



RESERVE BANK OF AUSTRALIA

ASPECTS OF AUSTRALIA'S FINANCES

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ASPECTS OF AUSTRALIA'S FINANCES

Given the financial orientation of this group, I thought I would focus my remarks today on some aspects of Australia's finances. In particular, I want to deal with three questions that often come up when I talk to analysts and bankers from overseas. These are:

- are Australian households over-gearred?
- does Australia have too much foreign debt? and
- do Australian banks rely too much on foreign wholesale funding?

Before I move on to these questions, I should note that, in my experience, foreigners never ask about government debt in Australia, or corporate debt for that matter. It is not hard to understand why, as both government and corporate debt in Australia are low by international standards.

Household Debt

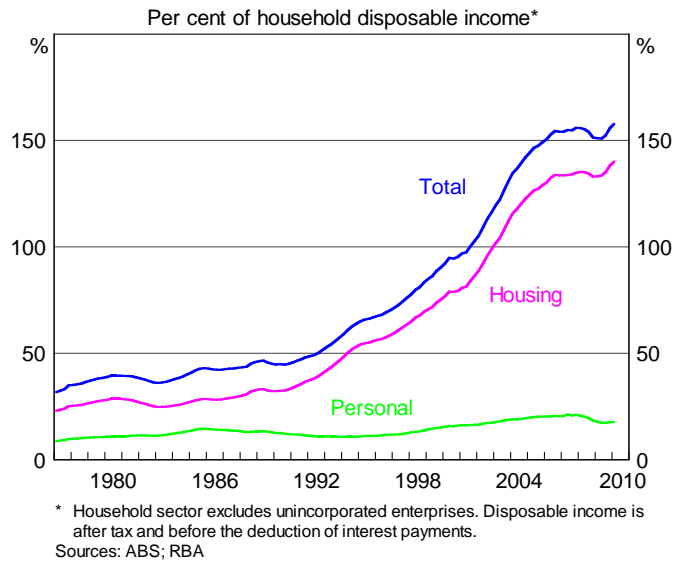
Let me then start with household debt.

The Reserve Bank monitors developments in household debt very closely as they have significant implications for the economy.

Glenn Stevens summarised the Bank's view on this last week when he noted that, while households had coped well with current levels of debt, it would not be wise for there to be further big increases in household indebtedness.

As you know, household debt has risen significantly faster than household income since the early 1990s. At that time, households on average had debt equal to half a year's disposable income; by 2006, debt had risen to around one and a half years' income. Since then, however, the ratio of debt to income has stabilised (Graph 1).

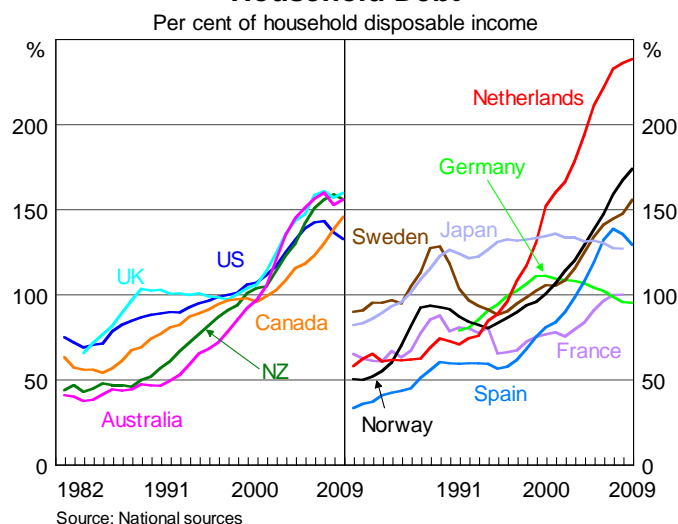
Graph 1
Household Debt



Most of the rise was due to housing debt, including debt used to fund investment properties. Other household debt, which includes credit card debt, car loans, margin loans and so on, has not changed much relative to income over the period.

The current household debt ratio in Australia is similar to that in most developed countries (Graph 2).¹ Significant exceptions are Germany and France, where the ratios are lower, at around one year's income, and the Netherlands, where the ratio is much higher – almost 2½ years' income – due to the tax incentives for households to stay geared up.

