarily.

Let me take you through a thought experiment that bears quite a close resemblance to the current economic environment. As I do so, I would ask that you keep in mind my caution about the need to separate *ex ante* and *ex post* concepts of demand and supply.

Imagine an economy experiencing strong growth in export prices. Its terms of trade – the ratio of export prices to import prices – are rising strongly. The higher terms of trade mean higher nominal and real incomes, and higher real wealth. It would be almost natural, it seems, to conclude that this higher income would be reflected in stronger demand for domestic product. And an observation that imports have increased strongly might be taken to be confirmation that domestic supply has been unable to keep up with this increase in demand, fuelling inflationary pressures. For some of our commentators, this line of argument has so much intuitive appeal that it is simply obvious.

But consider this alternative explanation. The *real* exchange rate also rises strongly in response to higher export prices, with two important consequences: first, the size of the *nominal* income boost is reduced; and second, imports become cheaper relative to domestic product. Yes, the higher income, and higher real wealth, due to higher export prices means an increase in the demand for domestic product. But there is a

² Since governments are equally responsible for what happens ‘automatically’ because of the structure of their tax and spending systems, the distinction between a discretionary and an automatic tightening is easily overstated.

strong substitution effect working in the opposite direction: the lower relative price of imports encourages demand substitution away from domestic product. Imports increase strongly not because they are being sucked in to fill an excess demand gap for domestic product, but rather because, in responding to changes in relative prices, demand is being taken away from domestic product.

The significance of these strong substitution effects was noted more than a decade ago by my colleague David Gruen in an important paper in a volume of proceedings of a Reserve Bank conference on the international integration of the Australian economy.³ He pointed out that ‘the policy implications of terms of trade shocks were profoundly changed by the float of the Australian dollar... With a floating exchange rate... a terms of trade rise leads to rapid nominal and real appreciation... (T)he rapid appreciation... implies that the expansionary effect on domestic real activity of the terms of trade rise is reduced substantially... and surprisingly, the appreciation seems to be so large that the net effect of a terms of trade rise is to gradually *reduce* domestic inflation (emphasis added)’.⁴

The next three charts illustrate how powerful these effects may have been over the past three years. Chart 5 shows the *real* trade-weighted exchange rate and the terms of trade. The real exchange rate is up 30 per cent over the past three years. Over the same period, the terms of trade are up 19 per cent, and forecast to be up a total of 34 per cent by the September quarter this year because of the contract price increases for iron ore, coking coal and steaming coal that came into effect in April.

Because these higher contract prices have been known publicly for some time, they have already been reflected in higher share prices for the mining companies involved, and hence have already contributed to higher wealth – and presumably higher consumption – for domestic (and foreign) shareholders.

As Chart 6 shows, the rising *real* exchange rate has delivered a rapid fall in the relative price of imports – indeed, the most rapid and sustained fall since the late 1980s, which was also a period of strong import growth.⁵

And to complete the picture, Chart 7 shows the powerful effect that these relative price changes have been having on consumption. The volume of consumer imports has been rising strongly as a share of the volume of household consumption over the

³ David Gruen and Geoffrey Shuetrim, ‘Internationalisation and the macroeconomy’, in Philip Lowe and Jacqueline Dwyer eds., *International Integration of the Australian Economy*, Reserve Bank of Australia (1994) pp. 309-363.

⁴ *Ibid.*, p.345.

⁵ Over the three years to the Dec quarter 2004, the nominal trade-weighted exchange rate appreciated by 27 per cent. As a consequence, import prices fell by 16 per cent over this time, which can be compared to a rise of 5½ per cent in the overall price of domestically purchased goods and services – the domestic final demand deflator. Note that the relative price of imports to domestic final demand changed little over 2004. However, since the passthrough from the docks to the shops of earlier import price falls occurs only gradually, the import prices faced by consumers probably continued to fall over 2004, as evidenced for example by continued falls in the price of the tradeable component (ex food and petrol) of the consumer price index.

past three years. In terms of dollars spent, however, the share of imports in the consumption basket *has hardly changed at all* over this time.

