# Submission to the Senate inquiry into Stimulus Packages

**Sinclair Davidson &**
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## About the authors

**Sinclair Davidson** is a Professor in the School of Economics, Finance and Marketing at RMIT University and a Senior Fellow at the Institute of Public Affairs. He has written extensively on taxation policy in Australia and is a regular contributor to public debate. His opinion pieces have been published in *The Age, The Australian, Australian Financial Review, Sydney Morning Herald*, and *Wall Street Journal Asia*. Sinclair has also been published in academic journals such as the *European Journal of Political Economy*, *Journal of Economic Behaviour and Organization* and the *Cato Journal*.

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## Sinclair Davidson: What I said in February 2009

In my submission to the Senate Inquiry in February of this year I indicated that the second ($42 billion) stimulus package was flawed.

> In summary, it is my view that the Senate should reject the fiscal stimulus package in its current format.
>
> - The package contains a lot of spending and little actual stimulus.
> - The proposed spending is poor quality expenditure of Federal funding.
> - Discretionary fiscal policy has a poor track record of success.
> - While the government needs to respond to the current economic down turn in a timely manner, there is no immediate urgent need to rush the package. Rather a better quality package should be designed and implemented.

I want to emphasise two points. First the 'little actual stimulus' and second the 'poor quality expenditure'. Nothing since February has caused me to revise my opinion. *The Australian* newspaper has performed a fine function in reporting the quality of the spending that the government has undertaken as part of its stimulus package. To be blunt the spending quality has been worse than I expected. Not only has the government spent money on projects with little additional economic return, it has done so in a very wasteful manner. Of course there would be teething problems in any project, yet the almost daily revelations of extraordinary waste go far beyond 'teething problems'. To remind ourselves of the underlying logic of the stimulus I quote again from my February submission.

> Professor John H. Cochrane, of the University of Chicago, has summarised the argument for stimulus spending as follows:
>
> > The classic argument for fiscal stimulus presumes that the central cause of our current economic problems is this: We, the people and our government, are not doing nearly enough borrowing and spending on consumer goods. The government must step in force us all to borrow and spend more. This diagnosis is tragically comic once said aloud.
>
> It is easy to 'Australianise' this comment, 'Australians have not been borrowing and spending enough on alcohol, pokies and tobacco and there are not nearly enough plasma televisions around. The government should borrow and spend more to ensure that more consumer spending occurs'. I invite Senators to read that statement out loud and wonder whether it sounds plausible or responsible. The fundamental problem with a lot of spending stimulus packages is that it consists of government spending a dollar, any dollar, on any project.

Unfortunately the media spent too much time concentrating on the view that the money may be spent on alcohol, pokies and the like and did not see the underlying argument; government would be borrowing and spending money in order to sustain consumption. The important point is the 'government spending a dollar, any dollar, on any project'.

Furthermore, there is unfinished business from the Stimulus package. In February I wrote,

> It also needs to be pointed out that Australia has just experienced a catastrophic failure in economic policy making. While the root causes of the current economic crises are non-Australian, nonetheless both the Treasury and the Reserve Bank of Australia failed to anticipate the impact of the crisis which commenced in mid-2007. The government has already spent $10.4 billion in a previous stimulus package and now proposes to spend an additional $42 billion. An inquiry into how and why the official economic government agencies failed to warn or forecast the local impact of the crisis needs to be undertaken.

## Has the stimulus worked?

The argument is favour of the stimulus having worked appears to be very powerful. Australia is the only OECD economy that has not officially entered into recession. Here in Australia a recession is defined as two consecutive quarters of negative GDP growth. That definition is arbitrary and some commentators have argued that other definitions be considered. There is merit in that suggestion. Nonetheless there is also community acceptance that the arbitrary definition we currently have is appropriate. It is not clear that exchanging one arbitrary definition for another, especially during a period of economic turbulence, is necessary or appropriate.

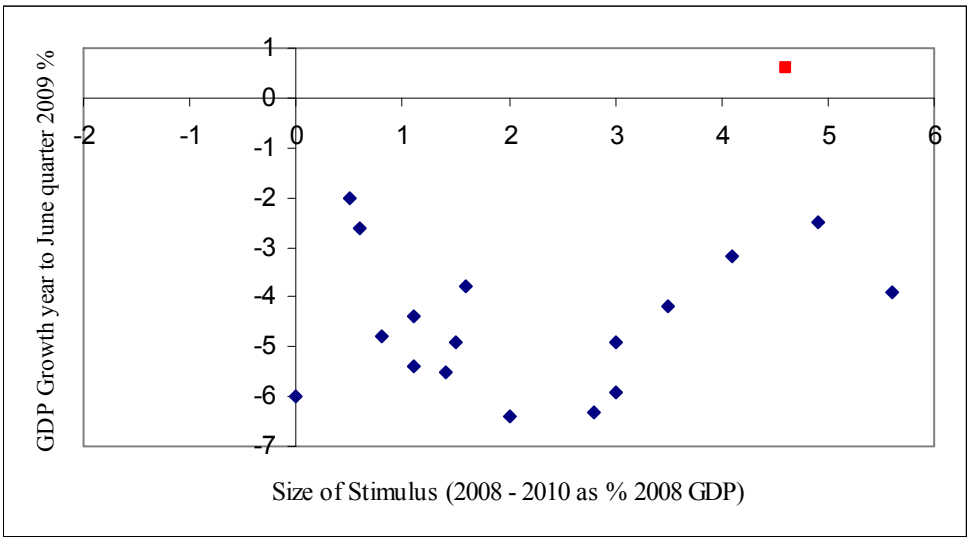
Our RMIT colleague Steve Kates has shown that two of the three component parts of the GDP calculation have experienced two consecutive quarters of negative growth, but that the measure most likely to be distorted by government spending has not.[1] The increase in that measure has ensured that the overall GDP figure has not experienced a decline in two consecutive quarters. To the extent this argument is correct Australians

[1] Steve Kates, Read the data: it was a recession, *The Australian*, September 14, 2009, pg. 16.

have actually experienced recessionary conditions, while a recession has not actually been declared.

The figure shows a scatter plot of GDP growth and size of the various stimulus packages.

**FIGURE ONE: ECONOMIC GROWTH AND STIMULUS**




*Source: Size of Stimulus OECD, GDP Growth Australian Financial Review 3 September, pg. 10*

Australia is one of seven economies with a stimulus package of three percent of 2008 GDP or more. Yet Australia is the only economy that has not experienced negative GDP growth. This is a fine economic achievement, but it is not clear that this is due to the stimulus package. To argue that the package itself is the cause of Australia's performance, the government would then need to explain why the other six economies with similarly large stimulus packages failed to produce similar economic growth.

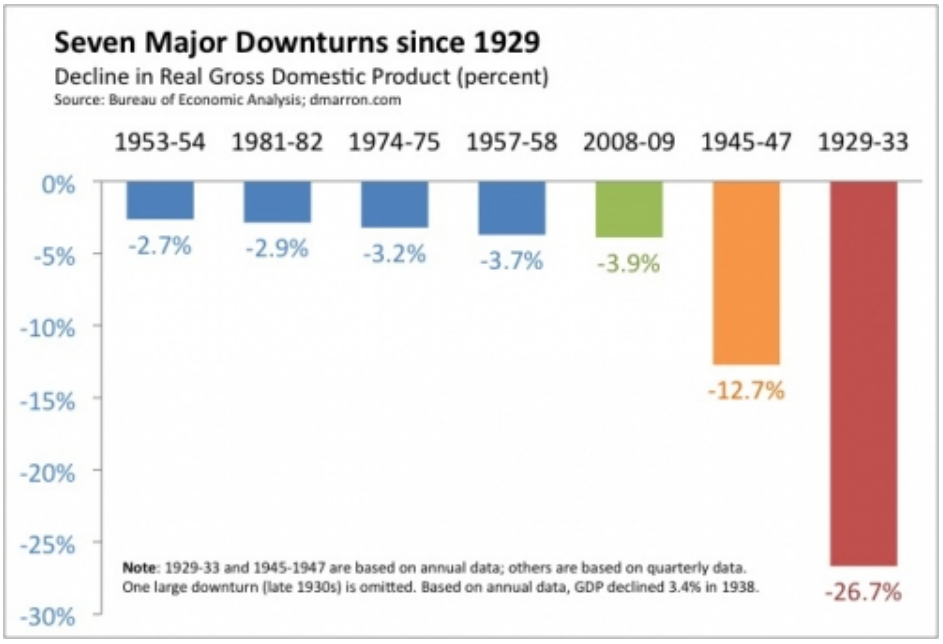
## Is this the Greatest Crisis since the Great Depression?

