

# A history of public debt in Australia

Katrina Di Marco, Mitchell Pirie and Wilson Au-Yeung<sup>1</sup>

Understanding debt and its historical trends is important, as the level of debt provides one measure of the strength of public finances. Levels of public sector borrowing fluctuate in line with the economic cycle and the budget position. This paper briefly describes the various measures of debt and trends in government borrowing.

---

<sup>1</sup> The authors are from the Budget Policy Division, the Australian Treasury. This article has benefited from the contributions and comments of Jason Allford, Derek Bazen, Jan Harris, Karen Incher, Luise McCulloch, Tony McDonald, Robert Seaton and Gene Tunny. Timothy McGuire provided research assistance. The views in this article are the views of the authors and not necessarily those of the Australian Treasury.

## Introduction

Understanding debt and its historical trends is important, as the level of debt provides one measure of the strength of public finances. Governments' borrowings to finance a budget deficit are collectively referred to as public debt. Over time, government borrowings add to the stock of public debt, but may finance things such as purchases of assets.

This article provides a brief analysis of Australia's public debt. It describes the various ways of measuring public debt and what these measures tell us about the strength of the government's finances. The article summarises the history of Australia's public debt, for both the Australian and State governments.

## Concepts of debt

Before analysing historical trends in Australia's public debt, it is important to understand the concepts of gross debt and net debt and what information they provide.

### Gross debt

Gross debt represents a portion of the total liability a government owes to creditors. The International Monetary Fund (IMF) Government Finance Statistics (GFS) manual defines gross debt as:

All liabilities that require payment or payments of interest and/or principal by the debtor to the creditor at a date or dates in the future. Thus, all liabilities in the GFS system are debt except for shares and other equity and financial derivatives [paragraph 7.142].

The main component of gross debt on the Australian Government's balance sheet is Commonwealth Government Securities (Treasury Bonds) outstanding.

While the gross debt measure provides information on government finances, it is only a partial indicator. Gross debt does not incorporate amounts that are owed to government by other parties. Also governments, like an individuals or businesses, hold assets which can be sold to meet their financial obligations. To capture the asset side of equation, net debt needs to be considered.

## Net debt

Broadly speaking, net debt is equal to gross debt less a related pool of financial assets.<sup>2</sup> Table 1 gives a simple representation of the main components that are included and excluded from the Australian Government's net debt calculation.

**Table 1: Components of net debt**

<b>What is in</b>	
<b>Liabilities (add to net debt)</b>	<b>Assets (subtract from net debt)</b>
Government securities (that we have sold to others)	Cash and other deposits (including cash investments in Funds)
Loans and other borrowings	Debt securities that the Government owns (eg State and Territory Government bonds)
	HELP Loans
	IMF capital subscription
<b>What is out</b>	
Superannuation liability	Equities (eg shares held by the Future Fund)
	Non-financial assets

Source: The Australian Treasury

Net debt is the most commonly quoted and well-known measure of a government's financial strength. One of the reasons is that it is part of everyday life for businesses and households. Another reason is that, historically, it was the only available stock measure for governments who were recording financial information in a cash-based accounting system. Finally, it is a measure that is internationally comparable, given most OECD countries report on it.