Graph 2
Household Debt



¹ Note that there is no particular reason why household debt ratios should be the same across countries.

All countries have experienced rises in household debt ratios over recent decades. Clearly, therefore, the forces that drove the rise in household debt ratios were not unique to Australia. The two biggest contributing factors were financial deregulation and the structural decline in interest rates.

One of the consequences of financial deregulation was that the availability of credit to households greatly increased. Up to the 1980s, the various controls on the financial sector meant that the ability of households to obtain credit was constrained. Even obtaining a housing loan was relatively difficult. However, after financial regulations were eased around the globe, many new financial products were developed specifically for households, and particularly relating to housing finance. Households found it was much easier to get a loan. Most loans products have worked well, though some have caused significant problems; sub-prime loans in the United States are the clearest example.

The level of interest rates in most developed economies in the past decade has been about half that in the decade to 1995. This structural decline in interest rates has facilitated the increase in household debt ratios because it reduced debt-servicing costs (Table 1). Households have therefore found that they can now service more debt than used to be the case.

	1985–1995	2000–2010
New Zealand	12.7	5.9
Australia	11.4	5.3
United Kingdom	10.1	4.2
Canada	8.7	3.1
Germany	5.9	2.9
United States	6.2	2.9

Sources: central banks; Thomson Reuters

Has the rise in household debt left households over-exposed financially? In trying to judge this, there are a few considerations to take into account.

First, at the same time as the household debt ratio has risen, so too have the assets held by households. Some commentators might dismiss this as simply reflecting the fact that the additional debt has been used to inflate asset values. There is some basis for this in relation to housing assets but, even if we exclude housing and focus only on households' financial assets, the statement is still true. Financial assets held by households have risen to the equivalent of 2.75 years of household income, up from 1.75 years' income in the early 1990s.

Second, the available data suggest that the increased debt has mostly been taken on by households which are in the strongest position to service it. For example, if we look at the distribution of debt by income, we can see that the big increases in household debt over the past decade have been at the high end of the income distribution (Graph 3). Households in the top two income quintiles account for 75 per

cent of all outstanding household debt (Graph 4). In contrast, households in the bottom two income quintiles account for only 10 per cent of household debt.

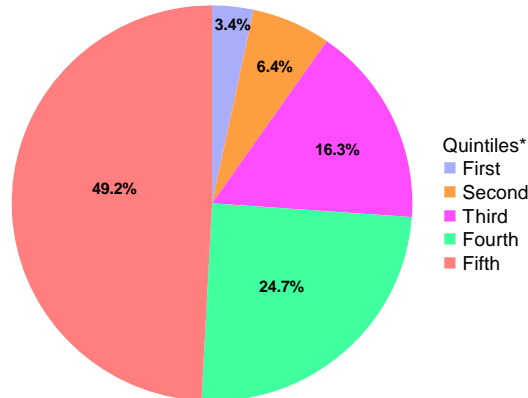
Graph 3
Owner-Occupier Debt*



* Average debt over the year
** Quintiles include all households
Sources: ABS; RBA

Graph 4
Indebted Households

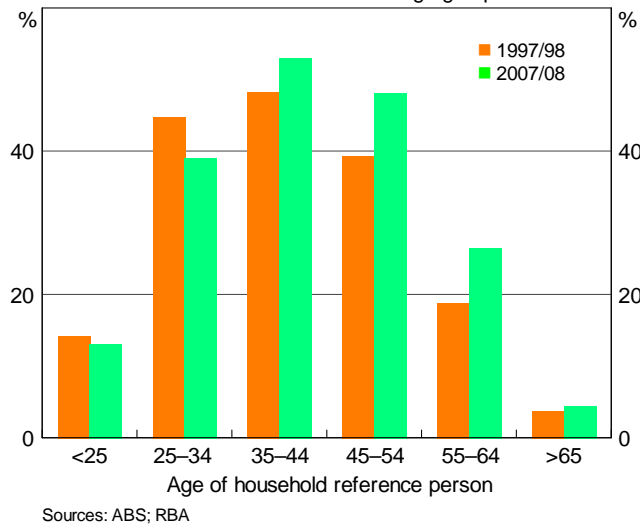
Share of household debt held by income quintiles, 2006



* Income quintiles include all households
Sources: HILDA Release 6.0; RBA

If we look at the distribution of debt by age of household, we see that the increased debt has mainly been taken on by middle-aged households. The proportion of 35–65 year olds with debt increased significantly through to 2008, as households have been more inclined to trade up to bigger or better located houses, and to buy investment properties. Households under 35 years of age (i.e. the group that would typically encompass first-home owners), in contrast, have seen a fall in the proportion with debt (Graph 5).