No. The often repeated comment that the current economic crisis is the greatest crisis since the Great Depression is misleading. It is especially misleading for Australia. It is misleading in two senses. First it suggests that the current crisis is similar to the Great depression in magnitude and severity, and secondly – for Australia – it suggests that

the current economic crisis has had an effect on the Australian economy greater than the recession in the early 1990s and early 1970s.

At his blog site Donald Marron (US economist) has shown a graphic displaying US data for crises since the Great Depression. This graphic has subsequently been republished at Gregory Mankiw's well-known blog site. The argument that this is the greatest crisis since the Great Depression is barely true in the US. It is certainly not correct in the case of Australia.

**FIGURE TWO: US ECONOMIC DOWNTURNS**




*Source: http://dmarron.com/2009/08/02/still-not-the-great-depression-2-0/*

Australian trade union unemployment (the only ABS unemployment data available for the pre-war period) was 10.8 percent in 1928, by 1932 unemployment had increased to 29 percent. In human terms this is a catastrophe. In the current crisis, the government is forecasting unemployment to rise to 8.5 percent. According to the OECD the Australian annual rate of unemployment was 4.2 percent in 2008 – it is now at 5.8 percent – a level last seen in October 2003. To be sure it is preferable that individuals do not become involuntarily unemployed, nonetheless this increase is in no way comparable to the increase observed in the 1930s.

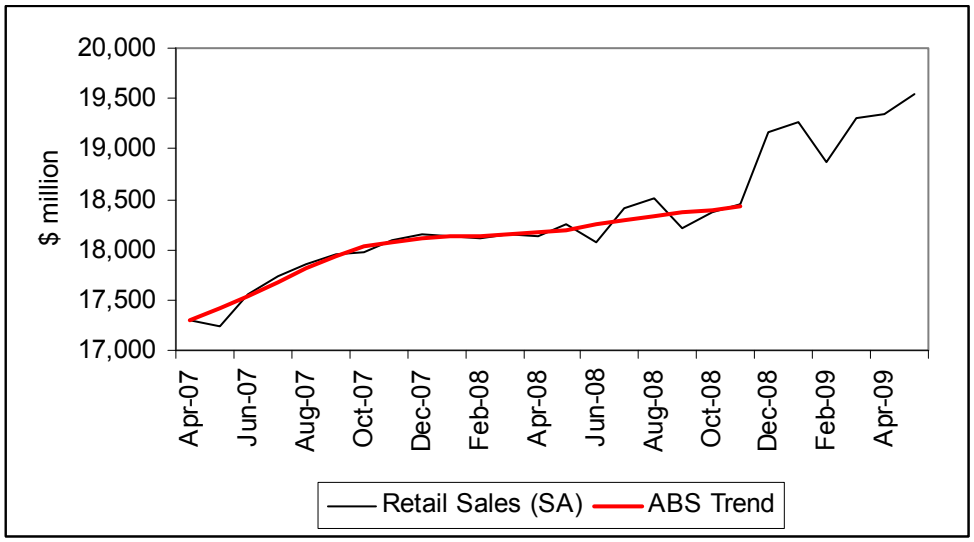
Angus Maddison has calculated historical GDP figures for the world economy and selected economies. According to his calculations the Australian economy performed poorly from 1927 through to 1937. GDP fell every year from 1927 until 1932. It was only in 1937 that GDP exceeded its 1926 level. By contrast Australia has experienced only one quarter of negative GDP growth in the current crisis.

## Assessing the data

### *Retail Sales*

The Retail Sales figures released by the ABS have become closely watched over the course of the year. In particular some have argued that an increase in retail sales indicates that the stimulus package has worked. Figure one replicates a figure from the ABS. In that figure the ABS show a trailing two-year period indicating the seasonally adjusted Retail Sales figures and also the truncated Trend figures for Retail Sales.

**FIGURE THREE: RETAIL SALES (SEASONALLY ADJUSTED) APRIL 2007 – MAY 2009**




*Source: ABS 8501.0 Retail Trade, Australia*

An observer might look at a figure such as this and conclude that if the ABS Trend line had persisted on its current path (or something very similar) that a massive

increase in Retail Sales had occurred. That would be an easy conclusion to draw; after all the ABS Trend line is much flatter in the post-October 2007 period than before and a flattish line can be expected to remain flat.

Indeed that type of analysis was undertaken by Tony Meer of Deutsche Bank and reported at Peter Martin's blog.[2] Peter Martin is the Canberra based economics correspondent for The Age.

**FIGURE FOUR: TONY MEER – DEUTSCHE BANK ANALYSIS**

*Source: http://petermartin.blogspot.com/2009/04/so-retail-spending-is-down.html*

Based on this type of analysis, Peter Martin (2009b) wrote in his *The Age* (2 April 2009) column

> A *Business Day* comparison of recorded spending with what would have been spent had the pre-December trend continued suggests that Australians spent an extra $370 million more in February, an extra $780 million in January and an extra $710 million in December.

2 See http://petermartin.blogspot.com/2009/04/so-retail-spending-is-down.html



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> The combined $1.8 billion in extra spending accounts for a sizable proportion of the $8.7 billion handout, some more of which would have spent in ways not measured by the retail statistics and still more of which is likely to be spent in coming months.

Looking at this type of analysis those figures are plausible. The point of contention, however, is the counter-factual.

We approach this problem from two angles. First we calculate trends in seasonally adjusted Retail Sales and compare them to reported seasonally adjusted Retail Sales. Unfortunately, the Australian Bureau of Statistics (ABS) has stopped calculating its own Retail Sales Trend figures (see ABS 2009a). Their argument being that the increase in federal government spending could distort the Trend estimate. We provide updated estimates of the ABS trend figure together with an alternate trend figure and compare them to the ABS Retail Sales (seasonally adjusted) figures.

We also attempt to answer "what would spending have been?" by conducting a small forecasting exercise. Specifically, we fit a typical time series model to the Retail Sales data spanning April 1982 to April 2008. From this model we generate a set of forecasts for the period May 2008 to April 2009. We present these forecasts as a proxy for "what would spending have been" and hence gauge the impact of the government spending by comparing them to the actual observations.

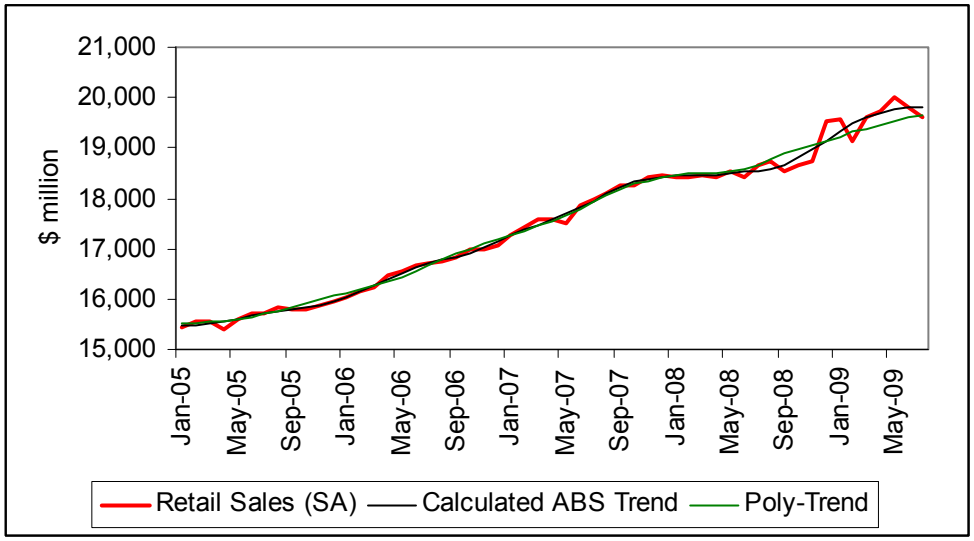
In summary, we find no evidence that Retail Sales have been significantly impacted by the federal government's spending.