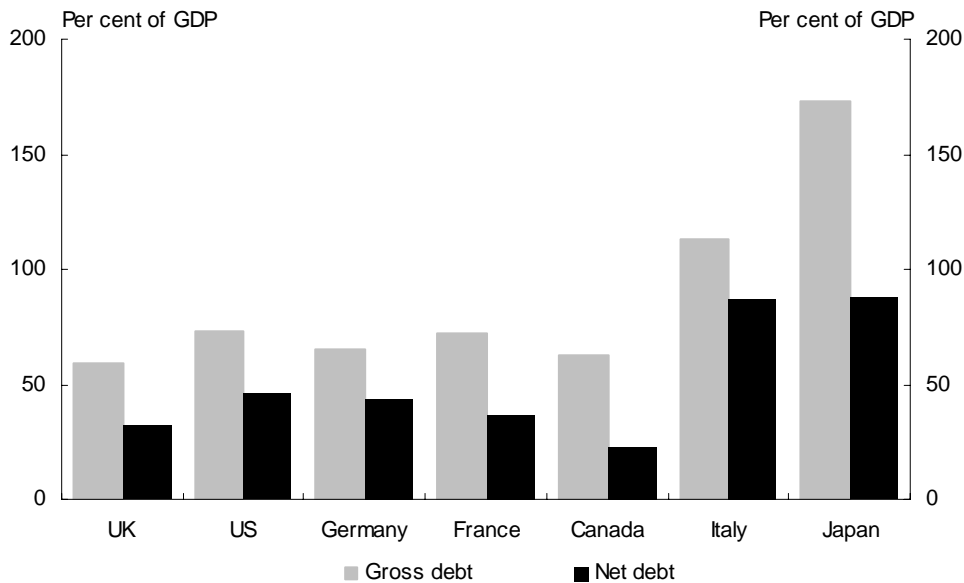
Compared with gross debt, net debt is a better measure of a government's overall indebtedness as it also captures the amount of debt owed to the government. Still, like gross debt, net debt is only a partial indicator of the government's financial strength, as not all government assets or liabilities are included. As an example, unfunded superannuation is not included in the calculation of net debt. On the other side of the ledger, the equity holdings of the Future Fund are also not included as an asset in the calculation of net debt.

## International comparisons of net debt and gross debt

Chart 1 compares the gross debt and net debt position of the general government sector in the G-7 countries.

<sup>2</sup> In terms of the Australian Government's balance sheet, net debt equals the sum of deposits held, advances received, government securities, loans and other borrowing, minus the sum of cash and deposits, advances paid, and investments, loans and placements.

**Chart 1: G-7 countries' gross debt and net debt (2008)**



Source: OECD *Economic Outlook 84*.

The case of Japan most clearly illustrates how only considering gross debt can result in a skewed interpretation of government finances. Using the gross debt measure, Japan, at 173 per cent of GDP, appears to have the highest debt level of the G7, well above the level of Italy. When the net debt measure is used, Japan and Italy have similar net debt- to-GDP ratios.

Similarly Canada, which has a comparable amount of gross debt to France, Germany and the US, has a significantly lower level of net debt than those countries.

The examples illustrate that care needs to be taken when using gross debt to compare across countries and over time.

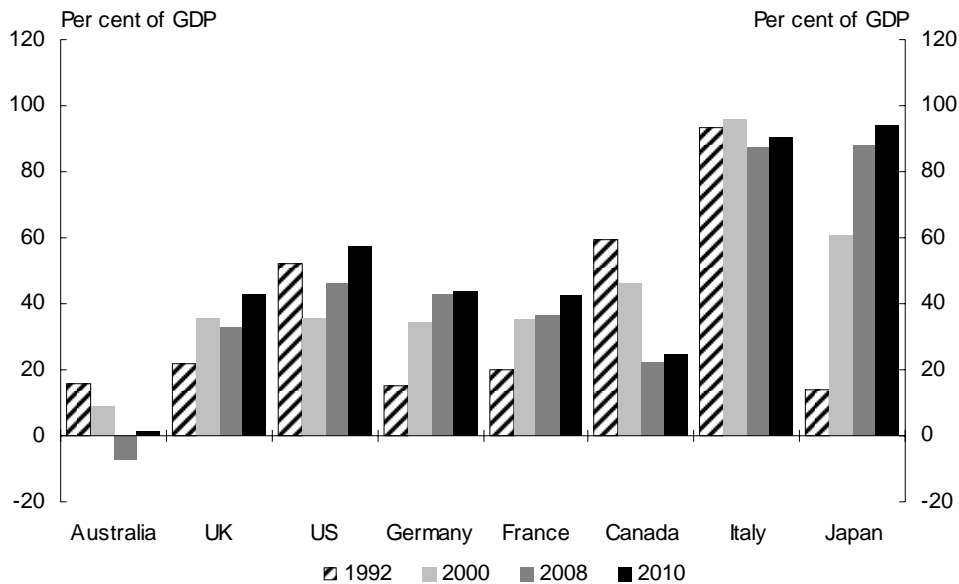
#### International comparisons of net debt over time

Australia has had historically low levels of net debt over the past two decades compared with the G-7 economies (Chart 2). In the early 1990s, Australia, along with the major economies, experienced an increase in net debt largely because of the global downturn. But in contrast to other economies, after 1995, Australia experienced a significant fall in its net debt.

