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Budget pressures on Australian governments 2014

John Daley and Cassie McGannon



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Overview

Australian government budgets are under pressure. Without tough decisions, they risk posting deficits of around 4½ per cent of GDP within 10 years. The problems have got worse since our first *Budget Pressures* report. We would be better off if we faced up to the tough problems sooner rather than later. We now need to find savings and tax increases of \$70 billion a year.

Over the economic cycle of boom and bust, balanced budgets are much better than the alternative. Persistent government deficits incur interest payments, and limit future borrowings, reducing flexibility in a crisis. They are also unfair: they require future taxpayers to pay for today's spending.

Despite relatively favourable economic conditions, Australian governments will post a collective deficit of between 2-3 per cent of GDP this year, and will remain in deficit by 1 per cent of GDP in 2017. Long-term spending has increased. The biggest driver was the sustained increase in health spending. Over the past decade health expenditure rose by over \$40 billion in real terms. The ageing population was not the prime cause. Rather, people of any age saw doctors more often, had more tests and operations and took more prescription drugs. Similarly, Age Pension costs grew much faster than GDP, not because of population ageing, but with policy decisions to increase benefits and widen eligibility.

New analysis in this edition of *Budget Pressures* shows that budget sustainability is also threatened by infrastructure spending. After a threefold increase in capital spending over the last 10 years, states are paying 3 per cent more of their revenues in interest and depreciation. Capital recycling and public private

partnerships may improve credit ratings, but ultimately future recurrent budgets must still pay for the cost of past infrastructure.

Continued trends in health and Age Pension costs are likely to drag future budgets backwards by 2 per cent of GDP by 2023. Future budgets will also be strained by promises of substantial new spending on the National Disability Insurance Scheme, schools, and defence, costing an extra 1 per cent of GDP. In addition, prices of Australia's minerals are likely to decline, dragging budgets another ½ percent of GDP into the red.

What can responsible leaders do to bring Australia's budgets under control? First, they must explain the size and importance of the problem. Second, they must design a package of measures that share the burden of reform fairly across the community.

As we showed in our *Balancing Budgets* report, the most promising reforms include lifting the age of access to Age Pension and superannuation, tightening the Age Pension assets test, paying less for pharmaceuticals with expired patents and asking students to pay a greater share of their tertiary education.

However, given the size of the problem, budgets can only be balanced by looking at both expenditure and revenue. The highest priority tax increases should be the withdrawal of poorly targeted tax concessions, particularly superannuation for the wealthy, capital gains discounts, and negative gearing.

Sustainable budgets require governments to make tough choices. They are politically difficult, but vital to Australia's prosperity.

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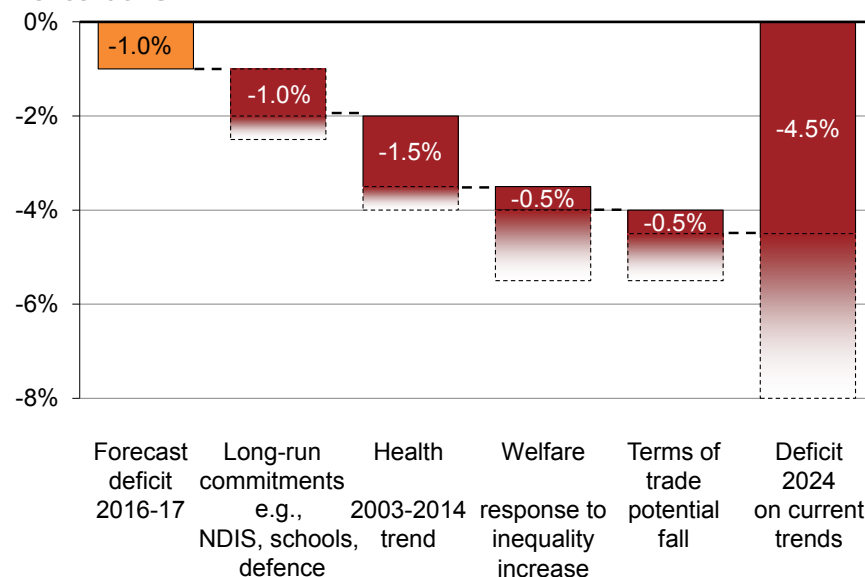
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1 The challenge for Australian government budgets

Australian government budgets are under substantial pressure. They could deteriorate from a projected deficit of 1 per cent of GDP from 2016-17 onwards to a deficit of more than 4.5 per cent of GDP, or \$65 billion in today's terms, by 2024. Figure 1 and the following text set out what these pressures are.

Figure 1: Projected budget balance for Australian governments by 2024 given plausible scenarios

Per cent of GDP



Source: Grattan analysis. See Supporting Analysis p44 for details.

1. A series of long-run commitments with significant increases in spending beyond the forward estimates (National Disability Insurance Scheme and defence spending, for example) could easily increase expenses by 1 to 1.5 per cent of GDP.
2. Health expenses are likely to increase by 1.5 to 2 per cent of GDP as their growth over the last decade continues. The prime cause is not an ageing population, as many believe, but the increase in the scope and volume of health services.
3. Additional welfare payments to hold inequality at current levels would increase government spending by 0.5 to 2.5 per cent of GDP – assuming that the current tight targeting of welfare continues.
4. A future fall in minerals prices, and thus the terms of trade, may reduce revenue by 0.5 to 2 per cent of GDP.

Some of these issues are already playing out. The 2013-14 Mid-Year Economic Financial Outlook (MYEFO) lowered budget outcomes and forecasts for 2013-14 relative to the 2012-13 budget by approximately 3 per cent of GDP,¹ reflecting many of the points discussed above.

¹ Commonwealth of Australia (2013)

Our forecast is more pessimistic than the long-term projections in the Pre-Election Financial Outlook (PEFO).² PEFO assumes that at least one of revenue or spending will be controlled more tightly. They also do not include the effect of rising pressures on State budgets.

In the remainder of this paper:

- Chapter 2 explains why continued budget deficits are a problem;
- Chapter 3 provides an **overview** of Australian government budgets;
- Chapter 4 describes **expenditure** pressures over the last decade;
- Chapter 5 describes increasing **revenue** pressures over the last decade;
- Chapter 6 describes **capital expenditure** trends and pressures;
- Chapter 7 describes **future pressures** on the budget;
- Chapter 8 describes potential **solutions** for balancing Australian budgets.
- Chapter 9 presents a 'bluffer's guide to budgets' that explains the terminology used in budget discussions and this paper.

A 'Supporting analysis' volume, available from Grattan Institute's website at www.grattan.edu.au, presents more detailed analysis of Commonwealth and state budgets, as well as details of the methodology of this report.

² Treasury (2013c), Chart F2, p.61

2 The value of balanced budgets

Over the economic cycle of boom and bust, balanced budgets are much better than the alternative. Persistent government deficits incur interest payments, and limit future borrowings. As a result they can unfairly shift costs between generations, and reduce flexibility in a crisis. Yet in good times it is hard for governments to run a surplus. They are invariably tempted to spend money. Many voters prefer outcomes with no identifiable losers.

Australia has escaped these problems, repairing its debt position over the 2000s, supported by public attitudes that were more averse to debt than those in most other countries. However, there are concerns that Australian attitudes are softening.

2.1 Balance over the economic cycle

Balanced budgets over the economic cycle make a big difference. Persistent large deficits make both the old and the young vulnerable: the old risk the security of their pensions and health care; the young bear an increased tax burden in the future to pay for past spending. Persistent large deficits lead to high government debt that can reduce flexibility in a crisis.³ Some argue that high government debt can reduce long-run economic growth – although this claim is contested.⁴

Persistent deficits undermine the security of people, such as retirees, who depend on government. High government debt may

lead to governments being forced to cut spending dramatically in a crisis. It is almost inevitable that such cuts will hit the vulnerable hard as the largest categories of government spending are welfare (22 per cent) and health (19 per cent), and dominated by spending on older people.

Perhaps the most important argument for budget reform is that deficits borrow from the future. They require future generations of taxpayers to pay for today's spending. There are fundamental issues of intergenerational fairness if future taxpayers are forced to bear the burden of today's spending that they do not have a say in, nor benefit from.

As many developed countries have rediscovered in recent years, high government debt coupled with low economic growth creates a terrible economic dilemma. If government increases spending, the debt gets worse, markets charge higher interest rates, and borrowing more becomes impossible. If government tries to reduce its deficit, GDP slows further, and government debt can rise as a proportion of GDP, making the problems worse.⁵ Their successors and financial institutions then find it difficult to borrow at reasonable costs, and economic growth is often slow for a long time.⁶

How to respond to the trap of low growth and high government debt remains contentious. It is far better to avoid the trap in the

³ Kotlikoff (1984)

⁴ Reinhart and Rogoff (2009), but see the debate summarised in Economist (2010) and Herndon, *et al.* (2013)

⁵ De Grauwe and Ji (2013), Figure 5; Summers and DeLong (2012)

⁶ Reinhart, *et al.* (2012)

first place. That means running balanced budgets over the economic cycle.

This principle requires Australia to run substantial surpluses over the remainder of the current economic cycle. During the Global Financial Crisis (GFC), the Australian government aggressively stimulated the economy through increased spending to avoid unemployment. Some argue that the government should have instead simply relied on the ‘automatic stabilisers’ of lower tax collection and increased welfare payments.⁷ Irrespective of views on this question, if budgets are to balance over the cycle, then additional stimulus in an economic downturn must be matched by additional government surpluses during good times.

It is arguable that continued deficits are sustainable if they are small enough to not increase government debt as a percentage of GDP. The burden of interest payments transferred to future generations can be rationalized if the debt funds productive investments that benefit future generations, or if economic growth is greater than the real interest rate.

Yet in practice, relatively little of the increase in spending over the last decade paid for investments that benefit future generations. As Chapter 4’s analysis shows, the big increases in spending were in health and the Age Pension. Most of the health budget is spent on older Australians. It is difficult to argue that this spending, while important, benefits future generations. The substantial increase in infrastructure spending may be more defensible – provided the spending was well targeted.

However, even if persistent deficits to fund productive investment are economically optimal, they may still lead to poor outcomes in the long run. If the theory of “sustainable deficits” is accepted, it becomes easy for a government to justify excessive deficits because there is no clear level at which government debt is ‘unsustainable’. Similarly, if the theory of “deficits to fund investments” is accepted, it becomes easy for a government to justify excessive deficits because it is always hard to tell whether government spending is truly investing, or simply spending for current generations. It is also difficult to prove that the costs of infrastructure outweigh the benefits.

Governments will always be tempted to use the excuse of funding productive investment to justify excessive deficits. Running a deficit enables a government to defer difficult decisions. As discussed below, political forces for ‘responsible’ government are the only real restraint on politically motivated spending. A deficit of zero – a balanced budget – may well be the only salient number to rally such political forces. Thus while perfect government may fund investments with debt, the best government in practice is likely to maintain a culture that champions balanced budgets to avoid a slide into unsustainable deficits.

At the very least, a highly transparent and rigorous process is required to ensure that debt-funded investments are indeed productive.⁸ Many doubt that all of the recent investments by government were productive, as discussed below in Chapter 6.9.

⁷ Differing views are canvassed in McDonald and Morling (2011)

⁸ Freebairn and Corden (2013)

2.2 Mindsets for budget repair

If Australian governments are serious about fixing their budgets, they need to make tough choices. Grattan Institute's 2013 report, *Balancing budgets: tough choices we need*, presents a range of them.⁹ None are particularly appealing. Nobody likes paying higher taxes or receiving fewer services. But governments need to make these difficult choices rather than put them off for future governments. We cannot simply 'grow out of trouble'. We need structural reform.¹⁰

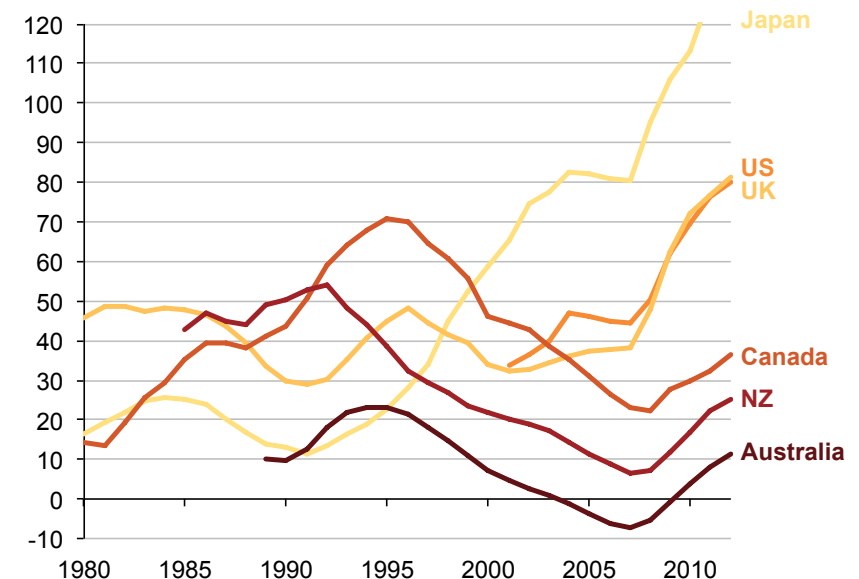
Valuable lessons can be learnt from previous Australian and international experiences of budget repair. These experiences, summarised in Grattan's 2013 *Balancing budgets: Supporting analysis*, show that to balance budgets, governments need to explain the problem, prioritise the large reforms, tackle both spending and taxation, and resist the temptation to delay.¹¹

2.3 Australian attitudes to budget deficits

Australia, New Zealand and Canada are exceptions to the international pattern of governments predominantly repairing budgets in a crisis. From around 1995, in contrast to many other developed countries, Australia and New Zealand produced substantial and sustained surpluses for over a decade, reducing net debt rapidly, (see Figure 2).¹²

The unusual performance of Australia and New Zealand may ultimately depend on public attitudes and education. In 2006 Ian Macfarlane, then Governor of Australia's Reserve Bank, suggested that the average voter in Australia is more economically literate than a typical voter elsewhere. This may be because Australian media provide more coverage of key economic decisions such as Reserve Bank interest rate decisions, or perhaps because Australian mortgages are more likely to be on

Figure 2: General government net debt
per cent of potential GDP



Note: IMF (2014c) does not include any US debt figures pre-2001. New Zealand figures were revised in 2014 and show a higher level of net debt to previous reports.
Source: Grattan analysis of IMF (2014c)

⁹ Daley, *et al.* (2013a)

¹⁰ IMF (2013), p. 10

¹¹ Daley, *et al.* (2013b), p. 51-55

¹² For a brief history, see Kamener and Tan (2012)

a floating rate. Speaking *before* the GFC, Macfarlane observed that this economic awareness helped to produce surpluses in Australia,¹³ whereas the United States and many European countries were running deficits and increasing debt through the early 2000s. The difference cannot be explained by the additional boost to the Australian economy from the mining boom. From 2003 to 2008, the US and Europe enjoyed strong economic growth but continued to run deficits that materially increased government debt, as Figure 2 shows.

However, there are concerns that several years of budget deficits, and the accompanying rhetoric justifying them in Australia and overseas, may have eroded public aversion to deficits. Public concern about deficits may also be affected by promises to introduce specific costly programs and political attitudes projecting a belief in the ability of government to cure all social ills (see Chapter 7).

¹³Macfarlane (2006).

3 The bottom line for Australian governments

Eight years after moving into deficit during the GFC, the combined Commonwealth and State¹⁴ budgets are still not projected to return to balance. Although Commonwealth and State governments are currently forecasting that things will get better from here, with higher revenues and lower expenditures, they are not projecting balanced budgets until well after 2016-17.

3.1 Combining Commonwealth and State budgets

This paper seeks to identify the collective position of Commonwealth and state governments. A combined picture reveals the real pressures on Australian government budgets, which are often obscured by transfers between Commonwealth and state budgets.¹⁵

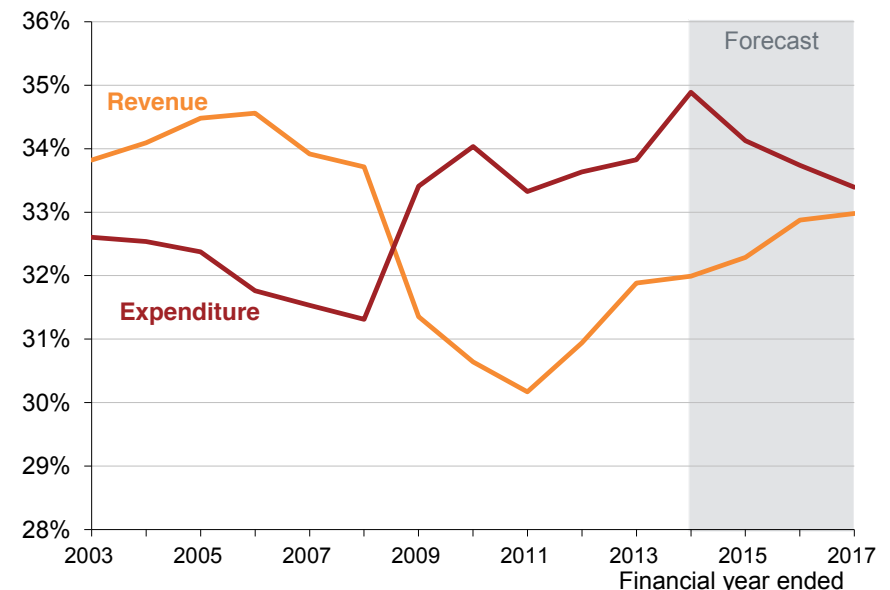
3.2 Trends in the bottom line

Australian government budget positions deteriorated over the last five years through the GFC, as Figure 3 shows. The deterioration in 2009 was not surprising: as economic growth slows, government budgets should generally move into deficit. As growth has picked up since 2009, deficits have narrowed, and are

¹⁴ Throughout this paper, we use 'States' to include both States and Territories of Australia.

¹⁵ Throughout this paper, we use 'transfers' to refer to payments from the Commonwealth to the States. Where we present combined Commonwealth and State expenditures, these transfers are treated as State expenditure unless otherwise specified. Welfare transfers are called 'payments' or 'benefits' to avoid confusion. Detail on the methodology for analysis of these budgets is presented in the Supporting Analysis volume.

Figure 3: Australian governments' historic expenditure and revenue per cent of GDP, 2002-03 to 2016-17



Note: Shows total revenue and expenditure for Commonwealth, State and Territory budgets. Transfers from the Commonwealth to States and Territories (e.g. GST, Specific Purpose Payments, and National Partnerships) have been removed from Commonwealth expenditure and States' revenue so they are not double-counted. See Supporting Analysis p35 for further notes.

Source: Grattan analysis of Commonwealth, State and Territory budget papers and mid-year review papers 2002-03 to 2013-14; ABS (2013a) Table 30; ABS (2013d) Tables 231-238

forecast to narrow further. But even so, government budget positions are not expected to balance within the forward estimates period (to 2016-17). Given economic conditions, they should probably already be in surplus (see Chapter 2).

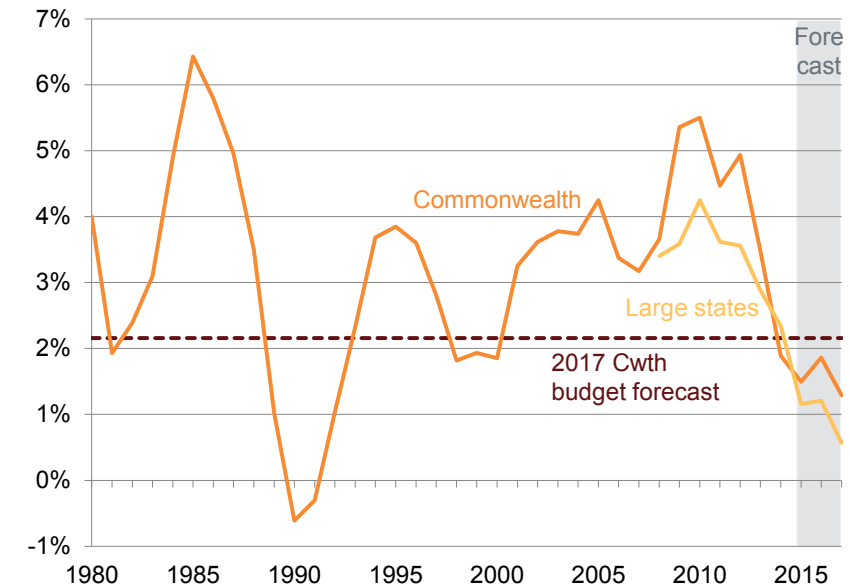
The collective deficit may not narrow as fast as is forecast. It relies on governments controlling spending growth more tightly and for longer than any government in Australia for the last 15 years, as Figure 4 shows.

The narrowing deficit also relies on continued bracket creep for income tax, which may not be politically sustainable as it hits middle income earners particularly hard.¹⁶

3.3 Commonwealth and state trends

Projections of budget balances have already been revised lower than those made only 18 months ago, primarily because the Commonwealth is forecasting substantially lower revenues. Figure 5 compares projections made by governments in their 2012-13 budgets (released between May and August 2012) compared to those in their 2013-14 mid-year budget reviews (released between December 2013 and February 2014). The earlier projections show the Commonwealth and consolidated state budgets balancing in 2013-14, and combined state governments moving gradually into deficit across the forward estimates. The new projections show a marked deterioration in the Commonwealth budget balance. State projections are only slightly worse than previously thought.

Figure 4: Annual real growth in government expenditures
5 year trailing average



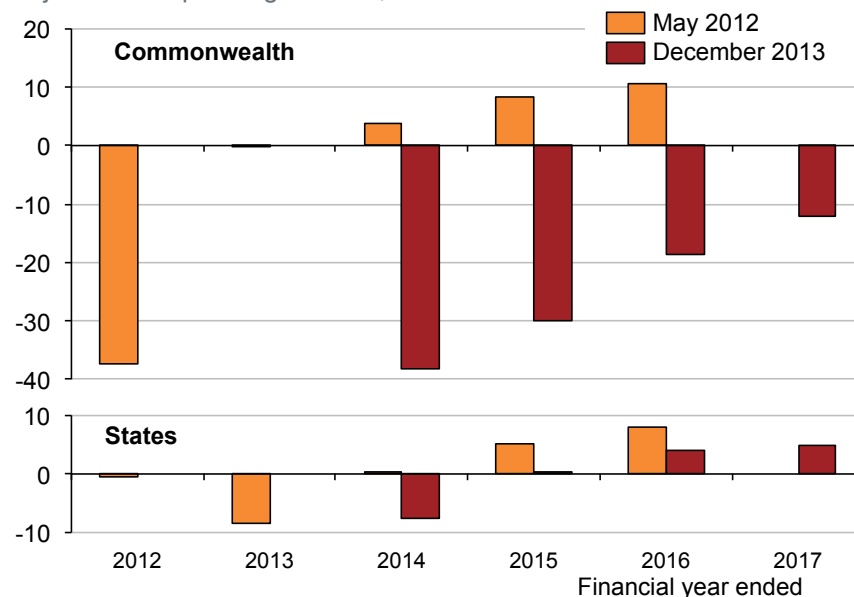
Note: 'Large states' combine NSW, VIC, WA and QLD and in 2014 account for approximately 88 per cent of Gross-Domestic Product (GDP)
Source: Treasury (2013a), Statement 10, Table 1, State and Territory Budget Papers (2002-03 to 2013-14)

¹⁶ See below, Section 5.1

The short-term deterioration in the Commonwealth Government's position is primarily due to falling revenues. The Government attributes this primarily to a softer economic outlook than that projected in earlier budget documents, to "legacy issues inherited from the former government", and to some changes to Treasury's projection methodology.¹⁷ It is also driven by policy changes

Figure 5: Budget projections from 2012-13 Budgets and 2013-14 mid-year budget reviews

Projected net operating balance, nominal \$ bn

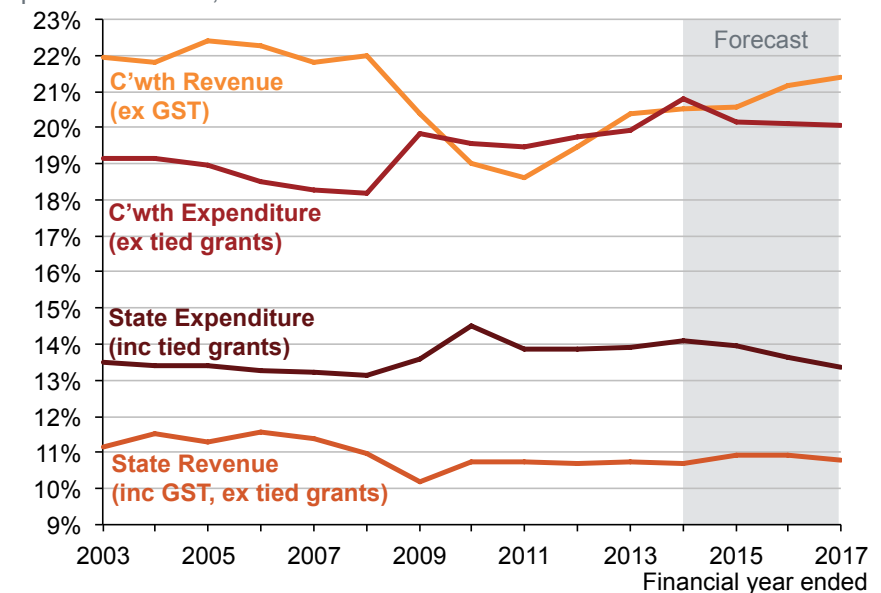


Source: Grattan analysis of Commonwealth, State and Territory budget papers and mid-year review papers 2011-12 to 2013-14

¹⁷ Commonwealth of Australia (2013) p. 19

proposed by the new government, including the abolition of the carbon price, and continuing fringe benefit tax concessions for company cars. Abolishing the minerals resource rent tax will reduce revenues, but the government intends to abolish the spending programs associated with the tax (such as the low income superannuation contribution and the Schoolkids Bonus

Figure 6: Commonwealth and State expenditures and revenues per cent of GDP, 2002-03 to 2016-17



Note: Revenue collected by the Commonwealth and transferred to States for expenditure on specified purposes is shown as Commonwealth revenue, and as State expenditure. To avoid double counting, it is excluded from both Commonwealth expenditure and State revenue. GST is treated as if it were a State revenue source.

Source: Grattan analysis of Commonwealth, State and Territory budget papers and mid-year review papers 2002-03 to 2013-14; ABS (2013a) Table 30; ABS (2013d) Tables 231-238; ABS (2013e).

payment).¹⁸ In the medium term, the GFC contributed substantially to deficits. Both revenue and expenditure for Commonwealth and States moved in the wrong direction during this period, as Figure 6 shows. While the economic cycle was responsible for many of the changes, substantial income tax cuts also dragged on Commonwealth revenue. With continued bracket creep Commonwealth revenue is rebounding, however, and is now only 0.5 per cent of GDP below pre-crisis levels.

The long-term deterioration in budget balances is a result both of the Commonwealth spending more, and collecting less revenue, as a percentage of GDP. Even with the GFC long over, Commonwealth expenditure remains 1 per cent of GDP higher than it was in 2003, while revenue is 1.5 per cent lower.

This analysis is based on a consistent treatment of transfers between the Commonwealth and States as being part of state expenditure. The analysis is also based on a consistent treatment of GST. The Commonwealth collects GST, and includes it in its revenues, but transfers all proceeds to the States. States bear the consequences if GST revenues are higher or lower than expected. To reveal the underlying picture, we treat the GST as part of state rather than Commonwealth revenue.

¹⁸ Ibid. p. 274. The budget impact of policy choices of the Liberal-National government is further discussed in section 7.3 and Box 6 in section 8.1

4 Expenditure trends

4.1 Overall expenditure trends

Health, welfare, education, defence, and infrastructure account for two-thirds of Australian government spending, as Figure 7 shows.

The three largest individual lines of spending are on old age pensions, hospitals and schools. Collectively, these amount to 8 per cent of GDP.

Note: NFS = not further specified. 'Other' comprises all other expenditure not elsewhere included, including employment, legal, immigration and customs, arts and sport, housing, communications, emergency services, superannuation and water. See Supporting Analysis p35 for further notes, including category definitions.

Source: Grattan analysis of Commonwealth and State budget papers 2013-14 and PBO (n.d.-a)

Figure 7: Australian governments' combined expenditures
Per cent of total, 2013-14 budget

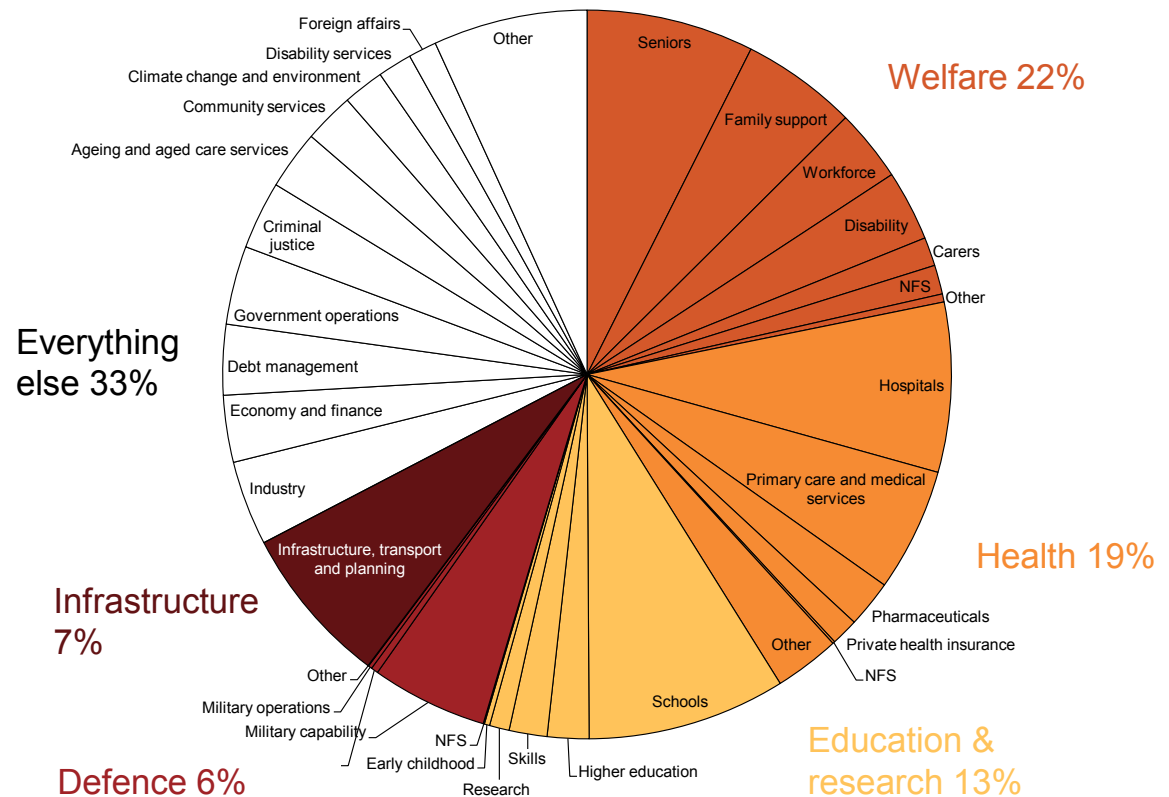
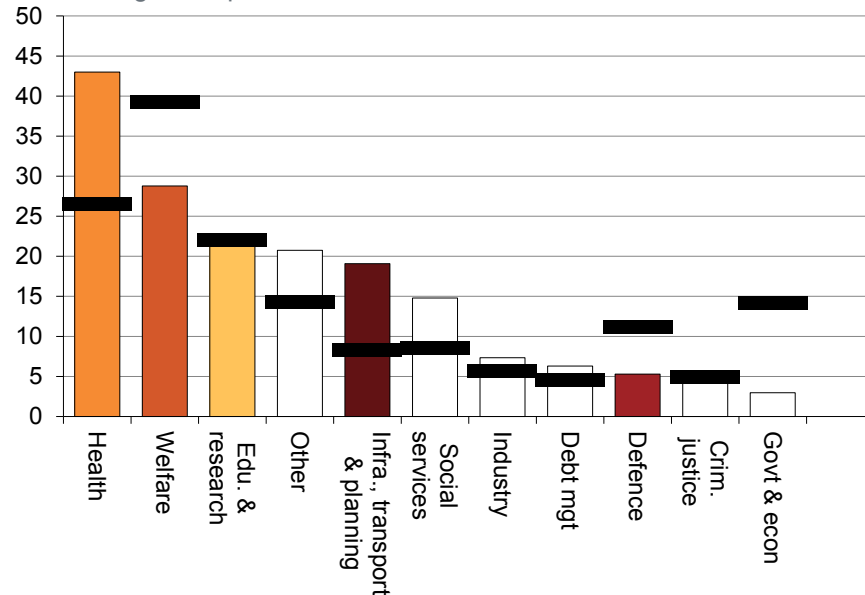


Figure 8: Change in Australian governments' expenditure

Real change in expenditure, \$2013 bn, 2002-03 to 2013-14



Notes: 'Other' comprises all expenditure not elsewhere included. 'Social services' comprises ageing and aged care services, disability services, and community services. 'Govt & econ' comprises government operations and economy and finance. 'Other' comprises all expenditure not elsewhere included. See Supporting Analysis p35 for further notes.

Source: Grattan analysis of Commonwealth and State budget papers for 2002-03 and 2013-14; ABS (2014c); ABS (2014b); PBO (n.d.-a)

Expenditures remain 1 per cent of GDP higher than before the GFC. The main cause is health expenditure, which is eating into government budgets. Growth in health spending above GDP over the past 11 years was greater than the growth above GDP of all other spending combined, as Figure 8 shows. Hospital spending

increased above GDP more than any other individual category.¹⁹

Infrastructure transport and planning expenditure also grew materially over the last decade. This includes the impact of higher depreciation charges as a result of increased state capital expenditure, primarily on transport infrastructure, as discussed in Chapter 6.

Some welfare expenditures, particularly the Age Pension and Carer's Pension also grew faster than GDP, but the overall welfare category grew much less due to the aggregate reduction in payments to working age people, including Newstart, Parenting Payment and Youth Allowance.

Australian trends in the drivers of government expenditure are mirrored in other countries. In the United States, for example, government health spending increased by 2 per cent of GDP, and aged pensions by 1 per cent of GDP over the decade to 2011. Overall, however, government expenditure in the United States jumped by 5 per cent of GDP, driven by trends not matched in Australia such as substantially rising spending in defence (1 per cent), unemployment benefits (2 per cent) and jails (1 per cent).²⁰

This analysis is broadly consistent with the Parliamentary Budget Office analysis of Commonwealth Government expenditure.²¹ More detail on expenditure changes by jurisdiction is presented in the Supporting Analysis volume.

¹⁹ See Supporting Analysis p6.

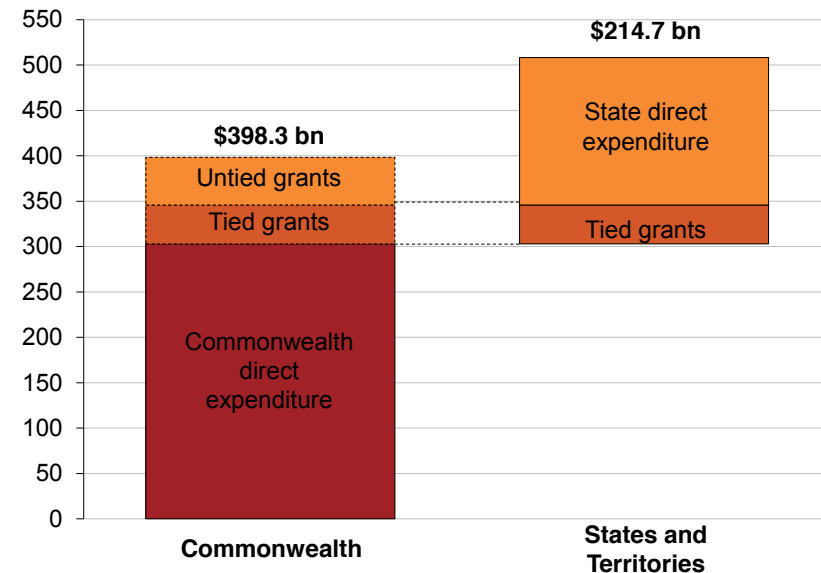
²⁰ Silver (2013)

²¹ PBO (2013a). There are some differences in classification, particularly of welfare and social services. See Supporting Analysis p35-37.

4.2 Commonwealth and state expenditure

Australian governments are forecast to spend \$518 billion in 2013-14. The Commonwealth will spend the most, as Figure 9 shows. It spends 76 per cent of its expenditure directly, mostly on welfare payments, defence, health services (including Medicare and pharmaceuticals) and education (including non-government schools and higher education).²² The rest is spent in Commonwealth grants to the states. About half of these grants, amounting to \$52 billion in 2013-14 are untied grants, mostly GST revenue. States have full control over how this money is spent. The remaining funds – \$43 billion in 2013-14 – are tied grants, meaning that the Commonwealth restricts how they are spent. Some tied grants are tightly controlled (a specified amount must be spent on public dental services to adults, for example), whereas other tied grants are looser (a specified amount must be spent on school education).²³ As well as these tied and untied grants, states are forecast to directly raise \$119 billion of revenue in 2013-14 and spend it on areas of their own choosing.²⁴

Figure 9: Commonwealth and state expenditure
\$bn, 2013-14



Source: Grattan analysis of Commonwealth and State budget papers 2013-14

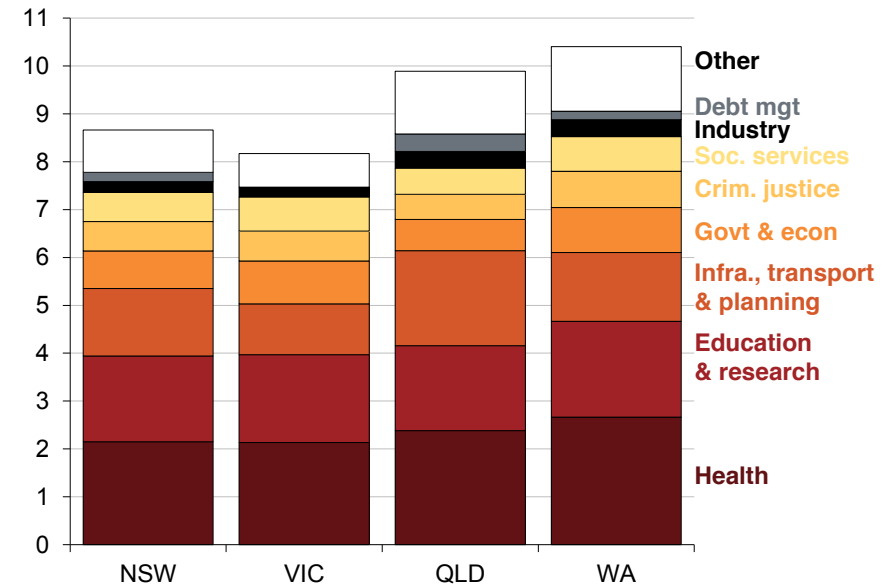
²² See Supporting Analysis p2 for further detail on Commonwealth expenditure.

²³ See section 9 for further details on Commonwealth-State transfers. In this report, 'tied' grants are treated as State expenditure. See Supporting Analysis p35-37 for further information.

²⁴ The history and constitutional underpinnings of these arrangements are detailed in Twomey (2014). See Supporting Analysis for further detail on State expenditure.

Some states spend considerably more per person than others, as Figure 10 shows.²⁵ Western Australia and Queensland spend at least \$1,200 more per person than do New South Wales and Victoria. Western Australia spends more per person in almost every category of spending. Some of this may be due to the higher costs of serving regional and remote populations, but some is probably attributable to Western Australia being under considerably less revenue pressure than other states due to the mining boom, as Section 5.2 discusses. Queensland spends a much larger proportion of its budget on infrastructure, transport and planning than other large states do, as Section 4.6 discusses.

Figure 10: State government expenditure per capita
\$'000 per person, 2013-14



Source: Grattan analysis of State budget papers 2013-14; ABS (2014a) Table 4.

²⁵ See Supporting Analysis for further detail of expenditure by each state.

4.3 Health expenditure

Health expenses are 19 per cent of Australian government expenditure, and grew by 76 per cent in real terms between 2002-03 and 2013-14.

Increases in health expenditures are mainly driven not by an ageing population, but by people of all ages seeing doctors more often, having more tests, treatments and operations, and taking more prescription drugs.²⁶ These changing practices are costing more per person, as Figure 11 shows.

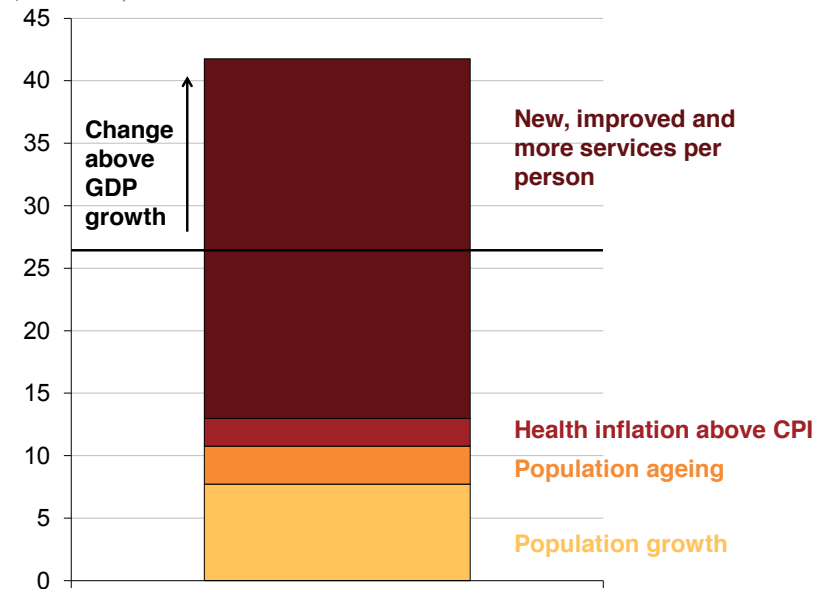
If the scope of health services continues to increase at the rate of the last decade, health will demand an additional 2 per cent of GDP from government budgets between 2013 and 2023.