Extending the ABS trend estimates is a straightforward exercise. ABS trend estimates are calculated by applying a symmetric Henderson weighted moving average to the seasonally adjusted Retail Sales data. As the data is monthly the number of moving average terms is 13. The symmetric characteristic means a set of surrogate filters must be used for the last six observations of the series. According to the most recent release of retail trade data (2009b Cat. 8501.0), the surrogates are based on end parameter weight of 3.5. This weighting scheme is outlined on page 62 of the ABS guide to interpreting time series (2003 Cat. 1349.0).

In addition to updating the trend estimates of the ABS trending method we estimate a commonly used trending method. This is a general function that can be referred to as a Local Polynomial Regression. We denote this trend estimate as 'Poly-Trend'.[3] The Poly-Trend is based on an algorithm which fits a polynomial to a neighbourhood of points. The algorithm fits a quadratic surface weighted by least squares. The weighting mechanism is designed to insure the local points are most influential (Venebles and Ripley 2002, page 423).

The results of the trend exercise can be seen in the figure below.

**FIGURE FIVE: RETAIL SALES TRENDS**




There is nothing unusual about the recent increases in Retail Sales. The seasonally adjusted figure for Retail Sales is at the long-term trend levels of Retail Sales. Based on the type of analysis reported by Peter Martin we conclude that irrespective of how the trend is estimated the sum of money relative to the government spending on households is a very small sum indicating that the money has not lead to additional spending. The summed net difference between the seasonally adjusted Retail Sales figures and the trend figures is $382 million for the ABS Trend estimate and $1.6 billion for the Poly-Trend estimate.

3 The Poly-Trend was estimated using standard in-built functions in the statistical program R 2.8.1.



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It is possible that the stimulus package has distorted the trend estimates. Consequently we perform a forecasting robustness test. We forecast what Retail Sales data would have been if we were in April 2008. With the knowledge we might have had in April 2008 what would our expectation of retails be going forward? At this time there was no suggestion that the Rudd government would increase spending or undertake a stimulus package.

In order to undertake this analysis i.e. what would Retail Sales have been if the stimulus packages were not administered, we fit the Holt-Winter's model to all the data except the most recent 15 observations. We then generate forecasts for the 15 periods we excluded; we then use these forecasts as a proxy of "what spending would have been". By comparing these forecasts to the actual values we can gauge the size of additional expenditure. The Holt-Winters model[4] has the general form

$$
\begin{aligned}
y_t &= l_{t-1} + b_{t-1} + s_{t-1} + e_t, \\
l_t &= l_{t-1} + b_{t-1} + \alpha e_t, \\
b_t &= b_{t-1} + \delta e_t, \\
s_t &= s_{t-1} + \gamma e_t.
\end{aligned}
$$

The terms $y_t$, $l_t$, $b_t$ and $s_t$ denote the observation, level, slope and seasonal component at time t. The error term is denoted by $e_t$ and is assumed to be normally distributed with a fixed variance and a zero mean. The unknown parameters α, δ, and γ are estimated using maximum likelihood estimation (Hyndman et al 2002).

4 This model was fitted using the ets command in R, R Development Core Team (2009).



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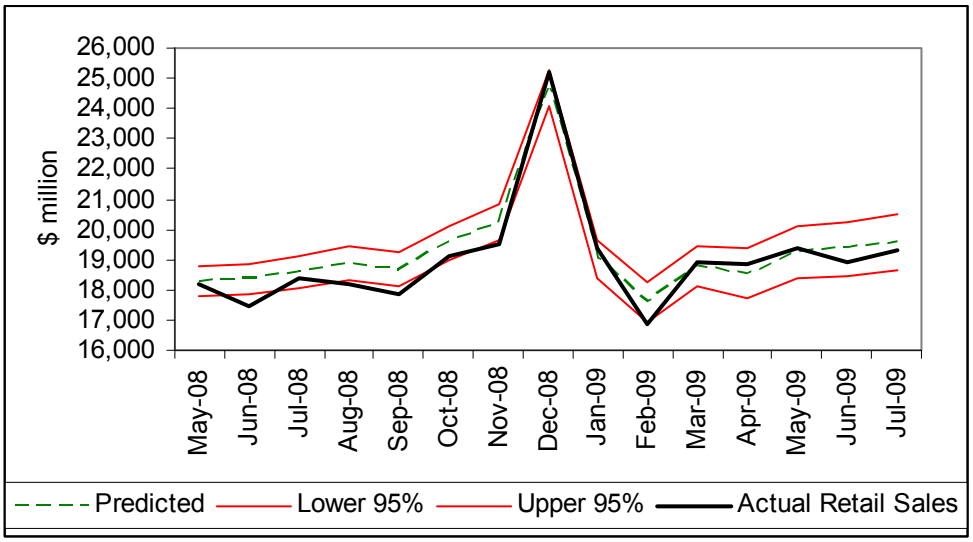
**FIGURE SIX: PREDICTED RETAIL SALES**




The solid black line represents the actual Retail Sales figures, the broken green line is our mean forecast and the red lines represent the 95% confidence intervals. Notice that the black line tends to remain within the confidence intervals. After November 2008, the Retail Sales figure also tends to be very close to our forecast. In other words, in April of last year we could have produced a very accurate forecast of Retail Sales. Yet we are told that Retail Sales were affected by the large amount of government spending in the stimulus package. In order for our forecast to be so accurate we must either have had foreknowledge of the stimulus package, or the package itself must have been so finely calibrated so as to ensure Retail Sales remained stable. Neither of these two possibilities is likely to have been the case. It is far more likely that the stimulus package had no overall impact on Retail Sales.

We know that the stimulus to Retail Sales could not have been finely calibrated simply because it was implemented without any formal modelling by Treasury. The Hansard on Wednesday 22 October 2008 records the following exchange between Senator Barnaby Joyce and Dr David Gruen (at pg. E52).

> **Senator JOYCE**—I want to go back to the $10.4 billion package. Did you do any modelling on the effect of that package, or did anybody in your department do any modelling on the effect of that package?
>
> **Dr Gruen**—No formal modelling was done of that package. Certainly, analysis was done of that package, but it was not formal modelling.

**Senator JOYCE**—So we have spent half of the nation's surplus without a formal modelling of the package, is that correct? We have spent half of the nation's surplus without a formal modelling of the effects of the package?

**Senator CAMERON**—These guys just do not believe there is a crisis.

**Senator JOYCE**—I am asking a question.

**Senator CAMERON**—They do not support the package because they just do not believe anything is going on.

**CHAIR**—Can we let Dr Gruen answer?

**Dr Gruen**—I can confirm that the package was $10.4 billion and that no formal modelling was done. I can confirm that no formal modelling was done.

**Senator JOYCE**—Do you believe that is prudent?

**Dr Gruen**—Yes, I think it goes to what I tried to lay out in my opening statement about the nature of the environment that the Australian economy has been facing over the last few weeks. We are dealing with a situation of very substantial disruption in credit markets. With the best will in the world, it is extremely difficult for formal models to come to terms with such events. We have a qualitative understanding of the sorts of impacts that such disruptions have on the economy, but, as I said, we are dealing in the nature of changing balances of risks, and it is a situation which calls for judgment. What came out of formal modelling would depend on what you put into the formal modelling.