In the period ahead, the net debt positions of the major OECD economies, including Australia, are again expected to grow as a result of the deteriorating global economic outlook and the need to introduce significant fiscal stimulus measures. The capacities of governments to respond to the deteriorating global economic outlook will be

different. These differences in capacity largely stem from differences in the initial strength of government finances and differences in the capacity of economies to grow.<sup>3</sup>

**Chart 2: Australian and G-7 public sector net debt**



Source: Australian Treasury and OECD *Economic Outlook 84* (November 2008). Net debt figures are from the OECD *Economic Outlook 84* except for Australia's 2010 figure which is the sum of the most recent forecasts for Australian, State and Territory general government sector net debt levels for financial year 2009-10.

Chart 2 reinforces Australia's relatively strong position with significantly lower levels of net debt projected in 2010 than the G-7 countries, even after introducing stimulus measures. Australia's projected net debt position, across all Government's is estimated to be 1 per cent of GDP compared with 48 per cent of GDP for the OECD.<sup>4</sup>

### Other measures of financial position

Over time, the demand for greater public accountability has led governments to publish more comprehensive sets of fiscal data. This has resulted in a trend towards using accrual accounting measures. By introducing a balance sheet into the primary Budget documents from 1999-2000, the Australian Government has been able to measure net financial worth and net worth.

<sup>3</sup> These are factors that ratings agencies consider. For a useful summary see Moody's Special Comment, *How far can Aaa governments stretch their balance sheets?*, February 2009.

<sup>4</sup> The OECD figure has not been updated from the OECD *Economic Outlook 84* published in November 2008. This figure is expected to be higher given the further deterioration of the global outlook and further stimulatory measures announced by governments.

A history of public debt in Australia

- Net financial worth is defined as total financial assets less total liabilities.
- Net worth is defined as total assets less total liabilities.

Both measures are conceptually better than gross debt and net debt at capturing the Australian Government's financial strength, as they are more comprehensive.

The difference between the two measures is the inclusion of non-financial assets in net worth. Given concerns surrounding the valuation of non-financial assets and their liquidity in the face of adverse shocks, the Australian Government has decided to use net financial worth as its primary indicator of balance sheet sustainability.<sup>5</sup>

## Trends in the level of public debt

### Trends in public sector gross debt

#### Colonial gross debt (pre-Federation)

At different times in Australia's history, governments have had to borrow to fund cyclical revenue shortfalls or to finance large infrastructure projects.

During the period 1850-1900 colonial governments played a central role in the construction of economic infrastructure. According to Butlin, Blanchard and Pincus (1982), between 1860 and 1900, public expenditure accounted for 40 per cent of domestic capital formation.

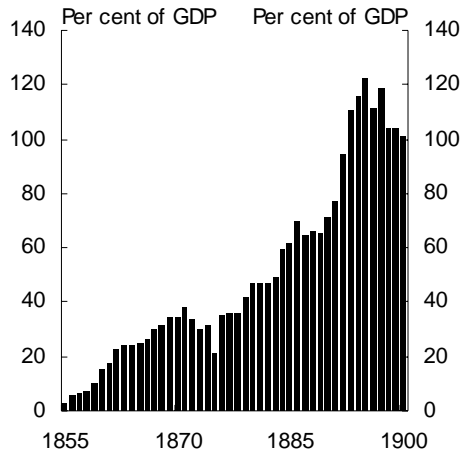
A large share of the capital expenditure was financed through borrowing, with gross debt rising from around 3 per cent of GDP in 1855 to around 100 per cent of GDP in 1900 (Chart 3). A very small stock of local capital meant that public borrowing, through the issuance of securities, was largely undertaken in London (Attard 2007). The securities that were issued, which were colloquially known as 'Colonial Consols', traded at yields well below comparable securities offered by the Australian private sector (Butlin, Blanchard and Pincus 1982).