Let me summarise. The sustained gap between growth in *ex post* (realised) real domestic demand and real output over the past three years does not provide unambiguous evidence of *ex ante* (planned) demand for domestic product running ahead of increasingly constrained supply. Instead, it can, at least partly, be explained by strong substitution of relatively cheap imports for domestic product.

One should therefore think very carefully before accepting a conclusion that macroeconomic policy should be tightened to slow domestic final demand growth to meet the rate of GDP growth. To do so would amount to targeting the net export contribution to GDP – which would be a curious, but inappropriate, role for macroeconomic policy.

Needless to say, I am not convinced that there is a case for allowing the tax to GDP ratio to rise to off-set the income boost from higher export prices. I don't think it obvious at all.⁶

Instead, macroeconomic policy needs to keep its eye on the balance between actual output and the economy's capacity to supply output – the output gap – which takes us back to the earlier charts that explored the degree of tightening in capacity utilisation that has occurred over the present long and stable expansion. That is what macro policy has been focussing on, of course – not in a simple mechanical way, but with an eye on the possible emergence of inflationary pressures. And the evidence is that macro policy has done its job pretty well.

Budget forecasts and projections

I want to turn, briefly, now to another issue that we had to grapple with in putting together this year's Budget – an issue that is also related to the terms of trade.

Recall that the Budget presents *estimates* for the current financial year, 2004-05, *forecasts* for the Budget year, 2005-06, and medium-term *projections* for the subsequent three years, 2006-07 to 2008-09.

The reason for preparing macroeconomic projections out to 2008-09 is to assist the Government to think through plausible medium-term impacts of its budget decisions. And the reason for reporting Budget information out to 2008-09 is to make transparent the plausible medium-term impact of those decisions. This is particularly important where Government decisions are phased in over a number of years.

The Budget presents *forecasts* only for the Budget year and then *projections* for later years because, even with the best will in the world, it is well nigh impossible to forecast the performance of the macroeconomy for years beyond the Budget year.

⁶ Note, too, that the terms of trade increase forecast for 2005-06 of 12¼ per cent is not significantly larger than the 9¾ per cent experienced in 2004-05. So even if one did not buy the argument presented here, the fact that the terms of trade are not accelerating strongly should force one to wonder why the stance of fiscal policy should be adjusted significantly.

Macroeconomic forecasting is simply not a sufficiently precise discipline for this to be a fruitful exercise.

Recognising the futility of attempting to *forecast* the macroeconomy too far out, the Budget instead *assumes* trend growth in the macroeconomic aggregates for years beyond the Budget year. These trend projections are then used to provide projections for the revenue and expenditure aggregates over the three years from 2006-07 to 2008-09.

This has been the standard approach ever since the projection years were explicitly introduced in the 1993-94 Budget. This year, however, facing an extremely unusual situation, we have implemented a change to our standard approach.

As I discussed earlier and showed in [Chart 5](#), the very large increases in contract prices for iron ore, coking coal and steaming coal that came into effect in April this year will lead to big increases in the terms of trade in the Budget year, 2005-06. This will in turn flow through to strong nominal GDP growth – with the Budget forecasting 7½ per cent nominal GDP growth in 2005-06, a full 2 percentage points faster than its current estimated trend rate.

It is, of course, the rate of growth of nominal GDP, rather than real GDP, that matters for the projected level of taxation revenue, because the taxation system taxes nominal incomes rather than real incomes.

Had we used our standard approach to the projections, we would have assumed a resumption of nominal GDP growth at its trend rate of 5½ per cent in the two years following the very strong nominal growth in the Budget year.⁷ But this approach would have locked-in, over the entire three-year projection period, the large contract price increases that came into effect in April this year.

It seems extremely likely that the world supply of these bulk commodities will rise significantly over the next few years as suppliers chase the recent very large price increases – which will in turn lead to a subsequent fall in prices. In putting the Budget together, we took the view that it was appropriate to protect the budget projections from the risk of likely price falls over the Budget's projection years.

