Australia's Foreign Debt Outlook
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Inquiries

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Introduction

The current account deficit (CAD) measures the net result of Australia's current transactions with the rest of the world. As a first approximation the CAD can be thought of as giving Australia's exports less imports. Exports of goods and services enter with a positive value and imports of goods and services are deducted. In addition to exports and imports, incomes received from abroad minus incomes paid abroad are included as are other current transfers, items such as pensions received by Australian residents. The current account is financed by capital inflows, including borrowing from overseas. Overseas borrowings increase the foreign debt. Hence there is a fairly close link between the CAD and Australia's foreign debt.

The CAD is once again an issue in Australia. Recent figures suggest a large widening in the CAD that is once again the subject of public attention. At the time of the 1997 Budget the 1997–98 CAD was forecast at $21 billion or 4 per cent of GDP. The mid-year review increased that to $23 billion or 4.25 per cent of GDP. The 1998 Budget estimates the CAD at $25 billion or 4.5 per cent of GDP for 1997–98, rising to $31 billion or 5.25 per cent of GDP in 1998–99. Some private forecasts are higher.

There has also been discussion from time to time about the sustainability of our foreign debt. At one stage there was a concern that Australia's foreign debt to GDP ratio would continue to increase apparently without limit. This possibility is examined further below.

Foreign Debt—where are we headed?

The latest figures for foreign debt show it now stands at $224.5 billion or 41.3 per cent of GDP (based on the seasonally adjusted GDP (expenditure estimate) for March 1998 expressed as an annual rate). The former governor of the Reserve Bank of Australia (RBA), Mr Bernie Fraser, pointed out in 1995 that the bulk of the growth in Australia's foreign debt occurred in the first half of the 1980s when the net debt rose from 6 per cent of GDP to around 35 per cent. The increase since then had been more gradual peaking at 42 per cent in 1993 and then easing back to 40 per cent in mid 1995. The rapid increase in foreign debt in the 1980s followed the widening of the balance of payments current account deficit (CAD) which began in the late 1970s. This was associated at the time with the euphoria surrounding the so-called 'resources boom.'
Generally the 1990s have seen foreign debt hover at or just above 40 per cent. We have perhaps even become complacent about the foreign debt position. In November 1997 the current RBA Governor, Mr Ian Macfarlane, giving evidence to the House of Representatives Standing Committee on Financial Institutions and Public Administration, talked about the foreign debt as being one of those problems either eliminated or under reasonable control.\(^3\) Since then, in a speech given in March 1998, the Governor has again drawn attention to Australia's weaknesses due to the widening of the CAD in the short term and the large increase in external debt likely to follow.\(^4\) He also cited IMF estimates of the external debt of other countries, these being reproduced in the table below.

<table>
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<th>Country</th>
<th>Net External Debt—% GDP</th>
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<tr>
<td>New Zealand (1996)</td>
<td>64.2</td>
</tr>
<tr>
<td>Sweden (1996)</td>
<td>45.2</td>
</tr>
<tr>
<td>Canada (1996)</td>
<td>44.8</td>
</tr>
<tr>
<td><strong>Australia (1996)</strong></td>
<td><strong>40.2</strong></td>
</tr>
<tr>
<td>Greece (1993)</td>
<td>33.3</td>
</tr>
<tr>
<td>Finland (1996)</td>
<td>31.6</td>
</tr>
<tr>
<td>Denmark (1996)</td>
<td>29.9</td>
</tr>
<tr>
<td>Ireland (1996)</td>
<td>29.8</td>
</tr>
<tr>
<td>United States (1996)</td>
<td>20.2</td>
</tr>
<tr>
<td>Austria (1996)</td>
<td>12.3</td>
</tr>
<tr>
<td>Italy (1996)</td>
<td>6.0</td>
</tr>
<tr>
<td>Spain (1995)</td>
<td>3.8</td>
</tr>
<tr>
<td>Norway (1993)</td>
<td>3.7</td>
</tr>
<tr>
<td>Germany (1995)</td>
<td>-2.1</td>
</tr>
<tr>
<td>France (1995)</td>
<td>-2.8</td>
</tr>
<tr>
<td>Portugal (1993)</td>
<td>-6.7</td>
</tr>
<tr>
<td>Netherlands (1994)</td>
<td>-19.7</td>
</tr>
<tr>
<td>Japan (1996)</td>
<td>-19.9</td>
</tr>
<tr>
<td>Switzerland (1995)</td>
<td>-99.0</td>
</tr>
</tbody>
</table>

Source: IJ Macfarlane, 'Some thoughts on Australia's position in the light of recent events in Asia,' Speech to the Bull and Bear Luncheon, 26 March 1998.

While Australia's net foreign debt is not the highest on the list, only New Zealand is significantly higher.

Some other interesting features of the table are worth commenting upon. Every debt is held by someone else who treats it as an asset. The same applies to external debts—a negative entry indicates that residents of that country hold more debt incurred by overseas borrowers than those residents have incurred overseas. Japan is the largest creditor country by size, though the largest as a proportion of GDP is Switzerland. Overall the total of all countries' net external debt should sum to zero.