Between 1856 and 1880, on average around 73 per cent of Australia's colonial debt was issued in London (Chart 4).

---

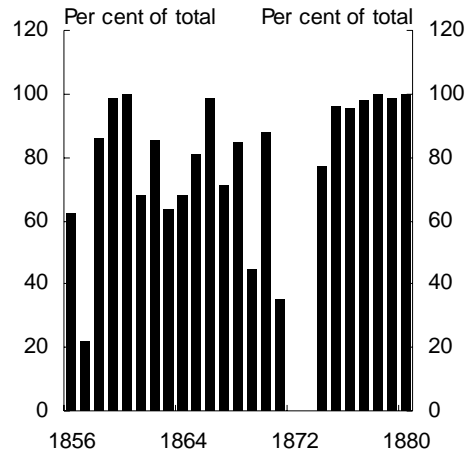
<sup>5</sup> See the discussion in Budget Paper No. 1, *Budget Strategy and Outlook 2008-09*.

**Chart 3: Gross debt**



Source: *Australians - Historical Statistics* 1987.

**Chart 4: Debt issued in London as a share of total Australia's colonial debt issued**



Source: Attard 2007.

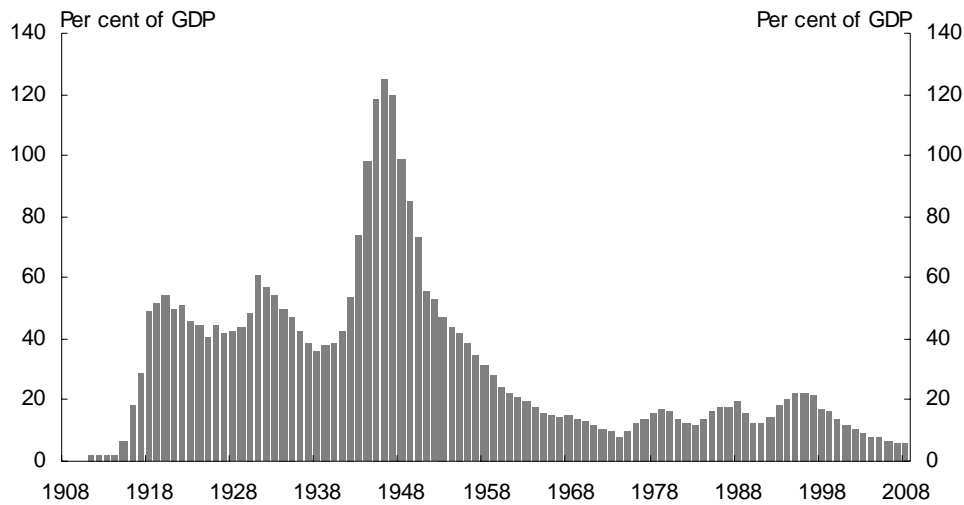
### Australian Government gross debt

For the first decade following Federation, the Australian Government did not have any public debt as budget revenues exceeded outlays. The first debt recorded on the Australian Government's balance sheet was debt transferred from South Australia on 1 January 1911, when the administration of the Northern Territory and the Port Augusta to Oodnadatta railway was passed to the Australian Government (Australian Office of Financial Management (AOFM) 2003-04).

The first public bond issue in Australia was conducted in 1915 as part of financing the First World War (AOFM 2003-04). Foreign borrowing also played an important role in the raising of debt in the years prior to the Second World War (Box 1).

During the First World War, gross Australian Government debt increased from around 2.2 per cent of GDP to around 50 per cent of GDP (Chart 5), with around one-third of this increase met through loans issued in London (AOFM 2003-04). By comparison with the First World War, the financing requirements of the Second World War were met largely through domestic borrowing. Gross Australian Government debt increased from around 40 per cent of GDP in 1939 to around 120 per cent of GDP in 1945. During both wars, War Savings Certificates, targeted at retail investors, were the primary instruments used to raise funds.