[Chart 8](#) summarises the approach we have taken. We have assumed that, after reaching unusually high levels in the Budget year, non-rural commodity export prices in Australian dollars fall back to their long run average levels in two equal-sized steps in the first and second projection years, 2006-07 and 2007-08.

The resumption of more normal export prices then flow through to projected rates of nominal GDP growth of 4¼ per cent in these two years, slower than if we had assumed abnormal conditions were permanent.⁸ The implication of this is that the

⁷ Nominal GDP growth in the third projection year, 2008-09, is projected to be slower than 5½ per cent because of the projected slowing in real GDP growth arising from the ageing of the population that was discussed earlier.

⁸ We assume that the falls in export prices flow through to slower growth in the GDP deflator, but do not affect growth in real GDP.

Budget projections of taxation revenue are based on a return to normal conditions and not on unrealistic assumptions about the future.

It should go without saying that none of us can be confident about the size or timing of the worldwide supply response to the current high bulk commodity prices. Nor can we be confident about the future path of these prices. But, likewise, in putting a budget together it would seem foolhardy to ignore these likely responses to the unusually high prices currently prevailing, even if we cannot be confident of their timing.

It is worth stressing that we do not regard the assumptions embodied in [Chart 8](#) as forecasts. Rather, they are simple, transparent, technical assumptions that we think provide an appropriately prudent basis on which to generate Budget projections of taxation revenue and expenses. Given this prudence, some of us have been a little surprised by commentary to the effect that the Government is taking a fiscal risk in funding permanent tax cuts from a temporary revenue boost: the fiscal projections of future surpluses, of around one per cent of GDP, assume both that the tax cuts will be permanent and that the revenue boost from historically high commodity prices will not be.

As you would expect, we will revisit these technical assumptions in the light of new information when the time comes to prepare forecasts and projections for this year's MYEFO and next year's Budget.

Some of you would have noticed that there is a further change to our revenue projections methodology contained in this year's Budget.

Taxation revenue over recent years has grown considerably more strongly than forecast or projected. This repeated outcome has drawn into question the quality of our forecasts, and so we undertook a detailed analysis of the methodology that we have been using to forecast revenue. This detailed analysis identified two main sources of the past systematic revenue under-estimation.

Firstly, nominal GDP has grown more strongly than forecast over recent years. In the earlier years of this decade, this was largely a consequence of the unexpectedly strong housing cycle, while in more recent years it has been a consequence of unexpectedly strong terms of trade.

Secondly, growth in taxation revenue appears to be significantly more responsive to growth in nominal incomes than had been built into our revenue forecasting methodology.

We have implemented changes to improve the accuracy of our forecasts in these two areas. We have renewed our efforts to improve the quality of our forecasts of nominal GDP, and its components, and raised the profile of these forecasts within the Treasury. And we have re-specified some of our models of taxation revenue – particularly for company tax and gross income tax from other individuals – to raise their responsiveness to growth in the relevant components of income.

These changes have been implemented for the current Budget. But there is more work to be done. In recognition of this, we have increased the resources allocated to

revenue forecasting, with an expectation that we will be able to further improve our forecasting methodologies over time.

Concluding remarks

Australia's macro economists live in interesting times. One would not be surprised to find that an economy that had been growing strongly for 12 years, and in most of those years at a rate above trend, was getting very close to full capacity. And if, after 12 years of growth, such an economy were to receive a substantial, positive, terms of trade shock, concern about inflationary pressures might be considered understandable.

But such concerns would be misplaced. The behaviour of the macro-economy is never that easy to understand. Economy-wide measures of labour utilisation do not tell a story of an economy crashing into capacity constraints – even given the recent run of relatively strong monthly employment figures. And it is far from clear that the positive terms of trade shock we are experiencing will add to inflationary pressures, for reasons that I have outlined.

Instead, the more plausible near to medium term scenario is of growth at, or slightly below, trend and continuing moderate inflation. This growth cycle has some way to run yet.