Increased health expenditure appears to be having an impact. Life expectancy, particularly for those aged over 65, has increased rapidly and consistently.²⁷ But it has come at a cost. If we want to continue to enjoy the benefits of increased access to sophisticated health services, governments will have to find a way to pay for them.

²⁶ See Productivity Commission (2013) Chapter 5.2 for an extensive discussion of these trends.

²⁷ Daley, *et al.* (2012), p. 56

Figure 11: Change in Australian governments' health expenditure
\$2012 bn, 2002-03 to 2011-12



Note: 'Population growth' models the effect of the increase in population size with no change in the age structure or average per capita health expenditure. 'Population ageing' uses age-specific per capita health expenditure data (based on AIHW figures) to model the effect of changes in the population structure. 'Health inflation above CPI' uses appropriate AIHW health price indices to model inflation in each category of expenditure. 'New, improved and more services per person' is the amount of expenditure that cannot be explained by these three factors. This analysis uses data with slightly different definitions and timeframes to that shown in Figure 8, so the size of the increase does not match exactly.

Source: Grattan analysis of AIHW (2012); AIHW (2012); ABS (2013a) Cat. no. 6401.0 Tables 1 and 2; ABS (2013c) Cat. no. 3101.0 Table 59.

4.4 Education expenditure

Education expenses are 13 per cent of Australian government expenditure, and grew by 48 per cent in real terms over the last decade.

School education expenses are much larger than other areas of education expenditure (Figure 12). Although they grew more slowly in percentage terms than did other categories, they grew by 45 per cent in real terms over the last 11 years.²⁸ School expenditure by governments in 2013-14 is \$14.1 billion more in real terms than in 2002-03, the fourth largest increase in dollar terms, behind only hospitals, infrastructure, and welfare for seniors. Spending on government schools has been driven primarily by the reduction in government school class sizes, and by the increasing average seniority of teachers – which translates into higher pay.²⁹

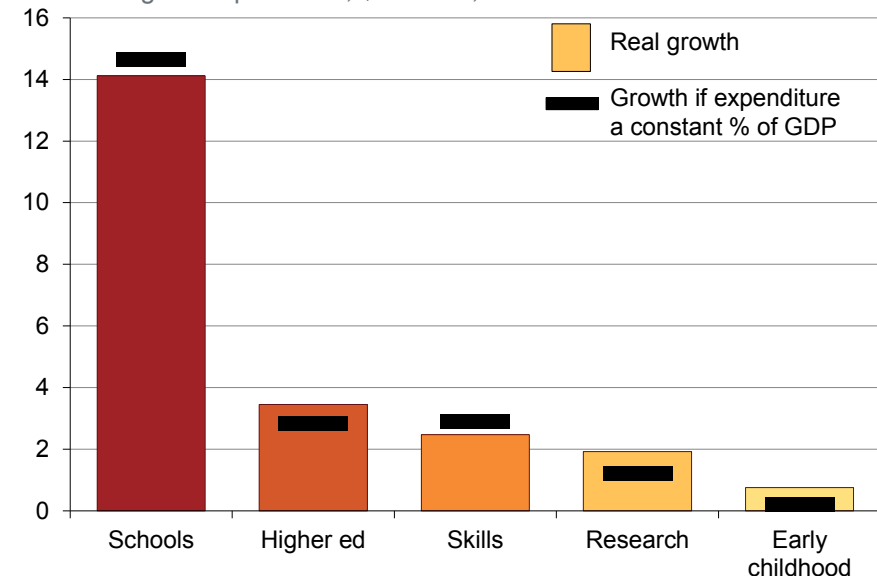
School spending by governments as a percentage of GDP has fallen slightly. The proportion of the population that is of school age is smaller than it was 10 years ago. A shift of enrolments into non-government schools has reduced government spending on schools, since governments collectively pay less per student in a non-government school than they do in a government school.

Higher education and research have also grown, but off a much smaller base. Together they will receive \$5.4 billion more in real terms in 2013-14 than in 2002-03. Government-funded higher

education student numbers grew by more than 34 per cent between 2002 and 2012.³⁰

Figure 12: Change in Australian governments' education expenditure

Real change in expenditure, \$2013 bn, 2002-03 to 2013-14



Note: 'Education expenditure not further specified' is too small to show; it comprised \$0.3bn in 2013-14. See Supporting Analysis for further notes.

Source: Grattan analysis of Commonwealth and State budget papers for 2002-03 and 2013-14; ABS (2014c); b); PBO (n.d.-a)

²⁸ Data is for government expenditure only. In 2009, private expenditure was 15.9 per cent of total expenditure on schools: see OECD (2013a)

²⁹ Jensen, *et al.* (2011)

³⁰ DIISRT (2012); Commonwealth budget papers 2012-13; Norton (2013)

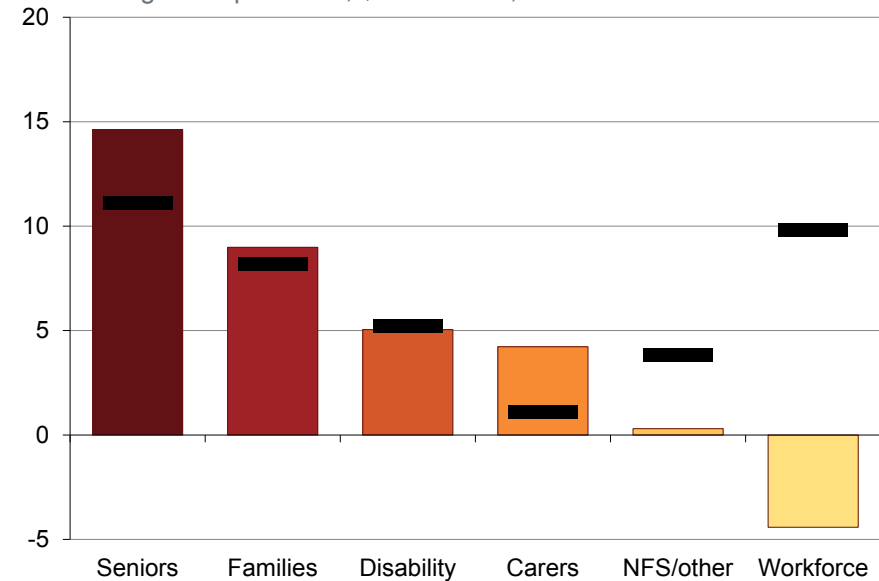
4.5 Welfare expenditure

Welfare is the largest single category of government spending, consuming 22 per cent of expenditure. Welfare spending grew by 34 per cent in real terms over the last decade, slower than GDP.

Because this data only includes direct expenditure, it does not capture the significant support given to many Australian households through tax concessions on superannuation (discussed in Section 5.6). Much of this support goes to middle- and high-income households.³¹ If these are included, welfare would be a large component of the budget, and growing faster.

The overall modest growth in welfare expenditure conceals very large variations between categories. The two largest categories of welfare – seniors and family support – grew by more than 50 per cent in real terms over the last 11 years, faster than real GDP, as Figure 13 shows.

Figure 13: Change in Australian governments' welfare expenditure
Real change in expenditure, \$2013 billion, 2002-03 to 2013-14



Notes: Categories comprise welfare payments directly to the identified group, and related administrative spending where identifiable. 'Families' includes family tax benefits, child care subsidies, parental leave, baby bonus and schoolkids bonus. 'Workforce' comprises payments to working-age people, including Newstart, Youth Allowance and Parenting Payment. See Supporting Analysis p35-40 for further notes.

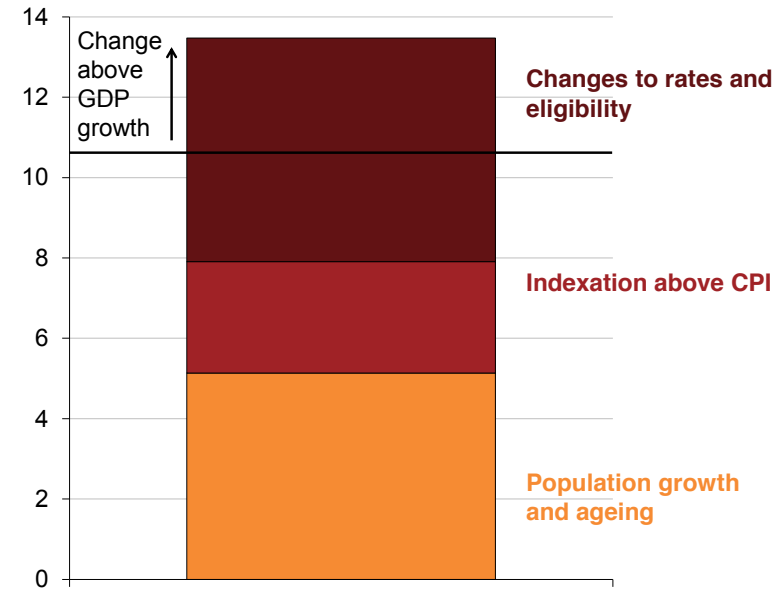
Source: Grattan analysis of Commonwealth and State budget papers for 2002-03 and 2013-14; ABS (2014c); b); PBO (n.d.-a)

³¹ See Daley, *et al.* (2013a) pp. 32-36

4.5.1 Welfare for seniors

Over the same period total welfare for seniors, primarily Age Pension payments, grew by 61 per cent, faster than GDP. Welfare for seniors is now the largest component of welfare spending. Yet, as with health spending, demographic ageing is *not* the prime cause (Figure 14).³² Spending on older people has increased rapidly – despite an increasing number of people retiring with superannuation – as a result of deliberate policy choices to increase Age Pension spending. These included the Howard Government changes to the assets and income tests in 2006-07, the 2008-09 Rudd Government increase to the base pension rate, and the 2010-11 Gillard Government Clean Energy Supplement which accompanied the introduction of the carbon price. The growth in spending above GDP was entirely due to these discretionary changes. Whether they were appropriate depends on many factors, including whether Age Pension expenditure was too low in 2003.

Figure 14: Drivers of change in Age Pension expenditure
\$2013 bn, 2002-03 to 2012-13



Note: Until September 2009, the Age Pension was indexed by CPI and benchmarked at 25% of Male Total Average Weekly Earnings (MTAWE). From September 2009, it was indexed by the greater of CPI or the Pensioner and Beneficiary Living Cost Index (PBLCI), and benchmarked to 27.7% of MTAWE. The 'indexation above CPI' category shows the impact of using the 25% MTAWE benchmark over ten years. Change in MTAWE has been the highest index in 7 of the 10 years between 2002-03 and 2012-13. 'Demographic change' is based on the increase in the number of people aged 65 and over; this is an approximation as in 2002-03 women were eligible for the Age Pension from age 63.5. Source: Grattan analysis of ABS (2012a) Cat no. 6302.0 Table 10C; ABS (2013a) Cat. no. 6401.0 Tables 1 and 2; ABS (2013b) Cat. no. 6467.0 Table 1; ABS (2013c) Cat. no. 3101.0 Table 59; FaCS (2002); FaHCSIA (2012); Harmer (2009).

³² See also Productivity Commission (2005) and Betts (2014)

Welfare for seniors is relatively poorly targeted. Almost half of the \$39 billion spent each year on the Age Pension goes to households with half a million dollars in net assets. Of mature-age households with a million dollars in net assets, about 80 per cent receive some welfare benefit, and on average it is more than \$200 a week, as Figure 15 shows.³³

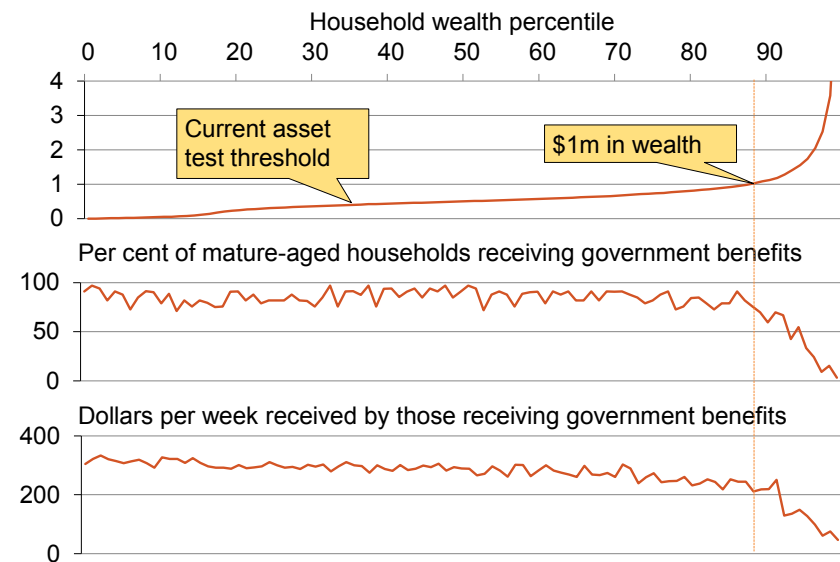
There is widespread concern that Age Pension spending may become unsustainable in future decades, given the rapid recent rise in costs, an ageing population, and lax eligibility rules.³⁴ The challenge would best be managed by increasing the Age Pension eligibility age, and better targeting payments towards those with genuine need and without significant assets, as Chapter 8 discusses.

On top of the Age Pension, a number of other government expenses and concessions are aimed at older people. The cost of concessions for public transport, car registration and third party insurance, utilities, rates, and health costs is already substantial. Public transport concessions are available to anyone over 60, irrespective of income.³⁵ Many other concessions are available if any person in a household is entitled to a part pension. These concessions cost NSW about \$1 billion in 2013-14.³⁶ Older people also have access to additional welfare payments such as the Seniors Supplement, and benefit from substantial superannuation concessions and tax concessions such as the Senior Australians Tax Offset. Australia has the highest level of tax concessions for

private pensions in the OECD, and people of pension age pay much lower taxes than do younger people at the same level of gross income.³⁷

Figure 15: Household assets and Age Pension eligibility

Household net wealth for mature-aged households, \$m



Note: 'Mature-aged households' refers to households in which the household reference person, generally the 'head' of the household, is of Age Pension age (65 and over)

Source: Grattan analysis of ABS (2011)

³³ Daley, *et al.* (2013a), p. 37

³⁴ See, for example, Productivity Commission (2013)

³⁵ Seniors Card (2013)

³⁶ Includes concessions to health care card holders. NSW Government 2013-14 Budget Paper 2, Appendix D

³⁷ Whiteford (2014b)

4.5.2 Welfare for jobseekers

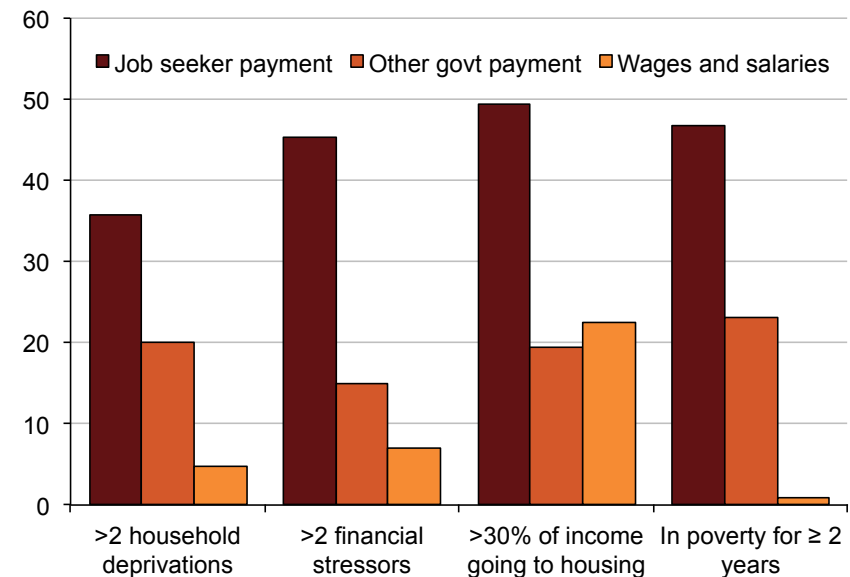
Welfare did not keep pace with GDP only because the aggregate cost of workforce payments such as Newstart, Youth Allowance and Parenting Payment fell in real terms. The unemployment rate fell, eligibility rules changed, and Newstart and Youth Allowance, which are indexed to the Consumer Price Index, did not keep pace with wage inflation. As a result, households whose main income is Newstart or jobseeker Youth Allowance have substantially lower disposable incomes after paying for housing: \$305 and \$242 a week, compared with \$503 a week for households on other government payments.³⁸

These shifts have had substantial human impact. On any measure, households on Newstart and equivalent payments are doing it tougher than are households receiving other forms of welfare, as Figure 16 shows. Households in which the main income is Newstart or jobseeker Youth Allowance are more financially stressed, spend more of their income on basics, and are more likely to be and remain for an extended period in poverty than are other households.³⁹

The real reduction in workforce payments may be partially reversed in coming years. There is significant pressure to increase the level of Newstart given the stresses now experienced by Newstart households.⁴⁰ Increasing Newstart by \$50 a week would cost the budget about \$2 billion, 0.1 per cent of GDP.

Figure 16: Households experiencing hardships by main income source of household

Percentage of households in category, 2009-10



Note: 'Job seeker payment' includes Newstart and jobseeker Youth Allowance. 'Other govt payment' is dominated by age and disability pensions. "Deprivations" (such as the inability to afford to invite friends for a meal once a month) and "Financial stresses" (such as being unable to pay electricity on time) are as defined by the ABS Household Expenditure Survey. 'Poverty' is defined as householders whose income after tax and welfare, and paying for housing is less than 50% of the median Australian household.

Source: Grattan analysis of Phillips and Nepal (2012).

³⁸ Phillips and Nepal (2012), p. 13

³⁹ Ibid.

⁴⁰ See, for example, Australian Greens (2013); BCA (2013)

4.5.3 Welfare for people with a disability

In contrast to pensions for seniors, disability pensions grew at only about the same rate as GDP between 2002-03 and 2013-14. Some of this growth was the consequence of individuals switching from Newstart to the Disability Support Pension (DSP), which pays more per week, and does not have the same requirements to actively search for work.

More than half the growth in DSP reflects demographic classification effects. The total proportion of older households on welfare has reduced over the last decade. However, there are more older households. As well, older households on welfare are more likely to claim DSP than Newstart, and DSP now supports some of the older households that would previously have received payments, such as mature age allowances, widows' pensions, and Age Pensions for women between 60 and 65, that have now been phased out.⁴¹

4.5.4 Welfare and inequality in Australia

Overall, Australia's welfare system is well-targeted. Welfare payments substantially reduce inequality of outcomes and opportunities. Once taxes and welfare are taken into account, overall inequality in Australia is a little above the OECD average, as Figure 17 shows. The effects of income inequality are mitigated by Australia's welfare system.

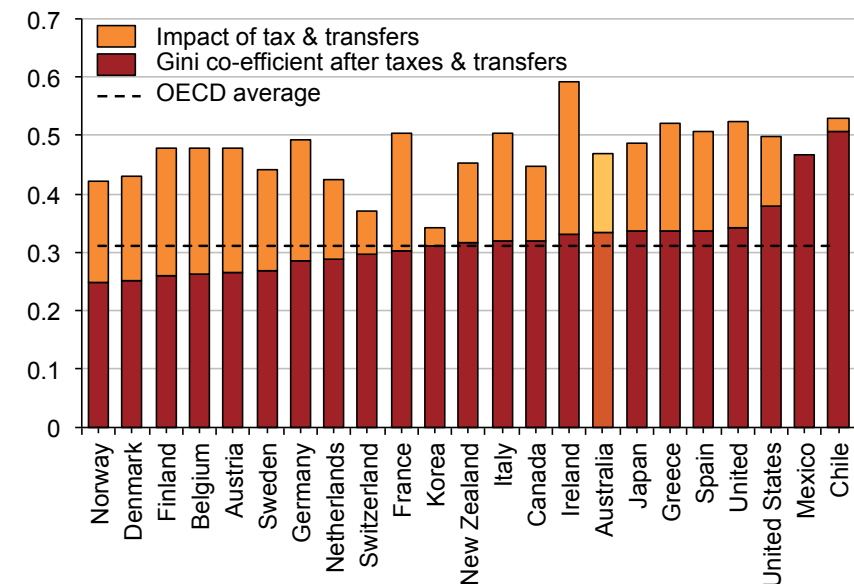
Australia's welfare system is highly targeted towards those who need the most. Although the Australian government pays less to

all households than elsewhere in the OECD, it pays more to low-income households, as Figure 18 shows.

Australian spending on means-tested payments is almost double that of anywhere else in the OECD. As a result, those in the poorest quintile in Australia receive 12 times more in cash

Figure 17: Household income inequality after taxes and payments in the OECD

Gini coefficient, late 2000s, household disposable income



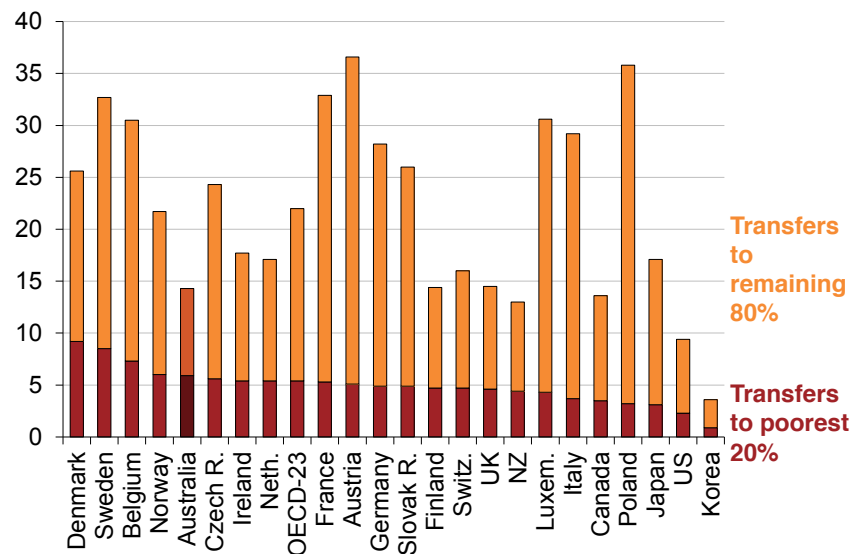
Note: No Gini coefficients for income before taxes and transfers are available for Mexico. Figures for Chile, Ireland, Japan, New Zealand and Switzerland are for 2009, all others are for 2010. Gini coefficient based on equivalised household disposable income (after taxes and payments) for total population.

⁴¹ Whiteford (2011); Whiteford (2014a)

Source: OECD (2013b)

payments than do those in the richest quintile. Across the OECD the poorest quintile only receives twice as much in cash payments, on average. The Australian tax system is also more redistributive than the OECD average, meaning that a greater proportion of the total tax take is collected from the rich than in comparable countries.⁴²

Figure 18: Redistribution of welfare payments in OECD countries
Public payments to households as a proportion of population disposable income, mid-2000s



⁴² OECD (2008), p.103-105

Note: Incomes are equivalised.

Source: Grattan analysis of Whiteford (2010)

A more extensive discussion of inequality and the welfare system in Australia is presented in Section 7.4 of the 2013 edition of this report; the situation has not changed materially in the year since that report was published.⁴³

4.6 Infrastructure expenditure

Infrastructure, transport and planning expenses are 7 per cent of Australian government budgets, and grew by 108 per cent in real terms between 2002-03 and 2013-14. States spent most of this money. Infrastructure, transport and planning now consume 16 per cent of State government budgets.⁴⁴

Accounting standards mandate that “recurrent spending” on infrastructure does not include the current year’s capital expenditure. Instead “recurrent spending” on infrastructure includes the interest and depreciation costs of *past* capital expenditure. Interest and depreciation from past infrastructure spending are consuming an increasing proportion of state recurrent budgets, as Chapter 6 will show.

As Figure 19 shows, infrastructure, transport and planning spending grew at least as fast as GDP in all large states. Growth was much faster than GDP in New South Wales and Queensland. A significant proportion of Queensland’s expenditure (\$4.1 billion) was spent by the Queensland Reconstruction Authority to repair

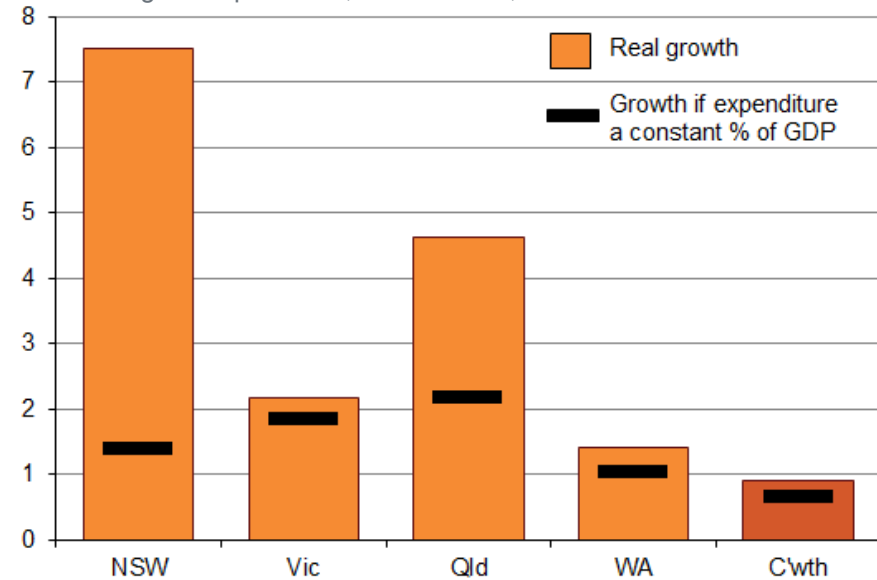
⁴³ Daley, *et al.* (2013), pp. 36-44. See also Whiteford (2013)

⁴⁴ The Commonwealth spends less than 1 per cent of its own-purpose expenditure on infrastructure, transport and planning.

infrastructure damaged in various natural disasters, including the 2010-11 floods and more recent tropical cyclones. This spending will fall provided that the number and severity of such disasters declines. The increase in New South Wales appears to be a more general increase across all categories of infrastructure, transport and planning expenditure, although some may be due to New South Wales using a different accounting approach to funding its transport agencies.

Figure 19: Change in Australian governments' infrastructure, transport and planning expenditure, by jurisdiction

Real change in expenditure, \$2013 billion, 2002-03 to 2013-14



Source: Grattan analysis of Commonwealth and State budget papers for 2002-03 and 2013-14; ABS (2014c); b); PBO (n.d.-a).

5 Revenue trends

Australian governments are forecast to collect \$497 billion in revenues in 2013-14, about 31 per cent of GDP. These revenues are dominated by income tax, company tax and the GST.

Other taxes – including all those raised directly by the States – are relatively small, as Figure 20 shows. Revenues collected by the Commonwealth are three times larger than revenues collected by all the States and Territories combined. Commonwealth transfers make up around 45 per cent of State revenues.

All major revenue sources dropped during the GFC. Collections have since recovered, apart from GST collections, which are likely to remain about 0.5 per cent of GDP less than the 2000-2010 average. Government decisions to abolish carbon pricing and the Minerals Resource Rent Tax (MRRT) remove potential revenue sources, although the total amount anticipated to be collected from these sources was relatively small.⁴⁵

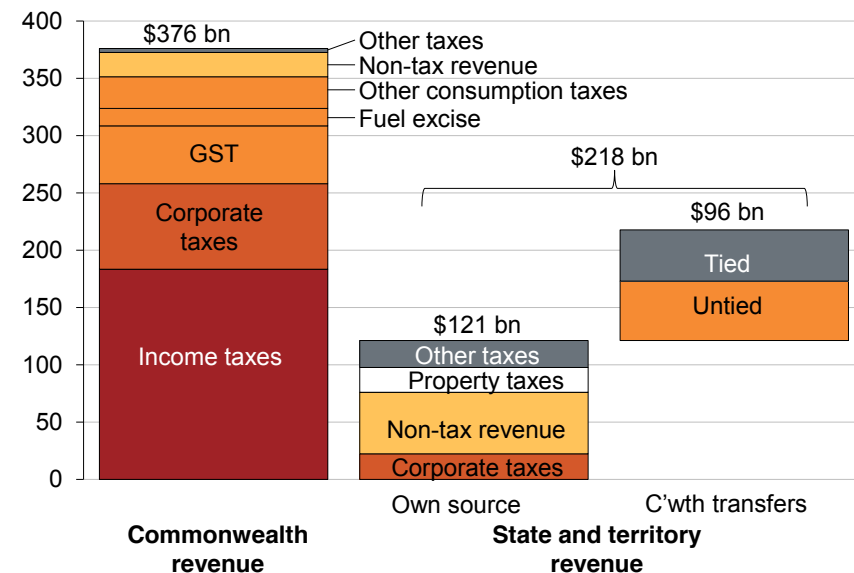
Tax expenditures – concessions to general tax provisions aimed at a specific policy outcome – now cost Australian governments more than \$135 billion a year in foregone revenue.⁴⁶ Although tax expenditures are notoriously difficult to compare across jurisdictions, available data suggest that Australia's foregone revenue from these concessions is amongst the highest in the developed world as a percentage of GDP.⁴⁷

⁴⁵ Longer-run Commonwealth revenue trends are reviewed in PBO (2014)

⁴⁶ Grattan analysis of Treasury (2014) and State government budget papers 2013-14.

⁴⁷ Tyson (2014)

Figure 20: Australian governments' revenues
\$ bn, 2013-14 budgets



Note: Classifications are based on liability rather than incidence, so income taxes' are individual income tax, superannuation taxes and fringe benefits tax; 'corporate taxes' are company tax, resource rent taxes and payroll tax; 'other consumption taxes' are carbon pricing, customs, excise and other sales taxes; 'other taxes' are mostly agricultural taxes for the Commonwealth, and gambling, insurance and vehicle taxes for the States; 'non-tax revenues' are not further specified for the Commonwealth, and are mostly dividends, interest, royalties and sale of goods and services for States; 'property taxes' are mostly land tax and stamp duty. For Commonwealth transfers to States: 'untied transfers' are mostly GST; 'tied transfers' include Specific Purpose and National Partnership payments. Source: Grattan analysis of Commonwealth and State budget papers 2013-14

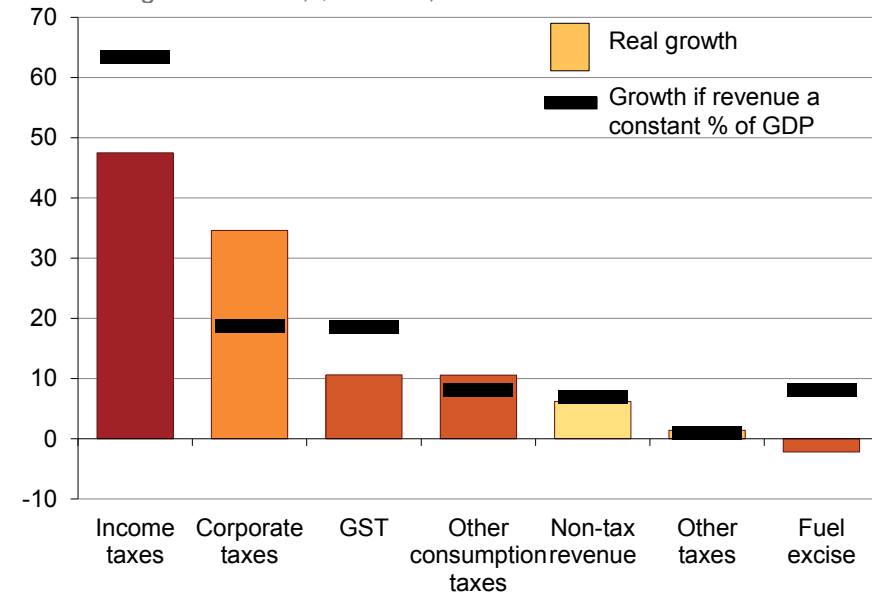
5.1 Commonwealth revenues

Revenues collected by the Commonwealth are forecast to amount to about 23.5 per cent of GDP in 2013-14. Over the 11 years to 2014, all major Commonwealth revenue sources increased in real terms, as Figure 21 shows. However, they fell as a proportion of GDP. Corporate taxes revenues rose faster than did GDP growth, while income and consumption taxes rose more slowly.

Yet this comparison conceals substantial variation from year to year, as Figure 22 shows. Commonwealth income and corporate tax dropped between 2007 and 2013 with big personal income tax cuts, and as the impact of the GFC flowed through the economy and then taxation revenues. Corporate tax revenues are forecast to return to close to their 2001-2010 average by 2017. Income tax receipts are projected to recover even more strongly, primarily due to bracket creep. Some have questioned whether allowing this level of fiscal drag is either politically feasible or economically desirable.⁴⁸

Figure 21: Change in Commonwealth government revenues

Real change in revenue, \$2013 bn, 2003 to 2014

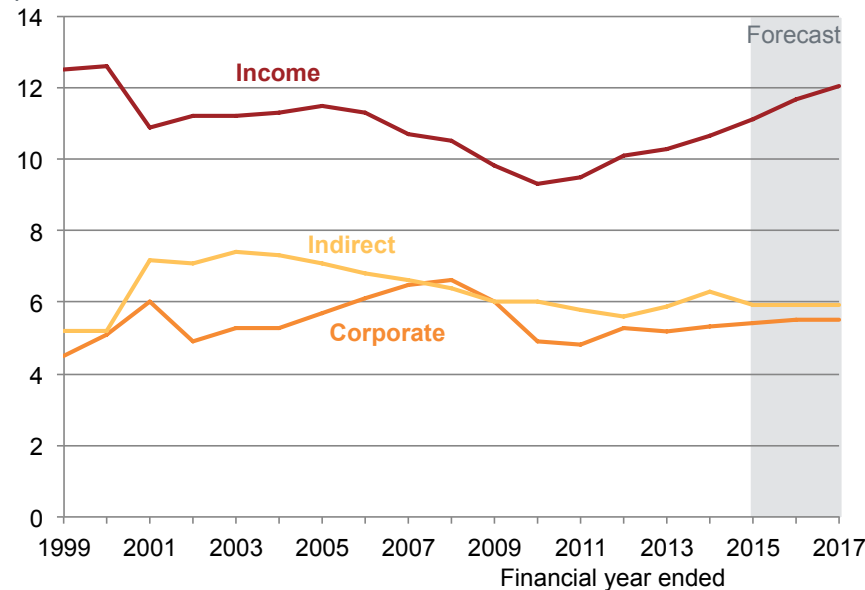


Note: 'Other taxes' is mostly agricultural taxes; 'other consumption taxes' is carbon pricing, non-GST sales taxes, customs, and non-fuel excises; 'income taxes' is individual income tax, superannuation taxes and fringe benefits tax. Non-tax revenues can vary widely depending on asset sales. However, the change in non-tax revenue, close to GDP, suggests that there are not major anomalies in either 2003 or 2014.

Source: Grattan analysis of Commonwealth budget papers 2002-03 and 2013-14; ABS (2014c) Table 1; ABS (2014b) Table 30.

⁴⁸ See, for example, Parkinson (2014).

Figure 22: Trends in major Commonwealth taxes
per cent of GDP

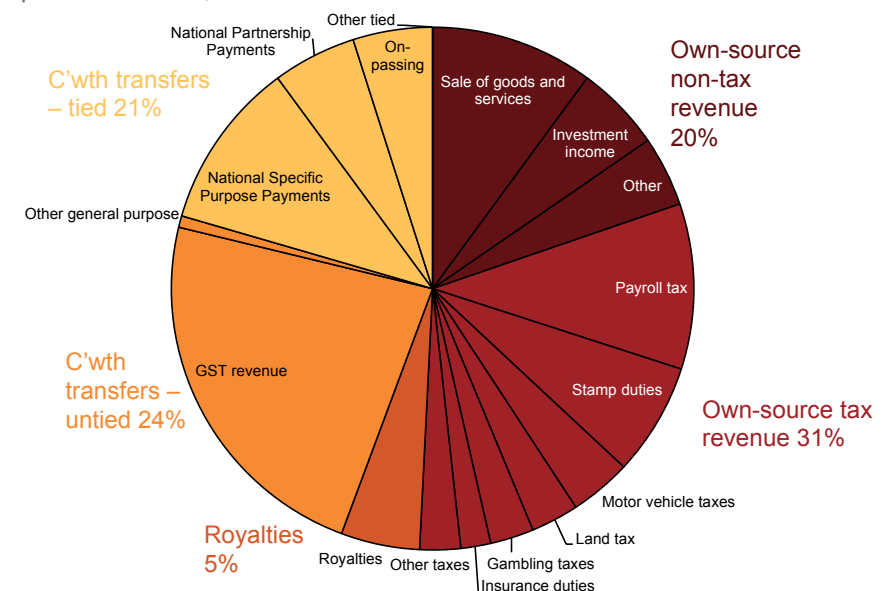


Note: Individual taxation receipts include individual and income tax withholding; corporate includes FBT, super funds, companies and resource rent taxes; indirect includes sales taxes, excise and customs duty, carbon price mechanism, and other.
Source: Treasury (2013a) Budget Paper 1, Statement 5, Table C2., Treasury (2013b)

5.2 State revenues

Revenues received by the States are forecast to amount to about 14 per cent of GDP in 2013-14. Many of these revenues are collected by the Commonwealth and then transferred to the States. State governments collect little more than half of what they spend, as Figure 23 shows.

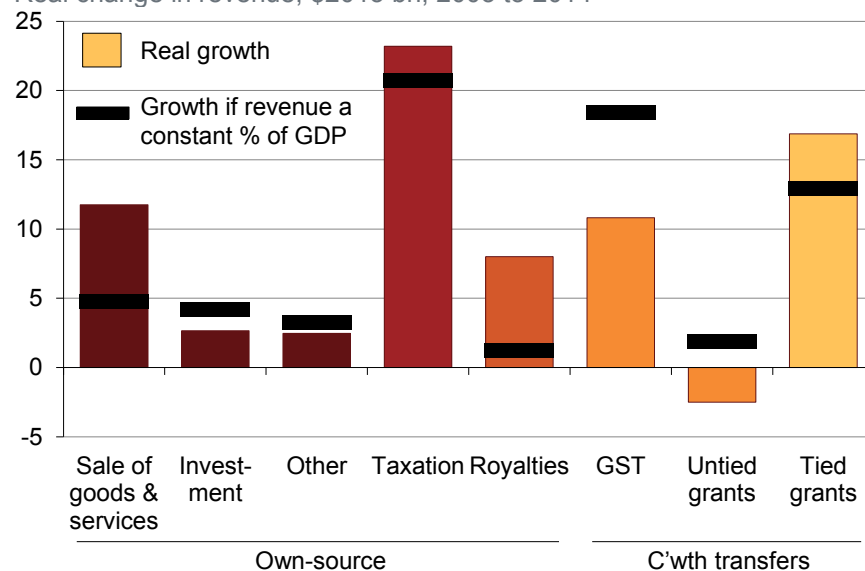
Figure 23: State and Territory government revenues by source
per cent of total, 2013-14



Notes: 'Investment income' includes interest income, dividends, and tax-equivalent payments from State entities. 'Other own-source' includes fines, fees, grants from entities other than the Commonwealth, and other revenue not elsewhere included. 'Other general purpose grants' is mostly royalty payments to WA.
Source: Grattan analysis of State budget papers for 2013-14.

Figure 24: Change in State government revenues

Real change in revenue, \$2013 bn, 2003 to 2014



Notes: 'Tied grants' include Specific Purpose Payments, National Partnership Payments, payments for on-passing to other entities, and other tied grants. 'Taxation' includes gambling, land, insurance, vehicle, payroll and stamp duties. 'Investment' includes interest income, dividends, and tax-equivalent payments from State entities. 'Other own-source' includes fines, fees, grants from entities other than the Commonwealth, and other revenue not elsewhere included. 'Untied grants' in 2013-14 are mostly royalty payments to WA; in 2002-03, they were mostly National Competition Policy payments and compensation payments for loss of revenue from State taxes abolished with the introduction of the GST (both have now ceased).

Source: Grattan analysis of State budget papers for 2002-03 and 2013-14; ABS (2014c) Table 1; ABS (2014b) Table 30.

Over the last 11 years, State revenues from the Commonwealth have been under pressure. Tied transfers from the

Commonwealth increased, but untied transfers – including GST revenues – shrank relative to GDP (Figure 24). The gap was filled by state charges and royalties growing faster than GDP.

As Figure 25 shows, some States collect much more revenue per capita than do others. In 2013-14, Queensland will collect at least \$750 more per person than New South Wales or Victoria, and Western Australia will collect over \$2,000 more per person. More detail is presented in the *Supporting analysis* volume.