**Chart 5: Australian Government public debt (at 30 June)<sup>6</sup>**



Source: Data from 1908 to 1982 are from Barnard *Source Papers in Economic History* 1986. Commonwealth Government Securities on issue is used for the period 1983-2008. For consistency reasons, GDP data for 1908 to 1982 are derived from *Source Papers in Economic History* 1986. GDP data for the period 1983 to 2008 are from the ABS *National Accounts*, cat. no. 5206.0.

Australian Government debt was progressively reduced after the Second World War and largely eliminated by the beginning of the 1970s. In the decade following the Second World War, relatively tight fiscal policy halted the growth in gross debt, while high inflation underpinned the sharp reduction in gross debt as a share of GDP. By 1974, gross debt had declined to around 8 per cent of GDP from a peak of around 120 per cent of GDP in 1946.

There were two further episodes of debt accumulation, and subsequent reduction, during the 1980s and early 1990s driven by periods of weak economic growth and associated budget deficits. From the mid-1990s, as the Australian Government's fiscal position improved, gross debt declined steadily as a share of GDP.

---

6 Care needs to be taken when making comparisons over time due to structural breaks in the series. These include the move from cash to accrual accounting and the change to market-to-market accounting for debt.



**Box 1: Australian Government foreign currency debt**

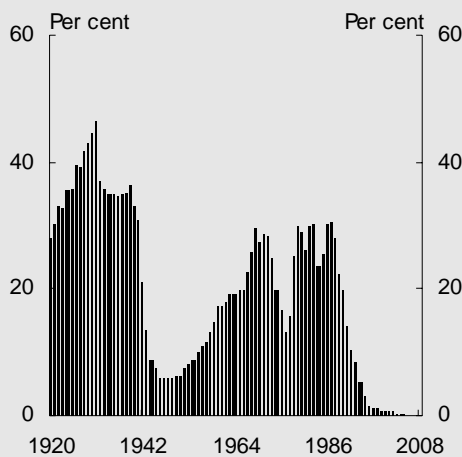
The Australian Government historically had a significant proportion of its debt denominated in foreign currencies, but foreign-denominated debt is now negligible (Chart A).

For the first 30 years after Federation, foreign currency debt made up around 35 per cent of total debt on issue. A large portion of this debt was financed from London. Between 1940 and 1950 the amount of foreign currency debt fell as domestic markets grew in size. After the Second World War, the value of foreign currency loans began to rise to finance balance of payment deficits (AOFM 2002-03).

The share of foreign currency borrowings of the Commonwealth Government Securities (CGS) portfolio remained around 30 per cent from 1970 until 1988. In 1988, the Government decided to concentrate debt issuance in domestic markets to maintain liquidity and efficiency.

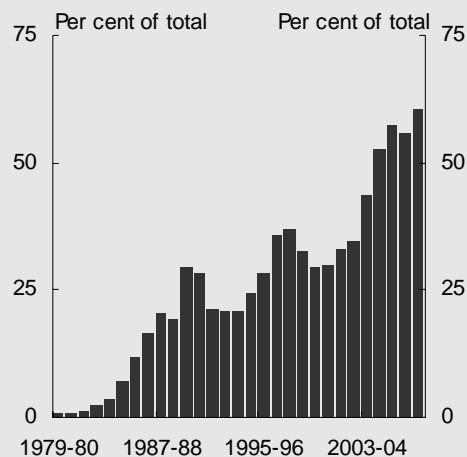
Capital account liberalisation has underpinned an increase in foreign holdings of Australian dollar-denominated CGS since the early 1980s (Chart B).

**Chart A: Overseas loans  
(per cent of CGS portfolio)**



Source: AOFM 2002-03 *Annual Report*.