Chart 1

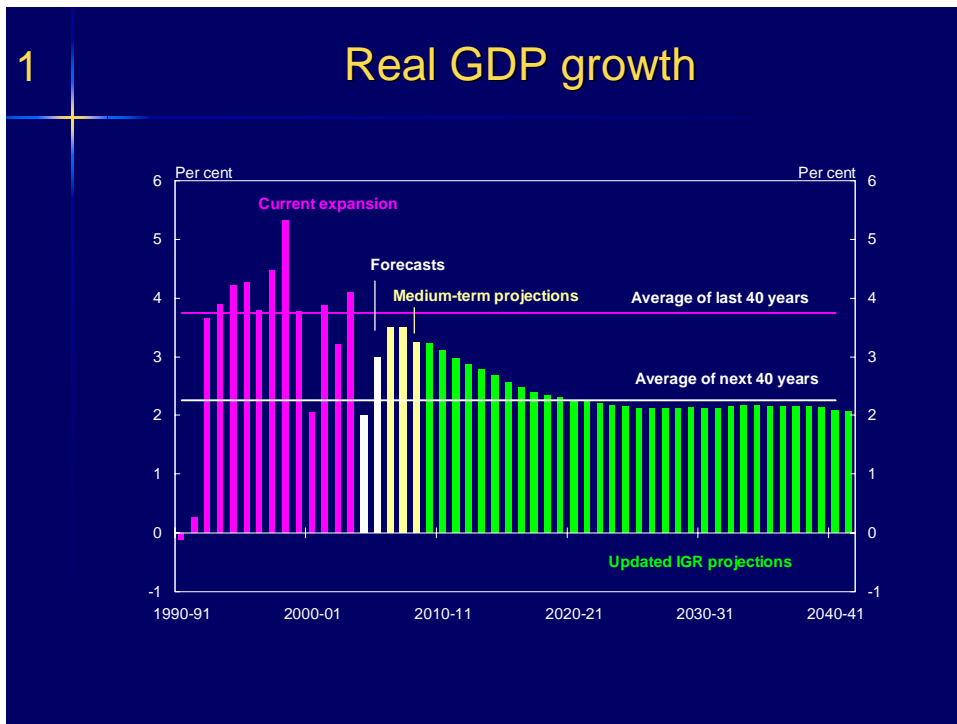


Chart 2

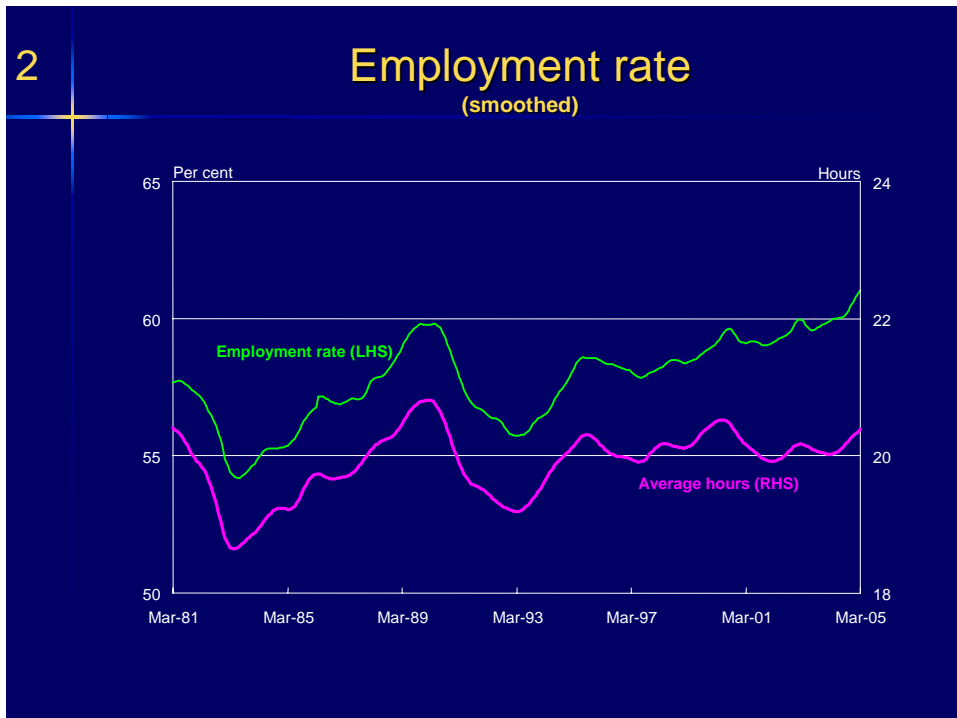