## *Unemployment*

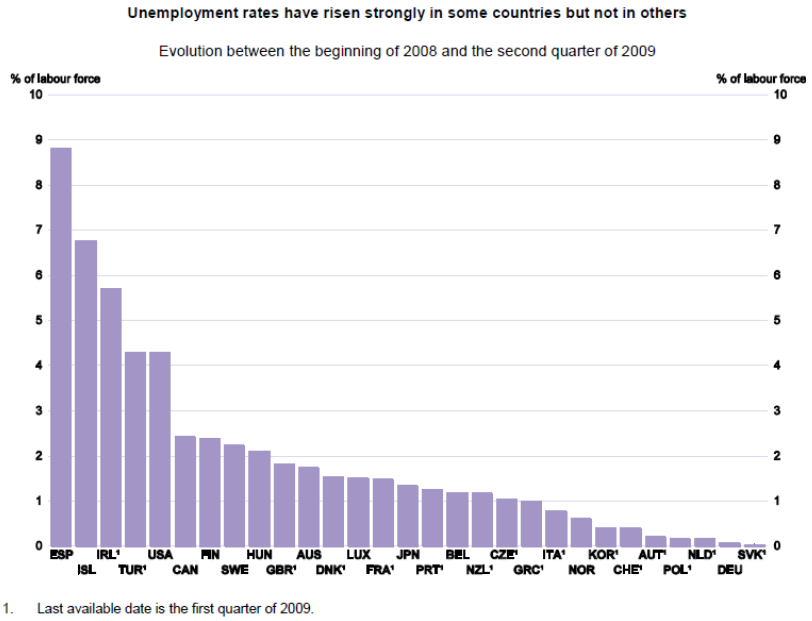
Did the stimulus package prevent unemployment from going through the roof?

Prime Minister Kevin Rudd has argued that without the government's stimulus package that the unemployment rate would have gone through the roof. The government can point to the 'scoreboard' for confirmation of this story. In fact Mr Rudd recently indicated that US unemployment is now 9.7 percent and Canadian unemployment is 8.7 percent. But what Mr Rudd didn't say is that the Canadian stimulus package (4.1 percent of 2008 GDP) is almost as large as the Australian package (4.6 percent of 2008 GDP) and the US package is larger at 5.6 percent of 2008 GDP. In other words the favourable employment outcomes here in Australia cannot only be due to the stimulus package, unless we are happy to believe that the Australian stimulus has been better targeted.

An OECD report published on 3 September 2009 indicates that unemployment has not risen much at all across 29 economies. Some economies like Spain have seen a

massive increase in unemployment as has the US and Canada. The increase here in Australia is the eleventh highest out of 29 countries. So we're not quite in the top third but 60 percent of OECD economies have experienced a lower increase in unemployment than did Australia. To be sure they were starting from a higher base than we were, but many OECD economies routinely experience higher rates of unemployment than do the US, Canada and Australia.

**FIGURE SEVEN: INCREASE IN OECD UNEMPLOYMENT**

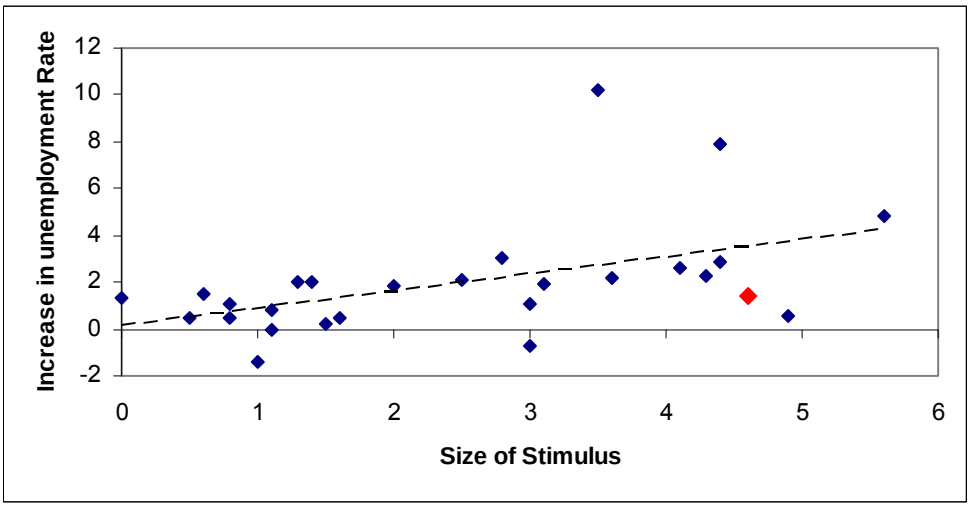



*Source: OECD What is the economic outlook for OECD countries: An interim assessment (3 September) pg. 19*

To claim that our low rate of unemployment points to the success of the stimulus package ignores the experience in other OECD economies. Many of those economies have experienced massive declines in GDP growth and have experienced (so-called) technical recessions, yet the increase in unemployment has not been that large.

In the graph we have plotted the increase in the unemployment rate (relative to 2007) and the size of the stimulus (as a percentage of 2008 GDP) – Australia is the large red dot. The data are all collected from the OECD.

**FIGURE EIGHT: UNEMPLOYMENT AND STIMULUS SIZE**



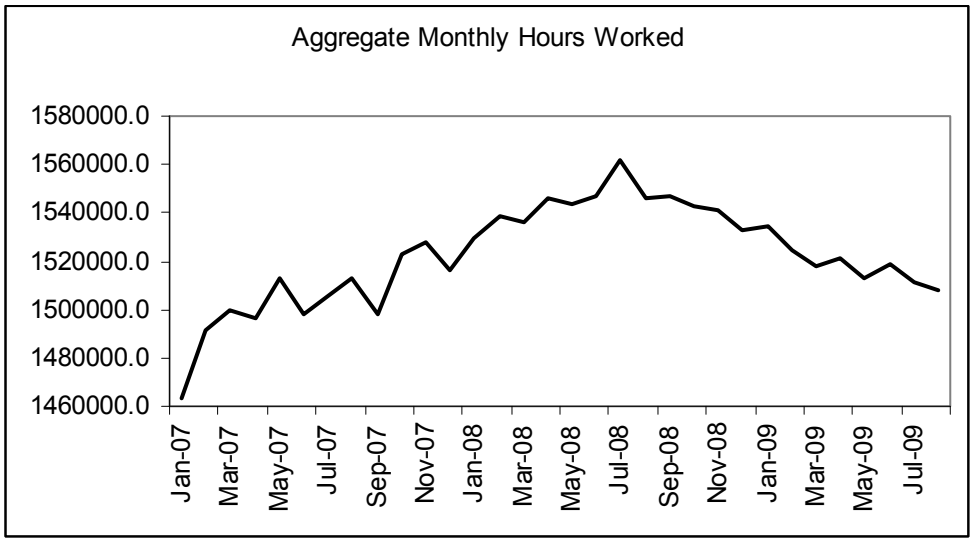

As can be seen the increase in unemployment is much less than the size of the stimulus package would suggest. If our unemployment rate had grown in line with average OECD expectations, the unemployment rate would be 7.9 percent but still less than the budget forecast of 8.5 percent.

So it is not clear that stimulus spending has saved Australian unemployment from going through the roof. It is far more likely that our resilient economy has fared well due to 25 years of economic reform beginning with the Hawke government and is not simply due to governmental quick fixes. To believe that the stimulus has brought about the excellent economic performance Australian is currently enjoying would be to believe that the Rudd government had developed the perfect stimulus package. We know, however, that the package was put together hurriedly and that the implementation has been poor. Let's rather give credit where it is due.

## *Hours Worked*

Much has been made of the decrease in hours worked. In this section we investigate that decline. The decline in Aggregate Monthly Hours Worked appears to be quite marked. This, of course, is not at all unusual given that economic growth in the economy has declined.