**Chart B: Foreign holdings  
(per cent of CGS portfolio)**

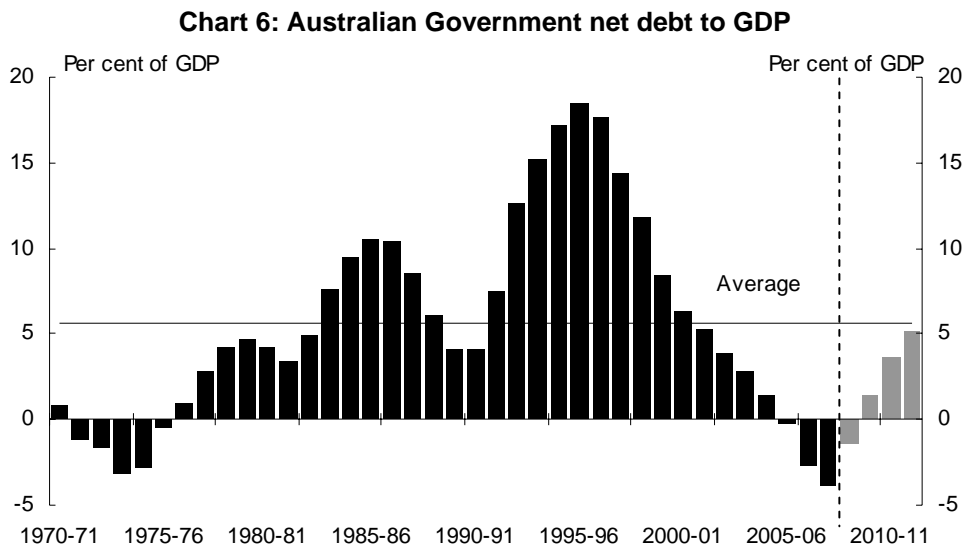


Source: RBA *Australian Economic Statistics*.

## Trends in Australian Government net debt

There has only been a formal recording of net debt data for the Australian Government since 1988. The Treasury has developed a net debt series for 1972-88 to allow better comparison across time (Treasury 1996).

Chart 6 shows that the Australian Government has historically had a positive net debt position – that is, the value of debt liabilities has exceeded the value of debt assets. Since 1970-71, net debt has averaged 5.7 per cent of GDP, reaching a peak of 18.5 per cent in 1995-96, and a low of -3.8 per cent of GDP in 2007-08. Changes in net debt have largely been driven by changes in the government’s budget position.<sup>7</sup> Especially in the 1990s, asset sales have also been a significant contributing factor (Box 2).



Source: *Mid-Year Economic and Fiscal Outlook 2008-09* and *Updated Economic and Fiscal Outlook November 2008* and the Australian Treasury.

During the early 1970s net debt was mainly negative and reached lows of -3.1 per cent of GDP. During the first half of the 1970s budget surpluses averaged 1.7 per cent of GDP, while in the second half, there were budget deficits averaging around – 1.6 per cent of GDP. By 1979-80, net debt was around 4.7 per cent of GDP.

---

<sup>7</sup> For a summary of trends in fiscal policy in Australia see Kennedy, Luu, Morling and Yeaman (2004) and Gruen and Sayegh (2005).

Net debt reached 10.4 per cent of GDP in 1985-86. It took only three years (from 1986-87 to 1989-90) to reduce net debt by around 6 percentage points of GDP. Across those same years, the underlying cash balance averaged around 0.6 per cent of GDP.

During this same period, the current account deficit was on the rise and reducing the Government's call on foreign capital was an important driver of fiscal policy (Kennedy, Luu, Morling and Yeaman 2004). As a result, in 1988, the government decided to concentrate its debt issuance in Australian dollars (Box 1). In 1987, 30 per cent of total borrowings were in foreign currencies. By 1990-91 it was around 21 per cent.

In the early 1990s recessions in many advanced economies caused a marked slowing in the world economy. The government implemented a more expansionary fiscal policy that was funded by borrowing. Net debt reached a peak of 18.5 per cent of GDP in 1995-96.

From 1995-96 onwards, the government undertook a program of fiscal consolidation (Kennedy, Luu, Morling and Yeaman 2004). The government also undertook significant sales of Public Trading Enterprises around this period (Box 2).

The combination of successive budget surpluses and asset sales led to the elimination of net debt. Net debt as a proportion of GDP gradually declined to its historical low of -3.8 per cent of GDP in 2007-08.