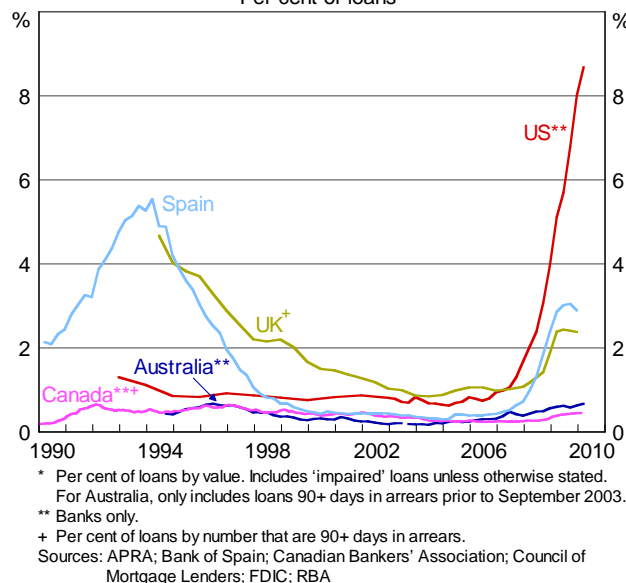
Graph 5
Households with Owner-Occupier Debt
 Per cent of households in age group



Another factor that has contributed to the resilience of household finances is that, by and large, the debt has not been used to increase consumption. Apart from some brief periods, household consumption has not been unusually elevated during this period of rising debt. Rather, the debt has mainly been used to acquire assets.

Perhaps the best, and most direct, indicator of households' capacity to support the increase in debt is the arrears rates on loans. This remains very low in Australia. The current arrears rate is around 0.7 per cent. This is one of the lowest rates among developed economies (Graph 6). Other data also suggest that households' aggregate debt-servicing capacity is quite strong: in recent years more than half of owner-occupiers have been ahead of schedule on the repayments on the loan they took out to buy their property.

Graph 6
Non-performing Housing Loans
 Per cent of loans*



Within this relatively benign aggregate figure, pockets of stress have emerged from time to time. We saw this clearly in the south-western suburbs of Sydney following the sharp run-up in Sydney house prices over 2002 and 2003. More recently there are some signs of increased housing stress in south-east Queensland and Western Australia, again following sharp rises in house prices in these areas.

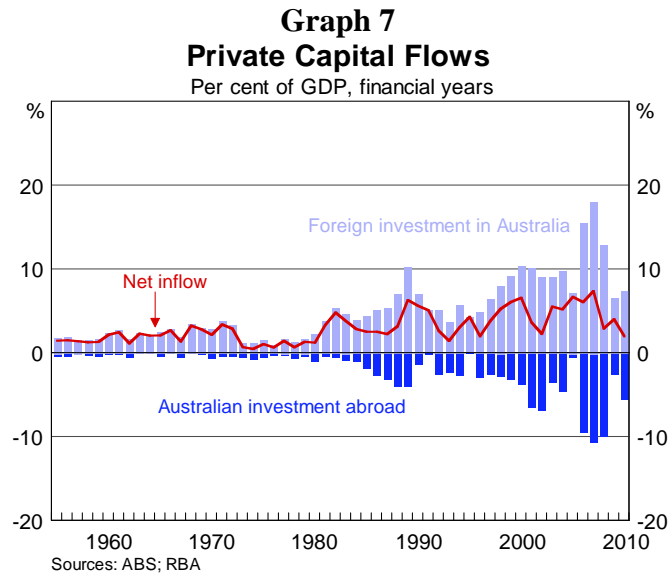
Another segment of the market that will bear close watching is first-home owners. They have accounted for an unusually high proportion of housing purchases over the past couple of years – around 40 per cent. This has reflected the incentives created by various first-home owner concessions. Most of these purchases have been funded by floating rate mortgages, and the average loan to valuation ratio is relatively high, at around 90 per cent. Clearly, this group will be very sensitive to changes in interest rates.