There has been a view that the foreign debt incurred by governments is a problem for the nation while private debt incurred overseas is only an issue for the individual borrower. The unfolding Asian financial crisis illustrates the problems that can be associated with foreign debt, even if it is mainly private foreign debt. The Asian financial crisis has also
caused Australia's CAD on the balance of payments to begin to widen. Now that Australia's foreign debt is once again an issue it is timely that we have a close look at where Australia's foreign debt is heading.

Returning to the actual figures, Australia's foreign debt is now $224.5 billion. The CAD should be around $25 billion in 1997–98 rising to $31 billion in 1998–99 according to the 1998–99 Budget Papers. The bulk of the CAD will be financed with debt. A small share of the CAD has been financed by direct investment recently. For the moment, for the purposes of this argument, equity investment will be ignored to keep things simple and because direct foreign investment cannot be relied upon. On that basis the foreign debt would increase to around $260 billion, a little under a 16 per cent increase by June 1999. By contrast GDP itself is likely to grow at around 8.3 per cent per annum over the next five quarters based on the Budget forecast of 3 per cent real GDP growth and 3.5 per cent through year increase in the GDP deflator. On those figures the foreign debt to GDP ratio is likely to increase from 41 per cent to about 44 per cent over the next 12 months.

As it happens there is a formula, which allows us to simply answer questions of the form 'what would happen to the debt to GDP ratio if the CAD remains at present levels?' The formula derived in the appendix says that, at any time, the economy is heading for a foreign debt to GDP ratio (from now on just the 'foreign debt ratio') equal to the ratio of the CAD, as a share of GDP, to the growth in GDP, the standard measure of economic growth. The formula can be expressed in the following words: we are heading towards a foreign debt ratio equal to the CAD ratio divided by the growth rate.

On the latest figures we have an official forecast CAD to GDP ratio of 5.25 per cent and a GDP growth rate (nominal) of 6.6 per cent. Using the formula, these figures suggest that we are heading for a foreign debt to GDP equilibrium ratio of 5.25/6.6, or 80 per cent.

Australia now has a foreign debt ratio of 41 per cent. That means we are a bit over half the way to the foreign debt ratio likely to be generated by Australia's economic fundamentals.

Our analysis suggests that if we had had a history of the CAD ratio and GDP growth at current levels, then we would now have foreign debt of around $435 billion, not the $224.5 billion we actually had in March 1998.

Fortunately we have indeed had a different history with the CAD ratio often lower than the present, and more importantly the nominal GDP growth rate normally much higher than the present. Nominal growth has fallen because inflation has fallen. It is worth reflecting on the significance of the nominal GDP growth rate in the formula.

Every homeowner who bought a house before the 1990s is aware of the effect of past high inflation rates in quickly eroding the real value of their home loans. Over time as their incomes increase, they also find their capacity to service the outstanding loan improves with time.
In previous years much the same thing was happening to Australia's foreign debt. For example, for much of the 1970s and 1980s we had inflation of around 10 per cent and real growth around 4 per cent. That gives us a nominal GDP growth of 14 per cent. Using that figure with our current CAD ratio would have us head towards a foreign debt to GDP ratio of 31 per cent of GDP. That is more like the sort of figure we experienced in earlier years. For example, at the end of 1988–89 the foreign debt to GDP ratio was 33 per cent.

More recently inflation has been relatively low averaging between 2 and 3 per cent while the CAD ratio has remained much the same as it has always been. In 1988–89, to continue the example, the CAD ratio was 5.6 per cent, though that was something of a high point. From 1988–89 to the present the average CAD ratio has been 4.6 per cent, about the same as now. The important thing to realise is that, with a CAD ratio of say 5 per cent, as nominal economic growth (i.e. real growth plus inflation) falls from 14 to around 6 per cent, we head for a foreign debt ratio of 80 odd per cent rather than the 32 per cent we were trending towards or hovering about in the earlier decades.

There has also been discussion from time to time about the sustainability of our foreign debt. The formula developed here can throw some light on those types of questions. For example, suppose we maintain inflation within the Reserve Bank's 2-3 per cent target range and maintain real growth at 3.5 per cent. We can now easily determine that under those conditions if we want to stabilise the foreign debt ratio at the current 41 per cent we need to reduce the CAD ratio to 2.5 per cent (0.41 times 6). If instead the CAD is allowed to continue at 5 per cent of GDP, then foreign debt will blow out to 83 per cent of GDP. At 4.6 per cent, the average CAD ratio over the last 9 years, the foreign debt ratio would blow out to 77 per cent. For the same CAD ratio, a lower rate of growth produces a higher ultimate foreign debt ratio.

An important implication to note is that the foreign debt ratio, whatever that ratio might be, is in fact stable. The CAD could in principle be any magnitude but the formula would show that Australia would nevertheless head towards a stable debt ratio. That ratio may well be too high for general acceptability, but at least it does not accelerate as was feared in the 1980s.