**FIGURE NINE: RECENT AGGREGATE MONTHLY HOURS**

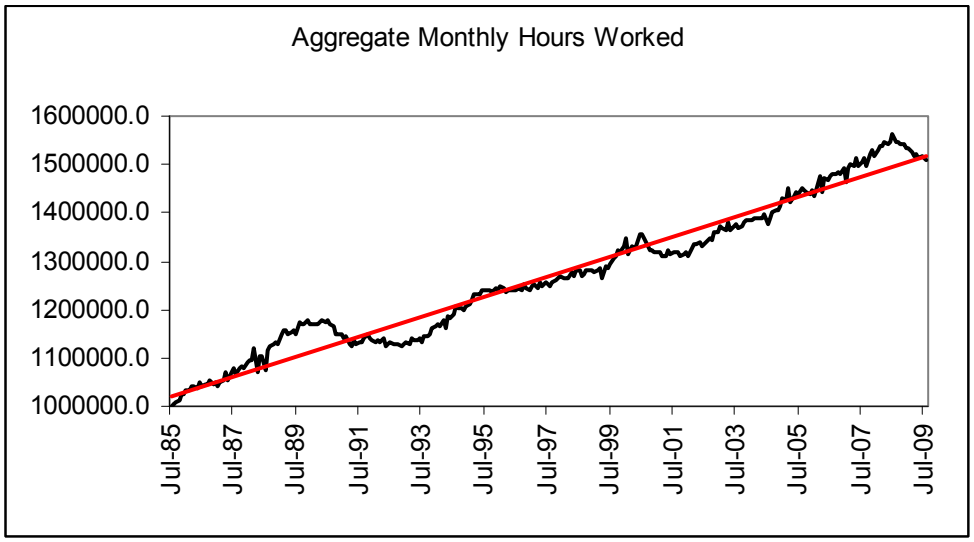



*Source: ABS*

When we plot that same time series making use of the entire series from July 1985 through to the present and add a trend line, we observe that the series has simply returned to trend.[5] This return to trend suggests that hours worked prior to the crisis was above trend. This is borne out by the data. It is possible that the above trend hours worked was due to WorkChoices or perhaps the so-called mining boom (we do not necessarily endorse the view that the performance of the economy was due to a 'mining boom' – this suggests that the economic performance has somehow been due to luck and factors beyond Australian control).

[5] It is important to note that this type of analysis does not take into account the size of the labour force – we are assuming here that the growth rate in the size of the labour force is constant. We are currently engaged in additional research to further evaluate this variable.

**FIGURE TEN: AGGREGATE MONTHLY HOURS AND TREND**




## *Saved or Spent?*

The Australian Treasury relied on an unpublished study by Christian Broda and Jonathan Parker to support their argument that the tax rebate announced as part of the federal government stimulus package would be spent and not saved.[6]

This particular study investigates the 2008 US$950 tax rebate by comparing spending in households that had received the rebate to spending in households that were eligible to receive the rebate but had not yet actually received the rebate.[7] The econometric test determines whether or not consumption is higher in those households that have received the tax rebate compared to those households that have not received the rebate. *It does not test whether the entire tax rebate has been consumed or saved.* The study finds that those households that had received the rebate consumed more than those that have not. Unsurprisingly, they find that low income households and liquidity constrained households that had received the rebate spend more than similar households yet to receive the rebate. (They claim that their test shows that low income

6 http://petermartin.blogspot.com/2009/02/so-why-does-treasury-believe-well-spend.html

7 http://faculty.chicagobooth.edu/christian.broda/website/research/unrestricted/Stimulus%20Payments%20and%20Spending.pdf

households have spent more than higher income households, but it is not clear from the reported table that this is the correct interpretation of their results.)

It is important to note that they have found that some of the tax rebate is spent. Of course nobody is suggesting that some of the tax rebate wouldn't be spent. The debate is about (1) how much would be spent and (2) was this the best way for the government to stimulate the economy? Indeed, Broda and Parker could very easily expand their econometric analysis to determine how much of the US$950 was in fact spent, but do not do so. Rather they provide survey evidence of additional spending. The survey results indicate that US$448 was spent in additional purchases – approximately 48 percent of the US$950. That implies the other 52 percent was saved (at least temporarily). They concluded that 'the stimulus payments are initially being spent at significant rates'. This is, of course, true; it is also fair to say that the Economic Stimulus Act of 2008 has not succeeded.

A recent paper by Sumit Agarwal, Chunlin Liu and Nicholas Souleles, published in the *Journal of Political Economy*, investigates credit card transactions to analyse the response to the 2001 US tax rebates.[8] They report that consumer initially save some of the rebate and then increase expenditure.

> For consumers whose most intensively used credit card account is in the sample, spending on that account rose by over $200 cumulatively over the nine months after rebate receipt, which represents over 40 percent of the average household rebate.

It is interesting to reflect on that statement, *40 percent of the rebate was spent over nine months*. Presumably the other 60 percent was either saved or consumed via other means. A previous paper by Nicholas Souleles (joint with David Johnson and Jonathan Parker), looking at the same 2001 rebate, also found that individuals initially saved the rebate (spending only a third of it in the first three months) and later increased spending.[9] Overall about two-thirds of the rebate was spent over six

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[8] Sumit Agarwal, Chunlin Liu, and Nicholas Souleles, 2007, 'The Reaction of Consumer Spending and Debt to Tax Rebates—Evidence from Consumer Credit Data', *Journal of Political Economy*, 115: 986–1019.

[9] David Johnson, Jonathan Parker, and Nicholas Souleles. 2006. 'Household Expenditure and the Income Tax Rebates of 2001', *American Economic Review* 96: 1589–1610.



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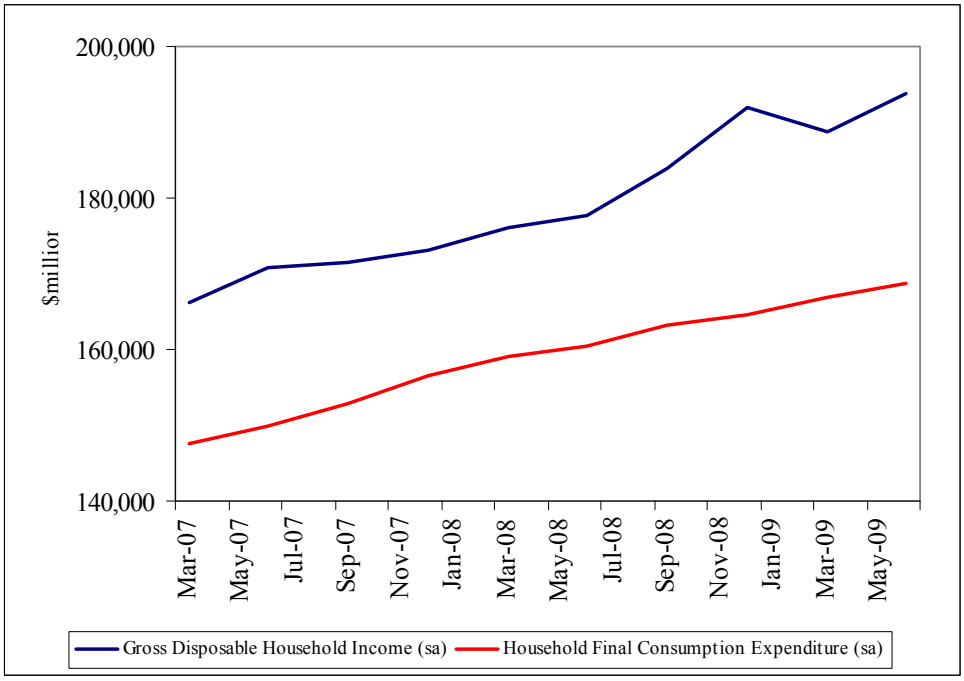
months. The overall conclusions of the two papers are similar, yet the differences between them which lie at the heart of the current debate are not reconciled in the later paper.

Professor Andrew Leigh of the Australian National University has conducted a survey to determine what had happened to the cash component of the second stimulus package.[10] Overall he found that 60 percent of the cash had been saved or used to pay-off debt. He argues that this is twice the rate at which Americans had spent similar tax rebates in 2001 and 2008. This may well be true – yet nonetheless a very large portion of the cash component of the stimulus package was not spent quickly as was advertised. Of particular concern is that the Leigh study relies on individual accurately recalling what they had spent money on and then truthfully answering the questions in the survey. Economists tend to be suspicious of survey results and usually prefer revealed preferences to stated preferences. The macroeconomic data do not support the Leigh view that substantial increased spending has occurred (neither does our forecast of Retail Sales support that hypothesis). The figure shows data from the ABS showing Gross Disposable Household Income and Household Final Consumption Expenditure, as can be seen there is no unusual change in consumption expenditure. This figure is very similar to one produced in the US by Professor John Taylor (except it is quite clear that consumption expenditure has fallen in the US[11]).