In summary, if we look at the way the increase in household debt has been distributed, what households have done with the money, and the arrears rates on loans, it is reasonable to conclude that the household sector has the capacity to support the current level of debt. Having said that, the higher the level of debt the more vulnerable households are to shocks that might affect the economy. We at the Reserve Bank therefore welcome the fact that the household debt ratio has flattened out in recent years and, as Glenn Stevens remarked last week, there would be benefits in that stability continuing.

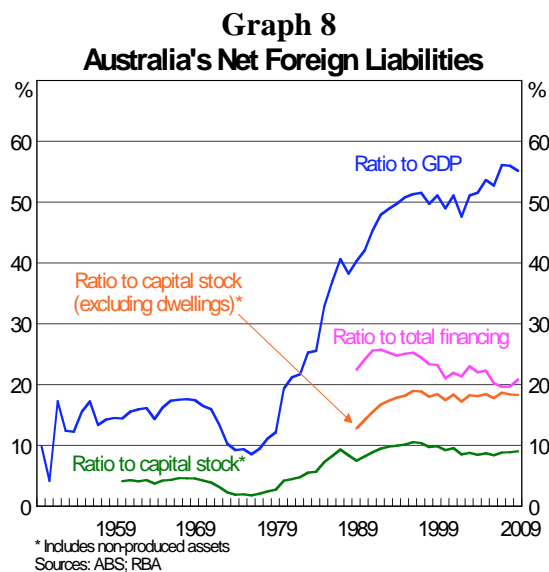
Foreign Debt

Let me now turn to the question of Australia's foreign debt.

Following the floating of the exchange rate and the removal of capital controls in the early 1980s, both foreign investment in Australia and Australian investment abroad increased sharply as the Australian economy became more integrated into the global financial system (Graph 7). In net terms, capital inflows increased from around 2 per cent of GDP to around 4 per cent, and, in the latest decade, to an average of almost 5 per cent of GDP. The current account deficit widened correspondingly, since with a floating exchange rate the current account and capital account balances must be equal and offsetting, both being determined simultaneously through the interaction of a wide range of economic and financial forces.



The pick-up in net capital inflow meant that the ratio of net foreign liabilities to GDP rose. From around 20 per cent in 1980, it rose to around 50 per cent by 1995. It then flattened out for a decade, but in recent years the further increase in net capital inflow has seen the foreign debt ratio rise again (Graph 8).



Expressing foreign liabilities relative to GDP is, perhaps, the most common way in which people analyse them. For emerging markets, this measure has been shown to have some association with vulnerability to balance of payments crises. This is because emerging market economies often have a fixed or managed exchange rate and their foreign liabilities tend to be denominated in foreign currency, rather than domestic currency. In such instances a rise in the ratio of foreign liabilities to GDP does indicate increased vulnerability as it signals an increase in the country's foreign exchange risk and liquidity risk.

For a developed economy that can borrow overseas in its own currency, and which has a floating exchange rate, the significance of a rise in the ratio of foreign liabilities to GDP is less clear. It also needs to be kept in mind that, as economies develop, most

financial variables rise relative to GDP. This seems to be a consequence of financial deepening. Expressing net foreign liabilities as a percentage of the total financing in the economy is, perhaps, more relevant, since it gives some indication of the proportion of the economy's funding that is coming from offshore. In Australia, this ratio has remained relatively steady since the late 1980s, at a little over 20 per cent.

Foreign liabilities can also be measured relative to the physical capital stock of the country, giving an indication of the proportion of the capital stock being funded by foreigners. This ratio, too, has been relatively steady in Australia since the late 1980s, at around 10 per cent.

One could argue that housing assets should be excluded from this latter measure, since foreigners' participation in the housing market is relatively limited. On that basis, the ratio rose somewhat in the early 1990s, but has been relatively steady since.