**Box 2: Sale of major Commonwealth Publicly Traded Enterprises (PTEs)<sup>8</sup>**

The Australian Government started a program of asset sales in 1987. These sales were largely conducted through trade sales (which involves a tendering process) or through public offerings of equity. The early asset sales were largely contained to property rather than PTEs. This changed in the early 1990s, with a marked increase in the sale proceeds from PTEs (Table A).

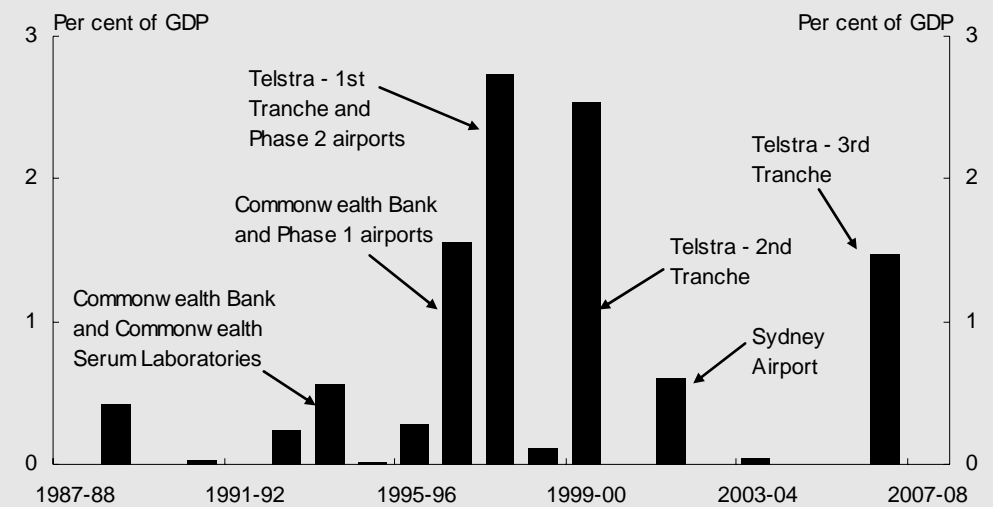
**Table A: Major privatisations**

Asset	Time	Sale Proceeds \$m
Telstra	1997,1999, 2006	45,600
Commonw ealth Bank of Australia	1993,1996,1997	6,800
Airports	1997,1998,2002	8,301
Qantas	1993,1995	2,115

Source: Department of Finance and Deregulation website.

Cumulative budget surpluses and proceeds from the sale of major PTEs, contributed to reducing net debt to its low of -3.8 per cent of GDP in 2007-08 from its peak in 1995-96. Of this, PTE sales contributed around \$61 billion, to reduce net debt. Chart A shows the proceeds of PTE sales as a share of GDP from 1987-88.

**Chart A: Value of major PTE sales (per cent of GDP)**



Source: Department of Finance and Deregulation website and author's calculations.

8 For an in-depth discussion on asset sales, readers are referred to the Reserve Bank Bulletin article 'Privatisation in Australia' (1997).