With low inflation it would appear wise to keep the CAD to GDP ratio as low as possible in order to avoid blowing out the foreign debt to GDP ratio. Unfortunately the current settings suggest we are headed for a level of foreign debt much higher than we have experienced in modern times. As we approach those levels there is bound to be heightened interest in issues to do with foreign debt and, as related issues, levels of foreign investment and ownership. The current settings suggest we are on the way to foreign debt at 80 odd per cent of GDP compared with 41 per cent in March 1998.

Strictly speaking the formula applied here refers to all net liabilities to foreigners—not just foreign debt. If Australia experienced higher direct investment it would mean that less debt would be required to cover the CAD. Direct or equity investment has been running at low levels lately. Also, for many people foreign ownership is hardly less important as a
policy issue than foreign debt. Nevertheless, it is easy to adjust the formula to exclude equity investment if that is desired. That is done in the appendix.

Policy implications

This is not the place for a full policy discussion. However, a few observations would appear to be in order.

Foreign direct investment in Australia has barely moved recently. If Australia can attract more equity investment the need for additional foreign debt will be reduced. However, that would then raise another set of issues to do with foreign investment.

The Budget Papers suggest that the blow out in the CAD is likely to be temporary. While it is far from clear how long it will take to occur, once Asia recovers, exports can be expected to resume their earlier path. If that turns out to be the case then some of the problems identified here will no longer be relevant. There would be a rise in the temporary foreign debt ratio, but we would soon revert to a course towards a lower foreign debt ratio. Of course, potential problems with China and Japan, both of which are facing uncertain outlooks, may interfere with this scenario.

Higher inflation would increase nominal growth and so lower the foreign debt ratio towards which Australia is heading. However, it is hardly sensible to advocate that as a desirable course of action.

The only other approach to prevent a blow out of foreign debt to 80 per cent of GDP is to directly tackle the CAD itself. Just how to do that raises a raft of policy options.

• Industry policy, including competition policy is designed to make domestic industry more competitive in the world economy.

• Macroeconomic responses that aim at lifting savings rates are designed to bring aggregate expenditure closer into line with aggregate output.

• Measures to influence exchange rates are designed to switch local and international spending away from other countries towards Australian goods and services.

The above is, of course, only a brief outline of the possible policy responses. It is not possible here to fully discuss those options. The aim here has been the more limited one of trying to understand where Australia foreign debt is headed given the recent performance of the CAD.
Endnotes


Deriving the formula for foreign debt

Let the current account deficit be written as

(i) \( CAD = d \cdot GDP \)

where \( d \) is the ratio of the CAD to GDP. Now GDP is growing over time so we can express GDP as

(ii) \( GDP = GDP \cdot e^{gt} \)

Where \( e \) is the exponent, \( g \) the growth rate and \( t \) is time. This formula is merely a convenient expression which gives GDP at any point in time for a given growth rate.

From equations (i) and (ii) we have

(iii) \( CAD = d \cdot GDP \cdot e^{gt} \)

Now debt, which we can call \( D \), is the accumulated value of past CADs or \( \int CAD \) where \( \int \) is the integration symbol. Hence

(iv) \( D = \int d \cdot GDP \cdot e^{gt} \)

and the solution is

(v) \( D = \left( \frac{d}{g} \right) \cdot GDP \cdot e^{gt} + K \)

where \( K \) is the constant of integration.

Now to get \( D \) as a share of GDP we can divide the right hand side of equation (v) by \( GDP \cdot e^{gt} \). That gives

(vi) \( \frac{D}{GDP} = \frac{d}{g} + \frac{K}{GDP \cdot e^{gt}} \)

which, in the long run, as \( K/GDP \cdot e^{gt} \) heads towards zero, simplifies to

(vii) \( \frac{D}{GDP} = \frac{d}{g} \).

This formula now says the ratio of foreign debt to GDP is simply the ratio of two numbers, the CAD as a share of GDP and the growth rate for GDP. This is the number towards which we are heading at any one time.

The constant of integration is unknown. The mathematics is silent on the value it might take. Here we can interpret it as given by history. It summarises all the reasons why we are not presently at the ratio given in the right hand side of equation (vii). But the constant of integration declines in importance as time continues. Hence the constant of integration reflects our starting point but it is the rest of the equation that tells us where we are going.

Of course in any exercise like this there are a number of assumptions in the mathematics which may influence the results. We have assumed that the entire CAD is financed by new debt. However, some of the CAD may be financed with equity and/or direct investment and some old debt may be written off. Likewise the exchange rate is assumed to remain constant in the absence of any particular reason to believe the exchange rate is likely to continue to change over time. However, these points do not affect the fundamental insights we derive from the formula in equation (vii). We just need to be careful not to overstate the precision implied by the mathematics.

If we want to distinguish foreign debt from foreign direct or equity investment then the increase in foreign debt itself will be some proportion of the CAD. For example, if the trend is 80 per cent of the CAD is financed by new foreign debt then equation (vii) has to be re-written as

(viii) \( \frac{D}{GDP} = 0.8 \frac{d}{g} \).