In short, these measures do not suggest the build-up of any significant disequilibrium in the economy resulting from foreign liabilities.

For developed economies with a floating exchange rate and the capacity to borrow offshore in their own currency, the risk from rising foreign liabilities is not that they will cause a traditional balance of payments crisis, but that they will undermine financial stability. The process by which this can happen typically starts with a country, for one or more reasons, becoming attractive to foreign investors. Capital floods in, overwhelming the capacity of the economy to use it productively. Credit is misallocated and eventually there is some form of a domestic financial crisis. This type of crisis can occur even in highly sophisticated economies, as illustrated by the recent sub-prime crisis in the United States.

The policy challenge for countries in this situation is to ensure that the ready availability of offshore funds does not end up distorting or weakening the financial side of the economy.

As the recipient of large amounts of offshore funds for much of the post-float period, Australia has had to remain alert to these challenges. By and large, it has been able to successfully absorb significant amounts of offshore capital over many years. There are several factors that have contributed to this:

- First, the country's foreign liabilities are virtually all either in Australian dollars or hedged back to Australian dollars.² Australia is able to do this because foreign investors are happy to hold a certain proportion of their assets denominated in Australian dollars. This means that Australian borrowers do not face foreign exchange risk on the capital sourced from overseas. Therefore, if sentiment turns and the exchange rate falls, domestic borrowers are largely unaffected. The large swings in the exchange rate of the Australian dollar that have occurred over the past couple of decades in no way threatened the corporate and financial sectors.

² D'Arcy P, M Shah Idil and T Davis (2009), 'Foreign Currency Exposure and Hedging in Australia', *RBA Bulletin*, December, pp 1–10.

- Second, the offshore capital that has flowed into Australia has been used essentially to fund high levels of investment. Australia uses foreign capital not because its national saving ratio is low, but because its investment ratio is high by the standards of developed economies (Table 2). In the past decade, for example, the national savings rate in Australia has averaged 22 per cent, much the same as in Europe and well above the figure of 15 per cent in the US and UK. Over the same period, the investment ratio in Australia averaged 27 per cent, whereas in most developed economies it has averaged around 20 per cent. This high ratio of investment to GDP is, I believe, an indication that Australia is using foreign capital productively, and sustaining the capacity of the country to service that capital.

	National Saving	National Investment
Australia	22	27
Canada	23	21
France	20	20
Germany	22	18
Japan	27	23
United Kingdom	15	17
United States	15	19

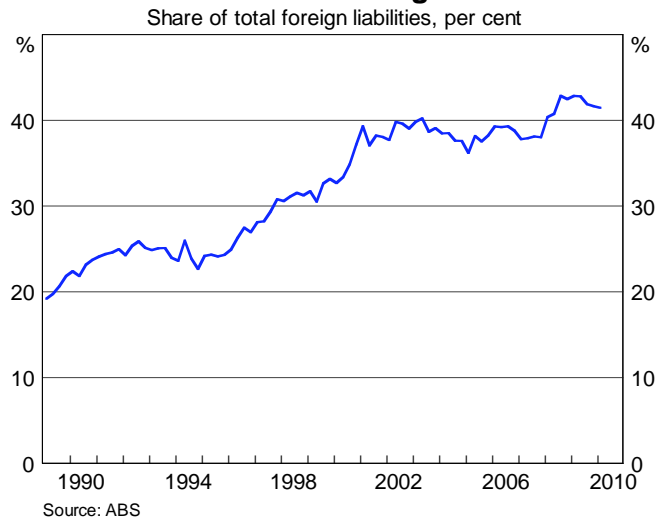
Source: ABS, IMF

- Third, credit standards, by and large, have remained robust and the amount of capital wasted through bad loans has remained limited.