5.3 Income taxes

Income taxes are forecast to be 10.7 per cent of GDP in 2013-14, as shown in Figure 22. This is close to their long-run average from 2000 to 2010.

Income taxes fell by 2 per cent of GDP from a peak in 2004-05 to a low in 2009-10. Revenue (including falls in capital gains tax) fell partly as a result of the GFC. It also fell with a series of rate cuts, particularly steep between 2006-07 and 2008-09,⁴⁹ so that income tax in 2010-2011 was \$10 billion lower than it would have been if the thresholds from 2006-07 had been indexed at CPI. However, by 2015-16, several years of bracket creep will cancel out the annual impact of these tax cuts, and income tax collection will be the same as if the income tax brackets had simply been indexed at CPI from 2007-08.⁵⁰

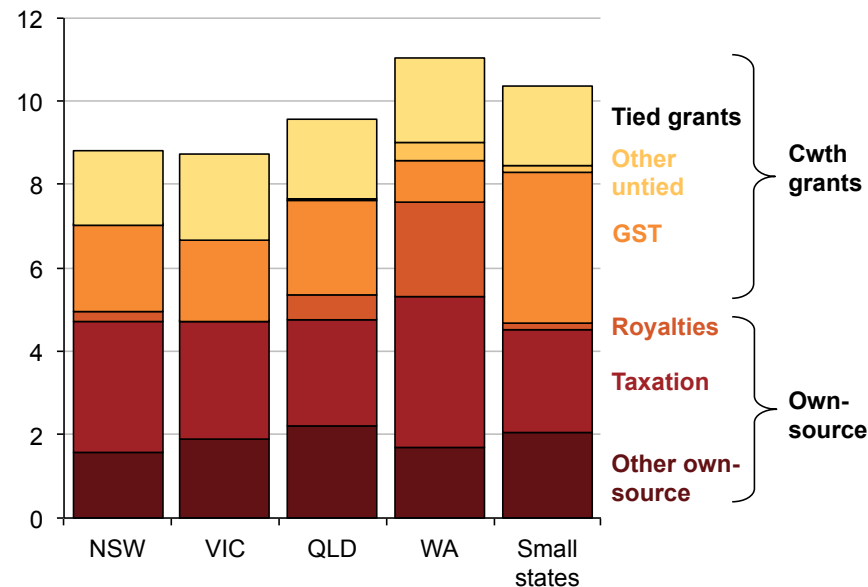
There is a reasonable chance that Capital Gains Tax (CGT) receipts will increase by about 0.3 per cent of GDP over the next few years. CGT is collected as income, company and

⁴⁹ See PBO (2014), p.30

⁵⁰ Deloitte Access Economics (2012), p. 73

superannuation taxes. Collections in 2010 were at a cyclical low of 0.45 per cent of GDP, well below the peak of 1.48 per cent of GDP in 2007. However, the share market and property price boom of the 2000s should probably be seen as an aberration: over 15 years, CGT receipts averaged 0.72 per cent of GDP.⁵¹

Figure 25: State government revenues per capita
\$2013 '000 per capita, 2013-14 budgets



Source: Grattan analysis of State budget papers for 2013-14; ABS (2014a) Table 4.

5.4 Corporate taxes

Commonwealth corporate taxes are forecast to be about 5.5 per cent of GDP in 2013-14. The largest component is company tax (4.5 per cent of GDP); much of the remainder is paid by super funds, the carbon price, and resource rent taxes. Payroll tax collected by the States is a further 1.4 per cent of GDP.

Over the last four years company tax revenues were below the average for 2000 to 2010, although above the low point of 2003. In part, economic growth and therefore corporate profits have been lower than before the GFC. In part company taxes are lower because of corporate losses during the GFC that were claimed in subsequent years.

Until the 2013-14 Budget, Treasury consistently overestimated company tax collections by about 0.5 per cent of GDP.⁵² This was partly because mining companies paid less tax than forecasts, which failed to allow for accelerated depreciation on substantial new investments. Another explanation, based on taxation statistics, is that financial asset investing companies paid about \$7 billion a year less tax after the share market crash in 2008.⁵³

5.5 Indirect taxes

Indirect taxes – primarily the GST and fuel excise – dropped by about 1 per cent of GDP relative to the 2001-2010 average, as Figure 22 shows.

⁵¹ Grattan analysis of Commonwealth 2013-14 Budget Paper No.1, p. 5-10

⁵² Chessell, *et al.* (2012), p. xxi

⁵³ Joiner and Eslake (2013), p.10

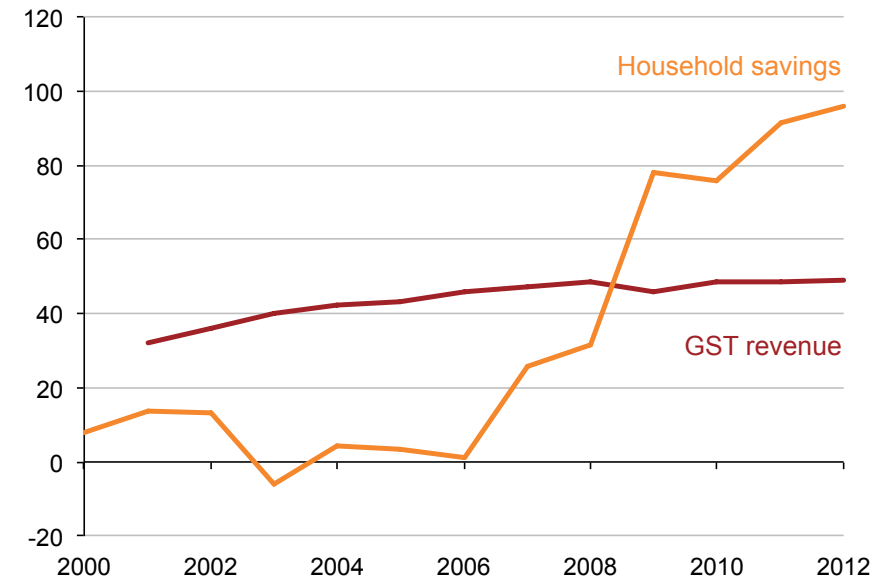
The fall in GST was partially due to changes in household savings.⁵⁴ In 2003, Australian households were saving less than 1 per cent of their discretionary (post-tax) income. By 2013 they were much more frugal, saving almost 10 per cent of discretionary income, or 6.5 per cent of GDP. Figure 26 suggests this may be a persistent change in behaviour, driven by a combination of historically high debt levels that households are now looking to reduce, lower confidence as a result of the GFC, increased awareness of rising longevity and the need for additional retirement savings, and replacement of the wealth increase previously delivered by strong capital gains in housing and equities.⁵⁵

GST revenues also fell because consumers spent an increasing proportion of their income on GST-exempt items such as education, health, and housing in the form of rent and mortgage interest (see Figure 27).⁵⁶ There was a further small loss of tax revenue as internet shopping grew, but not a material impact. As international online purchase sizes are small (averaging \$38 each) and falling, collecting GST on such purchases might well cost more than the revenue raised.⁵⁷

There is no obvious reason to expect these trends to reverse in the foreseeable future, particularly as the population ages: older

Figure 26: GST revenue and household savings

GST revenue and household savings, \$2012 bn



Note: Net household savings includes contributions and net earnings, less withdrawals, for superannuation.

Source: ABS (2013e) Cat no. 5506.0, ABS (2013b) Cat no. 5204.0

people spend a much higher proportion of their income on health.⁵⁸

Indirect taxes have also fallen relative to GDP because petrol excise was not indexed after 2001.⁵⁹ As a result, revenue from fuel excises fell in real terms between 2003 and 2014, despite an

⁵⁴ The flow of household savings as calculated by the Australian Bureau of Statistics includes contributions and net earnings, less withdrawals, for superannuation.

⁵⁵ Freestone, *et al.* (2011);

⁵⁶ See also PBO (2014) pp38–40

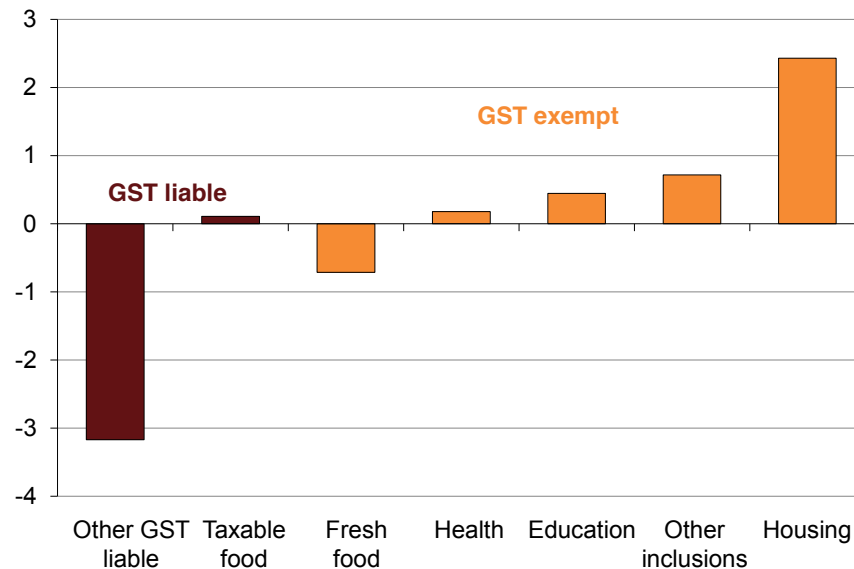
⁵⁷ See Daley, *et al.* (2013a) p52, and NAB (2013); cf EY (2012)

⁵⁸ Productivity Commission (2005).

⁵⁹ Treasury (2010b), section 9.3.

increasing population, as Figure 21 shows. If petrol excise had been indexed in line with inflation over the last decade, revenue on current volumes would be approximately \$5 billion higher. The higher price would probably reduce consumption, so the net revenue foregone is probably about \$3 billion.⁶⁰

Figure 27: Changes in consumer expenditure by GST liability
Change in share of household expenditure, 2004-10, percentage points of expenditure



Source: ABS (2006); ABS (2011)

⁶⁰ Daley, *et al.* (2013b). p. 28-29

5.6 Tax expenditures

When governments exempt certain types of transactions or taxpayers from an otherwise general tax, the foregone revenue is known as a tax expenditure. Tax expenditures are usually justified on the basis that they serve a particular policy objective better than does direct spending. Although tax expenditures are often less discussed than revenue or expenditure, they are a significant component of government budgets.

Measuring tax expenditures is inherently difficult, and Treasury has not quantified almost a third of all identified tax expenditures.⁶¹ Nonetheless, available estimates forecast that the Commonwealth will forego \$117 billion in tax expenditures in 2013-14, or almost a third of revenues collected.⁶² As Figure 28 shows, more than a third of this comes from superannuation tax, particularly the ability to contribute to superannuation funds from income before paying income tax, and the taxation of superannuation fund earnings at less than the marginal rate of income tax. The second-largest category is concessions for owner-occupied housing, particularly its exemption from capital

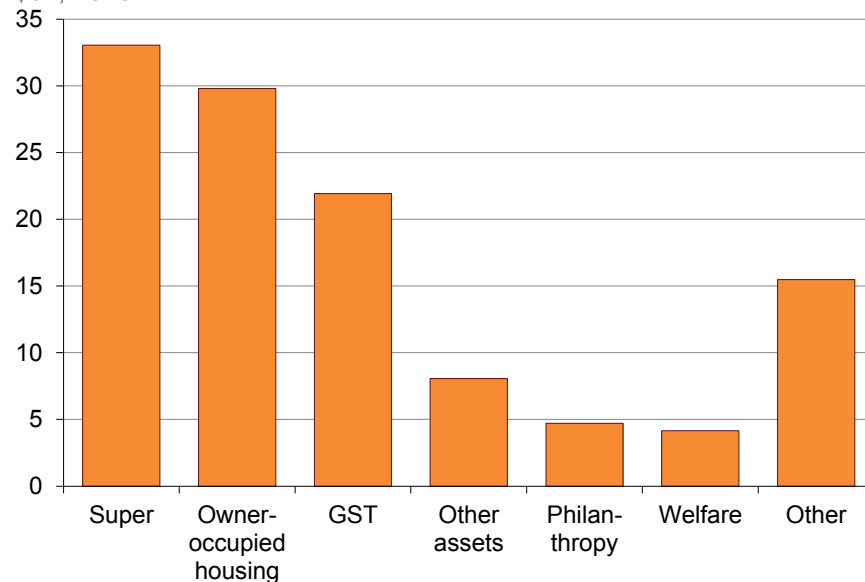
⁶¹ Measuring a tax expenditure involves determining how much revenue would have been collected if the exemption did not exist, which requires assumptions about what tax rules would apply in its place as well as how taxpayers behaviour might then change. For example, determining how much revenue government would collect if owner-occupied housing were not exempt from capital gains tax requires assumptions about what rate would apply, as well as whether fewer people might choose to invest in owner-occupied housing were it not subject to such favourable tax treatment. For a discussion of the difficulty of estimating and comparing tax expenditures, and a detailed description of the method used, see Treasury (2014) and the relevant sections of State budget papers.

⁶² Treasury notes that its estimates of tax expenditures are not strictly additive, introducing a further level of uncertainty to this figure.

gains tax. The third-largest is the exemption of fresh food, health, education, financial supplies and some other spending from GST.

Figure 28: Commonwealth tax expenditures by category

\$bn, 2013-14



Source: Grattan analysis of Treasury (2014)

Treasury suggests that the largest non-quantifiable expenditures include the ability to quarantine capital losses, as well as a number of company tax exemptions.⁶³

State tax expenditures are even more challenging to measure, since states use different tax benchmarks and assumptions. In 2012-13, the four largest states estimated that they gave up almost \$22 billion in tax exemptions,⁶⁴ primarily through stamp duties, land and payroll tax. These exemptions are equivalent to 20 per cent of those states' own-source revenue.

The best available data suggests that Australia has one of the largest tax expenditures in the world as a percentage of GDP.⁶⁵ This is not necessarily a bad thing; tax expenditures can achieve important policy aims. For example, exempting welfare payments from income tax ensures that money is not 'churned' from government to a recipient and returned immediately as tax. Nonetheless, tax expenditures are an important avenue for improving budgets. Chapter 8 assesses potential options for tax expenditure reform, including the significant fiscal benefits available from superannuation and GST reform.

⁶³ Treasury (2014) p11. These include exemptions for Commonwealth, State and Territory public authorities and entities; foreign branch profits; off-market share buy-backs; and charitable, religious, scientific, and community service entities.

⁶⁴ Grattan analysis of State budget papers 2013-14. Comparable data for 2013-14 is not available for all jurisdictions.

⁶⁵ Tyson (2014)

6 Capital expenditure

Capital expenditure is money spent on government-owned, fixed assets that provide services to the community.

Australian governments plan to spend \$21 billion on capital works in 2013-14. State and territory governments spend 84 per cent of this. Capital works are 6.1 per cent of all state and territory government spending in this financial year.

Over the last decade capital expenditure has increased substantially, much faster than GDP. Between 2007 and 2013, total government capital spending was three to six times the real value of expenditure in 2003-2004.

State governments tend to focus attention on their *recurrent* budget balance, which excludes capital expenditure. Yet higher capital expenditure matters because it increases interest and depreciation expenses in future recurrent budget balances. Interest and depreciation charges, largely a legacy of increased capital spending, have increased from about 6 to more than 9 per cent of state and territory revenue. State government recurrent spending to cover past infrastructure spending is consuming almost 0.5% of GDP more than 6 years ago. Tough policy choices can't reduce these charges: they are locked in to account for past spending.

New assets come with operating and maintenance expenses. These additional costs are not easily identifiable in government budgets, but they inevitably put more pressure on Australian budgets.

New assets can increase revenues, both through direct charging and by assisting economic growth that flows into higher tax revenues. They can also provide social benefits. However, unless projects are well-chosen and executed, the benefits may be less than the costs. Even if they exceed costs, government may not capture enough of the benefits to cover the costs of construction.

Accounting for capital expenditure has obscured some of the underlying problems in state budgets. Unusually large Commonwealth grants for infrastructure have boosted state headline recurrent budget balances. However, the depreciation expenses that match that revenue will drag on future state recurrent budget balances for many years.

Governments are regularly called on to spend more on infrastructure. If they simply maintain current levels of infrastructure spending, then interest and depreciation will consume an increasing share of their revenue in future.

Capital recycling – selling assets and spending the proceeds on new assets – would reduce the debt of state and territory governments. But it will not improve recurrent budget balances unless governments strike unusually good bargains in selling assets.

Similarly, increased use of public private partnerships (PPPs), instead of direct government borrowing for infrastructure, will not necessarily improve future budget balances. PPPs only substantially improve budgets if they generate additional revenue streams, such as new toll roads.

6.1 Trends in government capital expenditure

States and territories spend substantial capital to build hospitals, schools, roads, public transport and other infrastructure.⁶⁶

Over the last 11 years capital expenditure has increased significantly, peaking in 2009-10 with the Commonwealth's stimulus package (Figure 29).⁶⁷ But even when stimulus expenditure is excluded, capital expenditure in real terms in 2013-14 is four times higher than in 2002-03.

The analysis presented in this report is based on Australian Bureau of Statistics calculations that do not capture *all* government capital expenditure.⁶⁸ While this measure provides the most consistent comparison across Australia, it does not include spending that is often included in the headline capital expenditure of government budgets. For example, the ABS analysis does not include public non-financial corporations (PNFCs) that deliver services on behalf of government.⁶⁹ These are often excluded from general government budgets on the basis

⁶⁶ Note that the Commonwealth Government provides funding to states and territories through grants to be spent on capital projects.

⁶⁷ This includes both the Building the Education Revolution (BER) and Social Housing Initiative under the Commonwealth Government's National Building Economic Stimulus Plan.

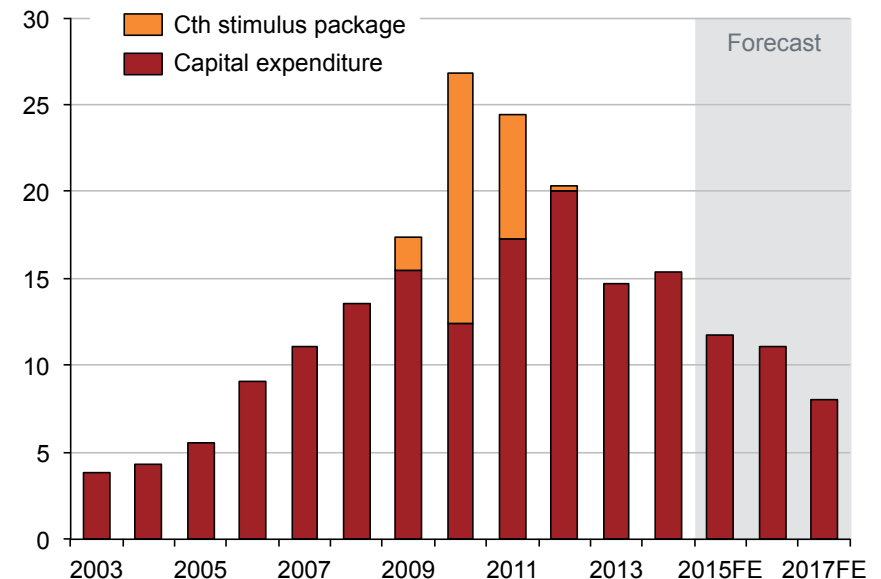
⁶⁸ This analysis uses the capital expenditure measure of 'general government net acquisition of non-financial assets' as reported by ABS (2013d). This measure captures purchases of non-financial assets, less asset sales, depreciation and other changes such as movements in inventories. See Supporting Analysis p41-43 for definitions.

⁶⁹ States use different terms to refer to PNFCs. For example they are termed 'Public Trading Entities' (PTEs) in New South Wales and 'Government Owned Corporations' (GOCs) in Queensland.

that their independent revenue streams will cover their costs, including capital expenditure.⁷⁰ However, the headline capital expenditure in NSW does include capital expenditure in the PNFC sector to purchase assets directly or through finance leases, such as the lease of train carriages via RailCorp.

Figure 29: State and territory capital expenditure

General government net acquisition of non-financial assets, \$2013 bn



Notes: 2012-13 are estimated actuals, 2013-14 and forward estimates are budgeted figures

⁷⁰ Other issues in reconciling this analysis to budgets published by individual state governments, such as timing issues, are discussed in Supporting Analysis p41-43.

Source: ABS (2013) cat 5512, Treasury (2008), Part 2, Table 2.1, State and Territory budget papers 2013-14

Box 1 – Budget classifications

Government budgets are reported according to standard economic sector classifications, as defined by the ABS.⁷¹ The key terms are:

General government means government departments and agencies that deliver public services, or act as a regulator of private sector activity. Examples of general government expenditure include education, health, and criminal justice.

Public Non-Financial Corporations (PNFCs)⁷² typically deliver commercial services such as water, electricity and ports. They operate on a cost recovery basis and fund capital expenditure through user charges as well as borrowings.⁷³ State governments may also provide general government funding to PNFCs to deliver services on behalf of the government. Such expenditures are usually included in headline capital expenditure numbers.

Public Financial Corporations (PFCs) are arms of government engaged in financial activity including state central borrowing authorities such as Treasury corporations.

6.2 Commonwealth capital expenditure

The Commonwealth funds a large amount of state-based infrastructure such as roads, schools and hospitals. However the

Commonwealth accounts for this funding as recurrent grants to states rather than as capital expenditure in its capital account. As a result, the Commonwealth's capital expenditure captures only money spent on assets *owned* by the Commonwealth.

Between 2002-03 and 2012-13 Commonwealth capital expenditure grew by 10 per cent a year, on average.⁷⁴

The growth significantly exceeded average GDP growth of 3 per cent per year. While capital investment peaked at around \$7 billion in 2009-10, it has reduced and is not forecast to grow over the forward estimates period (Figure 30). This may change in the 2014-15 budget given recent defence acquisition decisions.

Most Commonwealth Government capital expenditure is spent on defence assets. These include specialised military equipment such as aircraft, ships and building support facilities. The increase in defence spending over the last 10 years was largely due to buying weapons systems and planes, chiefly Super Hornets and heavy lift planes.⁷⁵ Capital expenditure by other departments is significantly less than defence spending and includes buildings, infrastructure and computer software.⁷⁶

As it spends more on capital, the Commonwealth, like the states, will incur increasing interest and depreciation expenses. Yet the pressure on the Commonwealth budget will be less since the Commonwealth spends less on capital assets compared to states and territories.

⁷¹ ABS (2014e)

⁷² Also known as Public Trading Enterprises (PTEs) in New South Wales.

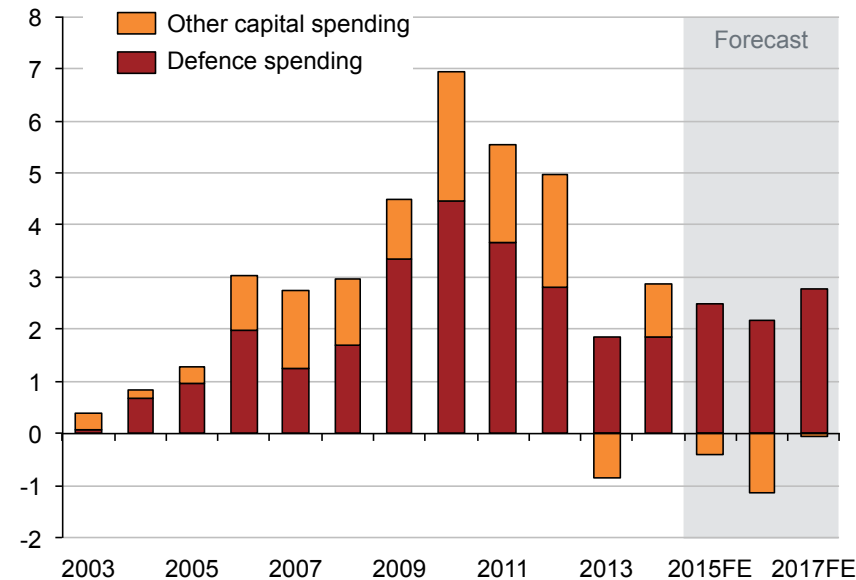
⁷³ Treasury NSW (2006) Budget Paper 4, pp. 16-17

⁷⁴ PBO (2013a), p. 50

⁷⁵ Growth in defence funding is consistent with a White Paper Defence 2000 target of three per cent growth in defence spending per year: *ibid.* p. 38.

⁷⁶ *Ibid.*, p. 50.

Figure 30: Commonwealth general government net capital investment
\$2013 bn



Source: PBO (n.d.-b)

6.3 Funding capital expenditure

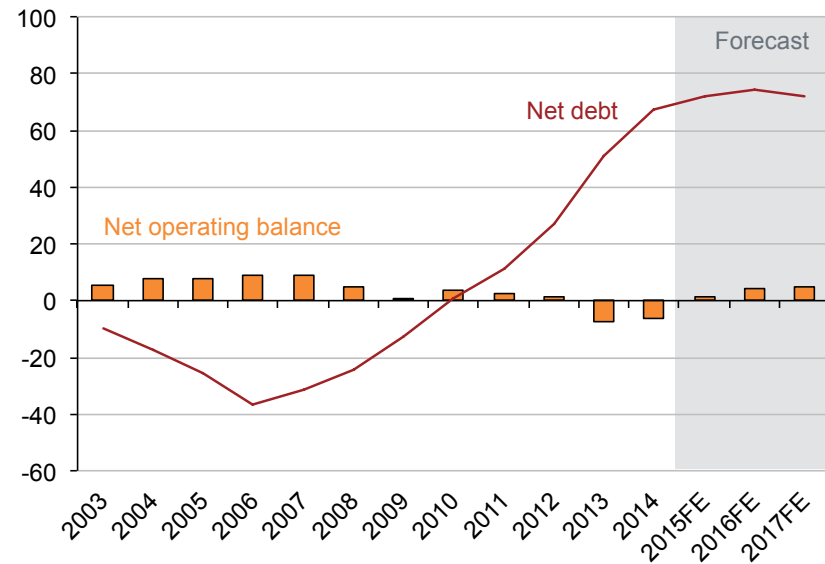
States could have funded capital expenditure through recurrent operating surpluses. However, over the last 7 years, states posted either recurrent deficits or small recurrent surpluses at best. Consequently, all states funded increased capital spending by running down accumulated surpluses and then borrowing and increasing debt. In 2006, total state and territory budgets had financial assets that exceeded debt liabilities by \$37 billion. Today

states have \$69 billion in net debt, as Figure 31 shows. Borrowing by the three largest states – Queensland, Victoria and New South Wales – mostly drove the increase. Capital expenditure drove almost all the increase in debt as states collectively had close to zero net operating balances between 2008 and 2014.

Although the Commonwealth Government contributed funds for large infrastructure projects, these were often conditional on states matching the Commonwealth's funding. Victoria's Regional Rail Link and the New South Wales' Pacific Highway upgrade are examples.⁷⁷ States therefore increased debt to pay their share.

⁷⁷ Department of Infrastructure and Regional Development (2014b), Department of Infrastructure and Regional Development (2014a)

Figure 31: Combined state and territory net debt
\$2013 bn



Note: Net debt is deposits held, advances received and borrowings, less cash, deposits, investments, advances paid, and investments, loans and placements: ABS (2005)

Source: ABS (2013d), state and territory budget papers 2013-14

6.4 Recurrent budget impacts of capital expenditure

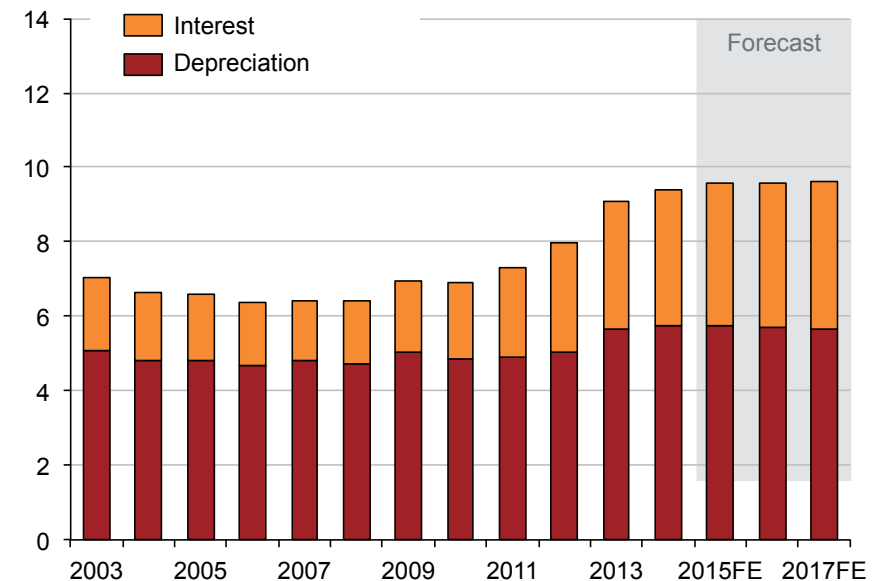
From an accounting perspective, historic capital expenditure increases depreciation and therefore recurrent expenses in future budgets. If capital works are debt-funded, the increased interest also drags on future recurrent budgets.

Unlike many other expenditures, depreciation charges cannot be reduced through a change in government policy or priorities. Depreciation costs are locked in for the life of the asset. Interest costs are locked in until debt is repaid.

Over the last 11 years, interest and depreciation costs as a percentage of state revenue increased from about 6 to 9.4 per cent in 2013-14, as Figure 4 shows. They are estimated to increase slightly over the forward estimates period. Interest expenses have increased faster than depreciation.

This increase is equivalent to states spending about 0.5% of GDP more paying for the infrastructure spending of previous years.

Figure 32: State and territory depreciation and interest costs as a percentage of revenue
Percentage of revenue

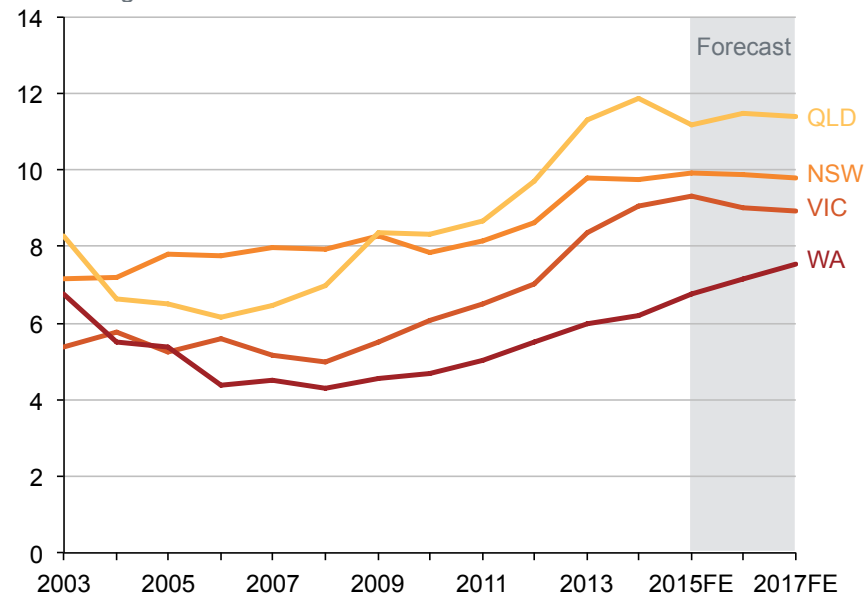


Source: ABS (2013) cat 5512, State and Territory budget papers (2013-14)

The only state that has not followed this trend is Tasmania, as Figure 33 and Figure 34 show. The particularly rapid increase in Queensland is partly due to capital works repairing damage from cyclones, flooding and bushfires.

Figure 33: Interest and depreciation costs as a percentage of revenue, by state

Percentage of revenue

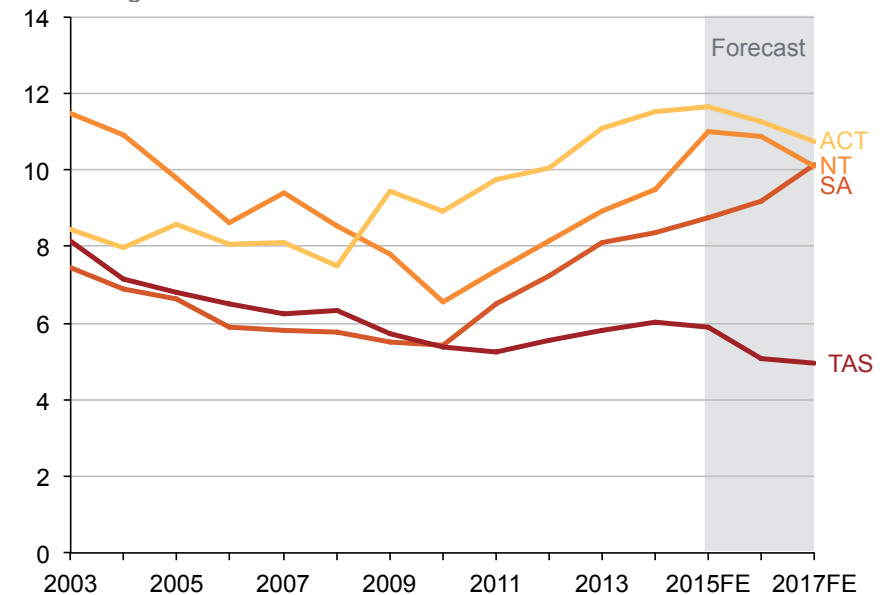


Source: ABS (2013d), State and Territory budget papers (2013-14)

If capital expenditure is simply maintained at current levels, depreciation charges may increase further. Whether this is happening is not clearly visible, and depends on the age profile of assets already being depreciated. The depreciation charges attributable to this profile are visible over the forward estimates. But beyond that period, some state government central agencies have no central registry of the aggregate stock of assets, their remaining life, or forecast depreciation costs. Instead, individual agencies hold these figures.

Figure 34 Interest and depreciation costs as a percentage of revenue, by state

Percentage of revenue



Source: ABS (2013d), State and Territory budget papers (2013-14)

6.5 Maintenance costs

As well as adding to interest and depreciation expenses, new infrastructure also requires ongoing operational expenses and maintenance. Budgets typically do not provide aggregated reporting on maintenance. Maintenance spending can usually only be calculated by examining line items for each agency in every jurisdiction.

It is often possible to defer maintenance spending. Doing so improves recurrent budget balances but increases the amount that will need to be spent in future.

Failing to maintain assets often increases total costs in the long run. As many home-owners have discovered, ignoring a leaky roof can cost a lot more than buying new tiles. If assets are badly run down, then recurrent maintenance will often be reclassified as capital works for renovations. This classification may defer the

impact on recurrent budgets, but will then be a larger ongoing charge than is timely maintenance.

A case study of Victoria's Department of Education and Early Childhood Development (Box 2) shows that spending can be much less than industry standards for maintenance for many years. This creates a substantial backlog that will inevitably need to be spent but which is not visible in the budget papers.

Box 2: Maintenance and capital expenditure in Victoria's Department of Education and Early Childhood Development

Over a decade, spending on regular school maintenance in Victoria was only about 0.6 per cent of asset value, less than a third of the industry standard for asset management.

As **Figure 35** shows, money was allocated for maintenance both through recurrent school budgets, and as capital projects to “modernise and redevelop” schools when buildings had fallen well behind contemporary requirements. These capital projects were a mixture of substantial renovations for new purposes, and catch-up maintenance

In 2012, the Department undertook an audit of school buildings. It identified that more than 2000 buildings, or 7.5 per cent, were at the point of ‘imminent failure’ or had already failed. The Department estimated that an additional \$420 million was required to return these buildings to appropriate condition, with more than half the spending classified as capital expenditure rather than maintenance.

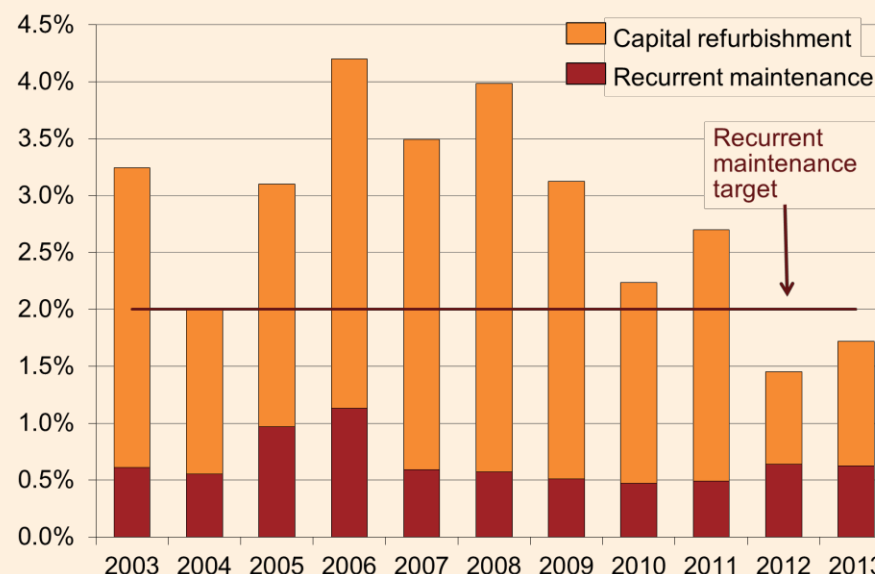
Following the Victorian Auditor General's report, the Department is developing a new maintenance funding formula driven by the profile of stock of assets, rather than by the number of students.

Note: The maintenance funding benchmark used by the Victoria Auditor General's Office is 2 per cent of asset stock. Victorian Auditor-General's Office (2012), p. viii

Sources: Victorian Auditor-General's Office (2012)

Figure 35: DEECD school maintenance expenditure

Expenditure as a % of asset stock



Note: Figures converted to \$2012-13. Asset stock is 'property, plant and equipment' Capital refurbishment includes modernisation, refurbishment and regeneration, minor works, construction of new classrooms, replacement and specific programs. Capital refurbishment is annual Total Estimated Expenditure (TEI) classified as Refurbishment Recurrent maintenance is maintenance provided to schools through SRPs and Budget and Expenditure Review Committee (BERC) funding

Source: DTF Victoria (multiple years), DEECD (multiple years)

6.6 Accounting impact of Commonwealth grants

Accounting standards for Commonwealth infrastructure grants can make state budgets look better than they really are. Accounting standards require that states treat Commonwealth contributions as recurrent revenue. The Commonwealth treats these grants as recurrent expenditure, and so includes them in its recurrent budget balance. The states and territories treat the grants as recurrent income – which helps their headline recurrent budget balance – but when they spend the money they typically account for it as capital expenditure.

This accounting trick does not immediately affect the states' headline recurrent budget balance, but it creates a drag on future recurrent budget balances as the asset depreciates. It increases both short-term recurrent revenue and long-term future recurrent spending. When Commonwealth grants for capital expenditure return to more normal levels, the underlying recurrent budget position of state governments will be revealed as worse than it is on current headline numbers.

6.7 Capital recycling

Capital recycling is the use of proceeds from the sale of government-owned assets to invest in new infrastructure. Such sales are claimed to free up capital for new capital works that would otherwise put the budget further into debt.

Capital recycling does affect net debt positions: the amount of cash that governments are liable to pay bondholders. If governments built new infrastructure, but did not sell existing infrastructure, their debt levels would be higher. Debt positions

Box 3: Capital recycling examples

New South Wales leased Port Botany and Port Kembla to private operators and put the cash produced from these long-term leases into NSW's infrastructure fund, Restart NSW.⁷⁸ The government intends to use some of this money to fund transport capital projects including the WestConnex project.

The Commonwealth Government recently announced the sale of Medibank Private in 2014-15.⁷⁹ It intends to spend the proceeds of the sale on infrastructure.⁸⁰

To encourage states to recycle capital, the Commonwealth Government announced that it will provide incentives for state and territory governments to sell assets. The Commonwealth will make incentive payments, valued at 15 per cent of the asset sale price, when sale proceeds are invested in infrastructure as opposed to paying down net debt.⁸¹

are relevant when ratings agencies calculate credit ratings for state governments. These ratings affect the interest rate paid on state debt.

Capital recycling usually does not markedly improve a government's recurrent budget balance. If you sell an asset and use the funds to repay debt, then you avoid interest and operating expenses. However, the reduced expense is usually matched by reduced income given up when the asset is sold. The private

⁷⁸ Treasury NSW (2013), Budget Paper 2, pp. 1-14

⁷⁹ Cormann (2014a)

⁸⁰ Cormann (2014b)

⁸¹ Hockey (2014)

sector usually values assets according to their future revenues.⁸² Because the private sector's cost of capital is higher than public sector debt charges, assets are likely to be sold at prices so that the savings in interest payments are outweighed by the loss of future income.

However, capital recycling can improve a government's recurrent budget balance if the purchaser thinks that they will be able to generate substantially more revenue from the asset than government did, and accordingly pays more for the asset. For example, the NSW government sold three ports for more than \$5 billion at what were generally regarded as excellent prices.⁸³ However, even at these prices, the interest saved will only just cover the current earnings given up. Although the ports had not paid dividends to government in the previous five years,⁸⁴ they were generating profits, retained in the business. The purchasers paid about 25 times the current earnings,⁸⁵ implying that the revenues were about 4% of the sale price. States currently pay an interest rate of around 4% on their borrowings.

Privatisation of government assets may also lead to productivity gains.⁸⁶ The value of these gains may be captured by the public, government, or the new operator.⁸⁷ Who gains depends on the price paid, and whether user charges fall as costs are reduced.