[10] Andrew Leigh, 2009, How Much Did the 2009 Fiscal Stimulus Boost Spending? Evidence from a Household Survey, Unpublished Paper, http://econrsss.anu.edu.au/~aleigh/

[11] John Cogan, John Taylor and Volker Wieland, The stimulus didn't work, Wall Street Journal, September 17, 2009.

**FIGURE ELEVEN: HOUSEHOLD INCOME AND HOUSEHOLD EXPENDITURE**




*Source: ABS cat. 5206.0*

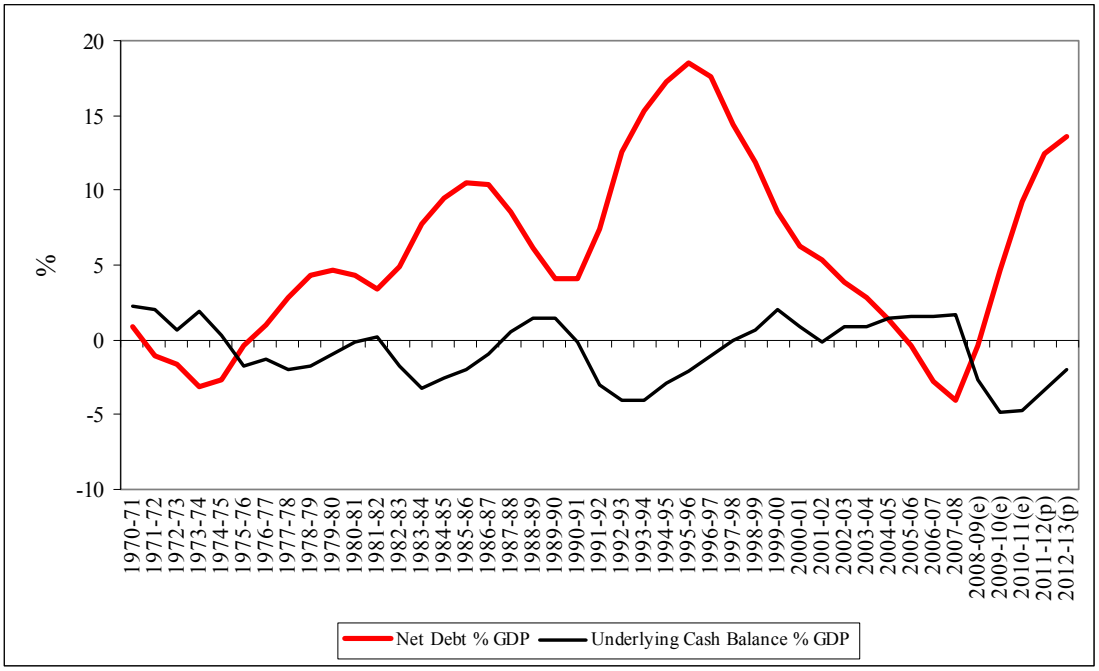
## *Auditing the Budget Assumptions*

A critical assessment of the Federal Government's recent budget is presented in this section. In particular, we assess the projections of the growth rate of GDP and unemployment. We conclude that the projections are too optimistic. Our conclusion is based on two principles, previous macroeconomic experience and economic modelling. In this section it is important to note that we are not providing a macroeconomic forecast of the Australian economy, we are auditing the underlying assumptions in the Budget Papers.

The consequence of the overly optimistic projections is that public debt is under estimated by approximately $35 billion over the period 2009-10 to 2012-13. We believe this difference will be significantly greater as the horizon lengthens. We stop short however of providing predictions post 2012-13 as the level of information provided by the Department of Treasury (Federal Government) post June 2013 is too sparse for comprehensive review.

Figure twelve shows the evolution of net public debt and the underlying budget cash balances from 1970-71. As can be seen the underlying budget balances recover slowly from deficits and once the Commonwealth begins accumulating debt it takes a long time the reduce that debt level to zero.

**FIGURE TWELVE: AUSTRALIAN GOVERNMENT NET DEBT**




*Source: Budget Papers*

In May 2009 the Federal Budget was released. The budget together with a series of (pre budget) press announcements outlined a $42 billion stimulus plan. A large proportion of this has already been administered. We do not challenge the various spending incentives here; however we strongly believe the figures presented on May 12th 2009 are implausible and consequently are misleading.

Table One replicates Table 1-7 of the Budget documents which outlines projections of the key macroeconomic variables relating to the Australian economy.

**TABLE ONE: TABLE 1-7 FEDERAL GOVERNMENT DOCUMENTS**

| | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 |
|---|---|---|---|---|---|
| Real GDP | 0 | -0.5 | 2.25 | 4.5 | 4.5 |
| Employment | -0.25 | -1.5 | 0.5 | 2.5 | 2.5 |
| Unemployment rate | 6 | 8.25 | 8.5 | 7.5 | 6.5 |
| CPI | 1.75 | 1.75 | 1.5 | 2 | 2.5 |
| Nominal GDP | 5.75 | -1.5 | 3.75 | 6.25 | 6.75 |

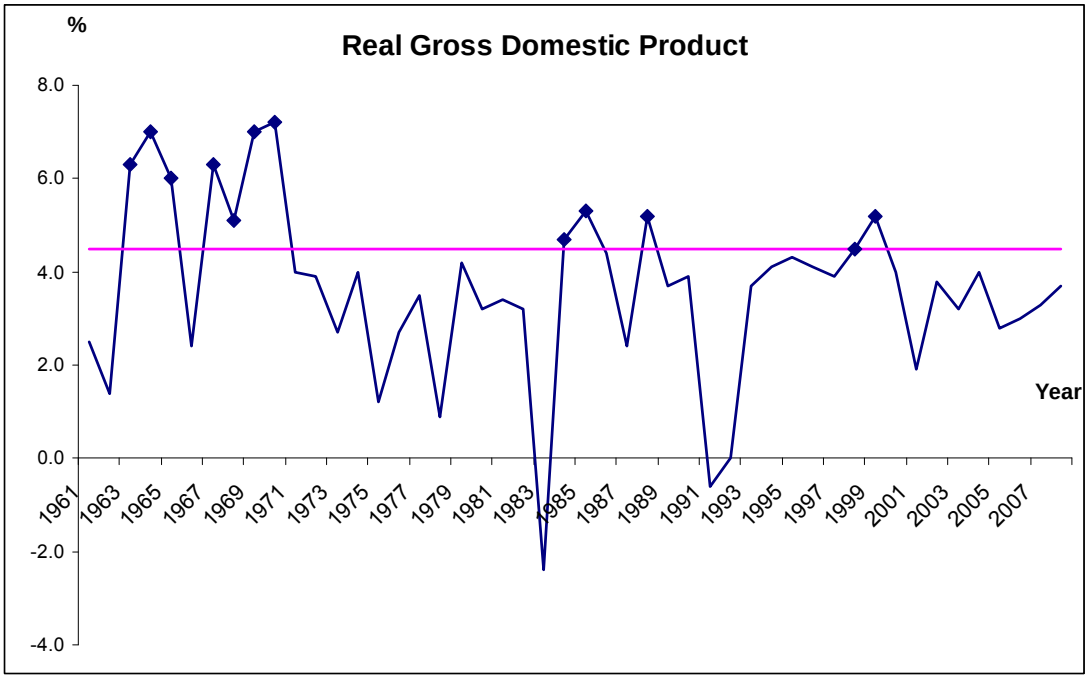
At first the numbers in Table One seem fairly innocuous, however close inspection suggest an implausible view of the 'recovery' phase of the economy (2011-13). We disagree with Treasurer Wayne Swan's assertions that these projections are 'extremely realistic and conservative'. We also have great difficultly with statements that suggest that these forecasts are as 'plausible as any other' (though like all such forecasts, they are only 'best guesses').[12] Statements like these are likely to mislead the public.