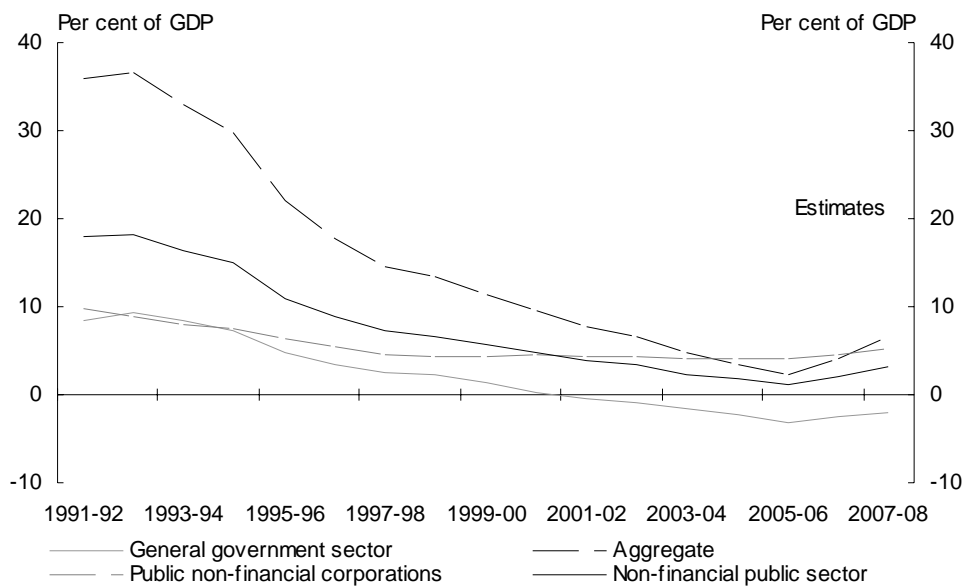
### Recent trends in state net debt

The ratio of aggregate state net debt to GDP declined steadily from the early 1990s until 2006-07, as state governments adopted fiscal strategies to reduce debt levels primarily through expenditure restraint but also through revenue increases and asset sales. Chart 7 illustrates recent trends in aggregate state net debt-to-GDP ratios (Budget Paper No. 3 2008-09).

Since 1998-99 states have been running an aggregate general government sector positive net operating balance. This illustrates that state borrowing, in aggregate, has not been occurring to fund recurrent expenditure. State borrowing chiefly occurs in the public non-financial corporations sector, where it relates to infrastructure required by those government-owned corporations to deliver the services they provide.

From 2006-07 state- and local-level non-financial public sector net debt began trending upwards, primarily reflecting the financing of state government infrastructure projects, particularly by public non-financial corporations.

**Chart 7: State net debt**



Source: Budget Paper No. 3, *Australia's Federal Relations 2008-09*.

## Conclusion

A government's balance sheet comprises both assets and liabilities. This article has demonstrated that only considering gross debt can result in an incomplete picture of public finances. By taking into account assets the public sector owns, a more accurate view of a government's ability to respond to economic conditions can be determined.

This article has shown that Australia has undergone several periods of debt accumulation, followed by periods of fiscal consolidation. Periods of strong economic growth following episodes of debt accumulation have helped support relatively quick improvements in the public sector's net debt position. Australia has a low level of net debt both historically and when compared with G-7 economies.

## References

Attard, B 2007, 'New Estimates of Australian Public Borrowing and Capital Raised in London, 1849 – 1914', *Australian Economic History Review*, Vol. 17, No. 2, July.

Australian Office of Financial Management 2003-04, *Annual Report*, Review: Foreign Currency Debt.

Boot, H M 2000, 'Government and the Colonial Economies: A Reply to Frost', *Australian Economic History Review*, Vol. 40, No. 1, March.

Butlin, N G, Barnard, A and Pincus, J J 1982, *Government and Capitalism*, George Allen and Unwin Australia Pty Ltd.

Budget Paper No. 3, *Australia's Federal Relations, 2008-09*.

Groenewegen, P 1990, *Public Finance in Australia*, Prentice Hall.

Gruen, D and Sayegh A, 2005, 'The Evolution of Fiscal Policy in Australia', *Treasury Working Paper* No. 4, November.

International Monetary Fund 2001, *Government Finance Statistics Manual*, Chapter 7: The Balance Sheet.

Kennedy, S Luu, N Morling, S and Yeaman, L 2004, 'Fiscal Policy in Australia: Discretionary Policy and Automatic Stabilisers', Paper prepared for the Treasury/Australian National University Macroeconomic Conference.

Moody's Investor Services, *How Far Can Aaa Governments Stretch Their Balance Sheets?*, February 2009.

Reserve Bank of Australia, *Privatisation in Australia*, *Reserve Bank of Australia Bulletin*, December 1997.

Treasury 'Australia's century since Federation at a glance', *Economic Roundup Centenary Edition*, 2001.

Treasury, *Historical Net Debt Series*, *Economic Roundup*, Spring 1996.

Vamplew, W, *Australians: Historical Statistics*, Sydney, NSW, Australia: Fairfax, Syme and Weldon Associates 1987.