⁸² PWC (2014)

⁸³ Bartholomeusz (2014)

⁸⁴ Roe (2014)

⁸⁵ Bartholomeusz (2014)

⁸⁶ For example, in the electricity distribution sector, private operators appear to have materially lower capital and maintenance costs: see Wood, *et al.* (2012)

⁸⁷ See discussion in Daley, *et al.* (2013a) pp. 78-9.

Capital recycling may also effectively transfer risks from government to the private sector.

The construction of new assets affects recurrent budgets whether or not other assets are recycled. New assets create additional depreciation, and will drag on future budgets, except in the unusual situation where additional revenues from the asset (such as tolls) are greater than the depreciation and interest costs from building the asset.

6.8 Public Private Partnerships (PPPs)

PPPs have become a popular mechanism to finance state government infrastructure. A private entity borrows the capital, builds the asset, and then leases it to government through a finance lease. Typically the asset is transferred back to government once the finance lease expires – often after decades.

A few assets generate so much income that government does not need to make payments under the finance lease. Much more commonly, government undertakes to make regular payments to the developer for a number of years. Ultimately these 'availability payments', as they are often called, must be funded from recurrent budgets.

PPPs affect a state's capital expenditures just as if the state built the asset itself. Accounting rules typically require state governments to record the capitalised value of the finance lease as a capital expense when the asset is commissioned. This value should be similar to the cost of borrowing to build the asset, and then paying interest and repaying the principal on those borrowings. Given the higher profit margins and financing costs of

Box 4: What are Public Private Partnerships?

PPPs are agreements between private enterprise and governments to deliver public infrastructure projects.⁸⁸ Since the early 2000s governments have undertaken about 130 PPPs to build roads, railways, hospitals, courts and prisons, among other projects.⁸⁹ PPPs typically bundle the investment to finance, design and build a single piece of public infrastructure, and to provide services from the infrastructure, into a long-term contract.⁹⁰ Private investors finance and manage the construction of public infrastructure, then lease it to government over a contracted period, sometimes between 20 and 30 years.

the typical PPP, the finance lease may well be more expensive than borrowing directly.

PPP arrangements have a similar effect on recurrent expenditures as if the state built and operated the asset itself. The annual payments under a finance lease should be similar to the cost of interest, principal repayments and maintenance.

PPP arrangements are only likely to cost budgets less if outsourcing a project's design, building and operation to a single operator aligns incentives and reduces the long run total cost of ownership of the asset. For example, a private sector operator might choose to invest more in a road's initial construction because this will reduce future maintenance costs. The best

argument for PPPs is that private operators may make better trade-offs of this kind than the public sector.

However, these advantages need to be balanced against the additional costs of PPPs, including transaction costs and the higher cost of funds for a private sector operator. The conditions of the PPP may also reduce government's ability to build future infrastructure. They may also provide windfall gains to private operators when government builds additional connecting infrastructure.

PPPs can transfer construction risk, and sometimes forecasting risks, to private sector operators. They may be better at managing construction risks, reducing total cost. Private sector capital may increase discipline around forecasting, so that white elephants are built less often. Yet these advantages must again be balanced against the additional costs, particularly the price that the private sector demands for taking forecasting risk.

Due to the commercially sensitive nature of PPPs, there is little publicly available information on the total cost of projects to government, nor the annual payment for each project. Nor is there information on the capital costs – interest and depreciation expenses – that the government will continue to incur for the life of the finance lease. This reduces transparency of capital expenditure across states and territories.

⁸⁸ Infrastructure Australia (2008)

⁸⁹ See Infrastructure Australia (2014) for a full list of completed PPPs:

⁹⁰ Engle, *et al.* (2013), RBA (2014)

Box 5: PPPs in Australia

The Victorian County Court project showed how PPPs can be innovative. The Liberty Group, a private entity, designed, developed, financed, built and manages the state's busiest trial court. It comprises 54 courts and state-of-the-art technology, including video-conferencing and remote-witness facilities.

The consortium's bid included the construction - but not fit out - of two additional floors for future expansion at no further cost to taxpayers until new courtrooms were required. The delay in fit-out expenditure on eight additional courtrooms until they were needed in 2008 generated significant savings that both reduced the government's costs and improved the consortium's return on investment.

PPPs can effectively transfer construction and traffic risks to private sector operators. These risks are real. Cracks in walls delayed opening Melbourne's City Link tunnel. Delays in construction of the Victorian Desalination Plant resulted in lower payments to the private sector operator. Several toll road PPPs, including Sydney's Cross-City and Lane Cove Tunnels and Brisbane's Clem7 tunnel, went into receivership when traffic volumes fell significantly short of forecasts.

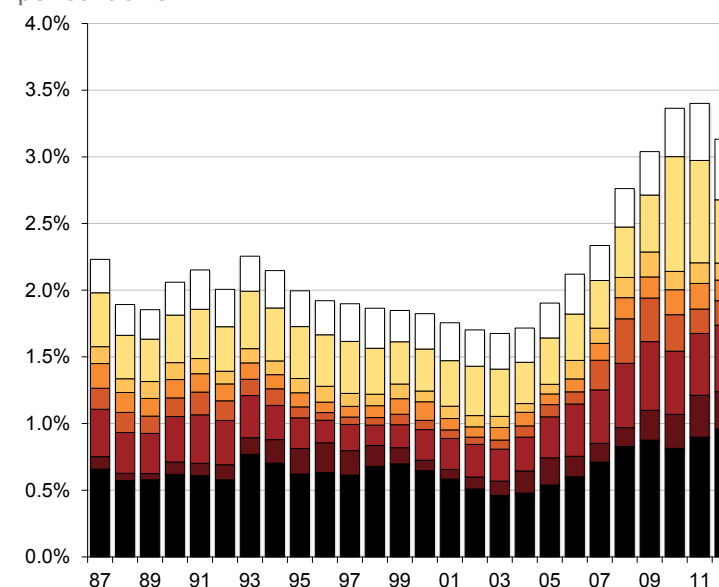
Source: Hodge and Duffield (n.d.), Guest (2011), New South Wales Audit Office (2006)

6.9 Impact of capital expenditure

The rapid increase in state infrastructure spending may be surprising given the frequent assertions that Australia has a large

infrastructure deficit.⁹¹ Yet Australian government spending on infrastructure increased significantly over the last seven years, and was much higher over this period than its typical level since 1987 when the ABS began collecting records.

Figure 36: Infrastructure work done for the public sector per cent of GDP



Note: Health and education expenditure is general government expenditure by national, state and local government

Source: ABS (2013c) Table 11, ABS (2013b) Table 53. Excludes telecommunications which is insignificant after Telstra sale

⁹¹ Citigroup (Citigroup Economic & Market Analysis) (2008); Productivity Commission (2014) and Infrastructure Australia (2013b) cited by Productivity Commission (2014), p. 58

Capital expenditure can be a good thing; infrastructure is important for economic growth if it is the right infrastructure in the right place at the right time for the right price.⁹²

However, governments may not be getting particularly good value from the significant increase in infrastructure spending. Some have questioned whether governments have invested in the 'right' or most productive infrastructure.⁹³ Governments continue to promise investment in projects that don't have rigorous benefit cost analyses ahead of those that do.⁹⁴ Even when these analyses are followed, they do not guarantee value for money. Analyses for transport infrastructure systemically overestimate the benefit cost ratios of projects.⁹⁵ A litany of local examples – from the cost overruns for the Myki ticketing system in Melbourne to the highly optimistic initial traffic forecasts for the Clem7 Tunnel in Brisbane, the Cross City Tunnel in Sydney, Eastlink in Melbourne, and the Sydney and Brisbane airport trains – demonstrates that Australia is not immune from this dynamic.⁹⁶ Unfortunately, rigorous evaluation is hampered by lack of availability of data.

Others have suggested that governments have overpaid for infrastructure as a result of high costs.⁹⁷ The recent increase in government capital expenditure has not produced a clear lift in

productivity, although this would inevitably be hard to see given the many drivers of productivity growth.⁹⁸

On any view, increased capital expenditure has led to higher interest and depreciation costs that are an ongoing drag on state budgets. In addition, operating expenses will increase with capital expenditure. In the long term, budgets will be under even more pressure if expenses are not increased to maintain these assets properly.

Given the other pressures on state budgets, there is little room to fund new infrastructure. Sustainable spending on infrastructure will require improved recurrent budget balances, either through reduced spending in other areas, or higher taxes and charges. While PPPs may lead to better trade-offs between initial spending, design, and maintenance costs, they are not likely to result in a much better recurrent budget bottom line than government construction. Similarly, capital recycling may affect credit ratings, but it will not alter the additional pressure on recurrent budget balances due to new capital spending.

To ensure long-term state budget sustainability, the Victorian government has adopted a principle that future capital spending must be funded from recurrent budget surpluses so that debt does not increase, with interest payments that drag in future.

⁹² Eslake (2010)

⁹³ The Productivity Commission notes that there are many examples of poor project selection leading to 'highly inefficient outcomes'. Productivity Commission (2014), p. 69

⁹⁴ See, for example, Wiggins (2013); Infrastructure Australia (2013a); Flyvbjerg (2009); Davies (2013); Dobes (2008); Ergas and Robson (2010)

⁹⁵ Flyvbjerg (2009)

⁹⁶ Davies (2010); Davies (2012)

⁹⁷ Victorian Government (2014), p.34

⁹⁸ For a more detailed discussion of the merits of recent infrastructure spending, see Daley, *et al.* (2013a), p.65.

7 Budget pressures

Many in the community expect that Commonwealth and state government budgets will balance, without substantial cuts to services or increases in taxes. Many also expect that our standards of living will continue to rise rapidly. These expectations have been set by 20 years of rising standards of living, with real incomes per person rising at more than 2 per cent a year. Through the 1990s, productivity improvements fuelled growth. In the 2000s, rising prices for Australia's minerals exports delivered rising standards of living, particularly through lower prices for imports. These strong terms of trade boosted government revenues by about 2 per cent of GDP.

Yet good budgetary and economic times obscured mounting pressures on Commonwealth and state government budgets. In particular, health costs increased by 1 per cent of GDP, cuts amounting to 1 per cent of GDP were made to income tax and fuel excise and governments suffered through the global financial crisis. These hits to budgets were offset, however, by the price and economic effects of the mining boom.

The next decade is likely to be more difficult than the last. Real wages are likely to grow much more slowly. As the terms of trade fall, income growth per capita is likely to be much lower than we have come to expect through the last decade.⁹⁹ Falling terms of trade and lower economic growth will also make it harder to balance government budgets.

⁹⁹ Gruen (2012) p. 3; Eslake and Walsh (2011), Parkinson (2014). This is likely to be the case unless productivity growth rises quickly and to far above its historical average.

Budgets will face increasing pressures. Demand for health care is likely to continue to rise. As wages grow more slowly, inequality may increase, placing pressure on government to increase welfare spending. Australia's ageing population will also put more pressure on budgets in the form of Aged Pension and aged care costs.¹⁰⁰ Without changes, the Aged Pension could expand from 2.4 to 3.3 per cent of GDP by 2060.¹⁰¹

The increased capital expenditure over the last 10 years will continue to place pressure on budgets due to interest and depreciation expenses. These now account for 10 per cent of revenue in some states. Unless new revenue sources or spending cuts are found, these pressures may limit governments' ability to invest in new infrastructure, as Chapter 6 discussed.

Finally, new government spending will increase the pressure on budgets. Implementing the National Disability Insurance Scheme, reforms to school funding and a more expensive paid parental scheme will all make future budgets more difficult.

The title of Laura Tingle's 2012 *Quarterly Essay*, 'Great Expectations', aptly captured the political tendency to raise expectations about what government can and should deliver.¹⁰² As she pointed out, although governments have relinquished direct control of many institutions, from running airlines to setting interest rates, political rhetoric over the last decade has tended to

¹⁰⁰ IMF (2014a), pp. 27-28, Productivity Commission (2013), p. 143, 148

¹⁰¹ Productivity Commission (2013) p. 146

¹⁰² Tingle (2012)

imply that government can solve virtually any problem. Such expectations were easier to fulfil when real GDP was rising quickly, and government revenues were rising as a percentage of GDP.

While there may well be political pressures for government to increase living standards in more difficult economic times, there is little government can do. Community expectations about budgets are also likely to be disappointed. As the Secretary to the Treasury, Martin Parkinson, has pointed out, there is a “gap between community expectations and what governments can realistically do... [and] a gap between what citizens want from governments and what they are prepared to pay for those services”.¹⁰³

7.1 Macroeconomic influences on Australian budgets

Government budgets benefited from the strong terms of trade over the last decade. The prices of goods that generated taxes rose more quickly than the price of goods and services that governments bought (particularly foreign goods and Australian wages). Terms of trade have already fallen from their peak, and Treasury projects they will return to 2005-06 levels by 2019-20.¹⁰⁴ It is possible they will fall faster and further, back to the long-run average that prevailed between 1982 and 2002. This would mirror the history of other terms of trade changes around the world, which have tended to be symmetrical, falling back as far and as fast as they rose.¹⁰⁵ If Treasury projections are right, Australian

governments will be looking for 0.5 per cent of GDP in savings or tax increases to repair their budget balances. They could be looking for as much as 1.5 per cent of GDP in savings if terms of trade return to long run averages.

Australian government budgets are also benefiting from relatively benign economic conditions. Four years after the GFC, the economy of Australia and its major trading partners in Asia are close to their long run growth rates, even if the economies of many developed countries have not yet recovered to their pre-GFC size.

Combining these effects, one would expect Australian governments to be running comfortable surpluses at this point in the mining and economic cycles in order to pay back the stimulus spending of the GFC, and to absorb the likely hit to budget balances when the terms of trade return to more normal levels. Instead, Australian governments are relying on current minerals prices only declining slowly, and even then the effect will be to maintain current deficits or thin surpluses. Governments are very exposed to the risk of a scenario in which mining investment and earnings slow more quickly. Consequently there is a strong case for adjusting budget revenue and expenses sooner rather than later to prepare for this.

7.1.1 Terms of trade and minerals prices

The improvement in the terms of trade since 2003 as a result of the mining boom is estimated to have added around 1 to 2 per cent of GDP to the Commonwealth Government budget balance

¹⁰³ Parkinson (2014)

¹⁰⁴ Commonwealth of Australia (2013), Part2, p. 17

¹⁰⁵ Minifie, *et al.* (2013), p35

over the last few years, as Figure 37 shows.¹⁰⁶ The publicly reported cash balance was materially higher than the structural balance (what the budget outcome would have been without cyclical economic factors).

This free kick to the budget came because government revenues were boosted by high export prices,¹⁰⁷ while government expenses were more linked to import prices and local wages. When mining prices return closer to historic levels, these effects will unwind. Indeed there are signs this is already happening.¹⁰⁸

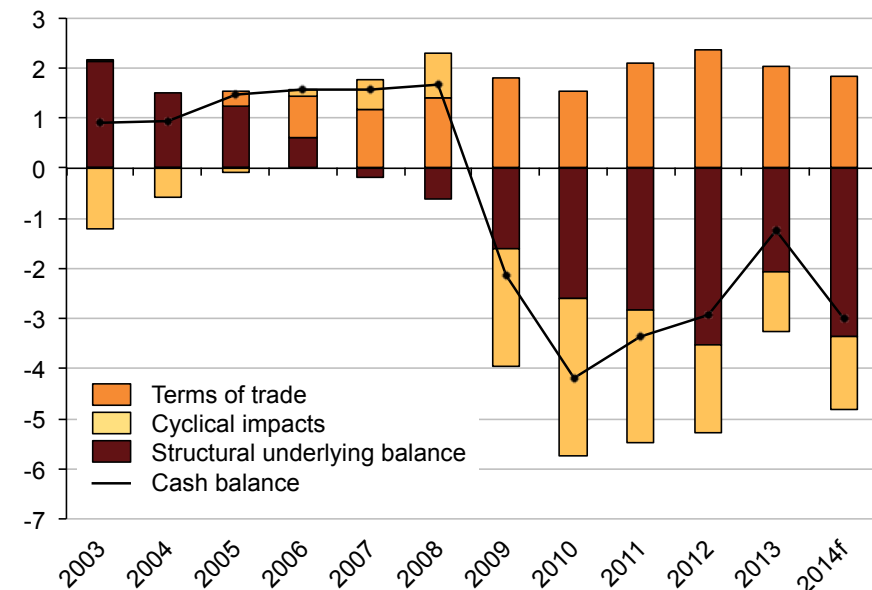
The speed of the decline in mineral prices is uncertain. Treasury expects they will only decline slowly in the near term,¹⁰⁹ reducing steadily over the long term as global supply increases.¹¹⁰ Treasury now estimates that the terms of trade will decline to their 2006-07 levels by 2017-18, and then continue to decline to 2005-06 levels by 2019-20. The projected decline to 2019-20 is outside the forward estimates period of the next three years.

The decline in the terms of trade may be faster and deeper than this. It is quite plausible that terms of trade could decline to about halfway between peak and the long-run average. If so, the price effect would reduce the Commonwealth budget balance by 0.6 per cent of GDP below current forecasts. Treasury scenario analysis suggest the flow-on effects on the economy and the

labour market would be much larger, albeit possibly offset by changes in the exchange rate.¹¹¹

Figure 37: Commonwealth budget balance

Per cent of nominal GDP



Notes: Financial years (i.e. 2003 is 2002-03). 2013f is the 2013-14 forecast in the 13-14 Budget. Stimulus allocated to cyclical; changes in company tax from the decade average due to depreciation allocated to cyclical. Depreciation rate assumed at 15 per cent. Terms of trade baseline is 2002-03.

Source: Minifie et al. (2013)

¹⁰⁶ Estimates by Treasury officials in 2010 are consistent with estimates compiled by the OECD, the IMF, and in Deloitte Access Economics (2012)

¹⁰⁷ McDonald, et al. (2010)

¹⁰⁸ Swan (2013)

¹⁰⁹ Commonwealth of Australia (2013), p. 12

¹¹⁰ Ibid., p. 12

¹¹¹ Treasury (2013a) Budget Paper 1, Statement 3, Appendix A

When minerals prices decline, nominal economic growth rates and government revenues will reduce, increasing the pressure on government budgets. If terms of trade fall faster than Treasury projections, and revert to their long-run average, they could reduce Commonwealth revenues and budget balance by 2 per cent of GDP, as Figure 38 shows.

To be prepared for this scenario, Australian governments would need to be running a budget balance 1 to 2 per cent of GDP higher than ordinary economic indicators would suggest. As discussed below, major economic indicators for Australia and the world suggest the Australian economy is now growing close to trend, and that governments should have a net budget surplus, even without the contribution of the terms of trade.

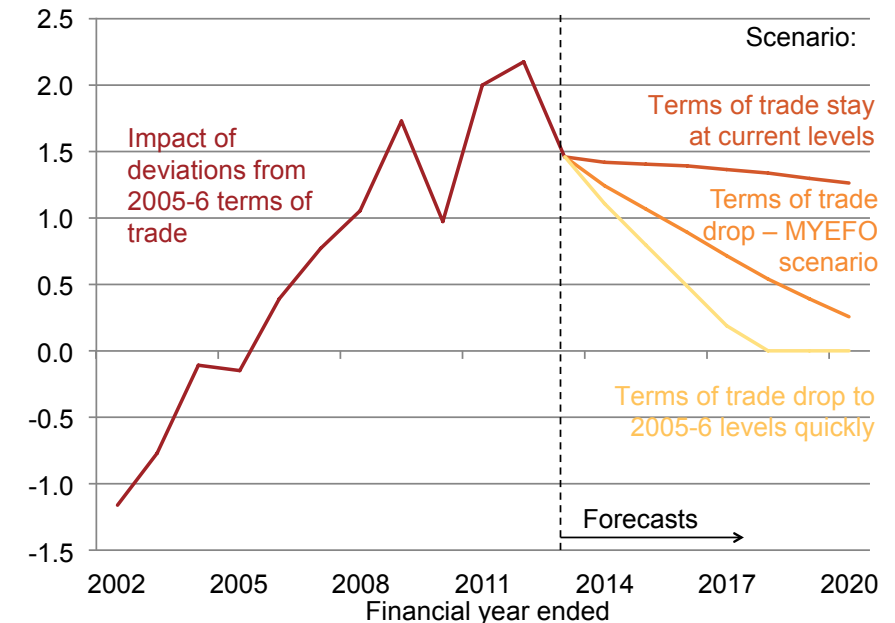
Government revenues in some states also benefited from a surge in royalties as volumes increased, and some states increased royalty rates. But total royalties collected are just \$10.6 billion, or 0.7 per cent of GDP, so the potential impact on Australian government budgets of royalty payments falling with mining prices is relatively small.

How significant is the risk of lower terms of trade? It is inherently difficult to forecast the minerals prices that drive Australia's terms of trade. They may stay stronger for longer given high demand from the continuing economic development of a range of countries, and relatively slow increases in supply due to consolidation of the global mining industry, declining ore grades, and slowing construction.¹¹² Iron ore prices have fallen from around \$US135 a tonne in December 2013 to \$112 in April 2014,

¹¹² Eslake (2011)

having rebounded after falling to as low as \$104 in March 2014.¹¹³ The Australian Bureau of Resources and Energy Economics (BREE) forecast the price will fall to \$US97 a tonne by 2017.¹¹⁴

Figure 38: Impact of terms of trade on Commonwealth tax revenues
Per cent of GDP



Source: Grattan analysis of ABS (2013b) cat. no. 5204.0; ABS (2013e) cat. no. 5506.0; Commonwealth budget papers for 2002-03 to 2013-14; McDonald et al. (2010).

¹¹³ IMF (2014b); McGrath (2014)

¹¹⁴ BREE (2014). Analysts such as Goldman Sachs forecast a period of oversupply in 2014, pushing down prices further to around \$85 a tonne by 2017: Goldman Sachs (2013)

7.1.2 Economic growth

Australian economic growth has a material impact on budgets from year to year. The gap between forecast and actual economic growth and prices has typically added or subtracted in the order of \$5 to \$10 billion from Commonwealth revenues over the last decade.¹¹⁵

Australia is no longer at the bottom of the economic cycle. Instead, the economy is probably at or above the average performance that can be expected over the next decade or two. GDP growth is close to its average over the 2000s and inflation is inside the RBA's target of 2 to 3 per cent. Unemployment has edged up, and Australian rates of unemployment and under-employment are higher than if the economy were running at full capacity. Participation rates have stalled for almost all age-groups over the last 2 years, ending seven years of strong growth, as Figure 39 shows.

Nevertheless, current rates of participation and unemployment are consistent with other recent periods of low unemployment outside the boom years of 2005-2008.¹¹⁶

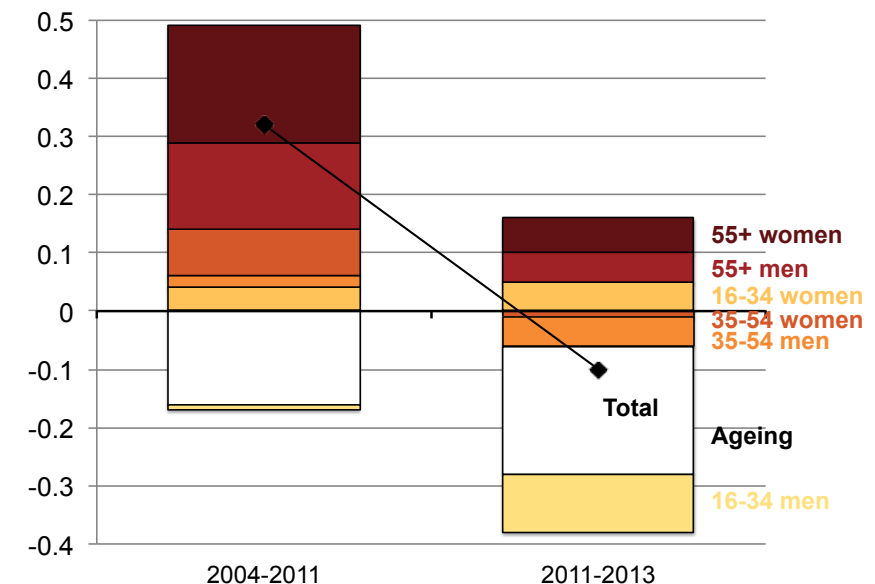
The fact that commodity prices are higher than during the pre-GFC boom, and that terms of trade are higher than almost any period in the last 60 years, is a big boost to national income.

Yet much of Australia's good fortune is driven by the economic performance of its trading partners. While the world economy has slowed post-GFC, Australia's main trading partners have roared

ahead at growth rates only a little below their mid-2000s boom. As a consequence, Australian commodity export volumes are higher than ever. Iron ore exports are *double* their pre-GFC level.

There are some weaknesses in the Australian economy that might improve. The high dollar is impeding growth in trade-exposed industries, particularly manufacturing and international services such as higher education. Economic growth may also be boosted

Figure 39: Annual change in participation rate
Percentage points change in workforce participation per year



Source: Borland (2013)

¹¹⁵ See Chessell, *et al.* (2012)p. xviii, xxi

¹¹⁶ RBA (2013), ABS (2014d) cat 6202 Table 01

as new mining capacity begins production. A key will be how much of this revenue stays in Australia, either as dividends for shareholders or tax and royalties for governments. However, the RBA estimates that foreigners own about 80 per cent of the resources sector,¹¹⁷ and in the absence of a well-designed resource rent tax, their profits are only captured in Australia through state mining royalties and company tax of 30 per cent which acts as a “final tax” for foreign shareholders.

Whatever the fate of this revenue, economic growth is normally slower after the peak of a mining boom than before.¹¹⁸ The history of previous mining booms around the world suggests that manufacturing industries typically rebound strongly afterwards. But these rebounding industries typically add less to economic growth than is subtracted by the slowing resources sector.¹¹⁹

Therefore, the current economic conditions may be about as good as it gets. Australian budgets should not expect a significant improvement from the economy ‘returning to normal’. Economic conditions that are generally close to long-run trends suggest that at this point in the economic cycle, Australia governments should be posting comfortable surpluses.

Classic Keynesian fiscal policy maintains that a country should have budget surpluses when the economy is growing strongly, and budget deficits when the risks of stalling are high. On this basis, the substantial budgetary stimulus that Australia employed at the bottom of the economic cycle needs to be counter-balanced

by budget surpluses even at mid-points in the economic cycle. Yet the current government’s statement of fiscal strategy, ‘to restore public sector finances by returning the budget to sustainable surplus... by 2023-24’,¹²⁰ implies a much slower return to surplus than would be expected at this point in the economic cycle.

The budgetary surpluses appropriate at this point in the economic cycle are on top of the buffer that may be needed if Australia’s terms of trade reduce, affecting prices in ways that would reduce government budget balances by about 1 to 2 per cent of GDP, as Section 7.1.1 discusses.

7.1.3 Economic forecasts

Budgetary forecasts depend on economic forecasts. If the latter are systemically optimistic or pessimistic, then the medium-term outlook may need to be revised. In the 2000s, budget outcomes were often about 1 per cent of GDP better than forecast, and since the GFC they have generally been about 1 per cent worse than forecast, as Figure 40 shows.

The variations are primarily in revenues, not expenses.¹²¹ Before the GFC, Treasury tended to underestimate the strength of growth in the global and Australian economies, and in the terms of trade, causing it to underestimate taxation revenue.¹²² Since the GFC, Treasury has generally overestimated the budget outcome by about 1 per cent of GDP. About half of this is due to

¹¹⁷ Connolly and Orsmond (2011)

¹¹⁸ Aitkin, *et al.* (2014)

¹¹⁹ See Minifie, *et al.* (2013) for a discussion of how other industries bounce back.

¹²⁰ Treasury (2013b), p. 26

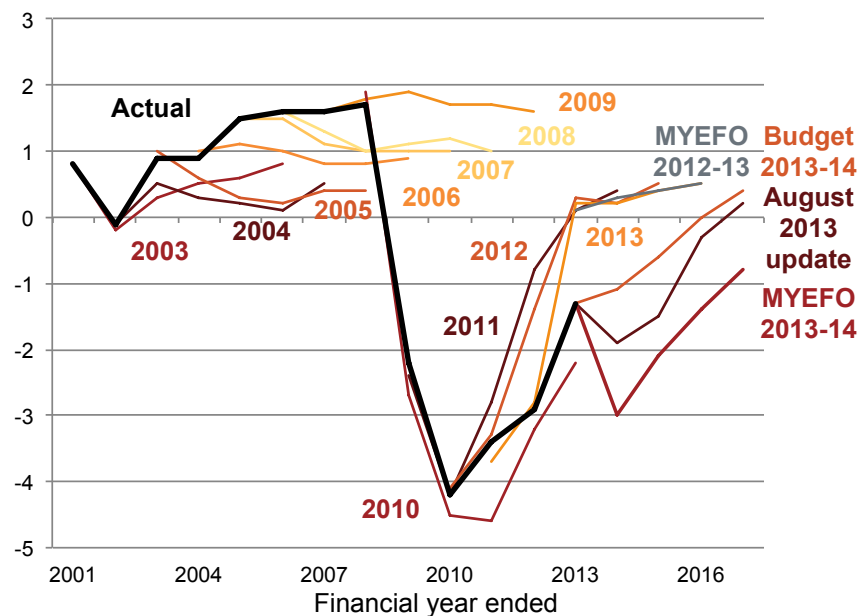
¹²¹ Deloitte Access Economics (2013), p. 17

¹²² Chessell, *et al.* (2012), p. xviii

overestimating the strength of global and Australian economic growth.¹²³

Figure 40: Actual and forecast underlying cash balance, Commonwealth budget

Per cent of GDP, year of forecast labelled



Source: Treasury (multiple years), Commonwealth of Australia (2013)

Estimating economic growth is inherently difficult: an RBA analysis found that half of its forecasts for GDP growth for the

following year were out by 1.2 per cent or more. Private sector forecasts are similarly inaccurate.¹²⁴ These forecasting issues are likely to balance out over the economic cycle, however. Treasury has now corrected its previous systemic overestimation of company tax revenues in its forecasts.¹²⁵

More recently, Treasury revised down its forecasts since the 2012-13 Mid-Year Economic and Fiscal Outlook (MYEFO). The deficit is worse by \$17 billion, due to a \$9 billion (one-off) grant to the Reserve Bank, \$4 billion in spending decisions and \$4 billion due to lower income, primarily personal income tax. These revised forecasts also include the impact of election commitments such as the repeal of the carbon and mining taxes, the introduction of the “Direct Action” response to climate change, and the implementation of paid parental leave.¹²⁶

7.1.4 Balance sheet risks

Government net debt is created by year-to-year budget deficits, and any major liabilities assumed by government that turn out to be unrecoverable. Only financial sector contingent liabilities are likely to be material to total government debt, and government is unlikely to have to pay for them given current policy settings.

The Commonwealth sets out its major contingent liabilities in its ‘Statement of Risks’, part of each year’s budget papers. Many of these risks are substantial, several are described as “unquantifiable”, but few are likely to result in the Commonwealth government taking on a debt of tens of percentage points of GDP.

¹²⁴ Tulip and Wallace (2012), p. 40

¹²⁵ See above section 5.4

¹²⁶ Commonwealth of Australia (2013), pp.19-22

¹²³ Ibid., p. 37

The largest risk is a government assuming the bad debts of major financial institutions. During the GFC the Commonwealth guaranteed the deposits of Australians, and provided guarantees for the wholesale borrowing of Australian banks. As recent events in Spain, Iceland, Ireland and Cyprus have shown, taking on these liabilities can add materially to total government debt.

Yet despite the stresses of the GFC, Australia's financial institutions remain in relatively good health. Australia's strong emergence from the GFC was in part good luck, as its banks were short of deposits given its long-running negative balance of payments, and so did not lend to sub-prime mortgages or to governments that subsequently encountered difficulties. As well, the Australian property market did not suffer a rapid collapse. In part this was due to good management as many bank managers had been part of banks that came near to failing in 1990, and APRA actively discouraged more risky lending in the years before the GFC.¹²⁷ Whether by good luck or good management, the failure of a substantial financial institution in Australia appears unlikely in the foreseeable future given current policy settings.

7.2 Spending pressures on Australian budgets

Future government budgets will come under pressure from rising political expectations and specific policy promises. Social and economic trends, particularly growing demand for health services, may also increase pressures.¹²⁸ Rising inequality as a result of increasing returns to the more highly educated may also create

pressure for additional welfare spending, particularly if income inequality increases with the slowing of the mining boom. The ageing population will place additional pressure due to lower workforce participation and increased costs, including Aged Pension and aged care. Yet the impact may be mitigated if policy reforms to increase workforce participation are put in place. States' recent capital expenditure will also put increasing pressure on budgets in the form of interest and depreciation expenses.

7.2.1 Health costs

Health dominated the increase in government spending above GDP over the last decade. Health costs are likely to continue to increase as a percentage of GDP. As Chapter 4 discusses, the primary driver of increasing health costs over the last decade was *not* an ageing population, but rather increased services for all ages. Without concerted policy changes, these trends are likely to continue. The 2010 Intergenerational Report (IGR) forecast that health costs would grow by 3 per cent of GDP over the following 40 years, with 1.3 per cent of GDP a result of the increased scope of health services.¹²⁹ Actual growth due to servicing in just the last decade was an additional 1 per cent of GDP, and about 2 per cent of GDP after adjusting for the terms of trade boom, a growth substantially faster than the IGR projection.¹³⁰

¹²⁷ McDonald and Morling (2011)

¹²⁸ The IMF (2014a) notes that both health care and pensions will be impacted by ageing populations, see p. 22

¹²⁹ Treasury (2010a)

¹³⁰ If economy-wide prices grew at the CPI over the past decade, health spending would have been about two percentage points above its 2002-3 proportion of GDP. As the terms of trade boom lifted economy-wide prices, this meant government had additional revenues to pay for increasing health costs. However, we expect economy-wide prices to move with CPI over the coming

If the scope of health services continues to increase at the rate of the last decade, health will demand an additional 2 per cent of GDP in government budgets by 2023.

7.2.2 Welfare

Welfare is the largest category of government expenditure, comprising 22 cents of every dollar spent by Australian governments. Future budgets are therefore sensitive to changes in welfare spending.

The purposes of welfare are contested. Almost all political theories agree that welfare payments should enable the most disadvantaged to pursue worthwhile opportunities and to live lives they have reason to value. Other theories, less universally accepted, aim to reduce inequality of outcomes and opportunities more generally. According to some economic analysis and some political theories, if incomes before taxes and payments become less equal, there is likely to be pressure to increase welfare to redress the balance. The pressures are likely to be greater if richer households are seen to gain the vast bulk of the benefits of economic growth.¹³¹

The real incomes of poor Australian households have generally risen over the last decade. At the same time tertiary graduates earn less of a premium than elsewhere in the OECD, perhaps because the mining boom has kept wages relatively high for those with fewer skills.

decade, with the price of healthcare continuing along its current trend. This implies an increase in share of GDP of about 2 per cent by 2022-23.

¹³¹ For more detailed analysis of inequality issues see Daley, *et al.* (2013).

But if the mining boom slows, inequality is likely to increase and absolute incomes will grow more slowly.¹³² This may increase the pressure for Australian governments to spend more on welfare.

In particular, government may face pressure to increase Newstart payments, which have fallen in real terms while Aged Pension payments increased much faster than CPI due to indexation arrangements and policy decisions.¹³³

The rapid growth of inequality in the rest of the world suggests that inequality in Australia may grow much faster in future, particularly if lower skilled workers are less in demand after the mining boom. If this happens, inevitably there will be more calls for governments to increase taxes and payments to reduce inequality. These calls are likely to be louder if poorer households are not seeing any growth in real income. Real household incomes have declined for three of the last five quarters.¹³⁴

Reducing inequality in these circumstances would impose substantial pressures on government budgets, particularly the Commonwealth's, which includes most welfare payments. Even in

¹³² Minifie, *et al.* (2013) see p. 15 for a discussion of how the mining boom has impacted employment and wages, countering the international trend towards increased inequality.

¹³³ In 1991 the Aged Pension was indexed to 25 per cent male total average weekly earnings, whereas unemployment benefits were left indexed to the consumer price index. Subsequently in 2009 the Rudd government lifted the rate again to 27.7 per cent of male earnings Department of Social Services (2014). A review is being conducted into the working age welfare payments including Newstart and the Disability Support Payments. The review however excludes the Age Pension and family assistance payments. Buckmaster (2014)

¹³⁴ National Centre for Social and Economic Modeling (NATSEM) analysis discussed by Uren (2014)

Australia's highly targeted tax-payment system, if Australian household income inequality follows its historic trend for another decade, it would cost 0.5 to 1.5 per cent of GDP to maintain the current level of household income inequality.

In practice, attempts to redistribute more widely drive at least some welfare payments. For example real spending on the Age Pension, after adjusting for the ageing of the population, is \$8 billion a year more than a decade ago. This suggests that the estimated budget pressure from welfare increases of 0.5 to 1.5 per cent of GDP may be conservative.

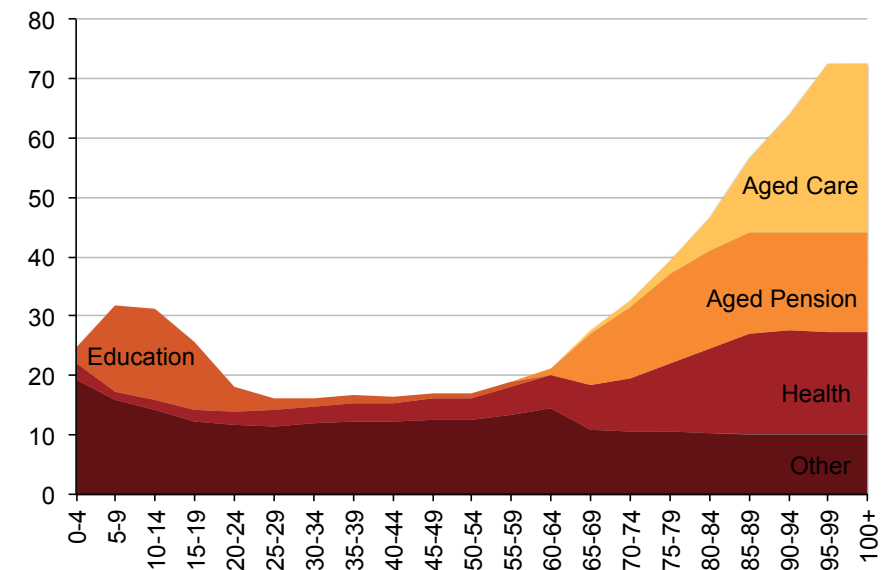
Unfortunately, higher taxes and payments inevitably impose inefficiencies, and often reduce incentives for workforce participation. Policy changes that increase participation rates among low-income households can have lower costs and do more to reduce inequality, although inevitably there are fewer guarantees that such policies will have the desired impact.

7.2.3 Ageing

The ageing of the population has not yet had much impact on Australian government budgets. It will have more impact over the next decade in aged care and health as substantially more people move into their 70s and 80s, as Figure 41 shows.

The impact on the budget can be offset by taxation and welfare reforms that encourage greater workforce participation by older Australians. Chapter 8 discusses these potential policy changes.

Figure 41: Age-related government spending
\$ thousands per person, 2011-12



Note: Selected categories of expenditure. Includes Commonwealth, states and territories. 'Other' includes the Disability Support Pension, Parenting Payment, Family Tax Benefit, Disability Support Services (both Australian Government and state and territory), Other social security and welfare payment, Defence and other expenditures and other state and territory expenditures not classified elsewhere.

Source: PC (2013) Figure 5.1

An ageing population will also substantially affect budgets if pension benefits and eligibility grow faster than GDP. The cost of pensions increased substantially over the last decade, as discussed in Chapter 4.5. Under current policy settings, these costs will continue to grow. The Productivity Commission estimates that the cost of pensions may increase by 0.4 per cent

of GDP in the next 10 years and to 3.3 per cent of GDP by 2060.¹³⁵

Changes will be needed to make the pension system more sustainable.¹³⁶ The public debate is beginning to acknowledge that Australia's current spending on Aged Pensions is unsustainable. Accordingly, the Australian Government has mooted changes, including raising the eligibility age to 70, tightening assets tests to include the family home and lowering generous indexation arrangements.¹³⁷

Aged care cost Australian governments \$17 billion in 2012-13 – 1.1 per cent of GDP – with most of it spent on residential care.¹³⁸ The Productivity Commission estimates that these costs may increase to 2.6 per cent of GDP by 2059-60.¹³⁹ Demand for these types of services will only increase with an ageing population, placing additional significant pressure on budgets if governments continue to meet the majority of costs. However, reforms recommended by the Productivity Commission, if they are implemented, may reduce the cost to government.

¹³⁵ Productivity Commission (2013) p. 146. The IMF (2014a) estimates that pension spending will increase by 0.7 per cent of GDP by 2030.