## *GDP*

Figure Thirteen illustrates the annual growth rate in GDP spanning June 1961 to June 2008. The pink line corresponds to 4.5%, the growth rate projected in the budget documents for 2011-12 and 2012-13. According to Figure Thirteen, only 12 times in the last 47 years has real growth in GDP reached 4.5% or higher. In the past 25 years this has occurred only twice, 1983/5 and 1997/9.

[12] An open letter authored by 21 economists, published in the *Australian Financial Review*, made this claim.

**FIGURE THIRTEEN: GROWTH IN REAL GROSS DOMESTIC PRODUCT**




*Source: ABS Cat. No. 5206030 (Diamond markers indicate 4.5% or higher)*

## *Unemployment Rate*

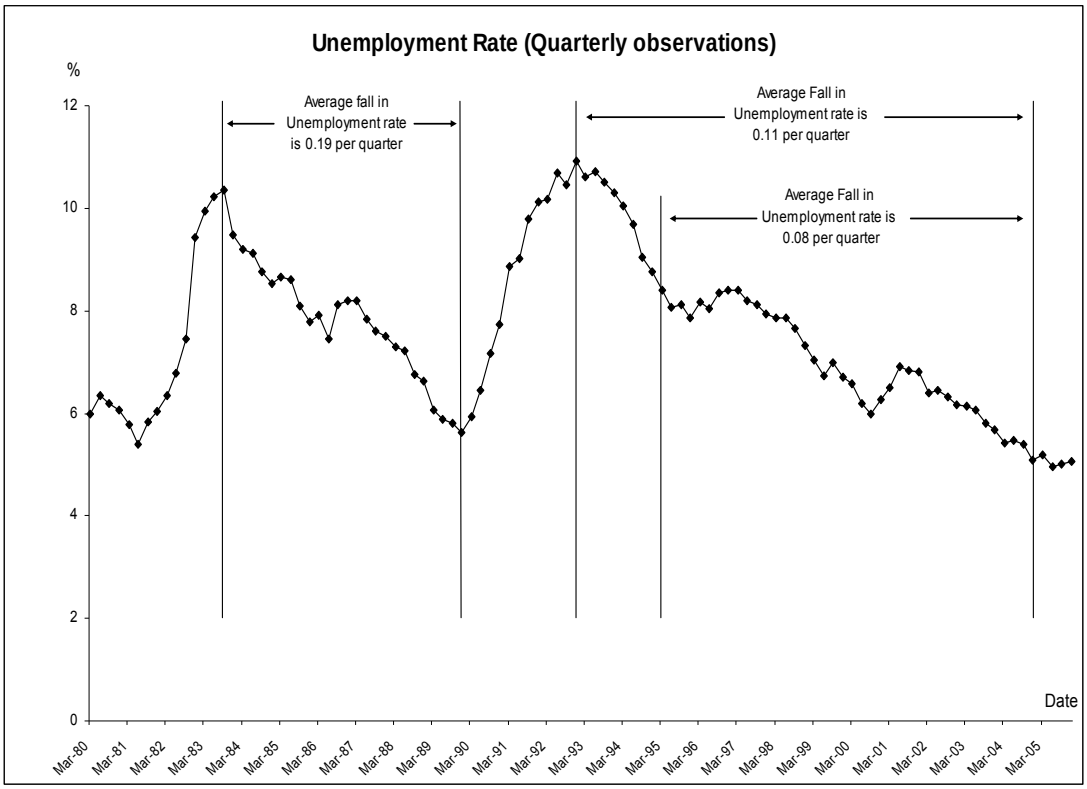
According to Table One the Federal Government projects the unemployment rate to peak in 2010-11 at 8.5 percent. For modelling purposes we accept the peak and its timing; however we believe the projected decreases in the unemployment rate are implausible.

Overestimating the decrease in the unemployment rate directly affects estimates of the operating deficit on both sides of the ledger. Specifically, tax revenues are over estimated which mean that the Treasury projections of Government Revenues are inflated. The effect of debt is compounded as social security payments and hence Government Expenses are underestimated.

Figure Fourteen presents the quarterly unemployment rate for since March 1980.
The values clearly demonstrate that the average quarterly decrease ranges between 0.08 and 0.19. Annually this implies a range of 0.3 to 0.8. Importantly, the average decrease over a comparable range is at most 0.16 percent per quarter or 0.6 percent

per annum. The implication of the Federal Governments too optimistic projections is that unemployment in Jun 2013 is likely to be 7.4 percent considerably higher than 6.5 percent.

**FIGURE FOURTEEN: DECLINES IN THE QUARTERLY UNEMPLOYMENT RATE**




Having shown that two of the projections are implausible we present estimates of the Net operating balance ($b) that realistically reflect the debt position for the period 2008-09 to 2012-13. We consider two different estimates which we refer to as scenario 1 and 2.

Both scenarios are estimated using the Global model of the Oxford Economic Forecasting (OEF) software package. Oxford Economics describe this model as being a "mainstream approach" characterised by "Keynesian" features in the short to medium term[13]. They refer to their formulation as a macroeconometric approach

[13] In the long term it has more neo-classical properties, however for the purposes of this analysis only short to medium term analysis was performed so therefore the analysis presented is consistent with a Keynesian philosophy.



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combining the best of purely econometric alternatives, such as vector autoregression (VAR), and economic driven specifications, such as computable general equilibrium (CGE) models. They indicate that their model is theory consistent and statistically robust. They state the main advantage of their approach is that it provides both a good forecasting and policy analysis tool.

Reports by Oxford Economics include "Valuing the effects of Great Barrier Reef bleaching" (http://www.oef.com/samples/gbrfoxford.pdf) for the Great Barrier Reef Foundation and "An assessment of the impact on the US economy of trade and investment with China" (http://www.oef.com/samples/oefchinatradeinvestment.pdf) for the US-China Business Council. Oxford Economics has a very prestigious client list:

**Institutions**

IMF, World Bank, US Treasury, US Government, OPEC, Bank of England, ADB, Ministries of Finance Italy/UK/Japan.

**Industries**

Airbus, Unilever, IBM, Intel, Microsoft, BMW, Boeing, BP, British Airways,

Daimler, General Motors, Renault, Shell.

**Finance**

Goldman Sachs, Morgan Stanley, Fidelity, Citigroup, Bank of America, Credit Suisse, UBS, Deutsche Bank, HSBC, Barclays.

**Others**

IEA, The Economist/EIU, The Institute of International Finance (IIF), McKinsey, Ernst & Young, KPMG.

RMIT University is the only Australian University to have access to the Oxford Economics modelling package.

In the first scenario we fix the unemployment rate so that it matches Table One, but allow the GDP to be determined by the model. In other words what rate of economic

growth would be necessary to generate an unemployment level consistent with the government's forecasts? Table 2 below presents the GDP projections in Table One together with a set of key indicators using OEF estimates of scenario 1.

**TABLE TWO: SCENARIO 1 KEY INDICATORS**

| | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 |
|---|---|---|---|---|---|
| Real GDP (Gov) | 0 | -0.5 | 2.25 | 4.5 | 4.5 |
| Real GDP (Scenario 1) | 0.9 | 0.1 | 2.8 | 4.5 | 3.3 |
| Unemployment rate (Scenario 1) | 5.67 | 8.25 | 8.51 | 7.51 | 6.47 |
| CPI (Scenario 1) | 1.46 | 2.51 | 1.38 | 1.66 | 2.1 |

Across all years the OEF has estimated GDP growth to be slightly higher with the exception of 2012-13. This increase in GDP growth, however, generates differences in the Net Operating surplus for those years, as indicated by Table 3.