Chart 3

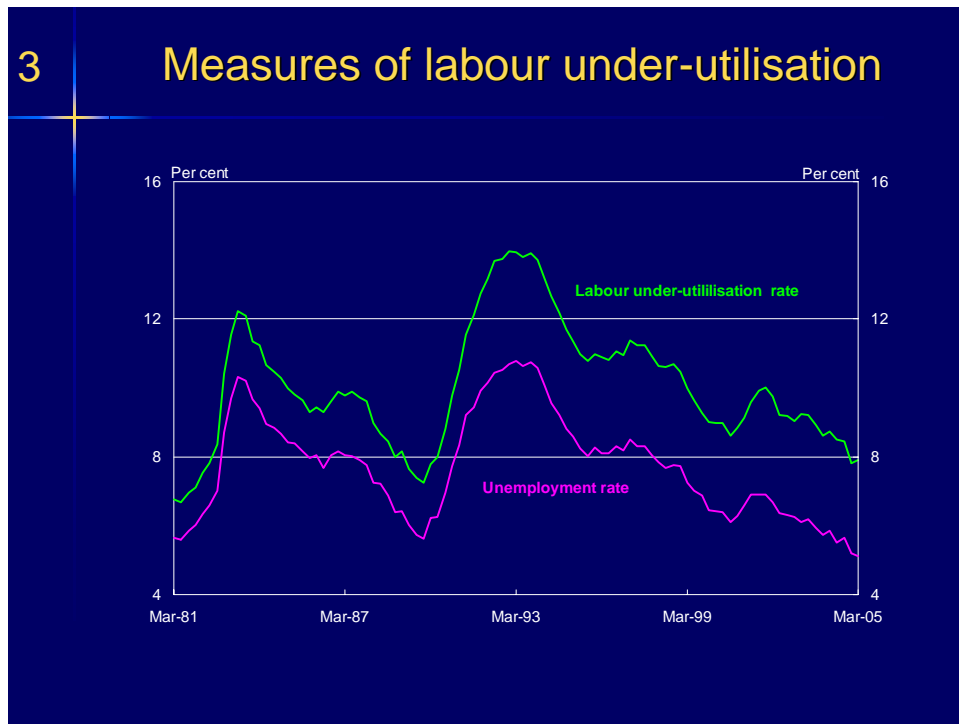


Chart 4

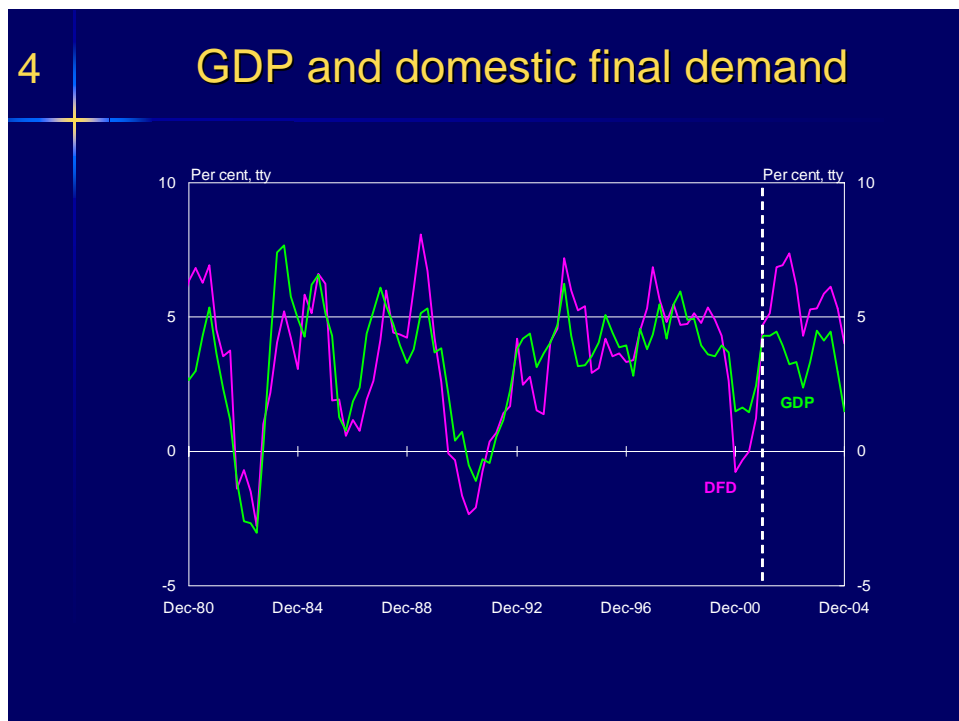