Foreign Borrowing by Banks

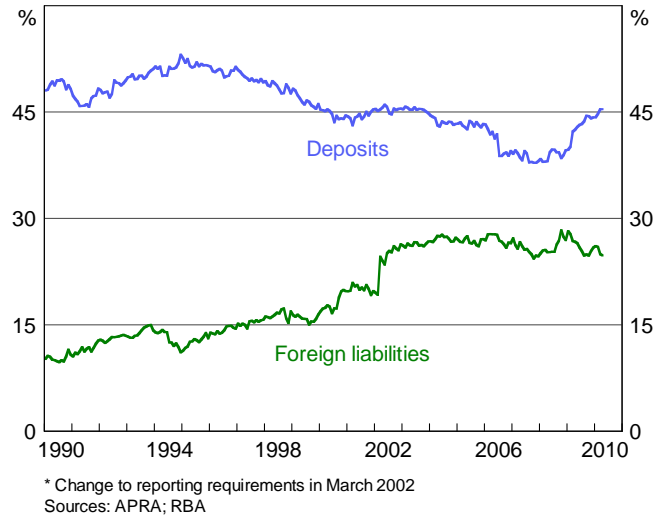
Within Australia's total foreign liabilities, the proportion accounted for by the foreign borrowing of Australian banks has increased. Virtually all this rise took place through the decade of the 1990s. Banks accounted for a little over 20 per cent of Australia's foreign liabilities in 1990 but, by 2001, this had risen to around 40 per cent. It has not changed much in the past decade (Graph 9).

Graph 9
Australian Banks' Foreign Liabilities



Part of this trend was the result of banks adjusting their balance sheets following financial deregulation and the growth of financial markets. These developments gave banks the opportunity to move from deposit funding to various forms of funding through markets, as a way of diversifying funding sources or reducing funding costs (Graph 10).

Graph 10
Banks' Funding Liabilities*



The growth of the superannuation industry, following government decisions to promote compulsory superannuation, probably contributed to this trend. Firstly, it meant households became less inclined to hold their savings as bank deposits, and second, the pool of funds created by superannuation increased demand for securities such as bank securities.

Within this trend away from deposits to funding through securities markets, there were also forces that resulted in banks increasing their use of offshore funding. As an example, a substantial proportion – about 20 per cent – of superannuation savings flow offshore, mainly into foreign equities. This reduces the pool of savings available

domestically to banks and, other things equal, increases the amount of offshore funding banks need to undertake.

It is also an inescapable fact that, with Australia running a current account deficit, some funding for the economy needs to come from offshore. Households, by and large, cannot borrow offshore and the government sector has not had much need for offshore funding. That leaves the corporate and the financial sectors. Of these, the financial sector has a comparative advantage in offshore borrowing, because of the relatively high credit rating of Australian banks, both compared with Australian corporations and, in recent years, with banks in other countries.

Banks in Australia have therefore established a significant role in intermediating the flow of funds from overseas to Australia. Banks in countries where there are surplus savings, such as those in Europe, play a similar role, though in reverse; they channel funds from domestic savers to offshore.

There is a natural tendency to believe that it is riskier for banks to borrow offshore than to lend offshore. Events over the past few years, however, have shown that one activity is not intrinsically more risky than the other. It is a matter of how the risks are managed. In the lead up to the financial crisis, for example, European banks were running very significant risks through their offshore lending, not only in terms of the credit quality of the US assets they were buying, but also in terms of the short-term nature of some of the funding transactions that supported those assets. The US dollar shortages that keep recurring in global money markets are manifestation of those funding risks. These risks were largely unrecognised and, it seems, not very well managed.

The Australian banks have long recognised the risks that come from their business model, and, in my experience, are very focused on understanding those risks and managing them. This contributed to their relatively good performance through the global financial crisis.

Conclusion

You may have noticed that I have not given categorical answers to the three questions I listed at the start of my talk. This is because I don't think it is possible to give simple 'yes' or 'no' answers to these questions.

However, looking at a broad range of financial data, and considering the fact that the Australian economy and financial system have exhibited a high degree of stability over many years, despite the many global events that have tested their resilience, is, I think, grounds for confidence that the economic and financial structure that has evolved in Australia is sustainable.

TRANSCRIPT OF Q&A SESSION WITH RIC BATTELLINO

15 JUNE 2010

QUESTION: Thanks very much. That was very insightful. Just what would you see as the three key challenges, then, to upsetting the housing –the steady state of housing or rent in the economy today? So, if I were an offshore bank, for example, saying the level of housing debt is too high, what you would answer and say what are the three key challenges that they'd have that might actually cause it to be higher and upset it, if you like?