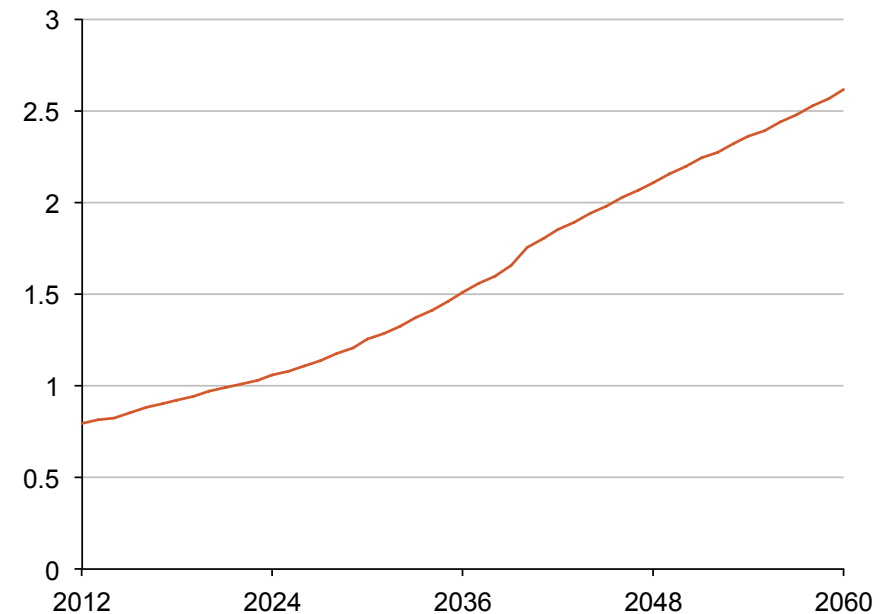
¹³⁶ IMF (2014a) p. 27 Stevens (2014) also notes that due to the demographic shift, more people will be moving into retirement and fewer people entering the workforce over time. As a result, governments need to focus on the medium term issue of the ageing population rather than the individual budget year outcomes. Stevens (2014)

¹³⁷ Maher (2014)

¹³⁸ Other types of care include home care and support.

¹³⁹ Productivity Commission (2013) p. 150. This is greater than that projected by the Intergenerational Report of 2010 which suggested an increase to 1.8 per cent of GDP by 2049-50.

Figure 42: Projected real increases in aged care costs
Per cent of GDP



Source: Productivity Commission (2013) Figure 5.12

Political pressure to continue these levels of age related expenditure is likely to grow. As the age of the median voter increases, a greater proportion of the electorate will have a vested interest in broader eligibility and higher benefits for aged pensions. In the medium run, this is where an ageing population will exert most pressure on government budgets. The electoral demography is an argument for changing policy sooner rather than later. The politics will only become more difficult as time

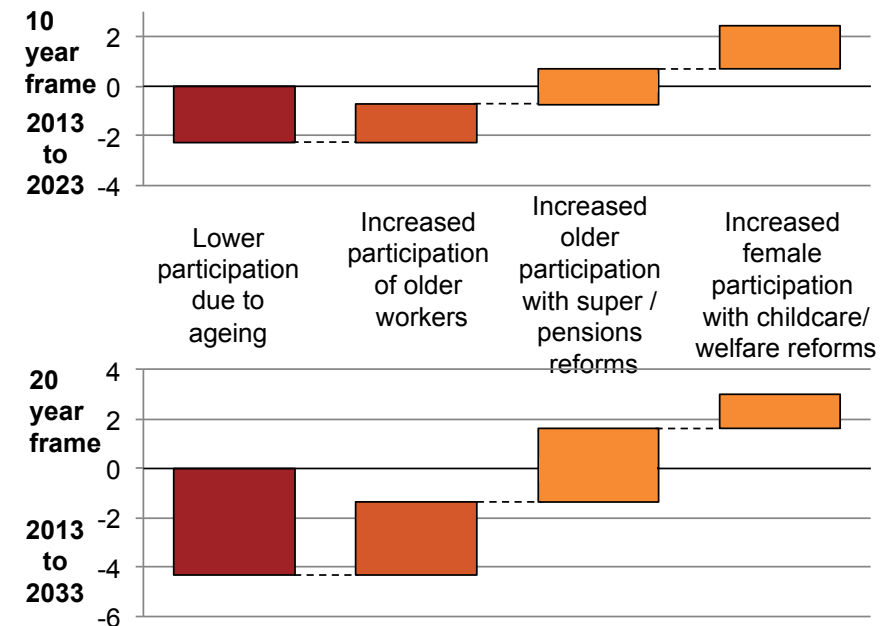
passes and the population ages.¹⁴⁰

The impact of ageing on government budgets depends on both demography and workforce participation. If more older people work, then economic output is higher, governments collect more in taxes, and pension expenses are lower.

Participation may even increase, despite ageing, if older age workforce participation is reinforced by policy change to increase the age of access to the Age Pension and superannuation.¹⁴¹ Without change in the participation rate of each age group, overall participation will reduce over the next decade. If participation rates of older age groups continue to increase, however, then overall participation rates will only fall slightly in the next decade, although they will probably fall more substantially thereafter, as Figure 42 shows.

Policy reforms along the lines of those identified in Grattan Institute's 2012 report, *Game-changers*, would more than

Figure 43: Changes in labour force participation rates
% of total population who participate in workforce



Note: 'lower participation due to ageing' assumes current age-specific participation rate of each age cohort. 'Increased participation of older workers' assumes participation rate of each age cohort continues to increase at 50% of current trends. 'Super / pension reforms' are to lift age of access to pension and superannuation to 70, as specified and modelled in Daley et al (2012a). 'Increased female participation with childcare/welfare reforms' assumes reforms to tax, welfare and childcare subsidies, as specified and modelled in Daley et al (2012a).
Source: Grattan analysis of ABS (2012e); Daley et al (2012a); ABS (2008) 3222.0 T A9.

counteract the impact of demography on participation, leading to substantially *higher* participation than there is now. Such reforms are promising opportunities for governments to improve their

¹⁴⁰ Thanks to Jeff Borland for this insight

¹⁴¹ Increased female workforce participation across age brackets will also provide substantial benefit to the economy if women with young children take home more of their earnings after paying tax, giving up welfare benefits, and paying for childcare. More in-depth analysis on this issue is provided in Daley, et al. (2012).

medium term budget position by increasing participation, and therefore increasing income and consumption tax revenues while reducing pension expenditure. See Chapter 8 for a discussion of potential policy reform.

7.2.4 Capital expenditure

States and territories have increased capital expenditure significantly in the last 10 years as Chapter 6 shows. As a result, governments face ongoing budget pressure through increased interest and depreciation expenses that cannot be compressed. These costs will be borne on an annual basis for the length of the debt and life of the assets.

Future infrastructure investment, expected under Coalition-National Government policy, will add to these expenses, placing ongoing pressure on budgets.¹⁴²

7.3 Commitments beyond the forward estimates

Government commitments to spending beyond the forward estimates could reduce budget balances by around \$29 billion, or 1.2 per cent of GDP, within the next few years, as Figure 44 shows.

¹⁴² The Prime Minister has signaled his intention for increased infrastructure investment by wanting to be known as the 'Infrastructure Prime Minister'. Abbott (2013), Abbott (2013). Future intended capital expenditure by the Commonwealth Government is yet to be made clear. However, the Productivity Commission notes that without reform to the process for selecting infrastructure projects, increased spending will 'increase cost to users, taxpayers, the community generally, and the provision of wasteful infrastructure'. Productivity Commission (2014), p. 2

The Mid-Year Economic and Fiscal Outlook (MYEFO), released in December, incorporated the budget impact of most of the government's election commitments within the forward estimates. This included abolishing the carbon price and mining tax, cutting company tax, increasing paid parental leave, and implementing Direct Action climate policy.¹⁴³ However, the government made a number of commitments that have a significant budget impact beyond 2017.

The government has now committed to the rollout of the National Disability Insurance Scheme in all jurisdictions,¹⁴⁴ and costs will ramp up significantly beyond the forward estimates as the scheme is fully implemented.¹⁴⁵ Furthermore, recent reports of the scheme's trials costing much more than anticipated suggest the total cost of delivery may be even higher than estimated.¹⁴⁶ Costs for the 'Schools First' funding agreement (previously known as the Gonski reforms) also rise significantly beyond 2017.

It is Coalition policy to restore defence spending to historic levels of 2 per cent of GDP.¹⁴⁷ The budget papers also note that a return to Australia's commitment to spend 0.5 per cent of gross national income on development aid would involve a significant increase above current forward estimates provisions.¹⁴⁸

¹⁴³ Commonwealth of Australia (2013) p. 3

¹⁴⁴ Western Australia is the final state to establish trial sites: Abbott (2014)

¹⁴⁵ Commonwealth of Australia (2013), p. 21

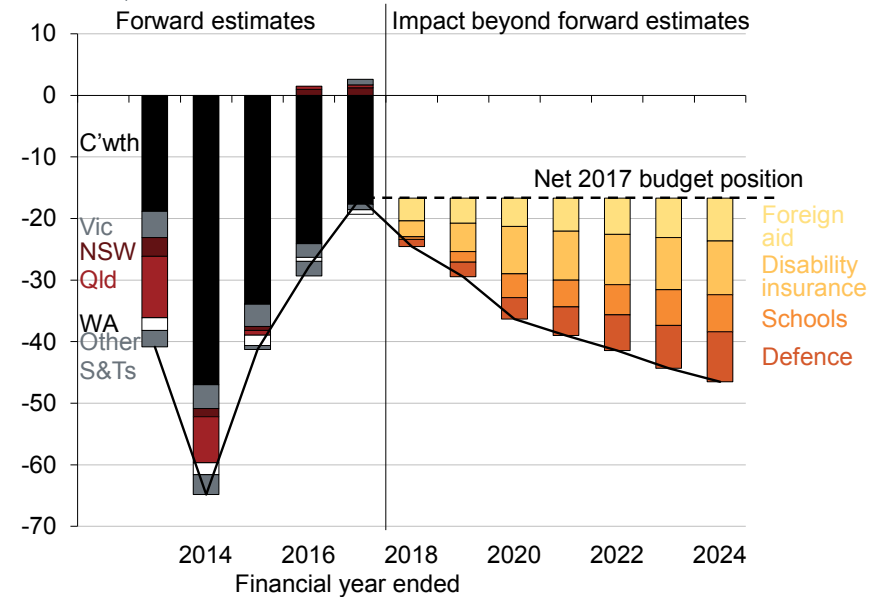
¹⁴⁶ Harrison (2014)

¹⁴⁷ Loughnane (2013c)

¹⁴⁸ Commonwealth of Australia (2013)p. 21

Figure 44: Budget impact of government policy commitments

Nominal \$ bn



Note: 'Foreign aid' shows the budget impact of a return to official development assistance of 0.5 per cent of gross national income from 2018. 'Disability insurance' shows MYEFO estimates of costs beyond the forward estimates of the NDIS. 'Schools' shows the estimated impact of the 'Schools First' funding agreement on Commonwealth and state budgets. 'Restore defence spending' shows budget impact of a return to 2009-10 spending levels as a percentage of GDP from 2017.

Source: Grattan analysis of Commonwealth and State budget papers and Mid-Year Economic and Fiscal Outlook, 2013-14; Loughnane (2010); Loughnane (2013c).

8 Budget solutions

8.1 Possible reform choices

Governments will have to make difficult choices to fix the structural budget deficits they face. In the 2013 report *Balancing Budgets: Tough Choices We Need*, Grattan Institute presented a series of options for budget reform.

We do not suggest that any Australian government will – or should – implement all the proposed options. However, we have tried to identify as many choices as possible that would both make a material difference to budget outcomes and not have unacceptable social or economic side-effects. Australian governments may find many of the choices unpalatable, but given the size of their long-term budget challenge, it will be hard for them to repair budgets without facing at least some of them. If they are all ruled off the table then Australians are entitled to ask whether their governments are serious about restoring budget balances.

All the budget choices presented are politically difficult. If they were easy, they would already have been made. Australia's governments are small by OECD standards, and our public sector operates more efficiently than most.¹⁴⁹ This makes it harder to find savings by cutting waste and shrinking non-essential services.

¹⁴⁹ OECD (2012a); OECD (2012b)

Box 6: Commitments of the new government

The new Commonwealth Government made a number of election commitments, not considered in the *Balancing Budgets* report, that would have a significant effect on the long-term budget balance. Further budget improvement would be achieved by not enacting some of these proposals:

- Expanded paid parental leave: an extra \$2 billion a year going mostly to middle- and upper-income families.¹⁵⁰
- Cutting company tax results in foregone revenue of over \$3 billion per year.¹⁵¹
- Changes to climate policy – the net effect of abolishing the carbon price and associated industry compensation, and introducing Direct Action – costs about \$4.5 billion a year.¹⁵²
- Increasing defence spending – the commitment to increase defence spending from 1.6 to 2 per cent of GDP in 10 years – will cost around \$8 billion at full implementation.¹⁵³

Although these commitments were offset by budget improvements elsewhere (such as a levy on large companies, the abolition of the schoolkids bonus, and cuts to the public service and foreign aid),¹⁵⁴ these improvements could be enacted without the accompanying spending, thereby improving the budget balance.

Note: All costings are at full implementation, in \$2013

¹⁵⁰ Grattan analysis of Loughnane (2013a); PBO (2013b)

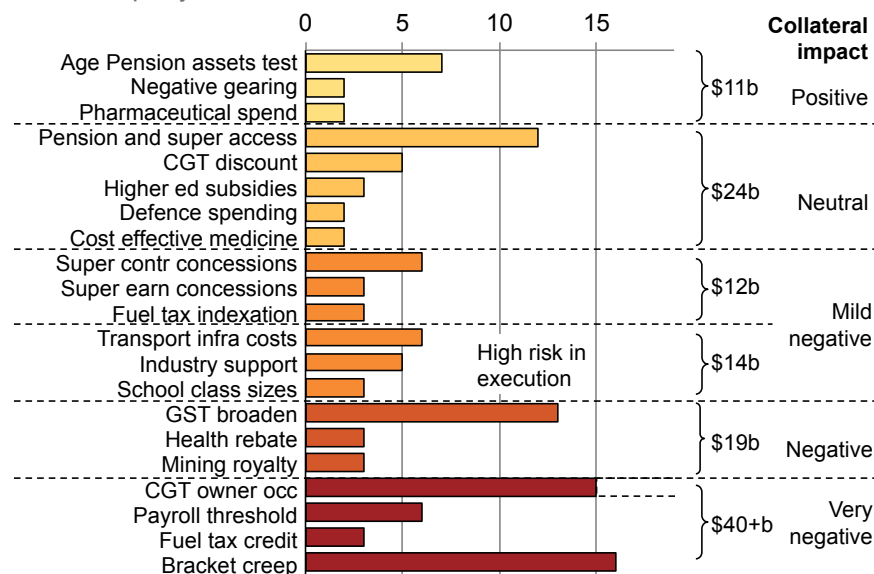
¹⁵¹ Grattan analysis of PBO (2013b)

¹⁵² Grattan analysis of *ibid.*

¹⁵³ Grattan analysis of Loughnane (2013b); Thomson (2013)

¹⁵⁴ See PBO (2013b); Hockey and Robb (2013)

Figure 45: Budgetary impact of possible budget choices
\$2013 bn per year



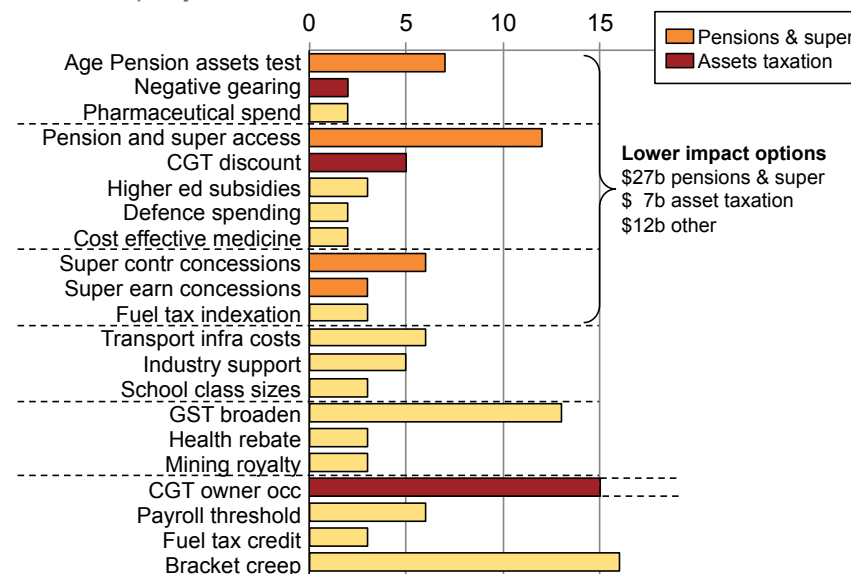
Note: Proposals considered that would generate less than \$2 billion are not shown. These include congestion charges, grants to first home-buyers, middle-class welfare, public sector efficiency, avoidable hospital costs and end-of-life care. Collateral impacts include impacts on economic growth, disproportionate impact on people in the bottom 20% of incomes, and impacts on other social objectives: see Daley, McGannon, et al. (2013a) pp. 20-22

Source: Daley et al 2013

The budgetary and collateral impacts of the 20 choices analysed in *Balancing Budgets* are summarised in Figure 45.

Some clear themes emerge from the analysis, as Figure 46 shows. Proposals for better targeting of support for older people –

Figure 46: Budgetary impact of possible budget choices by theme
\$2013 bn per year



Note: Proposals considered that would generate less than \$2 billion are not shown. These include congestion charges, grants to first home-buyers, middle-class welfare, public sector efficiency, avoidable hospital costs and end-of-life care.

Source: Daley et al 2013

both pensions and superannuation (shown in orange) – are generally larger and more attractive than other alternatives. Just four choices could improve the budget balance by \$27 billion a year.¹⁵⁵ Reform of assets taxation (shown in red), particularly

¹⁵⁵ There is some interaction between the Age Pension asset test proposal and the retirement age proposal. If the retirement age is lifted, the *additional* savings

negative gearing and the CGT discount, could yield \$7 billion a year. Of the other reforms, broadening the GST is large and relatively attractive. Some of the remaining tax exemptions are less attractive – they may have survived for good reasons. Tax increases could do more to improve budget balances, but they usually have more negative side effects. A number of cost reductions have smaller side effects, but their budgetary impact is also often smaller.

8.2 Packaging reform

All the proposals presented would leave some people worse off, at least in the short run. In the last decade, governments have been averse to making decisions that create identifiable losers.¹⁵⁶ Instead, potential losers were compensated with other measures, which generally drew on large and growing surpluses. In the current environment of substantial and increasing deficits, losers can no longer be paid off.

Yet it is important for pain to be shared: people may be more willing to accept the burden if they understand that everyone is experiencing some pain. It is also harder for special-interest groups to claim that their interests should not be adversely affected when everyone in the community is sharing the burden.

For these reasons, big and difficult reforms may be best introduced in a package. A package can show the magnitude of the problem and that the burden is widely shared. It can also

include some (smaller) spending increases that mitigate the impacts on those worst off and least able to absorb adverse change.

A package that would both focus on the most attractive opportunities identified in our prioritisation and distribute the burden across the community, affecting both rich and poor, would:

- broaden the GST to include fresh food and private spending on health and education;
- raise the pension and super age to 70;
- include the primary residence in the Age Pension asset test, while allowing people to continue to claim a pension, although its value would be recovered from the recipient's estate;
- limit superannuation tax concessions so that only \$10,000 a year can be contributed before tax, and those over 60 years old pay 15 per cent rather than no tax on earnings.

The proposals in this package would contribute about \$37 billion a year towards balancing budgets. The package picks up many of the proposals that would do most to improve budget balances, with relatively limited side effects

It would affect both rich and poor. Broadening the GST would affect all income groups, but hit low-income earners hardest, although compensation could reduce most of the impact. Raising the pension and superannuation age would affect all income groups. Including the primary residence in the Age Pension asset test would primarily affect middle-income earners – people doing

from reforming the Age Pension asset test are reduced as fewer people are old enough to qualify for the Age Pension.

¹⁵⁶For example, see Megalogenis (2012); Tingle (2012)

well enough to own their own house, but not so well that they do not qualify for the Age Pension.¹⁵⁷ Limiting superannuation tax concessions would mainly affect high-income earners, who reap most of the benefits of tax concessions for contributing more than \$10,000 a year to superannuation.

The package would probably slightly reduce inequality overall, which is consistent with some – but by no means all – efforts to improve budget balances around the world.¹⁵⁸

The major sensitivity with the package is that all the reforms appear to affect older Australians more. This may be more perception than reality, but it would need to be addressed.

Increasing the pension and superannuation preservation age mainly affects those aged about 50 to 55 in the short term. Assuming that the eligibility ages are lifted gradually, those already retired would be unaffected. All Australians who are under 50 today will share the burden in the future as they age. Many under the age of 45 may believe that increase is inevitable – and in any case the effect is at least 20 years away.

Including owner-occupied dwellings in the assets test primarily affects those over 65 – although these rules will of course apply to everyone when they are older. Limiting superannuation contribution tax concessions would affect high wage earners in all age groups, but particularly those over the age of 60. This group

¹⁵⁷ People in this cohort are likely to be middle-income earners over their lifetimes, and although their income in retirement is likely to be less than when working, their disposable incomes can often be relatively high: see Phillips and Nepal (2012)

¹⁵⁸ Rawdanowicz, *et al.* (2013), p. 27-28

currently pays much lower rates of income tax than do younger people on similar incomes. Those who are younger will also miss out on current, generous arrangements as they age.

Broadening the GST affects the spending of all Australians. Older Australians who are not working are likely to prefer other tax changes such as income tax increases that inherently affect them less.

The skew of Australia's current tax and welfare systems explains why the proposed package would have a greater impact on older Australians in the short term. Our tax and welfare system is generally tightly targeted to those most in need. The biggest exception is pension and superannuation systems, which are substantially 'age-based' rather than 'needs based'. Reforming these arrangements is a high priority that would substantially improve budget balances with relatively limited side effects.

Other packages might be designed around a different combination of proposals. The key task is to group together major reforms in ways that demonstrate that everyone in the community is sharing the burden of budget repair.

Further detail of potential reforms is provided in *Balancing Budgets*.¹⁵⁹ Other proposals for budget reform were made by the National Commission of Audit in May 2014.¹⁶⁰ Further analysis is required to understand both the costs and benefits of these proposals.¹⁶¹

¹⁵⁹ Daley, *et al.* (2013a)

¹⁶⁰ National Commission of Audit (2014)

¹⁶¹ McGannon and Daley (2014)

9 A bluffer's guide to budgets

9.1 General economic and financial terms

Gross domestic product or GDP is a measure of the size of a country's economy. In 2012-13, Australia's GDP is forecast to be approximately \$1,564 billion or \$1.6 trillion.¹⁶²

Inflation measures how much prices have increased over time. It is often measured by the change in the **Consumer Price Index (CPI)** which tracks the prices of what a typical household buys.

As a result of inflation, a loaf of bread costs more today than several years ago. Consequently, \$1 today buys less than \$1 bought in 2000. **Nominal prices** are the prices you see in the shop at the time. **Real prices** remove the effects of inflation so that a dollar has a constant value – it buys the same number of loaves of bread in any year. Real prices provide more meaningful comparisons of spending in different years. Real prices are often expressed in dollar values for a particular year, e.g. 2013 dollars.

In the context of budgets, **nominal spending** is the amount listed in the budget papers each year. **Real spending** removes the effect of inflation so we can compare how spending has actually changed. For example, if government purchases medicines that increase in price by 3 per cent each year, and government spending increases at 3 per cent per year, government buys the same amount of medicine every year. While its nominal spending grows at 3 per cent each year, its real spending is constant.

¹⁶² Commonwealth of Australia (2013); ABS (2014b) Table 30.

A **price deflator** converts nominal values into real values, and is based on a measure of inflation. The nominal price divided by the price deflator is the real price.

Production is how much is produced in an economy. **Economic growth** measures the increase in production from time to time.

Productivity measures how much is produced by a given input. **Labour productivity**, for example, measures how much is produced per hour worked. **Capital productivity** measures how much is produced for every dollar invested. **Productivity growth** measures how much more is produced with the same inputs.

The labour force **participation rate** is the proportion of working-age adults (16 years and older) who are either working or looking for work. The **labour force** includes the unemployed, but not people who are retired, institutionalised, or at home caring for children.

Australia, like most developed countries, has an **ageing population**. People are living longer on average, so a greater proportion of the population is older. This **demographic change** is likely to have big effects on society over time, affecting participation rates, tax collection, and government spending, particularly health and aged pensions

The **Organisation for Economic Co-operation and Development (OECD)** is a Paris-based think-tank whose members and funders are rich countries. It includes most developed countries.

9.2 Macroeconomics

Many measures of economic activity – such as GDP, unemployment and interest rates – move in cycles. During a boom, economic output increases, unemployment drops, and interest rates typically rise. Conversely, during busts, unemployment increases, interest rates fall, and GDP growth slows (or becomes negative). This is known as the **economic cycle**.

The **terms of trade** is the ratio of export prices to import prices for a country. Crudely, it measures the tonnes of coal Australia must export in order to import a plasma-screen TV. When terms of trade rise, Australia earns more plasma screen TVs per tonne of coal. If terms of trade fall, Australia would need to export more tonnes of coal to buy the same number of televisions.

From the mid-2000s, increased international demand for Australian minerals raised their price relative to other goods. Mining became very profitable. More mines were dug, increasing employment in the mining sector, as well as related industries (such as construction). Increasing demand for Australian minerals contributed to the rise in the value of the Australian dollar. These effects together are known as the **mining boom**.

The **global financial crisis (GFC)** is a common term for the financial crisis of 2007-08, which led to the 2008-12 global recession. Australia fared considerably better than most of the developed world during and after the crisis, but even so, economic growth slowed and government budgets were placed under greater pressure than in earlier years.

9.3 Budgets

9.3.1 Revenue

Revenue is all money the government collects. It is made up of:

- Taxes, including:
 - **Income taxes** – taxes paid by individuals on their earnings
 - **Company tax** – taxes paid by companies on their profits. When firms purchase new equipment, they are not generally allowed to deduct the entire cost from their revenues all at once. Instead, they allocate a portion of the investment to each year of its useful life. For some types of asset, Australian tax rules allow **accelerated depreciation**: firms can claim a greater share of the initial investment cost each year than the usual portion. This means that firms claim the cost of the capital more quickly, and so the firm's cost of investing decreases. Because firms pay less tax while they are claiming this greater portion of costs, accelerated depreciation reduces government revenues in the short term.
 - **Sales taxes** – such as the Goods and Services Tax
 - **Excises** – sales taxes levied on a particular product, such as fuel, cigarettes, or alcohol.
 - **Customs duties** - taxes on imported items, including clothing and cars
 - Other taxes, including **resource rent taxes** ('mining taxes')

and **carbon pricing**.

- Sale of goods and services
- Income received from investments, such as dividends from government-owned companies, and interest.
- **Royalties** – In Australia, states own resources and mining companies purchase them. Royalty revenues are the sales of these minerals to mining companies. Royalties are generally levied either as a fixed rate per tonne, or as a percentage of the total value.
- Grants from other levels of government

9.3.2 Tax expenditures

- When governments exempt certain types of transactions or taxpayers from an otherwise general tax, the foregone revenue is known as a **tax expenditure**. Tax expenditures are usually justified on the basis that they serve a particular policy objective better than does direct spending. Although tax expenditures are often less discussed than revenue or expenditure, they are a significant component of government budgets.

9.3.3 Expenditure

Expenditure is all money the government spends. It includes:

- Payments to individuals, such as the Age Pension and

unemployment benefits.¹⁶³

- Transfers to other levels of government
- Purchases of goods and services. This includes purchase of physical goods as needed, as well as the purchase of services from many different entities. For example, a government might purchase job retraining services from a private company or not-for-profit organisation rather than employ staff directly to deliver the training.
- Salaries and other expenses for employees, including front-line staff such as teachers and nurses as well as administrative staff.

9.3.4 Capital expenditure

Capital expenditure is money spent on building infrastructure, which can also be referred to as fixed or non-financial assets. **General government capital expenditure** is money spent on government infrastructure that is used to deliver services for the community. Examples include hospitals, schools, rail infrastructure and roads.

Government-owned corporations, or **public non-financial corporations**, also spend capital funding on infrastructure. Examples include water boards, railway corporations and electricity generators and distributors where state owned.

¹⁶³ These payments are sometimes called 'transfers' or 'welfare transfers'. This report uses 'transfers' to refer to payments by the Commonwealth to the states; welfare transfers are called 'payments' or 'benefits' to avoid confusion.

However these corporations deliver services typically on a user pay basis. In some instances, these corporations deliver infrastructure and services on behalf of the general government. However, accounting methods for recording this varies between states.

Public-Private Partnerships (PPPs) – a private financing mechanism for public infrastructure such as hospitals, schools and transport infrastructure such as rail and roads. Private providers are contracted to finance, design, build and operate infrastructure that is leased back to the state.

Capital expenditure costs include:

- **Net acquisition of non-financial assets** – the total change in the value of infrastructure over a year. It includes the purchase of, or expenditure on capital assets, less the sales of any capital assets, depreciation and any other changes such as the revaluation of assets.
- **Depreciation** – the annualised cost of consuming a fixed asset or infrastructure over the number of years the asset is expected to last.
- **Interest expenses** – interest paid on debt used to finance capital expenditure.

When governments finance capital expenditure through borrowing, it is recorded as a component of **net debt**. This is the total debt owed which includes borrowings, deposits and advances received by government, less any cash and

investments held by government and loans made to other parties.

9.4 Terms used in the budget papers

Commonwealth and State governments in Australia each publish a collection of documents every year in May or June that set out the government's economic and fiscal plans for the next year. These are generically called the **budget papers**.

Since economic conditions change through the year, governments also update their estimates of revenue and expenses late in the year. The Commonwealth update is called the **Mid-Year Economic and Fiscal Outlook (MYEFO)**. They also publish an updated set of figures before each election in the **Pre-election Fiscal Outlook (PEFO)**. State governments publish equivalent documents under different names.

Budget papers generally contain figures for revenue and expenditure for the previous financial year, the current financial year (sometimes called the **budget year**), and the next three financial years. This three-year period is called the **forward years** and the figures are known as the **forward estimates**.

Figures for the previous, current and next financial year are generally presented as **estimates**. Sometimes figures for the past year are presented as **actual** figures and the current year as **budgeted** figures. The figures for the final two years of the forward estimates are generally presented as **projections**.

Government expenses and revenues vary with the economic cycle. During a boom, profits and incomes increase, resulting in more taxes being paid; unemployment also falls, reducing

expenses. During a bust, the opposite happens. The **cyclical balance** component of the budget is the proportion of revenues and expenses that occur due to the economic cycle. Once we subtract this from the cash balance, we arrive at the **structural balance**. Determining the cyclical balance depends on modelling assumptions about the relationship between the economic cycle, expenses, and revenues.

9.5 Surplus, deficits and debt

A **budget deficit** occurs when a government collects less in revenues than it spends in any given year. A **budget surplus** occurs when revenues are greater than expenditures in a year. **Government debt** is the total debt that a government owes, and may come from governments running deficits several years in a row. **Gross debt** is the total amount of debt the government has. **Net debt** is the gross debt minus the value of assets the government owns (such as the Future Fund).

9.6 Federal financial relations

In Australia, the Commonwealth government collects most of the taxes, while State governments deliver most of the services. To correct this imbalance, the Commonwealth transfers money to the States in several ways:

- Some funding, such as the money collected via the GST, is given to States as **untied funding**. It can be spent however the State chooses.
- Most of the rest of the funding is given to the States as **tied funding**. This funding is given to the States on the condition

that they use it for a particular purpose. There are two types of tied funding: **Specific Purpose Payments (SPPs)** are relatively large amounts of money to be spent in general areas, such as schools or housing. **National Partnership Payments (NPPs)** are smaller amounts of money more closely tied to a particular policy goal, such as improving literacy and numeracy, or mental health reform.

- A small amount is paid by the Commonwealth ‘through’ the states to other bodies, mostly non-government schools and local governments. States do not control how this money is spent; they just pass it on to the Commonwealth-identified recipient. These payments are sometimes known as **on-passings**.

In this report, we use the term ‘**transfers**’ to refer to untied and tied funding from the Commonwealth to the States. Where we present combined Commonwealth and state expenditures, these transfers are treated as state expenditure unless otherwise specified. On-passings are always treated as Commonwealth expenditure.

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Overview

Australian government budgets are under pressure. Without tough decisions, they risk posting deficits of around 4½ per cent of GDP within 10 years. The problems have got worse since our first *Budget Pressures* report. We would be better off if we faced up to the tough problems sooner rather than later. We now need to find savings and tax increases of \$70 billion a year.

Over the economic cycle of boom and bust, balanced budgets are much better than the alternative. Persistent government deficits incur interest payments, and limit future borrowings, reducing flexibility in a crisis. They are also unfair: they require future taxpayers to pay for today's spending.

Despite relatively favourable economic conditions, Australian governments will post a collective deficit of between 2-3 per cent of GDP this year, and will remain in deficit by 1 per cent of GDP in 2017. Long-term spending has increased. The biggest driver was the sustained increase in health spending. Over the past decade health expenditure rose by over \$40 billion in real terms. The ageing population was not the prime cause. Rather, people of any age saw doctors more often, had more tests and operations and took more prescription drugs. Similarly, Age Pension costs grew much faster than GDP, not because of population ageing, but with policy decisions to increase benefits and widen eligibility.

New analysis in this edition of *Budget Pressures* shows that budget sustainability is also threatened by infrastructure spending. After a threefold increase in capital spending over the last 10 years, states are paying 3 per cent more of their revenues in interest and depreciation. Capital recycling and public private

partnerships may improve credit ratings, but ultimately future recurrent budgets must still pay for the cost of past infrastructure.

Continued trends in health and Age Pension costs are likely to drag future budgets backwards by 2 per cent of GDP by 2023. Future budgets will also be strained by promises of substantial new spending on the National Disability Insurance Scheme, schools, and defence, costing an extra 1 per cent of GDP. In addition, prices of Australia's minerals are likely to decline, dragging budgets another ½ percent of GDP into the red.

What can responsible leaders do to bring Australia's budgets under control? First, they must explain the size and importance of the problem. Second, they must design a package of measures that share the burden of reform fairly across the community.

As we showed in our *Balancing Budgets* report, the most promising reforms include lifting the age of access to Age Pension and superannuation, tightening the Age Pension assets test, paying less for pharmaceuticals with expired patents and asking students to pay a greater share of their tertiary education.

However, given the size of the problem, budgets can only be balanced by looking at both expenditure and revenue. The highest priority tax increases should be the withdrawal of poorly targeted tax concessions, particularly superannuation for the wealthy, capital gains discounts, and negative gearing.

Sustainable budgets require governments to make tough choices. They are politically difficult, but vital to Australia's prosperity.

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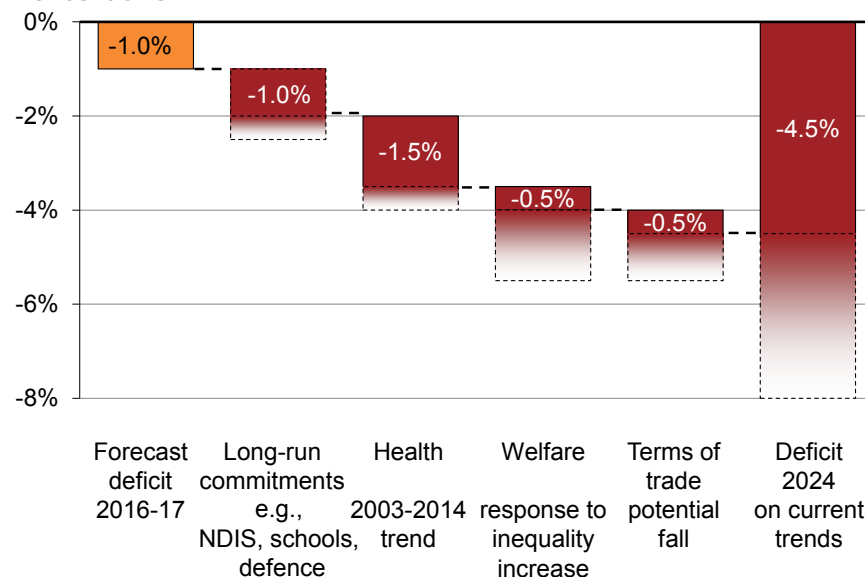
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1 The challenge for Australian government budgets

Australian government budgets are under substantial pressure. They could deteriorate from a projected deficit of 1 per cent of GDP from 2016-17 onwards to a deficit of more than 4.5 per cent of GDP, or \$65 billion in today's terms, by 2024. Figure 1 and the following text set out what these pressures are.

Figure 1: Projected budget balance for Australian governments by 2024 given plausible scenarios

Per cent of GDP



Source: Grattan analysis. See Supporting Analysis p44 for details.

1. A series of long-run commitments with significant increases in spending beyond the forward estimates (National Disability Insurance Scheme and defence spending, for example) could easily increase expenses by 1 to 1.5 per cent of GDP.
2. Health expenses are likely to increase by 1.5 to 2 per cent of GDP as their growth over the last decade continues. The prime cause is not an ageing population, as many believe, but the increase in the scope and volume of health services.
3. Additional welfare payments to hold inequality at current levels would increase government spending by 0.5 to 2.5 per cent of GDP – assuming that the current tight targeting of welfare continues.
4. A future fall in minerals prices, and thus the terms of trade, may reduce revenue by 0.5 to 2 per cent of GDP.

Some of these issues are already playing out. The 2013-14 Mid-Year Economic Financial Outlook (MYEFO) lowered budget outcomes and forecasts for 2013-14 relative to the 2012-13 budget by approximately 3 per cent of GDP,¹ reflecting many of the points discussed above.

¹ Commonwealth of Australia (2013)

Our forecast is more pessimistic than the long-term projections in the Pre-Election Financial Outlook (PEFO).² PEFO assumes that at least one of revenue or spending will be controlled more tightly. They also do not include the effect of rising pressures on State budgets.

In the remainder of this paper:

- Chapter 2 explains why continued budget deficits are a problem;
- Chapter 3 provides an **overview** of Australian government budgets;
- Chapter 4 describes **expenditure** pressures over the last decade;
- Chapter 5 describes increasing **revenue** pressures over the last decade;
- Chapter 6 describes **capital expenditure** trends and pressures;
- Chapter 7 describes **future pressures** on the budget;
- Chapter 8 describes potential **solutions** for balancing Australian budgets.
- Chapter 9 presents a 'bluffer's guide to budgets' that explains the terminology used in budget discussions and this paper.

A 'Supporting analysis' volume, available from Grattan Institute's website at www.grattan.edu.au, presents more detailed analysis of Commonwealth and state budgets, as well as details of the methodology of this report.

² Treasury (2013c), Chart F2, p.61

2 The value of balanced budgets

Over the economic cycle of boom and bust, balanced budgets are much better than the alternative. Persistent government deficits incur interest payments, and limit future borrowings. As a result they can unfairly shift costs between generations, and reduce flexibility in a crisis. Yet in good times it is hard for governments to run a surplus. They are invariably tempted to spend money. Many voters prefer outcomes with no identifiable losers.

Australia has escaped these problems, repairing its debt position over the 2000s, supported by public attitudes that were more averse to debt than those in most other countries. However, there are concerns that Australian attitudes are softening.

2.1 Balance over the economic cycle

Balanced budgets over the economic cycle make a big difference. Persistent large deficits make both the old and the young vulnerable: the old risk the security of their pensions and health care; the young bear an increased tax burden in the future to pay for past spending. Persistent large deficits lead to high government debt that can reduce flexibility in a crisis.³ Some argue that high government debt can reduce long-run economic growth – although this claim is contested.⁴

Persistent deficits undermine the security of people, such as retirees, who depend on government. High government debt may

lead to governments being forced to cut spending dramatically in a crisis. It is almost inevitable that such cuts will hit the vulnerable hard as the largest categories of government spending are welfare (22 per cent) and health (19 per cent), and dominated by spending on older people.

Perhaps the most important argument for budget reform is that deficits borrow from the future. They require future generations of taxpayers to pay for today's spending. There are fundamental issues of intergenerational fairness if future taxpayers are forced to bear the burden of today's spending that they do not have a say in, nor benefit from.

As many developed countries have rediscovered in recent years, high government debt coupled with low economic growth creates a terrible economic dilemma. If government increases spending, the debt gets worse, markets charge higher interest rates, and borrowing more becomes impossible. If government tries to reduce its deficit, GDP slows further, and government debt can rise as a proportion of GDP, making the problems worse.⁵ Their successors and financial institutions then find it difficult to borrow at reasonable costs, and economic growth is often slow for a long time.⁶

How to respond to the trap of low growth and high government debt remains contentious. It is far better to avoid the trap in the

³ Kotlikoff (1984)

⁴ Reinhart and Rogoff (2009), but see the debate summarised in Economist (2010) and Herndon, *et al.* (2013)

⁵ De Grauwe and Ji (2013), Figure 5; Summers and DeLong (2012)

⁶ Reinhart, *et al.* (2012)

first place. That means running balanced budgets over the economic cycle.

This principle requires Australia to run substantial surpluses over the remainder of the current economic cycle. During the Global Financial Crisis (GFC), the Australian government aggressively stimulated the economy through increased spending to avoid unemployment. Some argue that the government should have instead simply relied on the ‘automatic stabilisers’ of lower tax collection and increased welfare payments.⁷ Irrespective of views on this question, if budgets are to balance over the cycle, then additional stimulus in an economic downturn must be matched by additional government surpluses during good times.

It is arguable that continued deficits are sustainable if they are small enough to not increase government debt as a percentage of GDP. The burden of interest payments transferred to future generations can be rationalized if the debt funds productive investments that benefit future generations, or if economic growth is greater than the real interest rate.

Yet in practice, relatively little of the increase in spending over the last decade paid for investments that benefit future generations. As Chapter 4’s analysis shows, the big increases in spending were in health and the Age Pension. Most of the health budget is spent on older Australians. It is difficult to argue that this spending, while important, benefits future generations. The substantial increase in infrastructure spending may be more defensible – provided the spending was well targeted.