Chart 5

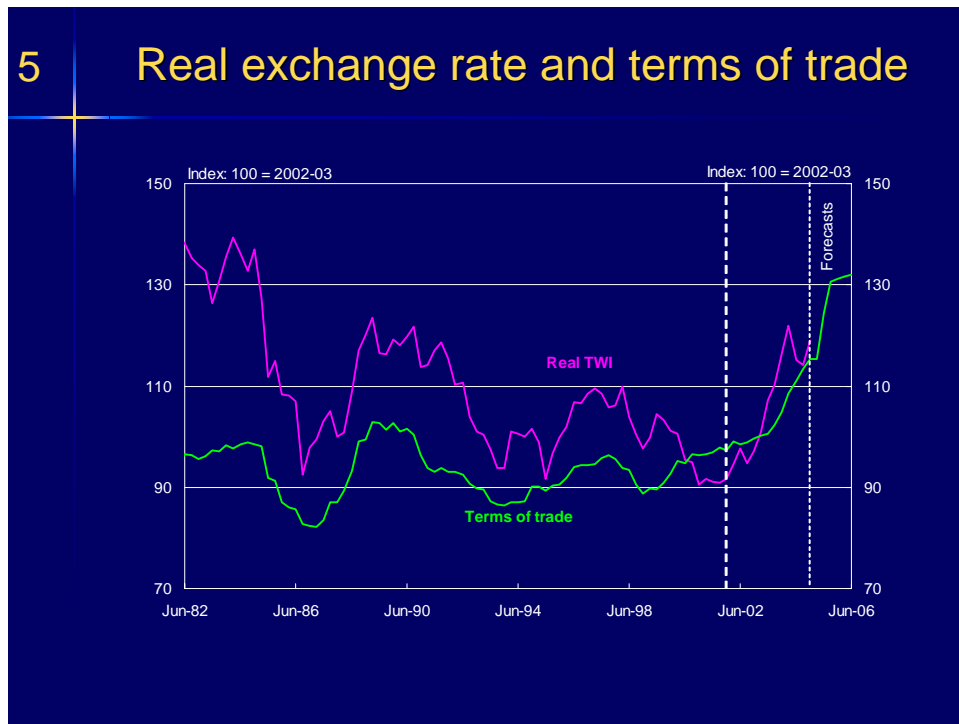


Chart 6