MR BATTELLINO: Upset it? Well, the biggest things that can go wrong are when economies falter quite badly. And the economy slows down and the unemployment rate starts to rise. So you've really got to keep an eye on things that could bring about that situation. But, having said that, even if there was some slowing in the economy, I think we'd be fairly confident that the household sector is in – or their finances are in - pretty good shape. As I say, you can look at the way that debt has been distributed. You know, most of the rise in debt is because households, for one reason or another, felt they had the capacity to gear up, buy more assets and basically make use of the capacity they had to service that debt.

So the fact that debt ratios here are very similar to most other countries – I think it suggests to me there's nothing unusual happening. I sometimes wonder why it is that foreigners have such a view about Australian households. I think it's partly – there's probably two reasons for that. First of all, if you measure just the saving rate of households in Australia as measured from the national accounts, it tends to look quite low. It's down there with United States. But that measure of saving for a household in Australia is not very meaningful because the Australian households essentially have most of their savings in securities-based products and, essentially, the Australian households own the corporate sector through their superannuation industries' funds and, therefore, this means that you really have to combine – look to the savings of the household sector and the corporate sector combined. Australian households really save through their ownership of the corporate sector. And, as I said, for the country as a whole, the saving rate is actually very good.

The second issue is that of house prices. People feel that house prices in Australia are quite high, and that's quite often because the ratio of house prices to income that are published for Australia tend to focus mainly on prices in the cities, and they are quite elevated. But, if you look across the whole country, the ratio of house prices to income is not that different from most other countries.

QUESTION: Just on that topic, do you think that, with offshoring and jobs becoming more scarce locally, there's a tendency for the cities to have all the jobs and, therefore, have all the demand for housing and create almost – what shall we say – like almost barren areas of property or barren areas where people aren't really –
5 they can't get work in these areas where the housing prices are lower? Isn't that a concern that housing prices are too high in the cities?

MR BATTELLINO: Well, the house prices in cities aren't high relative to the income in the cities because most of the figures you see published on house prices to income
10 – what they do is they measure house prices in the city and express it as a proportion of income of the whole country. But, if you do house prices relative to the incomes of the people living in those areas, then the prices in the cities also are quite reasonable. But, as to the demographics as to where people end up living, I mean I
15 can't really sort of say much about that. But, clearly, there's a lot of forces working there. Some work to pull people into the cities but there's also forces that encourage people to move out into other parts of the country. So I'm not clear – it's not clear to me where the balance will lie.

QUESTION: The Australian economy has showed a lot of resilience in this last GFC
20 period with budget deficits turning around quicker than were expected; unemployment sort of peaked a lot lower than everyone expected. What's your views on the impact of overseas debt and sovereign debt and the impact that might have on Australia? Is it a likelihood? And, if it does happen, our resilience to
25 whether a – like, a second wave, so to speak.

MR BATTELLINO: Well, yeah, the events in Europe really are quite worrying because - one of the problems when you have governments in financial difficulty is there's nobody there to bail out governments. I mean, if a government gets into
30 trouble, it's really – you've got to look at other governments or the IMF and the capacity – the bigger you are, the less capacity there is for somebody else to bail you out. So the developments in government debt are, I think, a worry because it's not clear to me that they can be solved certainly any time soon and if they are going to be solved through fiscal tightening, that actually means some quite difficult periods
35 ahead for some of these economies.

We're fortunate here in Australia though that the region where we are – well, certainly Australia's own government debt position is very good; we've one of the best in the world. But, all through the region where we are and our trading partners,

government debt is not a problem. So we're in this part of the world where, to the extent if we are going to be affected by these issues – and I suspect to some extent we will be – we're in a part of the world which will be least affected by these. How serious is it going to be? I really can't say. It depends on what measures are taken to deal with these issues and where it heads to from here.

QUESTION: The last month or two has been dominated by what's been happening in Greece, and I suppose it's been affecting world markets, and I note this morning that the Minutes of the RBA put interest rates on hold because of that uncertainty. Do you think the governments over there have sorted that out and do you think we're through it or do you think there will be some more countries like that which might have some issues in the months to come?