However, even if persistent deficits to fund productive investment are economically optimal, they may still lead to poor outcomes in the long run. If the theory of “sustainable deficits” is accepted, it becomes easy for a government to justify excessive deficits because there is no clear level at which government debt is ‘unsustainable’. Similarly, if the theory of “deficits to fund investments” is accepted, it becomes easy for a government to justify excessive deficits because it is always hard to tell whether government spending is truly investing, or simply spending for current generations. It is also difficult to prove that the costs of infrastructure outweigh the benefits.

Governments will always be tempted to use the excuse of funding productive investment to justify excessive deficits. Running a deficit enables a government to defer difficult decisions. As discussed below, political forces for ‘responsible’ government are the only real restraint on politically motivated spending. A deficit of zero – a balanced budget – may well be the only salient number to rally such political forces. Thus while perfect government may fund investments with debt, the best government in practice is likely to maintain a culture that champions balanced budgets to avoid a slide into unsustainable deficits.

At the very least, a highly transparent and rigorous process is required to ensure that debt-funded investments are indeed productive.⁸ Many doubt that all of the recent investments by government were productive, as discussed below in Chapter 6.9.

⁷ Differing views are canvassed in McDonald and Morling (2011)

⁸ Freebairn and Corden (2013)

2.2 Mindsets for budget repair

If Australian governments are serious about fixing their budgets, they need to make tough choices. Grattan Institute's 2013 report, *Balancing budgets: tough choices we need*, presents a range of them.⁹ None are particularly appealing. Nobody likes paying higher taxes or receiving fewer services. But governments need to make these difficult choices rather than put them off for future governments. We cannot simply 'grow out of trouble'. We need structural reform.¹⁰

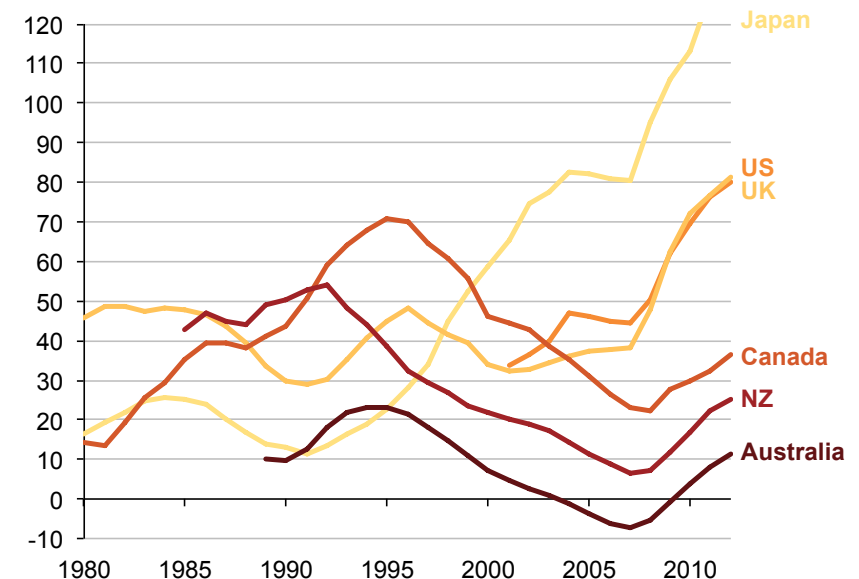
Valuable lessons can be learnt from previous Australian and international experiences of budget repair. These experiences, summarised in Grattan's 2013 *Balancing budgets: Supporting analysis*, show that to balance budgets, governments need to explain the problem, prioritise the large reforms, tackle both spending and taxation, and resist the temptation to delay.¹¹

2.3 Australian attitudes to budget deficits

Australia, New Zealand and Canada are exceptions to the international pattern of governments predominantly repairing budgets in a crisis. From around 1995, in contrast to many other developed countries, Australia and New Zealand produced substantial and sustained surpluses for over a decade, reducing net debt rapidly, (see Figure 2).¹²

The unusual performance of Australia and New Zealand may ultimately depend on public attitudes and education. In 2006 Ian Macfarlane, then Governor of Australia's Reserve Bank, suggested that the average voter in Australia is more economically literate than a typical voter elsewhere. This may be because Australian media provide more coverage of key economic decisions such as Reserve Bank interest rate decisions, or perhaps because Australian mortgages are more likely to be on

Figure 2: General government net debt
per cent of potential GDP



Note: IMF (2014c) does not include any US debt figures pre-2001. New Zealand figures were revised in 2014 and show a higher level of net debt to previous reports. Source: Grattan analysis of IMF (2014c)

⁹ Daley, *et al.* (2013a)

¹⁰ IMF (2013), p. 10

¹¹ Daley, *et al.* (2013b), p. 51-55

¹² For a brief history, see Kamener and Tan (2012)

a floating rate. Speaking *before* the GFC, Macfarlane observed that this economic awareness helped to produce surpluses in Australia,¹³ whereas the United States and many European countries were running deficits and increasing debt through the early 2000s. The difference cannot be explained by the additional boost to the Australian economy from the mining boom. From 2003 to 2008, the US and Europe enjoyed strong economic growth but continued to run deficits that materially increased government debt, as Figure 2 shows.

However, there are concerns that several years of budget deficits, and the accompanying rhetoric justifying them in Australia and overseas, may have eroded public aversion to deficits. Public concern about deficits may also be affected by promises to introduce specific costly programs and political attitudes projecting a belief in the ability of government to cure all social ills (see Chapter 7).

¹³Macfarlane (2006).

3 The bottom line for Australian governments

Eight years after moving into deficit during the GFC, the combined Commonwealth and State¹⁴ budgets are still not projected to return to balance. Although Commonwealth and State governments are currently forecasting that things will get better from here, with higher revenues and lower expenditures, they are not projecting balanced budgets until well after 2016-17.

3.1 Combining Commonwealth and State budgets

This paper seeks to identify the collective position of Commonwealth and state governments. A combined picture reveals the real pressures on Australian government budgets, which are often obscured by transfers between Commonwealth and state budgets.¹⁵

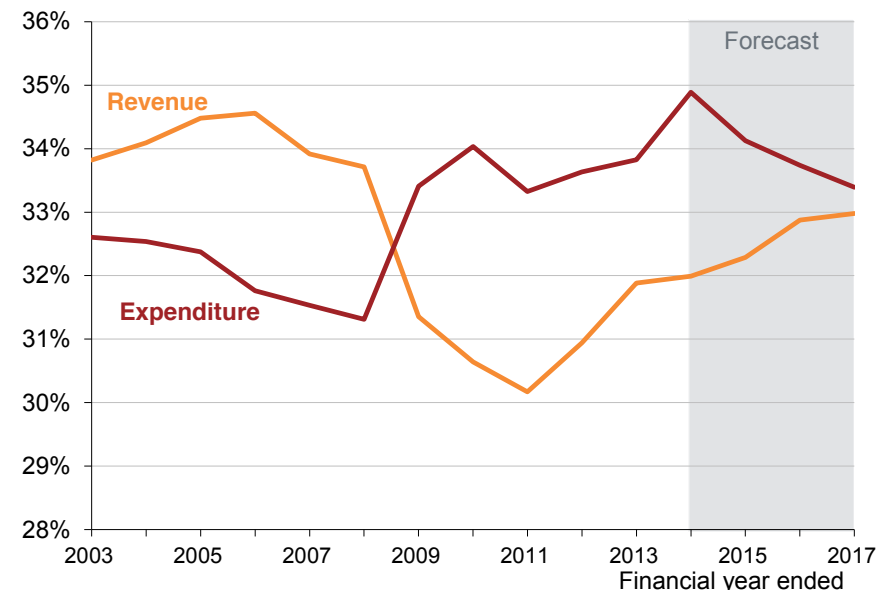
3.2 Trends in the bottom line

Australian government budget positions deteriorated over the last five years through the GFC, as Figure 3 shows. The deterioration in 2009 was not surprising: as economic growth slows, government budgets should generally move into deficit. As growth has picked up since 2009, deficits have narrowed, and are

¹⁴ Throughout this paper, we use 'States' to include both States and Territories of Australia.

¹⁵ Throughout this paper, we use 'transfers' to refer to payments from the Commonwealth to the States. Where we present combined Commonwealth and State expenditures, these transfers are treated as State expenditure unless otherwise specified. Welfare transfers are called 'payments' or 'benefits' to avoid confusion. Detail on the methodology for analysis of these budgets is presented in the Supporting Analysis volume.

Figure 3: Australian governments' historic expenditure and revenue per cent of GDP, 2002-03 to 2016-17



Note: Shows total revenue and expenditure for Commonwealth, State and Territory budgets. Transfers from the Commonwealth to States and Territories (e.g. GST, Specific Purpose Payments, and National Partnerships) have been removed from Commonwealth expenditure and States' revenue so they are not double-counted. See Supporting Analysis p35 for further notes.

Source: Grattan analysis of Commonwealth, State and Territory budget papers and mid-year review papers 2002-03 to 2013-14; ABS (2013a) Table 30; ABS (2013d) Tables 231-238

forecast to narrow further. But even so, government budget positions are not expected to balance within the forward estimates period (to 2016-17). Given economic conditions, they should probably already be in surplus (see Chapter 2).

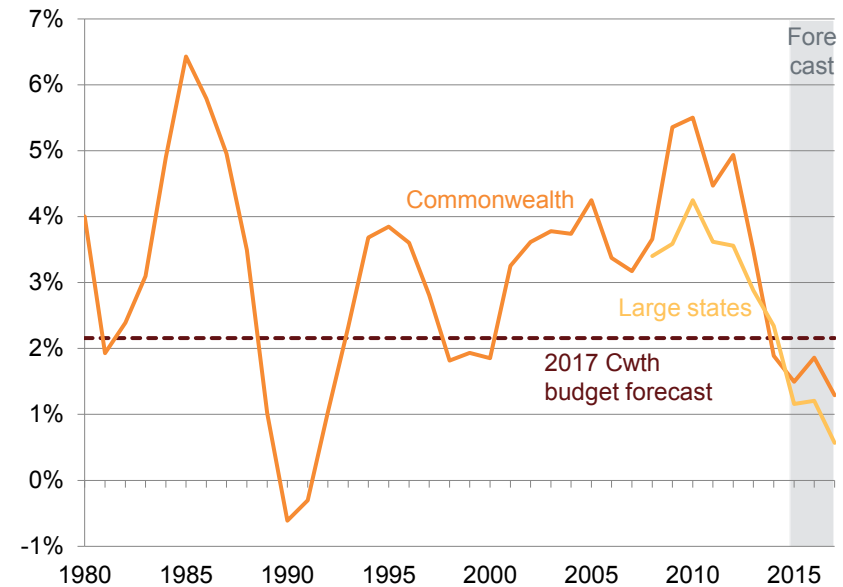
The collective deficit may not narrow as fast as is forecast. It relies on governments controlling spending growth more tightly and for longer than any government in Australia for the last 15 years, as Figure 4 shows.

The narrowing deficit also relies on continued bracket creep for income tax, which may not be politically sustainable as it hits middle income earners particularly hard.¹⁶

3.3 Commonwealth and state trends

Projections of budget balances have already been revised lower than those made only 18 months ago, primarily because the Commonwealth is forecasting substantially lower revenues. Figure 5 compares projections made by governments in their 2012-13 budgets (released between May and August 2012) compared to those in their 2013-14 mid-year budget reviews (released between December 2013 and February 2014). The earlier projections show the Commonwealth and consolidated state budgets balancing in 2013-14, and combined state governments moving gradually into deficit across the forward estimates. The new projections show a marked deterioration in the Commonwealth budget balance. State projections are only slightly worse than previously thought.

Figure 4: Annual real growth in government expenditures
5 year trailing average



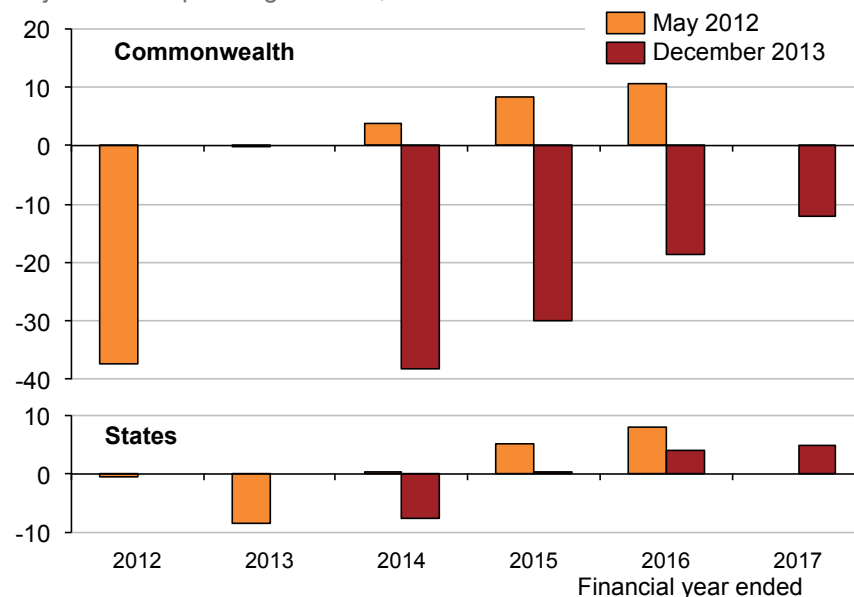
Note: 'Large states' combine NSW, VIC, WA and QLD and in 2014 account for approximately 88 per cent of Gross-Domestic Product (GDP)
Source: Treasury (2013a), Statement 10, Table 1, State and Territory Budget Papers (2002-03 to 2013-14)

¹⁶ See below, Section 5.1

The short-term deterioration in the Commonwealth Government's position is primarily due to falling revenues. The Government attributes this primarily to a softer economic outlook than that projected in earlier budget documents, to "legacy issues inherited from the former government", and to some changes to Treasury's projection methodology.¹⁷ It is also driven by policy changes

Figure 5: Budget projections from 2012-13 Budgets and 2013-14 mid-year budget reviews

Projected net operating balance, nominal \$ bn

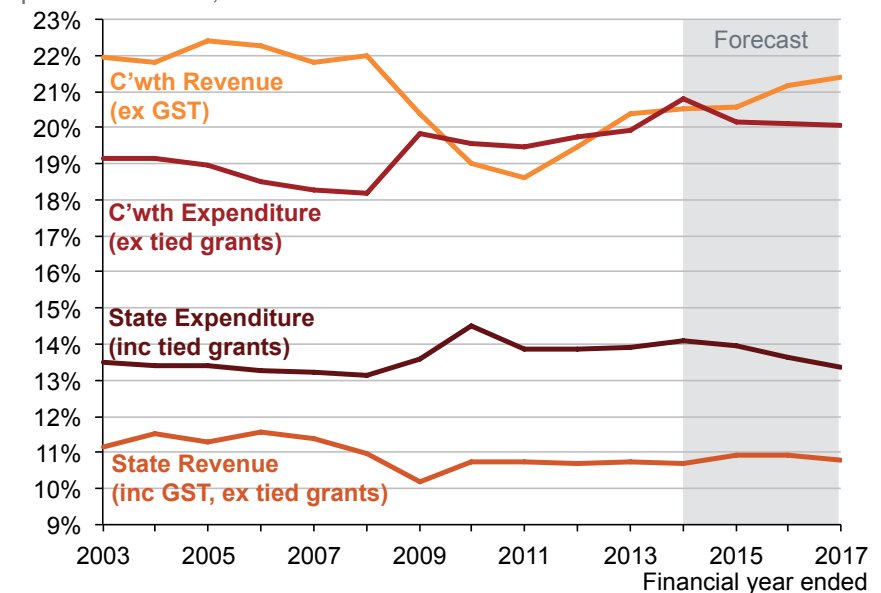


Source: Grattan analysis of Commonwealth, State and Territory budget papers and mid-year review papers 2011-12 to 2013-14

¹⁷ Commonwealth of Australia (2013) p. 19

proposed by the new government, including the abolition of the carbon price, and continuing fringe benefit tax concessions for company cars. Abolishing the minerals resource rent tax will reduce revenues, but the government intends to abolish the spending programs associated with the tax (such as the low income superannuation contribution and the Schoolkids Bonus

Figure 6: Commonwealth and State expenditures and revenues per cent of GDP, 2002-03 to 2016-17



Note: Revenue collected by the Commonwealth and transferred to States for expenditure on specified purposes is shown as Commonwealth revenue, and as State expenditure. To avoid double counting, it is excluded from both Commonwealth expenditure and State revenue. GST is treated as if it were a State revenue source.

Source: Grattan analysis of Commonwealth, State and Territory budget papers and mid-year review papers 2002-03 to 2013-14; ABS (2013a) Table 30; ABS (2013d) Tables 231-238; ABS (2013e).

payment).¹⁸ In the medium term, the GFC contributed substantially to deficits. Both revenue and expenditure for Commonwealth and States moved in the wrong direction during this period, as Figure 6 shows. While the economic cycle was responsible for many of the changes, substantial income tax cuts also dragged on Commonwealth revenue. With continued bracket creep Commonwealth revenue is rebounding, however, and is now only 0.5 per cent of GDP below pre-crisis levels.

The long-term deterioration in budget balances is a result both of the Commonwealth spending more, and collecting less revenue, as a percentage of GDP. Even with the GFC long over, Commonwealth expenditure remains 1 per cent of GDP higher than it was in 2003, while revenue is 1.5 per cent lower.

This analysis is based on a consistent treatment of transfers between the Commonwealth and States as being part of state expenditure. The analysis is also based on a consistent treatment of GST. The Commonwealth collects GST, and includes it in its revenues, but transfers all proceeds to the States. States bear the consequences if GST revenues are higher or lower than expected. To reveal the underlying picture, we treat the GST as part of state rather than Commonwealth revenue.

¹⁸ Ibid. p. 274. The budget impact of policy choices of the Liberal-National government is further discussed in section 7.3 and Box 6 in section 8.1

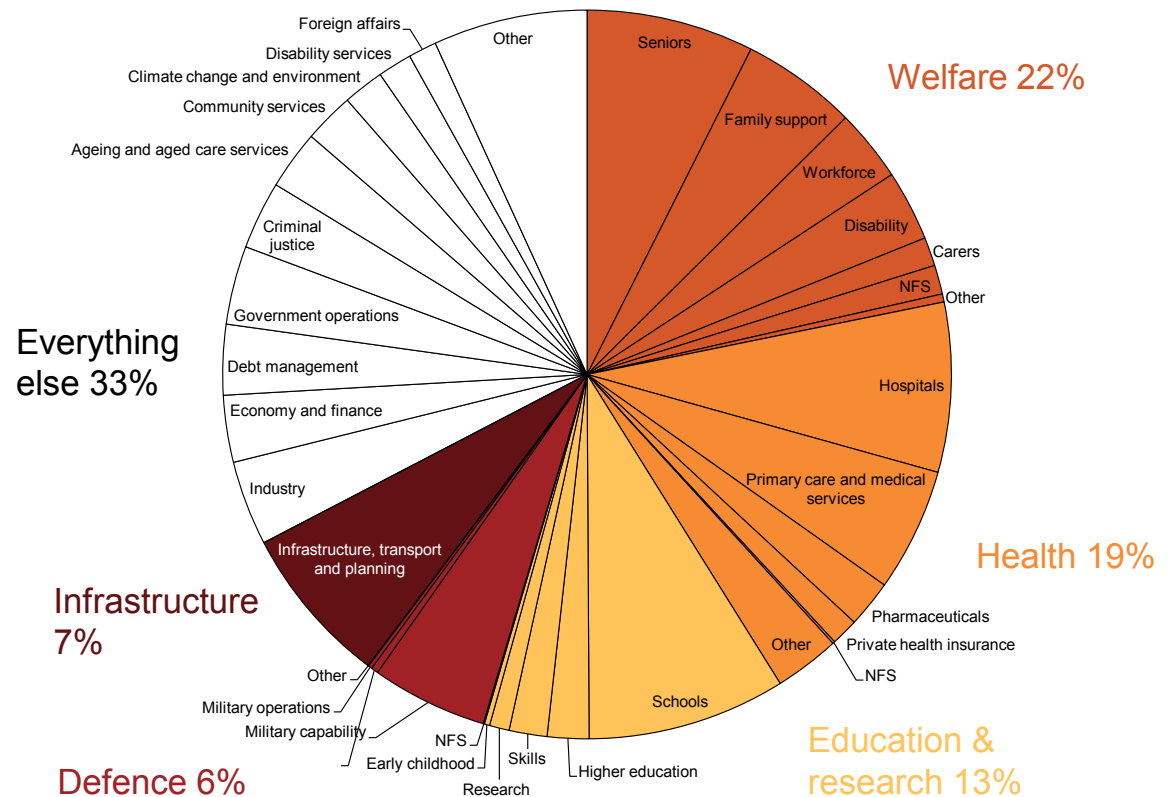
4 Expenditure trends

4.1 Overall expenditure trends

Health, welfare, education, defence, and infrastructure account for two-thirds of Australian government spending, as Figure 7 shows.

The three largest individual lines of spending are on old age pensions, hospitals and schools. Collectively, these amount to 8 per cent of GDP.

Figure 7: Australian governments' combined expenditures
Per cent of total, 2013-14 budget

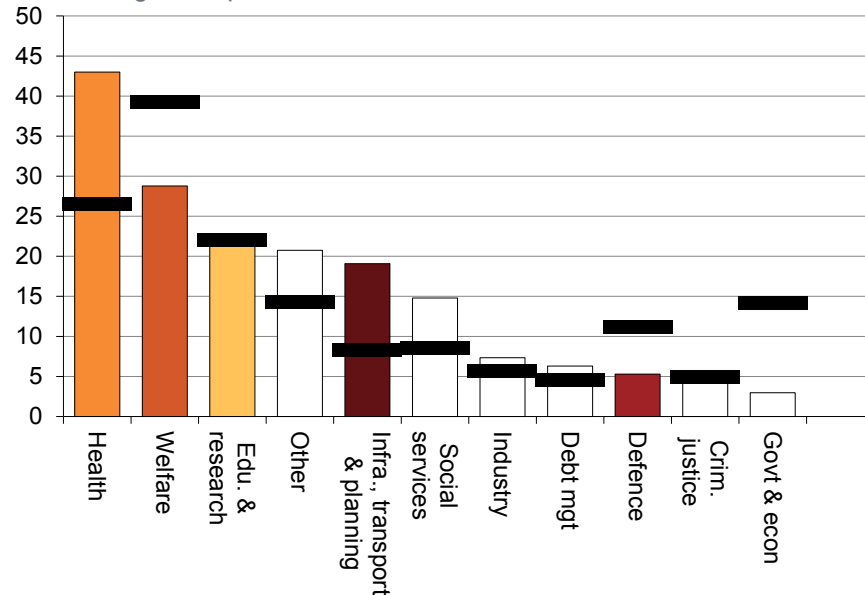


Note: NFS = not further specified. 'Other' comprises all other expenditure not elsewhere included, including employment, legal, immigration and customs, arts and sport, housing, communications, emergency services, superannuation and water. See Supporting Analysis p35 for further notes, including category definitions.

Source: Grattan analysis of Commonwealth and State budget papers 2013-14 and PBO (n.d.-a)

Figure 8: Change in Australian governments' expenditure

Real change in expenditure, \$2013 bn, 2002-03 to 2013-14



Notes: 'Other' comprises all expenditure not elsewhere included. 'Social services' comprises ageing and aged care services, disability services, and community services. 'Govt & econ' comprises government operations and economy and finance. 'Other' comprises all expenditure not elsewhere included. See Supporting Analysis p35 for further notes.

Source: Grattan analysis of Commonwealth and State budget papers for 2002-03 and 2013-14; ABS (2014c); ABS (2014b); PBO (n.d.-a)

Expenditures remain 1 per cent of GDP higher than before the GFC. The main cause is health expenditure, which is eating into government budgets. Growth in health spending above GDP over the past 11 years was greater than the growth above GDP of all other spending combined, as Figure 8 shows. Hospital spending

increased above GDP more than any other individual category.¹⁹

Infrastructure transport and planning expenditure also grew materially over the last decade. This includes the impact of higher depreciation charges as a result of increased state capital expenditure, primarily on transport infrastructure, as discussed in Chapter 6.

Some welfare expenditures, particularly the Age Pension and Carer's Pension also grew faster than GDP, but the overall welfare category grew much less due to the aggregate reduction in payments to working age people, including Newstart, Parenting Payment and Youth Allowance.

Australian trends in the drivers of government expenditure are mirrored in other countries. In the United States, for example, government health spending increased by 2 per cent of GDP, and aged pensions by 1 per cent of GDP over the decade to 2011. Overall, however, government expenditure in the United States jumped by 5 per cent of GDP, driven by trends not matched in Australia such as substantially rising spending in defence (1 per cent), unemployment benefits (2 per cent) and jails (1 per cent).²⁰

This analysis is broadly consistent with the Parliamentary Budget Office analysis of Commonwealth Government expenditure.²¹ More detail on expenditure changes by jurisdiction is presented in the Supporting Analysis volume.

¹⁹ See Supporting Analysis p6.

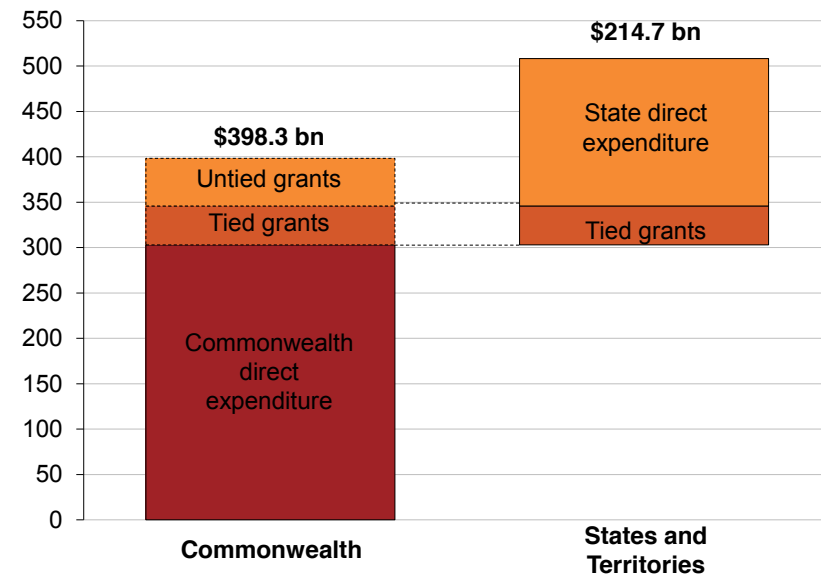
²⁰ Silver (2013)

²¹ PBO (2013a). There are some differences in classification, particularly of welfare and social services. See Supporting Analysis p35-37.

4.2 Commonwealth and state expenditure

Australian governments are forecast to spend \$518 billion in 2013-14. The Commonwealth will spend the most, as Figure 9 shows. It spends 76 per cent of its expenditure directly, mostly on welfare payments, defence, health services (including Medicare and pharmaceuticals) and education (including non-government schools and higher education).²² The rest is spent in Commonwealth grants to the states. About half of these grants, amounting to \$52 billion in 2013-14 are untied grants, mostly GST revenue. States have full control over how this money is spent. The remaining funds – \$43 billion in 2013-14 – are tied grants, meaning that the Commonwealth restricts how they are spent. Some tied grants are tightly controlled (a specified amount must be spent on public dental services to adults, for example), whereas other tied grants are looser (a specified amount must be spent on school education).²³ As well as these tied and untied grants, states are forecast to directly raise \$119 billion of revenue in 2013-14 and spend it on areas of their own choosing.²⁴

Figure 9: Commonwealth and state expenditure
\$bn, 2013-14



Source: Grattan analysis of Commonwealth and State budget papers 2013-14

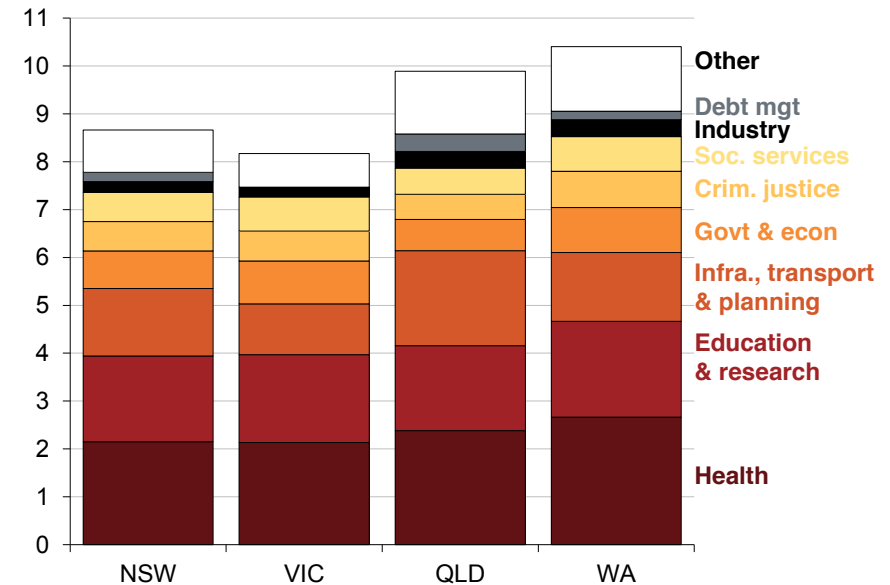
²² See Supporting Analysis p2 for further detail on Commonwealth expenditure.

²³ See section 9 for further details on Commonwealth-State transfers. In this report, 'tied' grants are treated as State expenditure. See Supporting Analysis p35-37 for further information.

²⁴ The history and constitutional underpinnings of these arrangements are detailed in Twomey (2014). See Supporting Analysis for further detail on State expenditure.

Some states spend considerably more per person than others, as Figure 10 shows.²⁵ Western Australia and Queensland spend at least \$1,200 more per person than do New South Wales and Victoria. Western Australia spends more per person in almost every category of spending. Some of this may be due to the higher costs of serving regional and remote populations, but some is probably attributable to Western Australia being under considerably less revenue pressure than other states due to the mining boom, as Section 5.2 discusses. Queensland spends a much larger proportion of its budget on infrastructure, transport and planning than other large states do, as Section 4.6 discusses.

Figure 10: State government expenditure per capita
\$'000 per person, 2013-14



Source: Grattan analysis of State budget papers 2013-14; ABS (2014a) Table 4.

²⁵ See Supporting Analysis for further detail of expenditure by each state.

4.3 Health expenditure

Health expenses are 19 per cent of Australian government expenditure, and grew by 76 per cent in real terms between 2002-03 and 2013-14.

Increases in health expenditures are mainly driven not by an ageing population, but by people of all ages seeing doctors more often, having more tests, treatments and operations, and taking more prescription drugs.²⁶ These changing practices are costing more per person, as Figure 11 shows.

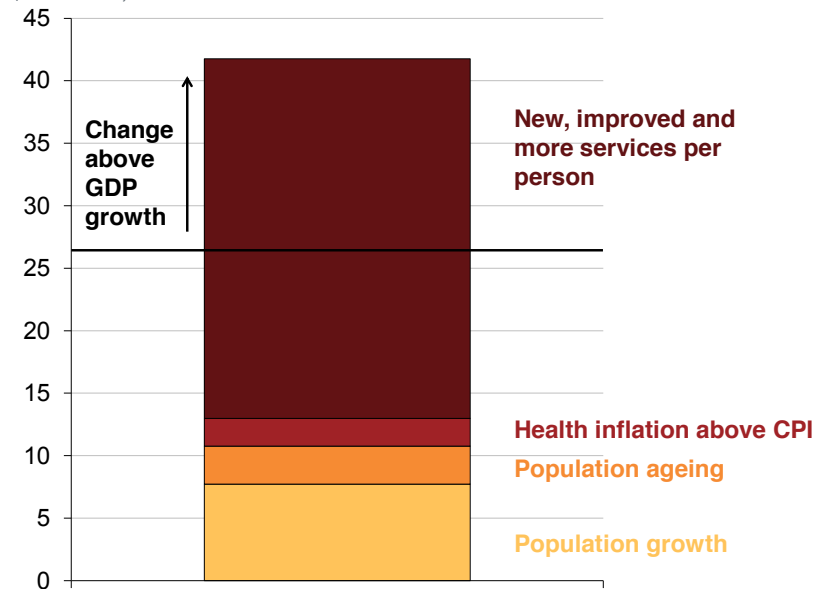
If the scope of health services continues to increase at the rate of the last decade, health will demand an additional 2 per cent of GDP from government budgets between 2013 and 2023.

Increased health expenditure appears to be having an impact. Life expectancy, particularly for those aged over 65, has increased rapidly and consistently.²⁷ But it has come at a cost. If we want to continue to enjoy the benefits of increased access to sophisticated health services, governments will have to find a way to pay for them.

²⁶ See Productivity Commission (2013) Chapter 5.2 for an extensive discussion of these trends.

²⁷ Daley, *et al.* (2012), p. 56

Figure 11: Change in Australian governments' health expenditure
\$2012 bn, 2002-03 to 2011-12



Note: 'Population growth' models the effect of the increase in population size with no change in the age structure or average per capita health expenditure. 'Population ageing' uses age-specific per capita health expenditure data (based on AIHW figures) to model the effect of changes in the population structure. 'Health inflation above CPI' uses appropriate AIHW health price indices to model inflation in each category of expenditure. 'New, improved and more services per person' is the amount of expenditure that cannot be explained by these three factors. This analysis uses data with slightly different definitions and timeframes to that shown in Figure 8, so the size of the increase does not match exactly.

Source: Grattan analysis of AIHW (2012); AIHW (2012); ABS (2013a) Cat. no. 6401.0 Tables 1 and 2; ABS (2013c) Cat. no. 3101.0 Table 59.

4.4 Education expenditure

Education expenses are 13 per cent of Australian government expenditure, and grew by 48 per cent in real terms over the last decade.

School education expenses are much larger than other areas of education expenditure (Figure 12). Although they grew more slowly in percentage terms than did other categories, they grew by 45 per cent in real terms over the last 11 years.²⁸ School expenditure by governments in 2013-14 is \$14.1 billion more in real terms than in 2002-03, the fourth largest increase in dollar terms, behind only hospitals, infrastructure, and welfare for seniors. Spending on government schools has been driven primarily by the reduction in government school class sizes, and by the increasing average seniority of teachers – which translates into higher pay.²⁹

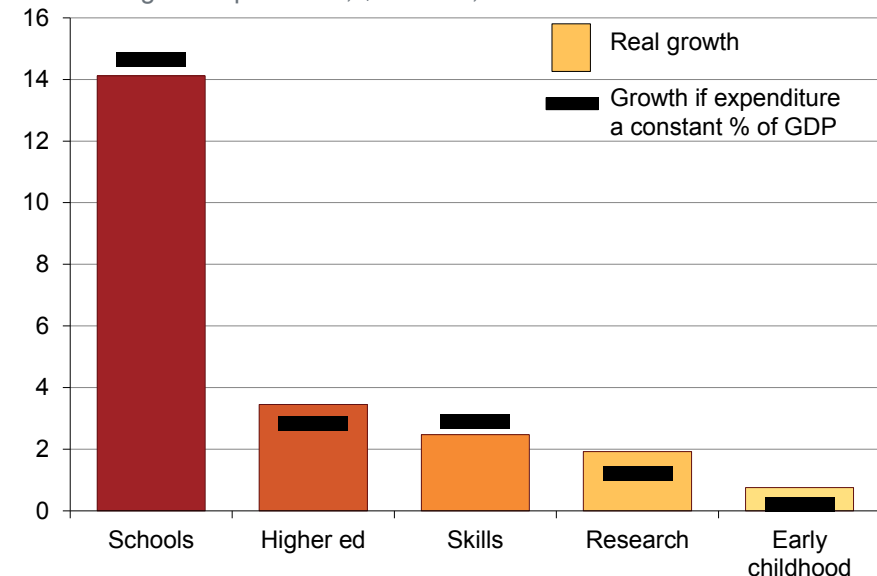
School spending by governments as a percentage of GDP has fallen slightly. The proportion of the population that is of school age is smaller than it was 10 years ago. A shift of enrolments into non-government schools has reduced government spending on schools, since governments collectively pay less per student in a non-government school than they do in a government school.

Higher education and research have also grown, but off a much smaller base. Together they will receive \$5.4 billion more in real terms in 2013-14 than in 2002-03. Government-funded higher

education student numbers grew by more than 34 per cent between 2002 and 2012.³⁰

Figure 12: Change in Australian governments' education expenditure

Real change in expenditure, \$2013 bn, 2002-03 to 2013-14



Note: 'Education expenditure not further specified' is too small to show; it comprised \$0.3bn in 2013-14. See Supporting Analysis for further notes.
Source: Grattan analysis of Commonwealth and State budget papers for 2002-03 and 2013-14; ABS (2014c); b); PBO (n.d.-a)

²⁸ Data is for government expenditure only. In 2009, private expenditure was 15.9 per cent of total expenditure on schools: see OECD (2013a)

²⁹ Jensen, *et al.* (2011)

³⁰ DIISRT (2012); Commonwealth budget papers 2012-13; Norton (2013)

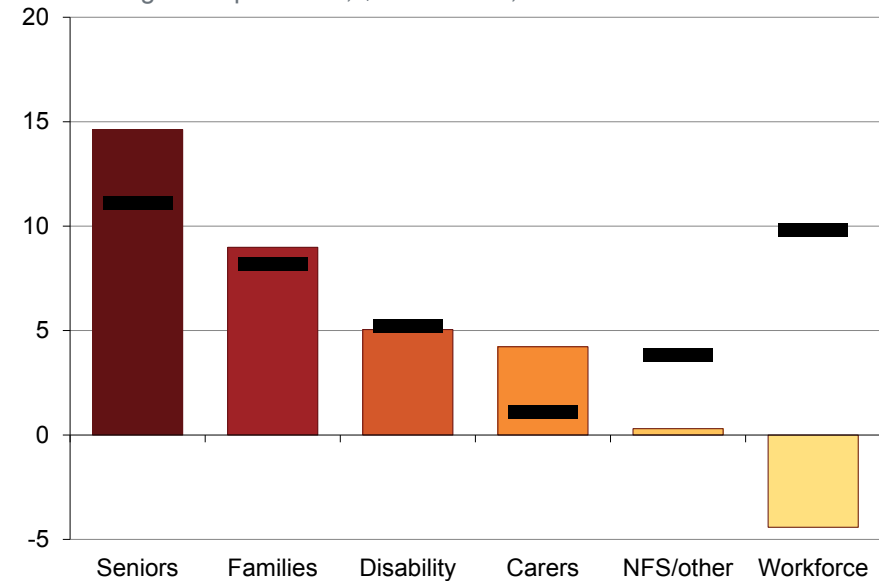
4.5 Welfare expenditure

Welfare is the largest single category of government spending, consuming 22 per cent of expenditure. Welfare spending grew by 34 per cent in real terms over the last decade, slower than GDP.

Because this data only includes direct expenditure, it does not capture the significant support given to many Australian households through tax concessions on superannuation (discussed in Section 5.6). Much of this support goes to middle- and high-income households.³¹ If these are included, welfare would be a large component of the budget, and growing faster.

The overall modest growth in welfare expenditure conceals very large variations between categories. The two largest categories of welfare – seniors and family support – grew by more than 50 per cent in real terms over the last 11 years, faster than real GDP, as Figure 13 shows.

Figure 13: Change in Australian governments' welfare expenditure
Real change in expenditure, \$2013 billion, 2002-03 to 2013-14



Notes: Categories comprise welfare payments directly to the identified group, and related administrative spending where identifiable. 'Families' includes family tax benefits, child care subsidies, parental leave, baby bonus and schoolkids bonus. 'Workforce' comprises payments to working-age people, including Newstart, Youth Allowance and Parenting Payment. See Supporting Analysis p35-40 for further notes.

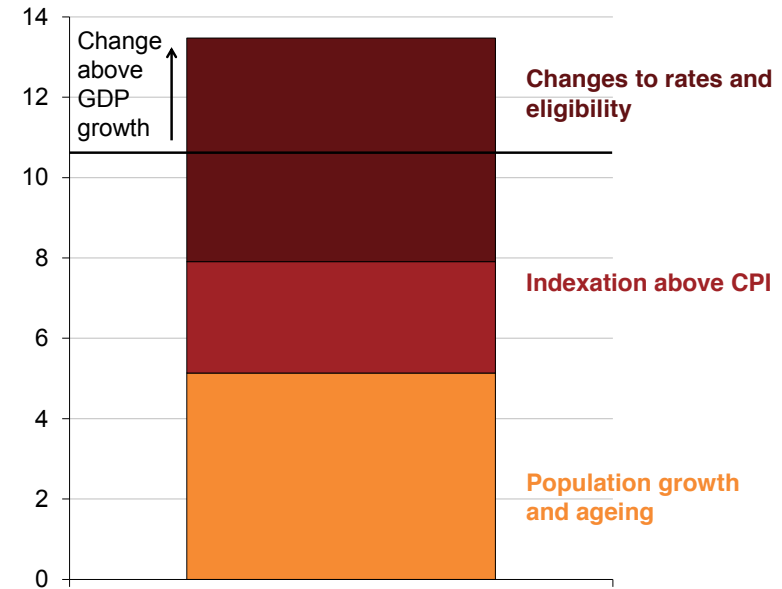
Source: Grattan analysis of Commonwealth and State budget papers for 2002-03 and 2013-14; ABS (2014c); b); PBO (n.d.-a)

³¹ See Daley, *et al.* (2013a) pp. 32-36

4.5.1 Welfare for seniors

Over the same period total welfare for seniors, primarily Age Pension payments, grew by 61 per cent, faster than GDP. Welfare for seniors is now the largest component of welfare spending. Yet, as with health spending, demographic ageing is *not* the prime cause (Figure 14).³² Spending on older people has increased rapidly – despite an increasing number of people retiring with superannuation – as a result of deliberate policy choices to increase Age Pension spending. These included the Howard Government changes to the assets and income tests in 2006-07, the 2008-09 Rudd Government increase to the base pension rate, and the 2010-11 Gillard Government Clean Energy Supplement which accompanied the introduction of the carbon price. The growth in spending above GDP was entirely due to these discretionary changes. Whether they were appropriate depends on many factors, including whether Age Pension expenditure was too low in 2003.