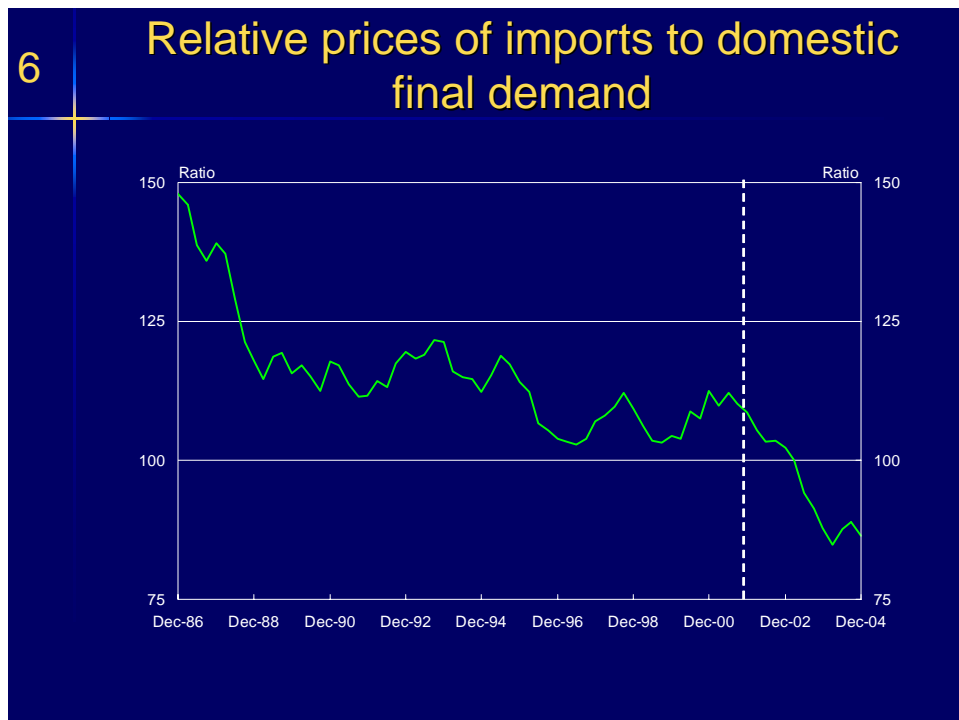


Chart 7

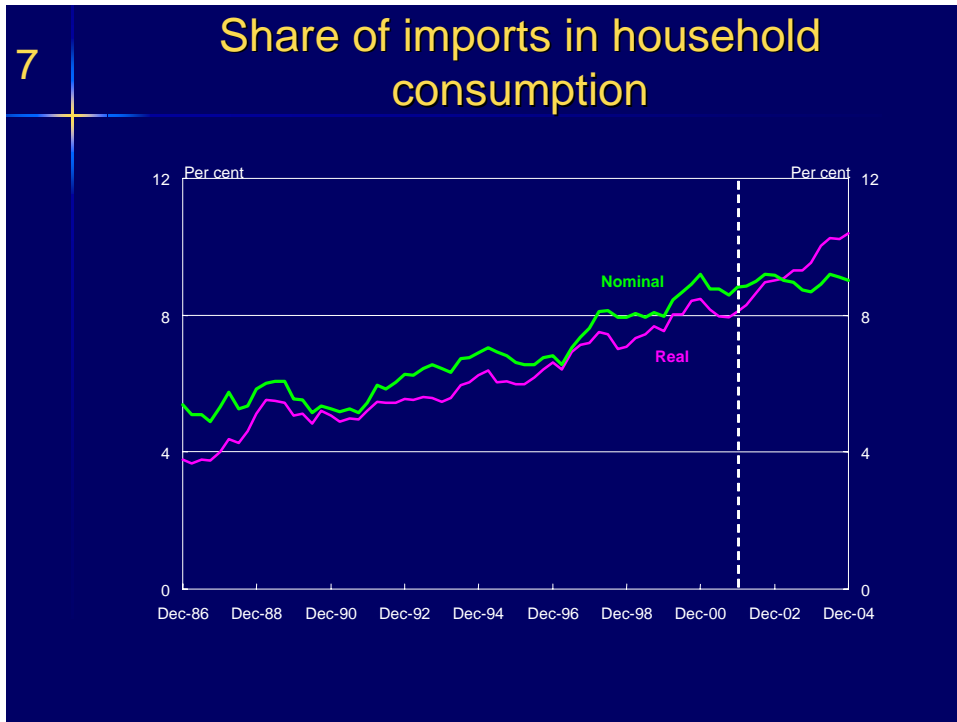


Chart 8