**TABLE THREE: NET OPERATING BALANCE ($B)**

| | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 |
|---|---|---|---|---|---|---|
| Budget Documents | 23.6 | -28.5 | -47.6 | -49.7 | -35.6 | -25.3 |
| Scenario 1 | 23.6 | -24.5 | -50.9 | -66.7 | -36.8 | -38.7 |

Table Three indicates that the budget figures from 2009-10 onwards underestimate the true size of the deficit. This is particularly the case in years 2010-11 and 2012-13. In total the net deficit position from 2008-09 to 2012-13 is $217 billion compared to the budget is $186 billion, a difference of $31 billion.

**FIGURE FIFTEEN: NET OPERATING BALANCE TO REAL GDP**

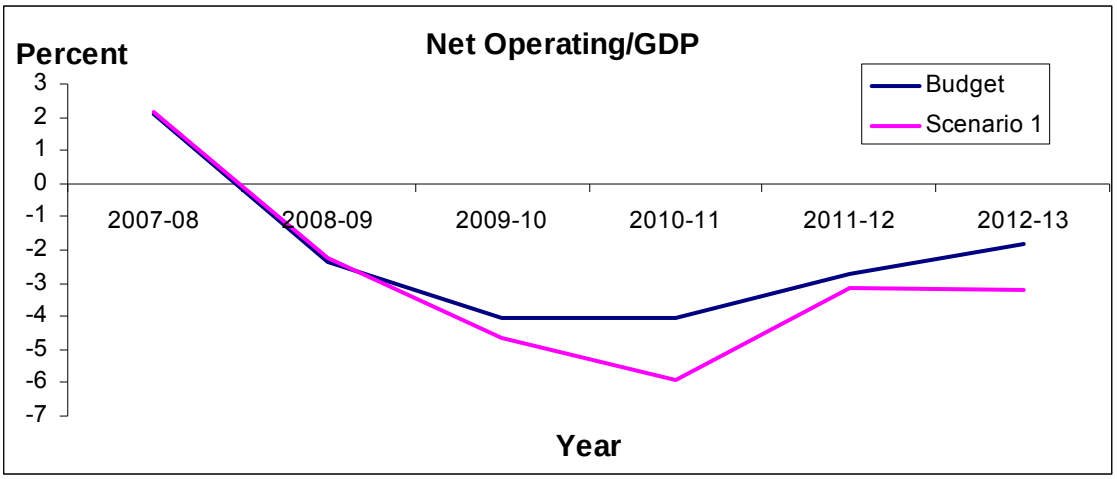


Figure 3 presents the Net Operating Surplus balance to GDP ratio which is comparable to Chart 1-3 of the budget documents. Again, relative to the Budget numbers the first scenario suggest that current budget estimates are overly optimistic.

In the second scenario we moderate the decrease in the unemployment rate to be consistent with expectations based on historical reasoning. Table Four presents the statistics of the key economic variables relating to scenario 2 and the budget estimates.

**TABLE FOUR TABLE 1-7 COMPARISON**

| | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 |
|---|---|---|---|---|---|
| Real GDP (Gov) | 0 | -0.5 | 2.25 | 4.5 | 4.5 |
| Unemployment rate (Gov) | 6 | 8.25 | 8.5 | 7.5 | 6.5 |
| Real GDP (Scenario 2) | 0.89 | 0.08 | 2.84 | 4.49 | 3.29 |
| Unemployment rate (Scenario 2) | 5.7 | 8.2 | 8.5 | 7.9 | 7.4 |
| CPI (Scenario 2) | 1.5 | 2.5 | 1.4 | 1.7 | 2.1 |

As before the estimates of GDP are relatively more positive for all years except 2012-13. The unemployment rate has been moderated such that it decreases consistent with historical experience.



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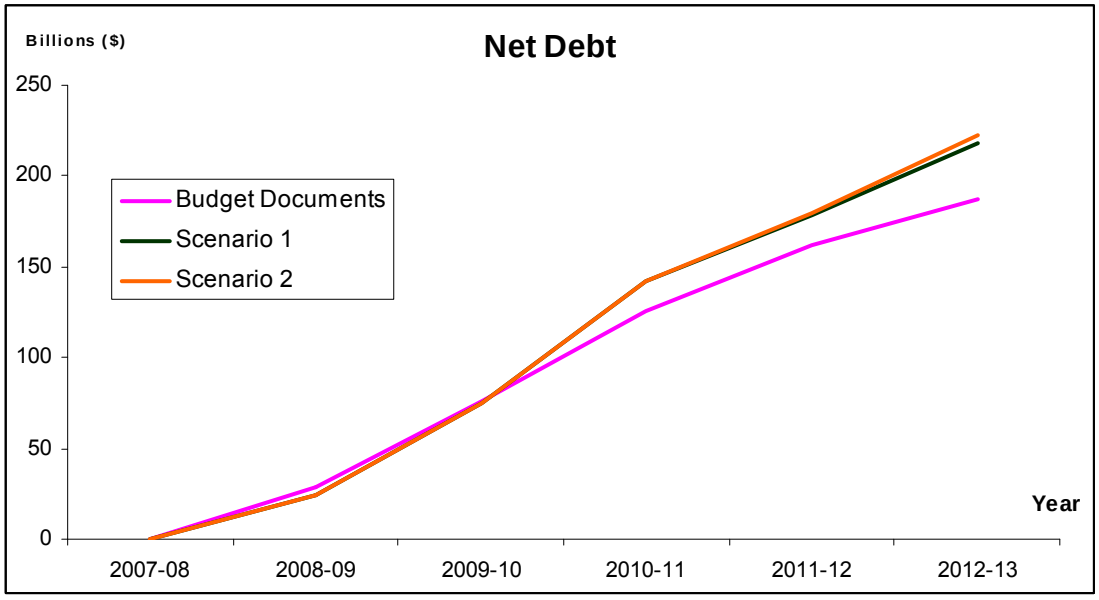
**TABLE FIVE NET OPERATING BALANCE ($B)**

| | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 |
|---|---|---|---|---|---|---|
| Budget Documents | 23.6 | -28.5 | -47.6 | -49.7 | -35.6 | -25.3 |
| Scenario 2 | 23.6 | -24.5 | -50.9 | -66.7 | -37.5 | -42.9 |

The net debt position indicated by the Table 5 is $222.5 (b) in June 2013. This is approximately $40 billion more than the estimate indicated by the Federal government.

The net debt of Australia for the years 2007-08 to 2012-13 is presented in Figure 4. It shows that the implausible projections have understated the Net debt by nearly $40 billion. This translates into a debt per capita over $10,000. This is significantly higher than the Budget estimates of $8,500.

**FIGURE SIXTEEN: FORECAST NET DEBT**




Once we relax the unrealistic assumptions contained within the Budget Papers it is clear that the Net Debt position will be somewhat worse than the government has already indicated.



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## Why has Australia performed well?

Australia has experienced a generation of economic reform. The Australian economy is much more resilient to economic downturns now than it has been in the past. For example the Australian economy did not enter into recession during the Asian crisis in the late 1990s, nor did it go into recession in the early 2000s. At some point we should recognise that this is not simply 'the lucky country' being lucky.

During the current crisis, the shock absorbers of the free market have operated to insulate the economy from some of the worst effects of the crisis. For example, the exchange rate depreciated (and has subsequently appreciated) and the stock market has fallen in value. A deregulated labour market has allowed employers and employees to renegotiate employment conditions to reduce hours worked and to job-share and the like. At the same time the Reserve Bank of Australia – a Commonwealth agency – has lowered interest rates by over four percent. In the lead up to the crisis Australian regulators took a very conservative approach to regulation and Australian financial institutions themselves have been reasonably conservative. All this implies that many of the weaknesses that plagued foreign economies were not evident in Australia. This is not an accident. The institutions – both public and private – of the economy worked well.

Of course our economy is somewhat vulnerable to international events and we do not suggest that Australia is immune from international crises. It is important to maintain a clear perspective of the strengths of our economy. It is not luck, it is not 'China', and it is not the 'mining boom'. It is the hard work of the Australian people and the economic reforms and leadership of the Hawke, Keating and Howard governments that have worked to fireproof the Australian economy.