MR BATTELLINO: Well, just clarifying on the Minutes there, that was one of the factors the Board took into account. But, also, the more general issue is the fact that we've been through this tightening process for the last few months and we were very keen to get interest rates back to a more normal level, given the way the economy had evolved, and we basically feel we've done that. So that was really the key reason why we now feel we've got the flexibility, because of what we did in the past, to take some time to see how things evolve.

In terms of the situation in Greece, well, the starting position for these countries is so poor in terms of their finance that even very severe fiscal tightening still leaves them with big budget deficits. And I think that's the thing that people are having trouble getting their minds around. How do you get out of it? Because I have to say these sort of issues are pretty well unprecedented and, to the extent they've arisen in the past, they've usually been associated with wars and they've usually ended up being sort of solved by periods of inflation, which has basically just inflated up the asset values of the economy. So there's a lot of uncertainty as to how countries can deal with these issues.

QUESTION: I think Australia's economy has done quite well with China in the last couple of years, and it sort of probably reduced the impact of the global financial crisis. Have we thought about – are we putting all our eggs in one basket? What if China does deteriorate in the future? What's Australia's plan behind that as a plan B to counteract any significant impact on the Australian economy?

MR BATTELLINO: Well, in recent years, I think Asia and China in particular have been a very significant force on our economy. But one of the things we noticed through the Asian financial crisis, if you go back to the late-'90s, even at the point we had over half our exports – almost two-thirds of our exports were going to Asia
5 even then. And so we had – all our major trading partners basically had this massive financial crisis, and you'd think that would have really affected the Australian economy. But one thing we noticed is that, being a – one of the advantages that comes from being a commodity exporter is that it's very easy to reorientate your markets. So, you can – my impression is that, if you're a
10 manufacturer or something, you have to have very sophisticated distribution channels and all sorts of things set up, whereas if you're selling coal and iron ore and this customer now doesn't want it, you just send the ship somewhere else. It's pretty easy if you're just selling into markets to redirect the product somewhere else. So we were quite surprised through the Asian crisis how resilient our exports were
15 through that period, given what happened to our trading partners.

So, there's no doubt that, if China was to slow down – and I have to say, at the moment China is trying to slow down because their growth rate really picked up a lot late last year/early this year and so it is trying to slow down and, in some ways, I
20 welcome that because I think it's actually going to make our life here easier to have a more moderate growth rate in China. But, if it does slow down, it will have impacts on us, but I'm sure the economy will be able to weather that the way it has in the past. I mean, there will be other markets around.

25 QUESTION: For quite some time, the Reserve Bank has been concerned about the economy's reliance on the resources market. With current slowdown in European markets potentially can also – the broader developing economies and initiation of RSPT – would you please elaborate a bit more about the reliance on the mining sector for the Australian economy in the next few – say, five years? What will be the
30 impact and what are the concerns? Thank you.

MR BATTELLINO: Well, you know, the broad fact here is Australia is having an unprecedented mining boom at the moment. Mining investment normally runs at about 1.5 per cent of GDP and, in a boom period – say, in the late-'80s commodity
35 boom – it got up to double that – 3 per cent – and that was a very significant boom. At the moment, investment is already up to – mining investment is up to 4.5 per cent of GDP, so three times the normal rate, and all the projections are that it's going to go a lot higher yet. If you start adding up all the projects that are

scheduled around the place, it is going to be very strong. So the question is: how is the economy going to accommodate that sort of investment boom? And, when we look at how the economy has performed in the past through those periods, it's pretty clear that those sort of booms have very significant impacts on the economy and do
5 cause a lot of stresses and strains. They're basically periods of very fast growth in economic activity and, broadly speaking, most parts of the economy benefit from that. But there are some sectors who do get affected by the wash of it all.

But, that's really - I think, the challenge for the Australian economy for the next few
10 years is going to be how to accommodate this mining boom that's going on and the lessons from history are that, if you don't maintain fairly disciplined economic policies through those periods, you can quickly get all sorts of distortions built up in the economy – inflation in particular – which end up causing a lot of problems in the economy. So it's quite a challenge. It's a good challenge to have, but it's a
15 challenge nonetheless.