Figure 14: Drivers of change in Age Pension expenditure
\$2013 bn, 2002-03 to 2012-13



Note: Until September 2009, the Age Pension was indexed by CPI and benchmarked at 25% of Male Total Average Weekly Earnings (MTAWE). From September 2009, it was indexed by the greater of CPI or the Pensioner and Beneficiary Living Cost Index (PBLCI), and benchmarked to 27.7% of MTAWE. The 'indexation above CPI' category shows the impact of using the 25% MTAWE benchmark over ten years. Change in MTAWE has been the highest index in 7 of the 10 years between 2002-03 and 2012-13. 'Demographic change' is based on the increase in the number of people aged 65 and over; this is an approximation as in 2002-03 women were eligible for the Age Pension from age 63.5. Source: Grattan analysis of ABS (2012a) Cat no. 6302.0 Table 10C; ABS (2013a) Cat. no. 6401.0 Tables 1 and 2; ABS (2013b) Cat. no. 6467.0 Table 1; ABS (2013c) Cat. no. 3101.0 Table 59; FaCS (2002); FaHCSIA (2012); Harmer (2009).

³² See also Productivity Commission (2005) and Betts (2014)

Welfare for seniors is relatively poorly targeted. Almost half of the \$39 billion spent each year on the Age Pension goes to households with half a million dollars in net assets. Of mature-age households with a million dollars in net assets, about 80 per cent receive some welfare benefit, and on average it is more than \$200 a week, as Figure 15 shows.³³

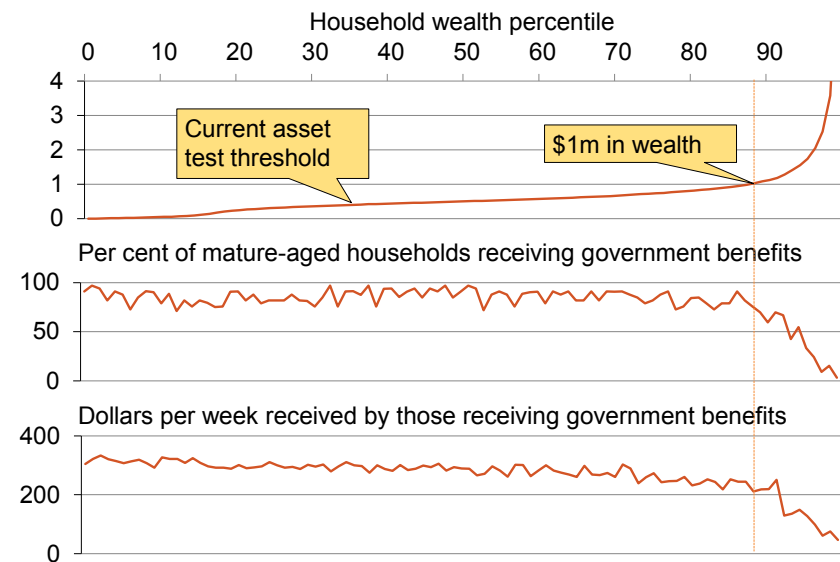
There is widespread concern that Age Pension spending may become unsustainable in future decades, given the rapid recent rise in costs, an ageing population, and lax eligibility rules.³⁴ The challenge would best be managed by increasing the Age Pension eligibility age, and better targeting payments towards those with genuine need and without significant assets, as Chapter 8 discusses.

On top of the Age Pension, a number of other government expenses and concessions are aimed at older people. The cost of concessions for public transport, car registration and third party insurance, utilities, rates, and health costs is already substantial. Public transport concessions are available to anyone over 60, irrespective of income.³⁵ Many other concessions are available if any person in a household is entitled to a part pension. These concessions cost NSW about \$1 billion in 2013-14.³⁶ Older people also have access to additional welfare payments such as the Seniors Supplement, and benefit from substantial superannuation concessions and tax concessions such as the Senior Australians Tax Offset. Australia has the highest level of tax concessions for

private pensions in the OECD, and people of pension age pay much lower taxes than do younger people at the same level of gross income.³⁷

Figure 15: Household assets and Age Pension eligibility

Household net wealth for mature-aged households, \$m



Note: 'Mature-aged households' refers to households in which the household reference person, generally the 'head' of the household, is of Age Pension age (65 and over)

Source: Grattan analysis of ABS (2011)

³³ Daley, *et al.* (2013a), p. 37

³⁴ See, for example, Productivity Commission (2013)

³⁵ Seniors Card (2013)

³⁶ Includes concessions to health care card holders. NSW Government 2013-14 Budget Paper 2, Appendix D

³⁷ Whiteford (2014b)

4.5.2 Welfare for jobseekers

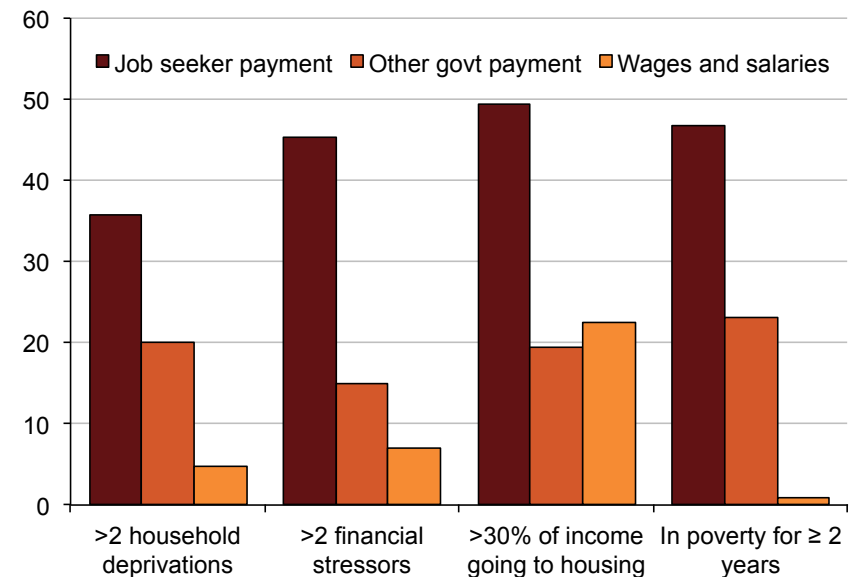
Welfare did not keep pace with GDP only because the aggregate cost of workforce payments such as Newstart, Youth Allowance and Parenting Payment fell in real terms. The unemployment rate fell, eligibility rules changed, and Newstart and Youth Allowance, which are indexed to the Consumer Price Index, did not keep pace with wage inflation. As a result, households whose main income is Newstart or jobseeker Youth Allowance have substantially lower disposable incomes after paying for housing: \$305 and \$242 a week, compared with \$503 a week for households on other government payments.³⁸

These shifts have had substantial human impact. On any measure, households on Newstart and equivalent payments are doing it tougher than are households receiving other forms of welfare, as Figure 16 shows. Households in which the main income is Newstart or jobseeker Youth Allowance are more financially stressed, spend more of their income on basics, and are more likely to be and remain for an extended period in poverty than are other households.³⁹

The real reduction in workforce payments may be partially reversed in coming years. There is significant pressure to increase the level of Newstart given the stresses now experienced by Newstart households.⁴⁰ Increasing Newstart by \$50 a week would cost the budget about \$2 billion, 0.1 per cent of GDP.

Figure 16: Households experiencing hardships by main income source of household

Percentage of households in category, 2009-10



Note: 'Job seeker payment' includes Newstart and jobseeker Youth Allowance. 'Other govt payment' is dominated by age and disability pensions. "Deprivations" (such as the inability to afford to invite friends for a meal once a month) and "Financial stresses" (such as being unable to pay electricity on time) are as defined by the ABS Household Expenditure Survey. 'Poverty' is defined as householders whose income after tax and welfare, and paying for housing is less than 50% of the median Australian household.

Source: Grattan analysis of Phillips and Nepal (2012).

³⁸ Phillips and Nepal (2012), p. 13

³⁹ Ibid.

⁴⁰ See, for example, Australian Greens (2013); BCA (2013)

4.5.3 Welfare for people with a disability

In contrast to pensions for seniors, disability pensions grew at only about the same rate as GDP between 2002-03 and 2013-14. Some of this growth was the consequence of individuals switching from Newstart to the Disability Support Pension (DSP), which pays more per week, and does not have the same requirements to actively search for work.

More than half the growth in DSP reflects demographic classification effects. The total proportion of older households on welfare has reduced over the last decade. However, there are more older households. As well, older households on welfare are more likely to claim DSP than Newstart, and DSP now supports some of the older households that would previously have received payments, such as mature age allowances, widows' pensions, and Age Pensions for women between 60 and 65, that have now been phased out.⁴¹

4.5.4 Welfare and inequality in Australia

Overall, Australia's welfare system is well-targeted. Welfare payments substantially reduce inequality of outcomes and opportunities. Once taxes and welfare are taken into account, overall inequality in Australia is a little above the OECD average, as Figure 17 shows. The effects of income inequality are mitigated by Australia's welfare system.

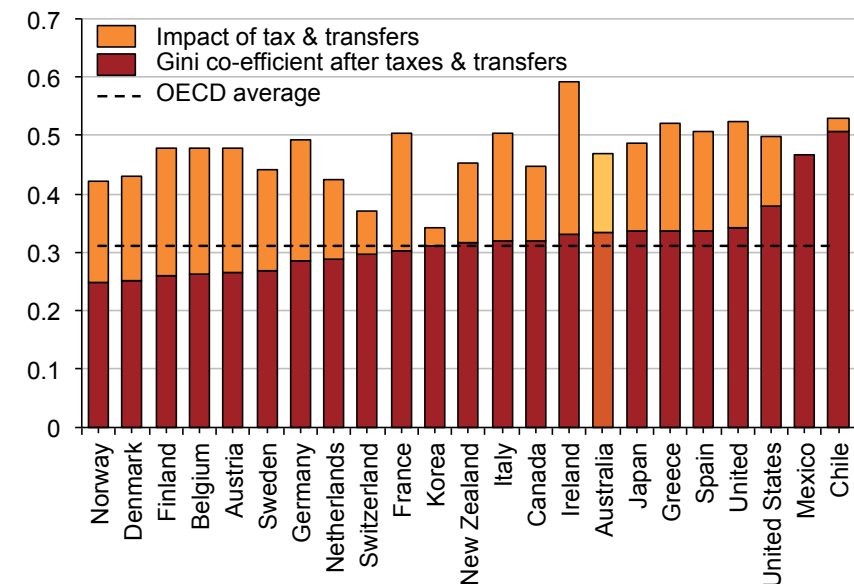
Australia's welfare system is highly targeted towards those who need the most. Although the Australian government pays less to

all households than elsewhere in the OECD, it pays more to low-income households, as Figure 18 shows.

Australian spending on means-tested payments is almost double that of anywhere else in the OECD. As a result, those in the poorest quintile in Australia receive 12 times more in cash

Figure 17: Household income inequality after taxes and payments in the OECD

Gini coefficient, late 2000s, household disposable income



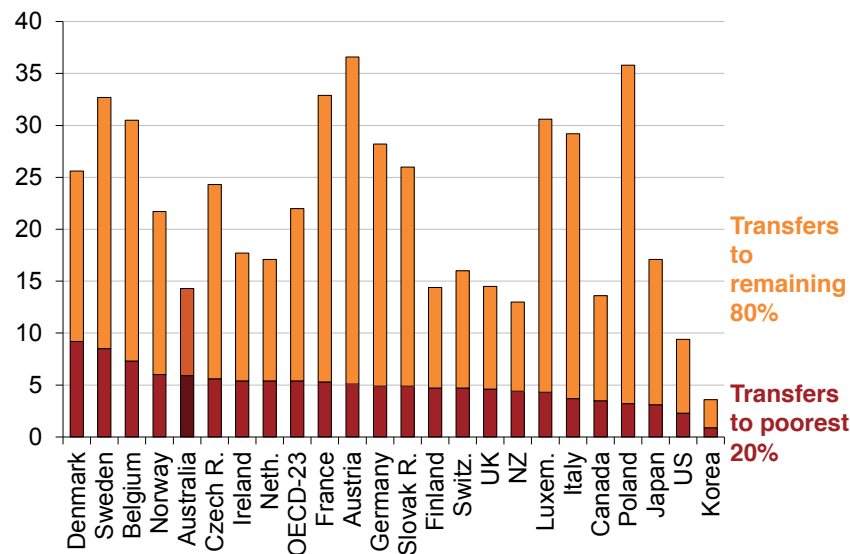
Note: No Gini coefficients for income before taxes and transfers are available for Mexico. Figures for Chile, Ireland, Japan, New Zealand and Switzerland are for 2009, all others are for 2010. Gini coefficient based on equivalised household disposable income (after taxes and payments) for total population.

⁴¹ Whiteford (2011); Whiteford (2014a)

Source: OECD (2013b)

payments than do those in the richest quintile. Across the OECD the poorest quintile only receives twice as much in cash payments, on average. The Australian tax system is also more redistributive than the OECD average, meaning that a greater proportion of the total tax take is collected from the rich than in comparable countries.⁴²

Figure 18: Redistribution of welfare payments in OECD countries
Public payments to households as a proportion of population disposable income, mid-2000s



⁴² OECD (2008), p.103-105

Note: Incomes are equivalised.

Source: Grattan analysis of Whiteford (2010)

A more extensive discussion of inequality and the welfare system in Australia is presented in Section 7.4 of the 2013 edition of this report; the situation has not changed materially in the year since that report was published.⁴³

4.6 Infrastructure expenditure

Infrastructure, transport and planning expenses are 7 per cent of Australian government budgets, and grew by 108 per cent in real terms between 2002-03 and 2013-14. States spent most of this money. Infrastructure, transport and planning now consume 16 per cent of State government budgets.⁴⁴

Accounting standards mandate that “recurrent spending” on infrastructure does not include the current year’s capital expenditure. Instead “recurrent spending” on infrastructure includes the interest and depreciation costs of *past* capital expenditure. Interest and depreciation from past infrastructure spending are consuming an increasing proportion of state recurrent budgets, as Chapter 6 will show.

As Figure 19 shows, infrastructure, transport and planning spending grew at least as fast as GDP in all large states. Growth was much faster than GDP in New South Wales and Queensland. A significant proportion of Queensland’s expenditure (\$4.1 billion) was spent by the Queensland Reconstruction Authority to repair

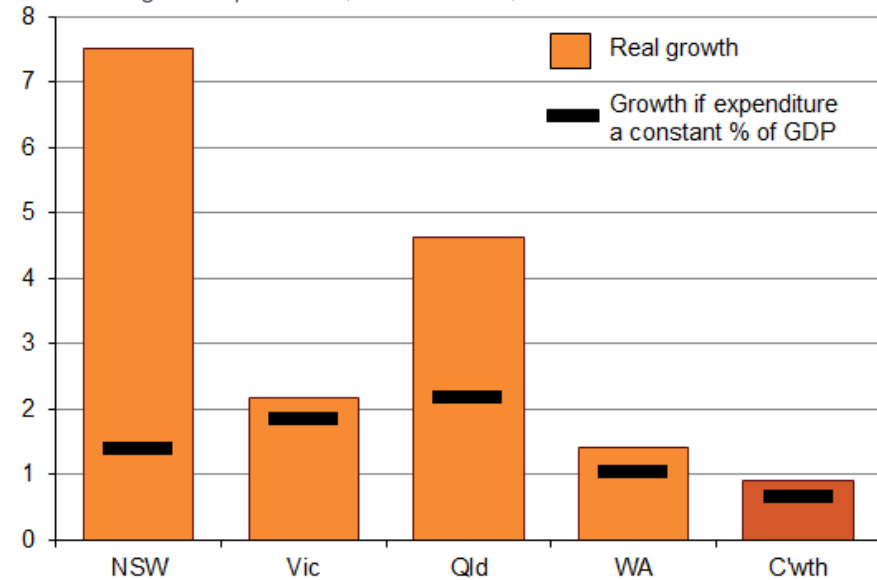
⁴³ Daley, *et al.* (2013), pp. 36-44. See also Whiteford (2013)

⁴⁴ The Commonwealth spends less than 1 per cent of its own-purpose expenditure on infrastructure, transport and planning.

infrastructure damaged in various natural disasters, including the 2010-11 floods and more recent tropical cyclones. This spending will fall provided that the number and severity of such disasters declines. The increase in New South Wales appears to be a more general increase across all categories of infrastructure, transport and planning expenditure, although some may be due to New South Wales using a different accounting approach to funding its transport agencies.

Figure 19: Change in Australian governments' infrastructure, transport and planning expenditure, by jurisdiction

Real change in expenditure, \$2013 billion, 2002-03 to 2013-14



Source: Grattan analysis of Commonwealth and State budget papers for 2002-03 and 2013-14; ABS (2014c); b); PBO (n.d.-a).

5 Revenue trends

Australian governments are forecast to collect \$497 billion in revenues in 2013-14, about 31 per cent of GDP. These revenues are dominated by income tax, company tax and the GST.

Other taxes – including all those raised directly by the States – are relatively small, as Figure 20 shows. Revenues collected by the Commonwealth are three times larger than revenues collected by all the States and Territories combined. Commonwealth transfers make up around 45 per cent of State revenues.

All major revenue sources dropped during the GFC. Collections have since recovered, apart from GST collections, which are likely to remain about 0.5 per cent of GDP less than the 2000-2010 average. Government decisions to abolish carbon pricing and the Minerals Resource Rent Tax (MRRT) remove potential revenue sources, although the total amount anticipated to be collected from these sources was relatively small.⁴⁵

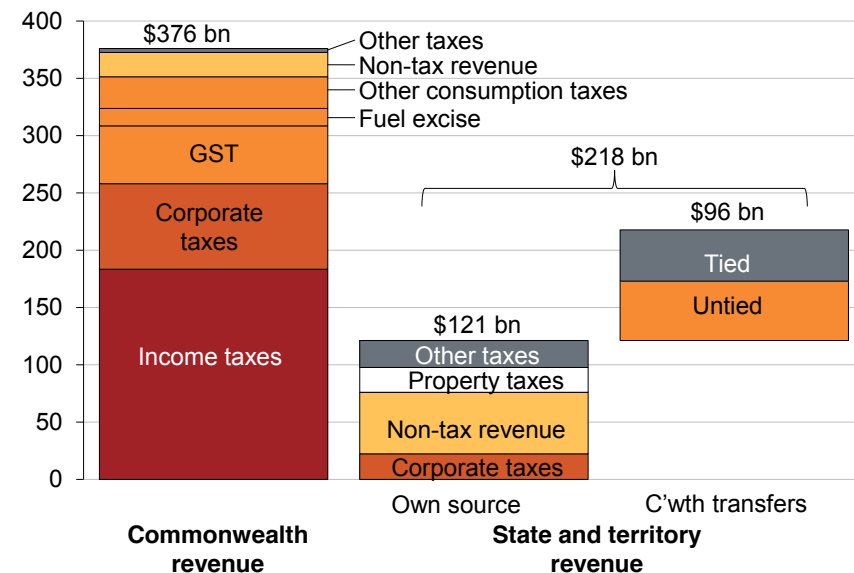
Tax expenditures – concessions to general tax provisions aimed at a specific policy outcome – now cost Australian governments more than \$135 billion a year in foregone revenue.⁴⁶ Although tax expenditures are notoriously difficult to compare across jurisdictions, available data suggest that Australia's foregone revenue from these concessions is amongst the highest in the developed world as a percentage of GDP.⁴⁷

⁴⁵ Longer-run Commonwealth revenue trends are reviewed in PBO (2014)

⁴⁶ Grattan analysis of Treasury (2014) and State government budget papers 2013-14.

⁴⁷ Tyson (2014)

Figure 20: Australian governments' revenues
\$ bn, 2013-14 budgets



Note: Classifications are based on liability rather than incidence, so income taxes' are individual income tax, superannuation taxes and fringe benefits tax; 'corporate taxes' are company tax, resource rent taxes and payroll tax; 'other consumption taxes' are carbon pricing, customs, excise and other sales taxes; 'other taxes' are mostly agricultural taxes for the Commonwealth, and gambling, insurance and vehicle taxes for the States; 'non-tax revenues' are not further specified for the Commonwealth, and are mostly dividends, interest, royalties and sale of goods and services for States; 'property taxes' are mostly land tax and stamp duty. For Commonwealth transfers to States: 'untied transfers' are mostly GST; 'tied transfers' include Specific Purpose and National Partnership payments. Source: Grattan analysis of Commonwealth and State budget papers 2013-14

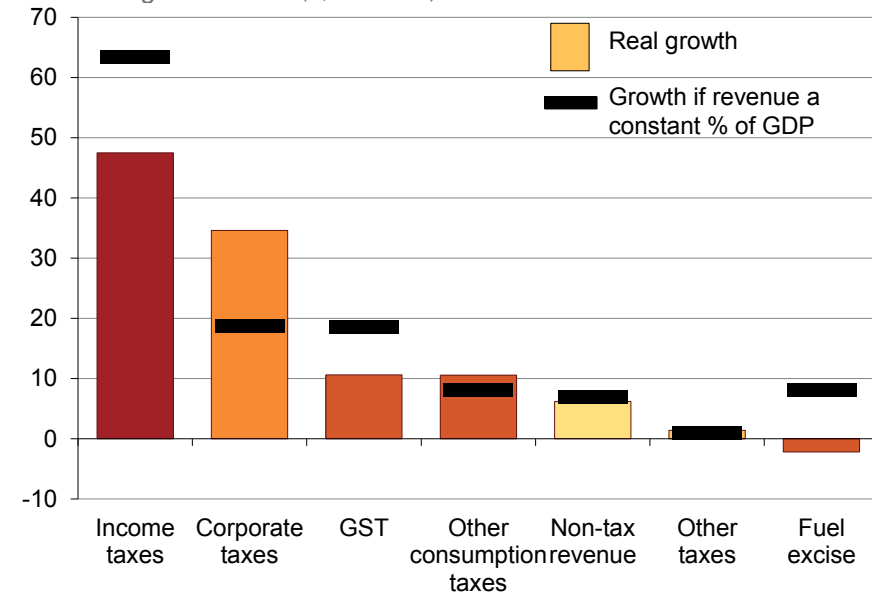
5.1 Commonwealth revenues

Revenues collected by the Commonwealth are forecast to amount to about 23.5 per cent of GDP in 2013-14. Over the 11 years to 2014, all major Commonwealth revenue sources increased in real terms, as Figure 21 shows. However, they fell as a proportion of GDP. Corporate taxes revenues rose faster than did GDP growth, while income and consumption taxes rose more slowly.

Yet this comparison conceals substantial variation from year to year, as Figure 22 shows. Commonwealth income and corporate tax dropped between 2007 and 2013 with big personal income tax cuts, and as the impact of the GFC flowed through the economy and then taxation revenues. Corporate tax revenues are forecast to return to close to their 2001-2010 average by 2017. Income tax receipts are projected to recover even more strongly, primarily due to bracket creep. Some have questioned whether allowing this level of fiscal drag is either politically feasible or economically desirable.⁴⁸

Figure 21: Change in Commonwealth government revenues

Real change in revenue, \$2013 bn, 2003 to 2014

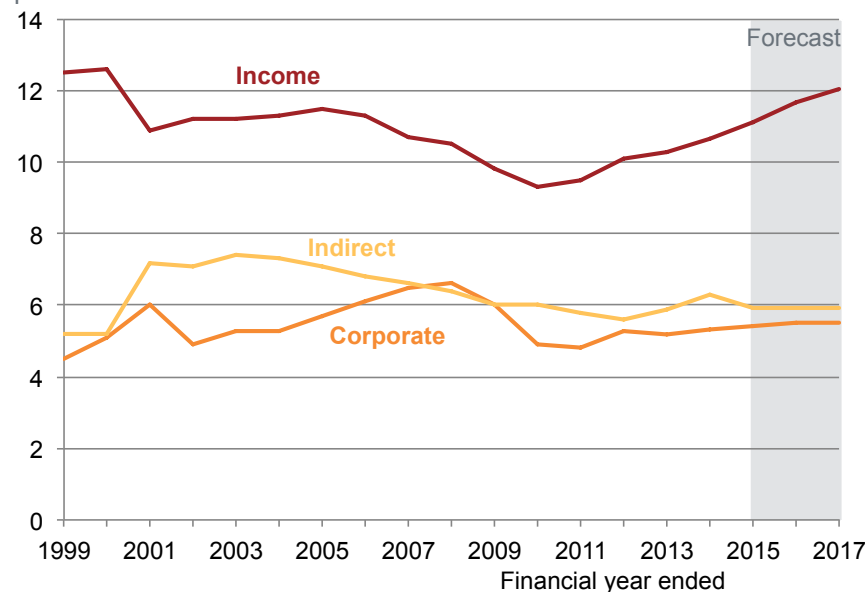


Note: 'Other taxes' is mostly agricultural taxes; 'other consumption taxes' is carbon pricing, non-GST sales taxes, customs, and non-fuel excises; 'income taxes' is individual income tax, superannuation taxes and fringe benefits tax. Non-tax revenues can vary widely depending on asset sales. However, the change in non-tax revenue, close to GDP, suggests that there are not major anomalies in either 2003 or 2014.

Source: Grattan analysis of Commonwealth budget papers 2002-03 and 2013-14; ABS (2014c) Table 1; ABS (2014b) Table 30.

⁴⁸ See, for example, Parkinson (2014).

Figure 22: Trends in major Commonwealth taxes
per cent of GDP

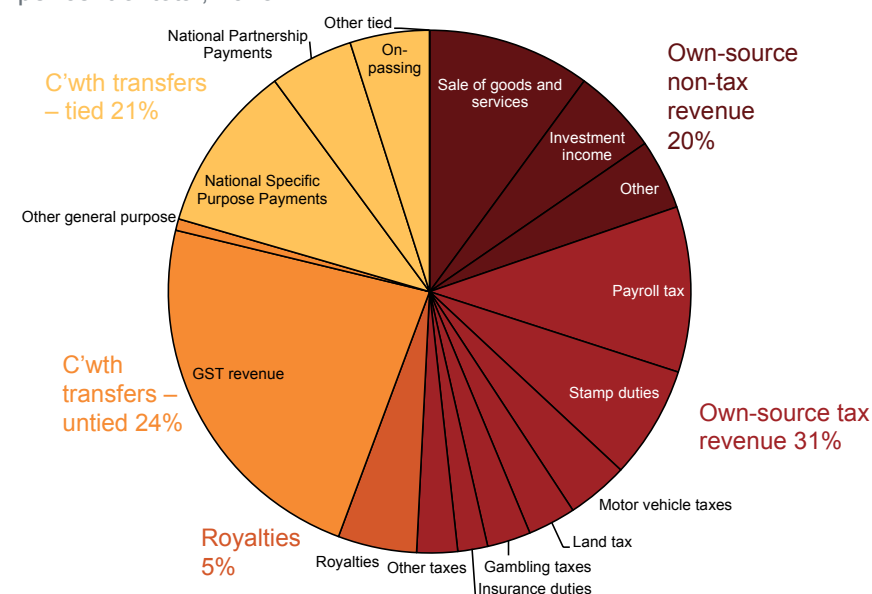


Note: Individual taxation receipts include individual and income tax withholding; corporate includes FBT, super funds, companies and resource rent taxes; indirect includes sales taxes, excise and customs duty, carbon price mechanism, and other.
Source: Treasury (2013a) Budget Paper 1, Statement 5, Table C2, Treasury (2013b)

5.2 State revenues

Revenues received by the States are forecast to amount to about 14 per cent of GDP in 2013-14. Many of these revenues are collected by the Commonwealth and then transferred to the States. State governments collect little more than half of what they spend, as Figure 23 shows.

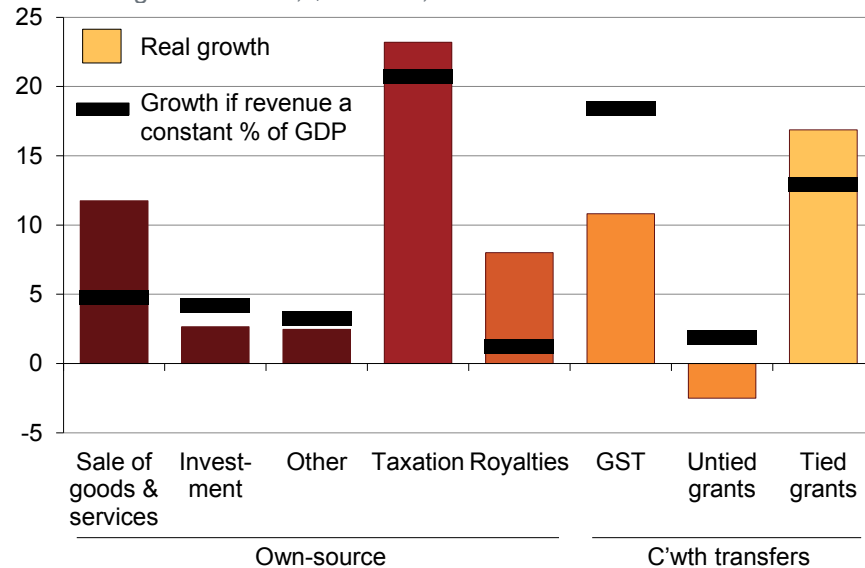
Figure 23: State and Territory government revenues by source
per cent of total, 2013-14



Notes: 'Investment income' includes interest income, dividends, and tax-equivalent payments from State entities. 'Other own-source' includes fines, fees, grants from entities other than the Commonwealth, and other revenue not elsewhere included. 'Other general purpose grants' is mostly royalty payments to WA.
Source: Grattan analysis of State budget papers for 2013-14.

Figure 24: Change in State government revenues

Real change in revenue, \$2013 bn, 2003 to 2014



Notes: 'Tied grants' include Specific Purpose Payments, National Partnership Payments, payments for on-passing to other entities, and other tied grants. 'Taxation' includes gambling, land, insurance, vehicle, payroll and stamp duties. 'Investment' includes interest income, dividends, and tax-equivalent payments from State entities. 'Other own-source' includes fines, fees, grants from entities other than the Commonwealth, and other revenue not elsewhere included. 'Untied grants' in 2013-14 are mostly royalty payments to WA; in 2002-03, they were mostly National Competition Policy payments and compensation payments for loss of revenue from State taxes abolished with the introduction of the GST (both have now ceased).

Source: Grattan analysis of State budget papers for 2002-03 and 2013-14; ABS (2014c) Table 1; ABS (2014b) Table 30.

Over the last 11 years, State revenues from the Commonwealth have been under pressure. Tied transfers from the

Commonwealth increased, but untied transfers – including GST revenues – shrank relative to GDP (Figure 24). The gap was filled by state charges and royalties growing faster than GDP.

As Figure 25 shows, some States collect much more revenue per capita than do others. In 2013-14, Queensland will collect at least \$750 more per person than New South Wales or Victoria, and Western Australia will collect over \$2,000 more per person. More detail is presented in the *Supporting analysis* volume.

5.3 Income taxes

Income taxes are forecast to be 10.7 per cent of GDP in 2013-14, as shown in Figure 22. This is close to their long-run average from 2000 to 2010.

Income taxes fell by 2 per cent of GDP from a peak in 2004-05 to a low in 2009-10. Revenue (including falls in capital gains tax) fell partly as a result of the GFC. It also fell with a series of rate cuts, particularly steep between 2006-07 and 2008-09,⁴⁹ so that income tax in 2010-2011 was \$10 billion lower than it would have been if the thresholds from 2006-07 had been indexed at CPI. However, by 2015-16, several years of bracket creep will cancel out the annual impact of these tax cuts, and income tax collection will be the same as if the income tax brackets had simply been indexed at CPI from 2007-08.⁵⁰

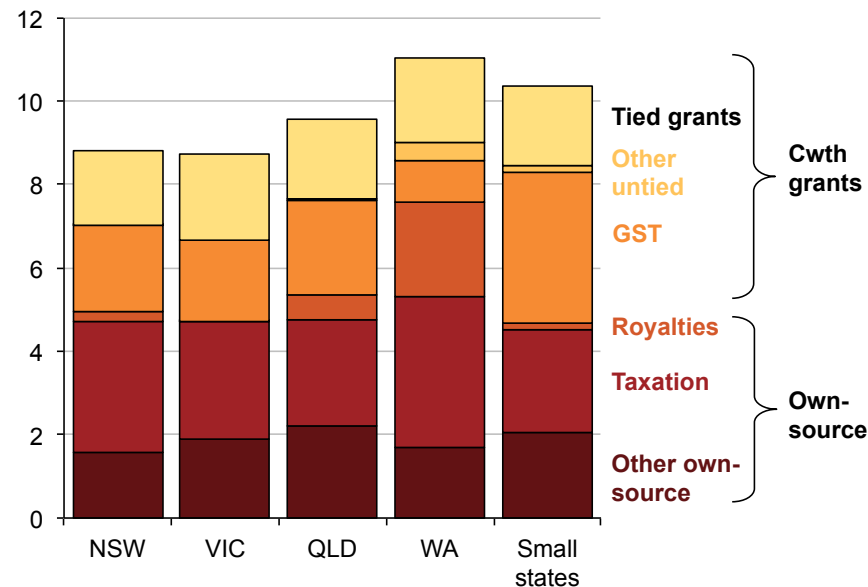
There is a reasonable chance that Capital Gains Tax (CGT) receipts will increase by about 0.3 per cent of GDP over the next few years. CGT is collected as income, company and

⁴⁹ See PBO (2014), p.30

⁵⁰ Deloitte Access Economics (2012), p. 73

superannuation taxes. Collections in 2010 were at a cyclical low of 0.45 per cent of GDP, well below the peak of 1.48 per cent of GDP in 2007. However, the share market and property price boom of the 2000s should probably be seen as an aberration: over 15 years, CGT receipts averaged 0.72 per cent of GDP.⁵¹

Figure 25: State government revenues per capita
\$2013 '000 per capita, 2013-14 budgets



Source: Grattan analysis of State budget papers for 2013-14; ABS (2014a) Table 4.

5.4 Corporate taxes

Commonwealth corporate taxes are forecast to be about 5.5 per cent of GDP in 2013-14. The largest component is company tax (4.5 per cent of GDP); much of the remainder is paid by super funds, the carbon price, and resource rent taxes. Payroll tax collected by the States is a further 1.4 per cent of GDP.

Over the last four years company tax revenues were below the average for 2000 to 2010, although above the low point of 2003. In part, economic growth and therefore corporate profits have been lower than before the GFC. In part company taxes are lower because of corporate losses during the GFC that were claimed in subsequent years.

Until the 2013-14 Budget, Treasury consistently overestimated company tax collections by about 0.5 per cent of GDP.⁵² This was partly because mining companies paid less tax than forecasts, which failed to allow for accelerated depreciation on substantial new investments. Another explanation, based on taxation statistics, is that financial asset investing companies paid about \$7 billion a year less tax after the share market crash in 2008.⁵³

5.5 Indirect taxes

Indirect taxes – primarily the GST and fuel excise – dropped by about 1 per cent of GDP relative to the 2001-2010 average, as Figure 22 shows.

⁵¹ Grattan analysis of Commonwealth 2013-14 Budget Paper No.1, p. 5-10

⁵² Chessell, *et al.* (2012), p. xxi

⁵³ Joiner and Eslake (2013), p.10

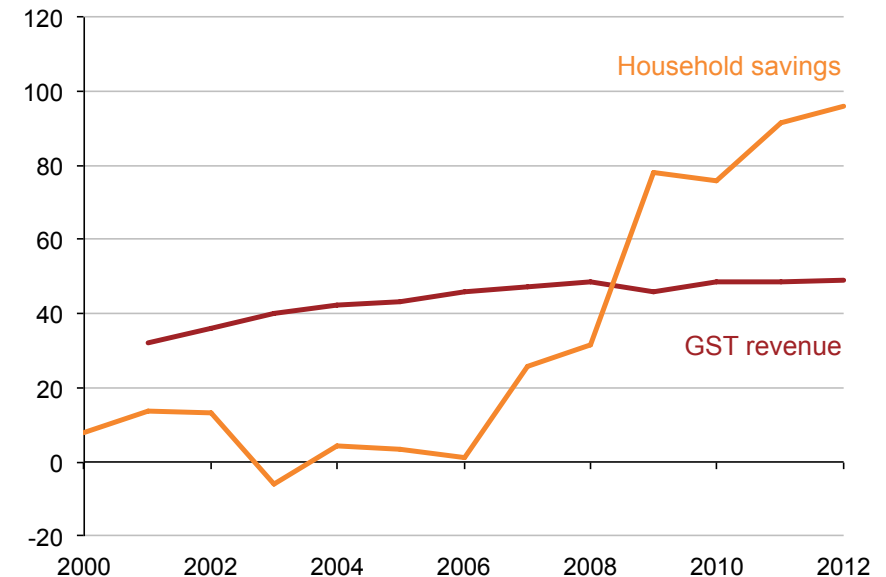
The fall in GST was partially due to changes in household savings.⁵⁴ In 2003, Australian households were saving less than 1 per cent of their discretionary (post-tax) income. By 2013 they were much more frugal, saving almost 10 per cent of discretionary income, or 6.5 per cent of GDP. Figure 26 suggests this may be a persistent change in behaviour, driven by a combination of historically high debt levels that households are now looking to reduce, lower confidence as a result of the GFC, increased awareness of rising longevity and the need for additional retirement savings, and replacement of the wealth increase previously delivered by strong capital gains in housing and equities.⁵⁵

GST revenues also fell because consumers spent an increasing proportion of their income on GST-exempt items such as education, health, and housing in the form of rent and mortgage interest (see Figure 27).⁵⁶ There was a further small loss of tax revenue as internet shopping grew, but not a material impact. As international online purchase sizes are small (averaging \$38 each) and falling, collecting GST on such purchases might well cost more than the revenue raised.⁵⁷

There is no obvious reason to expect these trends to reverse in the foreseeable future, particularly as the population ages: older

Figure 26: GST revenue and household savings

GST revenue and household savings, \$2012 bn



Note: Net household savings includes contributions and net earnings, less withdrawals, for superannuation.

Source: ABS (2013e) Cat no. 5506.0, ABS (2013b) Cat no. 5204.0

people spend a much higher proportion of their income on health.⁵⁸

Indirect taxes have also fallen relative to GDP because petrol excise was not indexed after 2001.⁵⁹ As a result, revenue from fuel excises fell in real terms between 2003 and 2014, despite an

⁵⁴ The flow of household savings as calculated by the Australian Bureau of Statistics includes contributions and net earnings, less withdrawals, for superannuation.

⁵⁵ Freestone, *et al.* (2011);

⁵⁶ See also PBO (2014) pp38–40

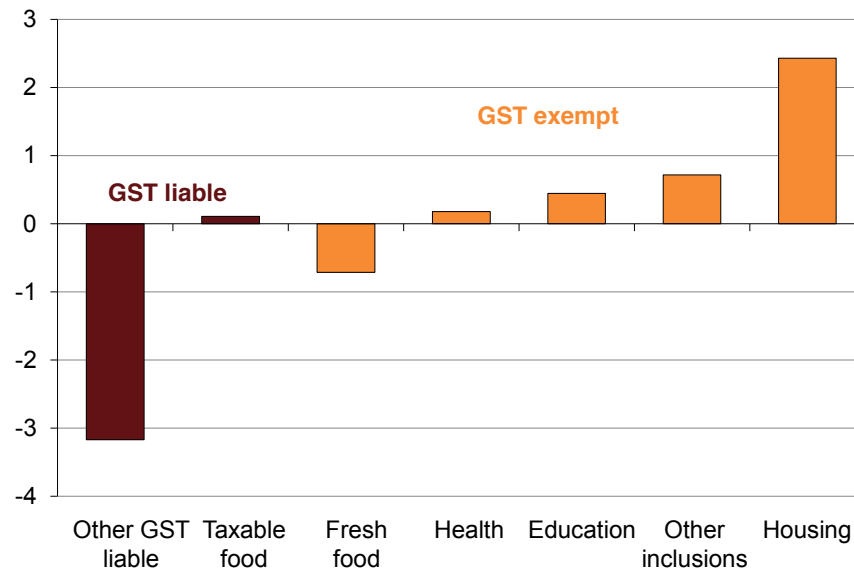
⁵⁷ See Daley, *et al.* (2013a) p52, and NAB (2013); cf EY (2012)

⁵⁸ Productivity Commission (2005).

⁵⁹ Treasury (2010b), section 9.3.

increasing population, as Figure 21 shows. If petrol excise had been indexed in line with inflation over the last decade, revenue on current volumes would be approximately \$5 billion higher. The higher price would probably reduce consumption, so the net revenue foregone is probably about \$3 billion.⁶⁰

Figure 27: Changes in consumer expenditure by GST liability
Change in share of household expenditure, 2004-10, percentage points of expenditure



Source: ABS (2006); ABS (2011)

⁶⁰ Daley, *et al.* (2013b). p. 28-29

5.6 Tax expenditures

When governments exempt certain types of transactions or taxpayers from an otherwise general tax, the foregone revenue is known as a tax expenditure. Tax expenditures are usually justified on the basis that they serve a particular policy objective better than does direct spending. Although tax expenditures are often less discussed than revenue or expenditure, they are a significant component of government budgets.

Measuring tax expenditures is inherently difficult, and Treasury has not quantified almost a third of all identified tax expenditures.⁶¹ Nonetheless, available estimates forecast that the Commonwealth will forego \$117 billion in tax expenditures in 2013-14, or almost a third of revenues collected.⁶² As Figure 28 shows, more than a third of this comes from superannuation tax, particularly the ability to contribute to superannuation funds from income before paying income tax, and the taxation of superannuation fund earnings at less than the marginal rate of income tax. The second-largest category is concessions for owner-occupied housing, particularly its exemption from capital

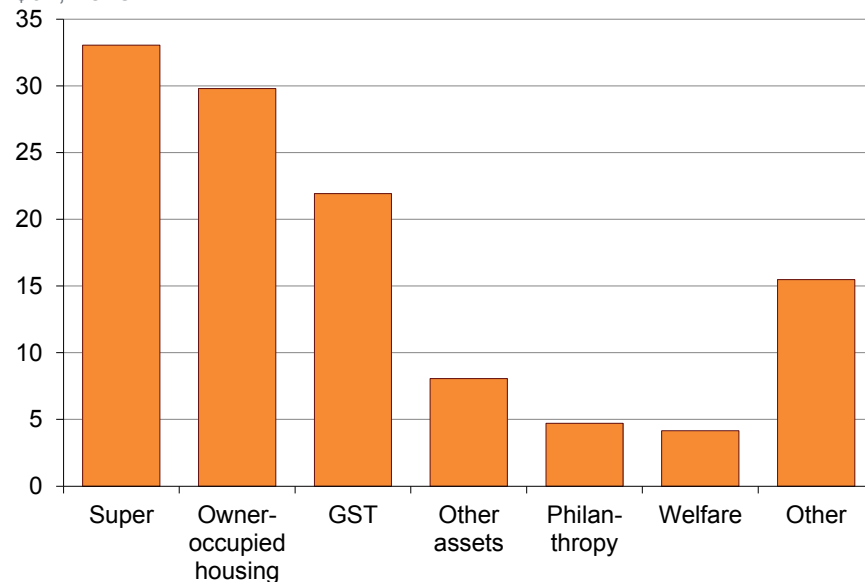
⁶¹ Measuring a tax expenditure involves determining how much revenue would have been collected if the exemption did not exist, which requires assumptions about what tax rules would apply in its place as well as how taxpayers behaviour might then change. For example, determining how much revenue government would collect if owner-occupied housing were not exempt from capital gains tax requires assumptions about what rate would apply, as well as whether fewer people might choose to invest in owner-occupied housing were it not subject to such favourable tax treatment. For a discussion of the difficulty of estimating and comparing tax expenditures, and a detailed description of the method used, see Treasury (2014) and the relevant sections of State budget papers.

⁶² Treasury notes that its estimates of tax expenditures are not strictly additive, introducing a further level of uncertainty to this figure.

gains tax. The third-largest is the exemption of fresh food, health, education, financial supplies and some other spending from GST.

Figure 28: Commonwealth tax expenditures by category

\$bn, 2013-14



Source: Grattan analysis of Treasury (2014)

Treasury suggests that the largest non-quantifiable expenditures include the ability to quarantine capital losses, as well as a number of company tax exemptions.⁶³

State tax expenditures are even more challenging to measure, since states use different tax benchmarks and assumptions. In 2012-13, the four largest states estimated that they gave up almost \$22 billion in tax exemptions,⁶⁴ primarily through stamp duties, land and payroll tax. These exemptions are equivalent to 20 per cent of those states' own-source revenue.

The best available data suggests that Australia has one of the largest tax expenditures in the world as a percentage of GDP.⁶⁵ This is not necessarily a bad thing; tax expenditures can achieve important policy aims. For example, exempting welfare payments from income tax ensures that money is not 'churned' from government to a recipient and returned immediately as tax. Nonetheless, tax expenditures are an important avenue for improving budgets. Chapter 8 assesses potential options for tax expenditure reform, including the significant fiscal benefits available from superannuation and GST reform.

⁶³ Treasury (2014) p11. These include exemptions for Commonwealth, State and Territory public authorities and entities; foreign branch profits; off-market share buy-backs; and charitable, religious, scientific, and community service entities.

⁶⁴ Grattan analysis of State budget papers 2013-14. Comparable data for 2013-14 is not available for all jurisdictions.

⁶⁵ Tyson (2014)

6 Capital expenditure

Capital expenditure is money spent on government-owned, fixed assets that provide services to the community.

Australian governments plan to spend \$21 billion on capital works in 2013-14. State and territory governments spend 84 per cent of this. Capital works are 6.1 per cent of all state and territory government spending in this financial year.

Over the last decade capital expenditure has increased substantially, much faster than GDP. Between 2007 and 2013, total government capital spending was three to six times the real value of expenditure in 2003-2004.

State governments tend to focus attention on their *recurrent* budget balance, which excludes capital expenditure. Yet higher capital expenditure matters because it increases interest and depreciation expenses in future recurrent budget balances. Interest and depreciation charges, largely a legacy of increased capital spending, have increased from about 6 to more than 9 per cent of state and territory revenue. State government recurrent spending to cover past infrastructure spending is consuming almost 0.5% of GDP more than 6 years ago. Tough policy choices can't reduce these charges: they are locked in to account for past spending.

New assets come with operating and maintenance expenses. These additional costs are not easily identifiable in government budgets, but they inevitably put more pressure on Australian budgets.

New assets can increase revenues, both through direct charging and by assisting economic growth that flows into higher tax revenues. They can also provide social benefits. However, unless projects are well-chosen and executed, the benefits may be less than the costs. Even if they exceed costs, government may not capture enough of the benefits to cover the costs of construction.

Accounting for capital expenditure has obscured some of the underlying problems in state budgets. Unusually large Commonwealth grants for infrastructure have boosted state headline recurrent budget balances. However, the depreciation expenses that match that revenue will drag on future state recurrent budget balances for many years.

Governments are regularly called on to spend more on infrastructure. If they simply maintain current levels of infrastructure spending, then interest and depreciation will consume an increasing share of their revenue in future.

Capital recycling – selling assets and spending the proceeds on new assets – would reduce the debt of state and territory governments. But it will not improve recurrent budget balances unless governments strike unusually good bargains in selling assets.

Similarly, increased use of public private partnerships (PPPs), instead of direct government borrowing for infrastructure, will not necessarily improve future budget balances. PPPs only substantially improve budgets if they generate additional revenue streams, such as new toll roads.

6.1 Trends in government capital expenditure

States and territories spend substantial capital to build hospitals, schools, roads, public transport and other infrastructure.⁶⁶

Over the last 11 years capital expenditure has increased significantly, peaking in 2009-10 with the Commonwealth's stimulus package (Figure 29).⁶⁷ But even when stimulus expenditure is excluded, capital expenditure in real terms in 2013-14 is four times higher than in 2002-03.

The analysis presented in this report is based on Australian Bureau of Statistics calculations that do not capture *all* government capital expenditure.⁶⁸ While this measure provides the most consistent comparison across Australia, it does not include spending that is often included in the headline capital expenditure of government budgets. For example, the ABS analysis does not include public non-financial corporations (PNFCs) that deliver services on behalf of government.⁶⁹ These are often excluded from general government budgets on the basis

⁶⁶ Note that the Commonwealth Government provides funding to states and territories through grants to be spent on capital projects.

⁶⁷ This includes both the Building the Education Revolution (BER) and Social Housing Initiative under the Commonwealth Government's National Building Economic Stimulus Plan.

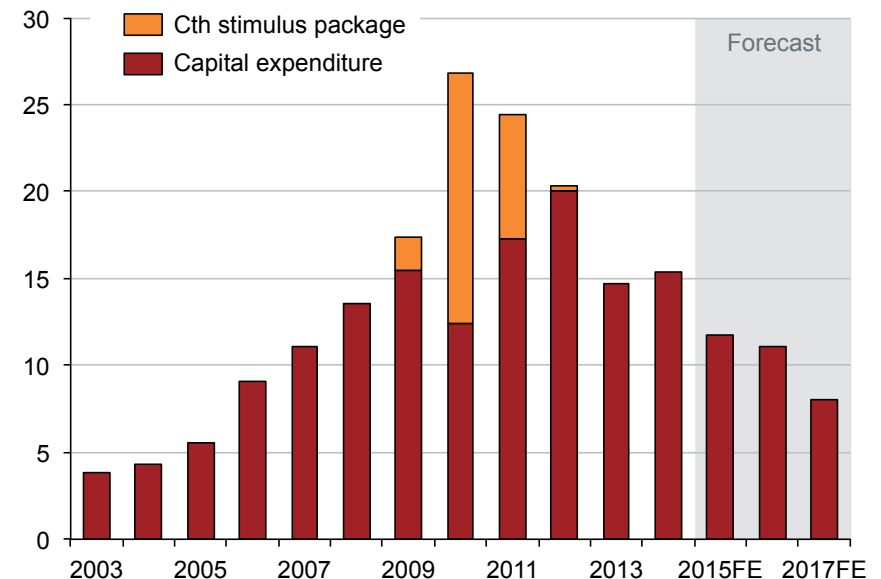
⁶⁸ This analysis uses the capital expenditure measure of 'general government net acquisition of non-financial assets' as reported by ABS (2013d). This measure captures purchases of non-financial assets, less asset sales, depreciation and other changes such as movements in inventories. See Supporting Analysis p41-43 for definitions.

⁶⁹ States use different terms to refer to PNFCs. For example they are termed 'Public Trading Entities' (PTEs) in New South Wales and 'Government Owned Corporations' (GOCs) in Queensland.

that their independent revenue streams will cover their costs, including capital expenditure.⁷⁰ However, the headline capital expenditure in NSW does include capital expenditure in the PNFC sector to purchase assets directly or through finance leases, such as the lease of train carriages via RailCorp.

Figure 29: State and territory capital expenditure

General government net acquisition of non-financial assets, \$2013 bn



Notes: 2012-13 are estimated actuals, 2013-14 and forward estimates are budgeted figures

⁷⁰ Other issues in reconciling this analysis to budgets published by individual state governments, such as timing issues, are discussed in Supporting Analysis p41-43.

Source: ABS (2013) cat 5512, Treasury (2008), Part 2, Table 2.1, State and Territory budget papers 2013-14

Box 1 – Budget classifications

Government budgets are reported according to standard economic sector classifications, as defined by the ABS.⁷¹ The key terms are:

General government means government departments and agencies that deliver public services, or act as a regulator of private sector activity. Examples of general government expenditure include education, health, and criminal justice.

Public Non-Financial Corporations (PNFCs)⁷² typically deliver commercial services such as water, electricity and ports. They operate on a cost recovery basis and fund capital expenditure through user charges as well as borrowings.⁷³ State governments may also provide general government funding to PNFCs to deliver services on behalf of the government. Such expenditures are usually included in headline capital expenditure numbers.

Public Financial Corporations (PFCs) are arms of government engaged in financial activity including state central borrowing authorities such as Treasury corporations.

6.2 Commonwealth capital expenditure

The Commonwealth funds a large amount of state-based infrastructure such as roads, schools and hospitals. However the

Commonwealth accounts for this funding as recurrent grants to states rather than as capital expenditure in its capital account. As a result, the Commonwealth's capital expenditure captures only money spent on assets *owned* by the Commonwealth.

Between 2002-03 and 2012-13 Commonwealth capital expenditure grew by 10 per cent a year, on average.⁷⁴

The growth significantly exceeded average GDP growth of 3 per cent per year. While capital investment peaked at around \$7 billion in 2009-10, it has reduced and is not forecast to grow over the forward estimates period (Figure 30). This may change in the 2014-15 budget given recent defence acquisition decisions.

Most Commonwealth Government capital expenditure is spent on defence assets. These include specialised military equipment such as aircraft, ships and building support facilities. The increase in defence spending over the last 10 years was largely due to buying weapons systems and planes, chiefly Super Hornets and heavy lift planes.⁷⁵ Capital expenditure by other departments is significantly less than defence spending and includes buildings, infrastructure and computer software.⁷⁶

As it spends more on capital, the Commonwealth, like the states, will incur increasing interest and depreciation expenses. Yet the pressure on the Commonwealth budget will be less since the Commonwealth spends less on capital assets compared to states and territories.

⁷¹ ABS (2014e)

⁷² Also known as Public Trading Enterprises (PTEs) in New South Wales.

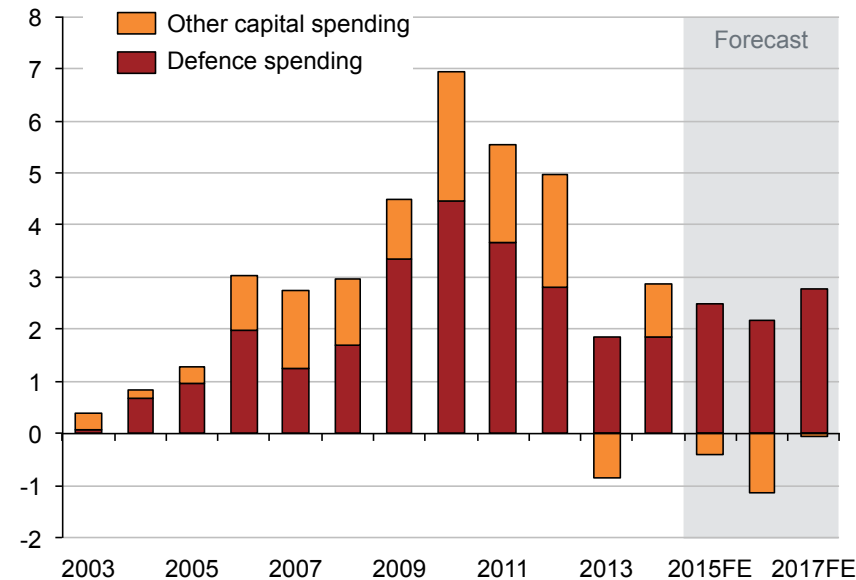
⁷³ Treasury NSW (2006) Budget Paper 4, pp. 16-17

⁷⁴ PBO (2013a), p. 50

⁷⁵ Growth in defence funding is consistent with a White Paper Defence 2000 target of three per cent growth in defence spending per year: *ibid.* p. 38.

⁷⁶ *Ibid.*, p. 50.

Figure 30: Commonwealth general government net capital investment
\$2013 bn



Source: PBO (n.d.-b)

6.3 Funding capital expenditure

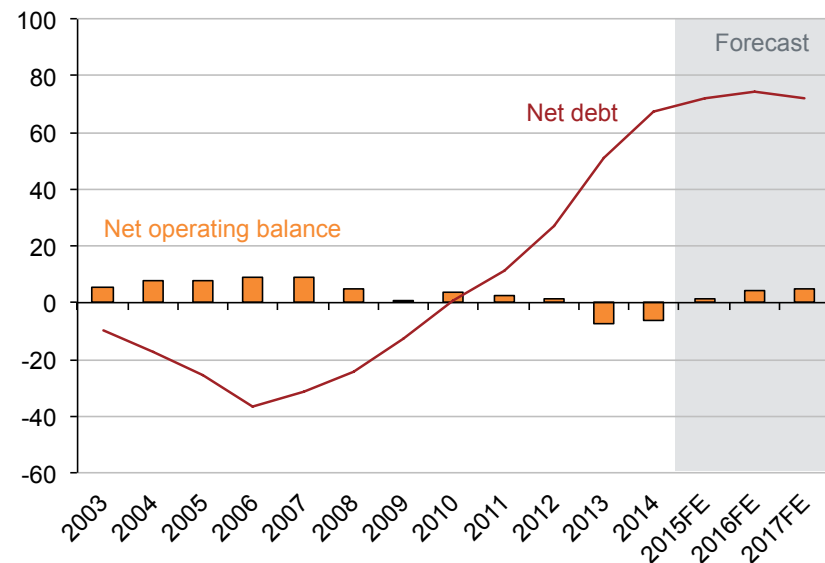
States could have funded capital expenditure through recurrent operating surpluses. However, over the last 7 years, states posted either recurrent deficits or small recurrent surpluses at best. Consequently, all states funded increased capital spending by running down accumulated surpluses and then borrowing and increasing debt. In 2006, total state and territory budgets had financial assets that exceeded debt liabilities by \$37 billion. Today

states have \$69 billion in net debt, as Figure 31 shows. Borrowing by the three largest states – Queensland, Victoria and New South Wales – mostly drove the increase. Capital expenditure drove almost all the increase in debt as states collectively had close to zero net operating balances between 2008 and 2014.

Although the Commonwealth Government contributed funds for large infrastructure projects, these were often conditional on states matching the Commonwealth's funding. Victoria's Regional Rail Link and the New South Wales' Pacific Highway upgrade are examples.⁷⁷ States therefore increased debt to pay their share.

⁷⁷ Department of Infrastructure and Regional Development (2014b), Department of Infrastructure and Regional Development (2014a)

Figure 31: Combined state and territory net debt
\$2013 bn



Note: Net debt is deposits held, advances received and borrowings, less cash, deposits, investments, advances paid, and investments, loans and placements: ABS (2005)

Source: ABS (2013d), state and territory budget papers 2013-14

6.4 Recurrent budget impacts of capital expenditure

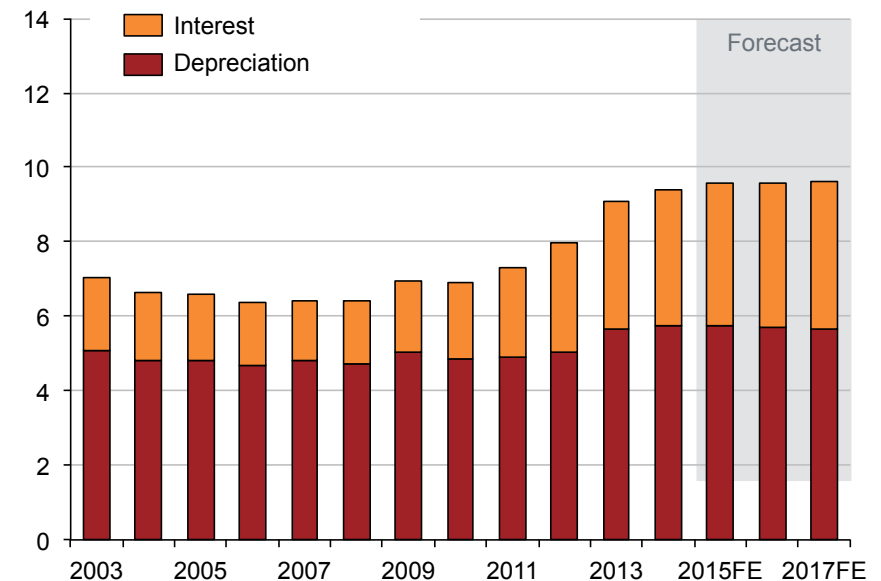
From an accounting perspective, historic capital expenditure increases depreciation and therefore recurrent expenses in future budgets. If capital works are debt-funded, the increased interest also drags on future recurrent budgets.

Unlike many other expenditures, depreciation charges cannot be reduced through a change in government policy or priorities. Depreciation costs are locked in for the life of the asset. Interest costs are locked in until debt is repaid.

Over the last 11 years, interest and depreciation costs as a percentage of state revenue increased from about 6 to 9.4 per cent in 2013-14, as Figure 4 shows. They are estimated to increase slightly over the forward estimates period. Interest expenses have increased faster than depreciation.

This increase is equivalent to states spending about 0.5% of GDP more paying for the infrastructure spending of previous years.

Figure 32: State and territory depreciation and interest costs as a percentage of revenue
Percentage of revenue

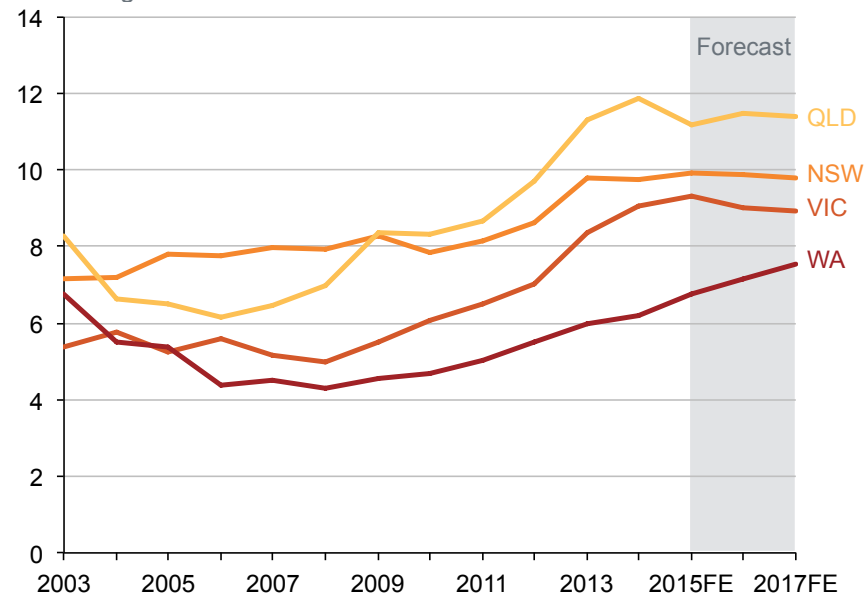


Source: ABS (2013) cat 5512, State and Territory budget papers (2013-14)

The only state that has not followed this trend is Tasmania, as Figure 33 and Figure 34 show. The particularly rapid increase in Queensland is partly due to capital works repairing damage from cyclones, flooding and bushfires.

Figure 33: Interest and depreciation costs as a percentage of revenue, by state

Percentage of revenue

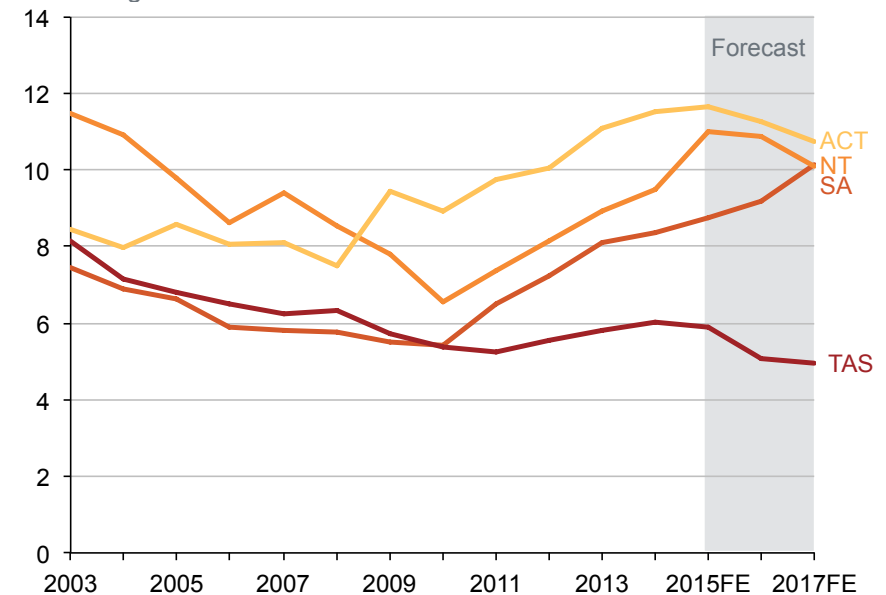


Source: ABS (2013d), State and Territory budget papers (2013-14)

If capital expenditure is simply maintained at current levels, depreciation charges may increase further. Whether this is happening is not clearly visible, and depends on the age profile of assets already being depreciated. The depreciation charges attributable to this profile are visible over the forward estimates. But beyond that period, some state government central agencies have no central registry of the aggregate stock of assets, their remaining life, or forecast depreciation costs. Instead, individual agencies hold these figures.

Figure 34 Interest and depreciation costs as a percentage of revenue, by state

Percentage of revenue



Source: ABS (2013d), State and Territory budget papers (2013-14)

6.5 Maintenance costs

As well as adding to interest and depreciation expenses, new infrastructure also requires ongoing operational expenses and maintenance. Budgets typically do not provide aggregated reporting on maintenance. Maintenance spending can usually only be calculated by examining line items for each agency in every jurisdiction.

It is often possible to defer maintenance spending. Doing so improves recurrent budget balances but increases the amount that will need to be spent in future.

Failing to maintain assets often increases total costs in the long run. As many home-owners have discovered, ignoring a leaky roof can cost a lot more than buying new tiles. If assets are badly run down, then recurrent maintenance will often be reclassified as capital works for renovations. This classification may defer the

impact on recurrent budgets, but will then be a larger ongoing charge than is timely maintenance.

A case study of Victoria's Department of Education and Early Childhood Development (Box 2) shows that spending can be much less than industry standards for maintenance for many years. This creates a substantial backlog that will inevitably need to be spent but which is not visible in the budget papers.

Box 2: Maintenance and capital expenditure in Victoria's Department of Education and Early Childhood Development

Over a decade, spending on regular school maintenance in Victoria was only about 0.6 per cent of asset value, less than a third of the industry standard for asset management.

As **Figure 35** shows, money was allocated for maintenance both through recurrent school budgets, and as capital projects to “modernise and redevelop” schools when buildings had fallen well behind contemporary requirements. These capital projects were a mixture of substantial renovations for new purposes, and catch-up maintenance

In 2012, the Department undertook an audit of school buildings. It identified that more than 2000 buildings, or 7.5 per cent, were at the point of ‘imminent failure’ or had already failed. The Department estimated that an additional \$420 million was required to return these buildings to appropriate condition, with more than half the spending classified as capital expenditure rather than maintenance.

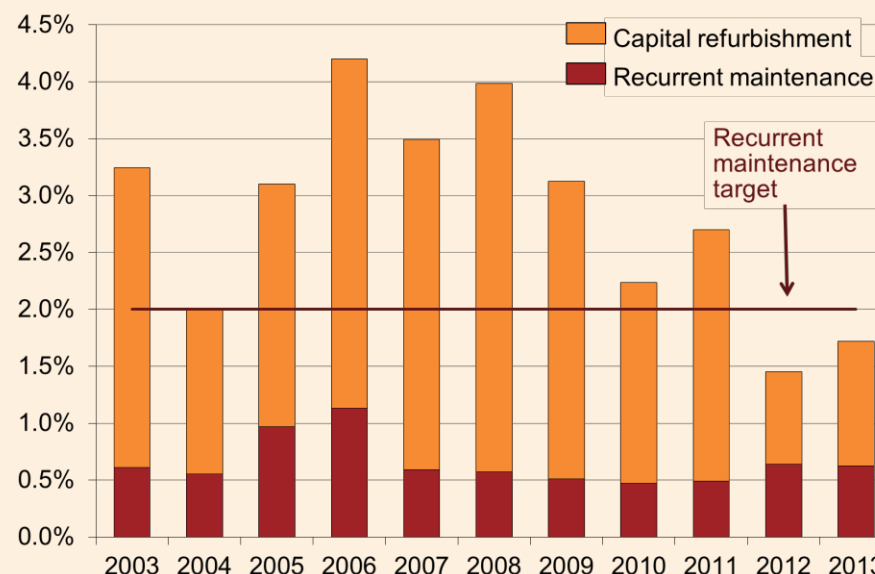
Following the Victorian Auditor General's report, the Department is developing a new maintenance funding formula driven by the profile of stock of assets, rather than by the number of students.

Note: The maintenance funding benchmark used by the Victoria Auditor General's Office is 2 per cent of asset stock. Victorian Auditor-General's Office (2012), p. viii

Sources: Victorian Auditor-General's Office (2012)

Figure 35: DEECD school maintenance expenditure

Expenditure as a % of asset stock



Note: Figures converted to \$2012-13. Asset stock is 'property, plant and equipment' Capital refurbishment includes modernisation, refurbishment and regeneration, minor works, construction of new classrooms, replacement and specific programs. Capital refurbishment is annual Total Estimated Expenditure (TEI) classified as Refurbishment Recurrent maintenance is maintenance provided to schools through SRPs and Budget and Expenditure Review Committee (BERC) funding

Source: DTF Victoria (multiple years), DEECD (multiple years)

6.6 Accounting impact of Commonwealth grants

Accounting standards for Commonwealth infrastructure grants can make state budgets look better than they really are. Accounting standards require that states treat Commonwealth contributions as recurrent revenue. The Commonwealth treats these grants as recurrent expenditure, and so includes them in its recurrent budget balance. The states and territories treat the grants as recurrent income – which helps their headline recurrent budget balance – but when they spend the money they typically account for it as capital expenditure.

This accounting trick does not immediately affect the states' headline recurrent budget balance, but it creates a drag on future recurrent budget balances as the asset depreciates. It increases both short-term recurrent revenue and long-term future recurrent spending. When Commonwealth grants for capital expenditure return to more normal levels, the underlying recurrent budget position of state governments will be revealed as worse than it is on current headline numbers.

6.7 Capital recycling

Capital recycling is the use of proceeds from the sale of government-owned assets to invest in new infrastructure. Such sales are claimed to free up capital for new capital works that would otherwise put the budget further into debt.

Capital recycling does affect net debt positions: the amount of cash that governments are liable to pay bondholders. If governments built new infrastructure, but did not sell existing infrastructure, their debt levels would be higher. Debt positions

Box 3: Capital recycling examples

New South Wales leased Port Botany and Port Kembla to private operators and put the cash produced from these long-term leases into NSW's infrastructure fund, Restart NSW.⁷⁸ The government intends to use some of this money to fund transport capital projects including the WestConnex project.

The Commonwealth Government recently announced the sale of Medibank Private in 2014-15.⁷⁹ It intends to spend the proceeds of the sale on infrastructure.⁸⁰

To encourage states to recycle capital, the Commonwealth Government announced that it will provide incentives for state and territory governments to sell assets. The Commonwealth will make incentive payments, valued at 15 per cent of the asset sale price, when sale proceeds are invested in infrastructure as opposed to paying down net debt.⁸¹

are relevant when ratings agencies calculate credit ratings for state governments. These ratings affect the interest rate paid on state debt.

Capital recycling usually does not markedly improve a government's recurrent budget balance. If you sell an asset and use the funds to repay debt, then you avoid interest and operating expenses. However, the reduced expense is usually matched by reduced income given up when the asset is sold. The private

⁷⁸ Treasury NSW (2013), Budget Paper 2, pp. 1-14

⁷⁹ Cormann (2014a)

⁸⁰ Cormann (2014b)

⁸¹ Hockey (2014)

sector usually values assets according to their future revenues.⁸² Because the private sector's cost of capital is higher than public sector debt charges, assets are likely to be sold at prices so that the savings in interest payments are outweighed by the loss of future income.

However, capital recycling can improve a government's recurrent budget balance if the purchaser thinks that they will be able to generate substantially more revenue from the asset than government did, and accordingly pays more for the asset. For example, the NSW government sold three ports for more than \$5 billion at what were generally regarded as excellent prices.⁸³ However, even at these prices, the interest saved will only just cover the current earnings given up. Although the ports had not paid dividends to government in the previous five years,⁸⁴ they were generating profits, retained in the business. The purchasers paid about 25 times the current earnings,⁸⁵ implying that the revenues were about 4% of the sale price. States currently pay an interest rate of around 4% on their borrowings.

Privatisation of government assets may also lead to productivity gains.⁸⁶ The value of these gains may be captured by the public, government, or the new operator.⁸⁷ Who gains depends on the price paid, and whether user charges fall as costs are reduced.

⁸² PWC (2014)

⁸³ Bartholomeusz (2014)

⁸⁴ Roe (2014)

⁸⁵ Bartholomeusz (2014)

⁸⁶ For example, in the electricity distribution sector, private operators appear to have materially lower capital and maintenance costs: see Wood, *et al.* (2012)

⁸⁷ See discussion in Daley, *et al.* (2013a) pp. 78-9.

Capital recycling may also effectively transfer risks from government to the private sector.

The construction of new assets affects recurrent budgets whether or not other assets are recycled. New assets create additional depreciation, and will drag on future budgets, except in the unusual situation where additional revenues from the asset (such as tolls) are greater than the depreciation and interest costs from building the asset.

6.8 Public Private Partnerships (PPPs)

PPPs have become a popular mechanism to finance state government infrastructure. A private entity borrows the capital, builds the asset, and then leases it to government through a finance lease. Typically the asset is transferred back to government once the finance lease expires – often after decades.

A few assets generate so much income that government does not need to make payments under the finance lease. Much more commonly, government undertakes to make regular payments to the developer for a number of years. Ultimately these 'availability payments', as they are often called, must be funded from recurrent budgets.

PPPs affect a state's capital expenditures just as if the state built the asset itself. Accounting rules typically require state governments to record the capitalised value of the finance lease as a capital expense when the asset is commissioned. This value should be similar to the cost of borrowing to build the asset, and then paying interest and repaying the principal on those borrowings. Given the higher profit margins and financing costs of

Box 4: What are Public Private Partnerships?

PPPs are agreements between private enterprise and governments to deliver public infrastructure projects.⁸⁸ Since the early 2000s governments have undertaken about 130 PPPs to build roads, railways, hospitals, courts and prisons, among other projects.⁸⁹ PPPs typically bundle the investment to finance, design and build a single piece of public infrastructure, and to provide services from the infrastructure, into a long-term contract.⁹⁰ Private investors finance and manage the construction of public infrastructure, then lease it to government over a contracted period, sometimes between 20 and 30 years.

the typical PPP, the finance lease may well be more expensive than borrowing directly.

PPP arrangements have a similar effect on recurrent expenditures as if the state built and operated the asset itself. The annual payments under a finance lease should be similar to the cost of interest, principal repayments and maintenance.

PPP arrangements are only likely to cost budgets less if outsourcing a project's design, building and operation to a single operator aligns incentives and reduces the long run total cost of ownership of the asset. For example, a private sector operator might choose to invest more in a road's initial construction because this will reduce future maintenance costs. The best

argument for PPPs is that private operators may make better trade-offs of this kind than the public sector.

However, these advantages need to be balanced against the additional costs of PPPs, including transaction costs and the higher cost of funds for a private sector operator. The conditions of the PPP may also reduce government's ability to build future infrastructure. They may also provide windfall gains to private operators when government builds additional connecting infrastructure.

PPPs can transfer construction risk, and sometimes forecasting risks, to private sector operators. They may be better at managing construction risks, reducing total cost. Private sector capital may increase discipline around forecasting, so that white elephants are built less often. Yet these advantages must again be balanced against the additional costs, particularly the price that the private sector demands for taking forecasting risk.

Due to the commercially sensitive nature of PPPs, there is little publicly available information on the total cost of projects to government, nor the annual payment for each project. Nor is there information on the capital costs – interest and depreciation expenses – that the government will continue to incur for the life of the finance lease. This reduces transparency of capital expenditure across states and territories.

⁸⁸ Infrastructure Australia (2008)

⁸⁹ See Infrastructure Australia (2014) for a full list of completed PPPs:

⁹⁰ Engle, *et al.* (2013), RBA (2014)

Box 5: PPPs in Australia

The Victorian County Court project showed how PPPs can be innovative. The Liberty Group, a private entity, designed, developed, financed, built and manages the state's busiest trial court. It comprises 54 courts and state-of-the-art technology, including video-conferencing and remote-witness facilities.

The consortium's bid included the construction - but not fit out – of two additional floors for future expansion at no further cost to taxpayers until new courtrooms were required. The delay in fit-out expenditure on eight additional courtrooms until they were needed in 2008 generated significant savings that both reduced the government's costs and improved the consortium's return on investment.

PPPs can effectively transfer construction and traffic risks to private sector operators. These risks are real. Cracks in walls delayed opening Melbourne's City Link tunnel. Delays in construction of the Victorian Desalination Plant resulted in lower payments to the private sector operator. Several toll road PPPs, including Sydney's Cross-City and Lane Cove Tunnels and Brisbane's Clem7 tunnel, went into receivership when traffic volumes fell significantly short of forecasts.

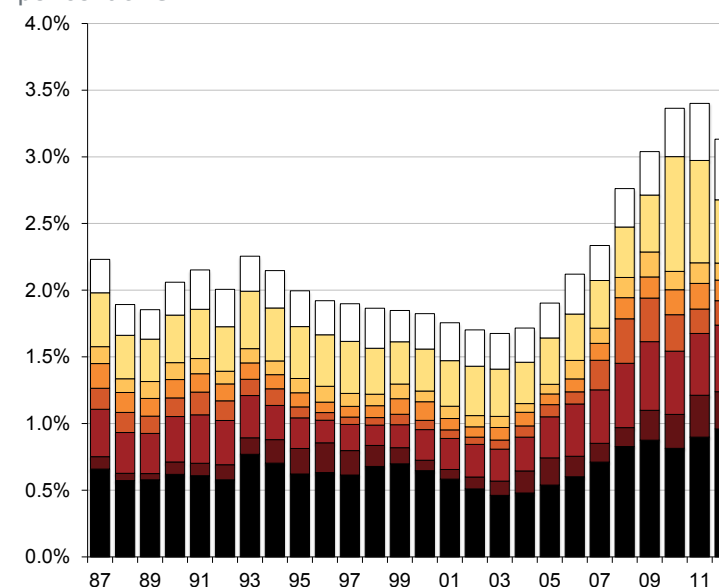
Source: Hodge and Duffield (n.d.), Guest (2011), New South Wales Audit Office (2006)

6.9 Impact of capital expenditure

The rapid increase in state infrastructure spending may be surprising given the frequent assertions that Australia has a large

infrastructure deficit.⁹¹ Yet Australian government spending on infrastructure increased significantly over the last seven years, and was much higher over this period than its typical level since 1987 when the ABS began collecting records.

Figure 36: Infrastructure work done for the public sector per cent of GDP



Note: Health and education expenditure is general government expenditure by national, state and local government

Source: ABS (2013c) Table 11, ABS (2013b) Table 53. Excludes telecommunications which is insignificant after Telstra sale

⁹¹ Citigroup (Citigroup Economic & Market Analysis) (2008); Productivity Commission (2014) and Infrastructure Australia (2013b) cited by Productivity Commission (2014), p. 58

Capital expenditure can be a good thing; infrastructure is important for economic growth if it is the right infrastructure in the right place at the right time for the right price.⁹²

However, governments may not be getting particularly good value from the significant increase in infrastructure spending. Some have questioned whether governments have invested in the 'right' or most productive infrastructure.⁹³ Governments continue to promise investment in projects that don't have rigorous benefit cost analyses ahead of those that do.⁹⁴ Even when these analyses are followed, they do not guarantee value for money. Analyses for transport infrastructure systemically overestimate the benefit cost ratios of projects.⁹⁵ A litany of local examples – from the cost overruns for the Myki ticketing system in Melbourne to the highly optimistic initial traffic forecasts for the Clem7 Tunnel in Brisbane, the Cross City Tunnel in Sydney, Eastlink in Melbourne, and the Sydney and Brisbane airport trains – demonstrates that Australia is not immune from this dynamic.⁹⁶ Unfortunately, rigorous evaluation is hampered by lack of availability of data.

Others have suggested that governments have overpaid for infrastructure as a result of high costs.⁹⁷ The recent increase in government capital expenditure has not produced a clear lift in

productivity, although this would inevitably be hard to see given the many drivers of productivity growth.⁹⁸

On any view, increased capital expenditure has led to higher interest and depreciation costs that are an ongoing drag on state budgets. In addition, operating expenses will increase with capital expenditure. In the long term, budgets will be under even more pressure if expenses are not increased to maintain these assets properly.

Given the other pressures on state budgets, there is little room to fund new infrastructure. Sustainable spending on infrastructure will require improved recurrent budget balances, either through reduced spending in other areas, or higher taxes and charges. While PPPs may lead to better trade-offs between initial spending, design, and maintenance costs, they are not likely to result in a much better recurrent budget bottom line than government construction. Similarly, capital recycling may affect credit ratings, but it will not alter the additional pressure on recurrent budget balances due to new capital spending.

To ensure long-term state budget sustainability, the Victorian government has adopted a principle that future capital spending must be funded from recurrent budget surpluses so that debt does not increase, with interest payments that drag in future.

⁹² Eslake (2010)

⁹³ The Productivity Commission notes that there are many examples of poor project selection leading to 'highly inefficient outcomes'. Productivity Commission (2014), p. 69

⁹⁴ See, for example, Wiggins (2013); Infrastructure Australia (2013a); Flyvbjerg (2009); Davies (2013); Dobes (2008); Ergas and Robson (2010)

⁹⁵ Flyvbjerg (2009)

⁹⁶ Davies (2010); Davies (2012)

⁹⁷ Victorian Government (2014), p.34

⁹⁸ For a more detailed discussion of the merits of recent infrastructure spending, see Daley, *et al.* (2013a), p.65.

7 Budget pressures

Many in the community expect that Commonwealth and state government budgets will balance, without substantial cuts to services or increases in taxes. Many also expect that our standards of living will continue to rise rapidly. These expectations have been set by 20 years of rising standards of living, with real incomes per person rising at more than 2 per cent a year. Through the 1990s, productivity improvements fuelled growth. In the 2000s, rising prices for Australia's minerals exports delivered rising standards of living, particularly through lower prices for imports. These strong terms of trade boosted government revenues by about 2 per cent of GDP.

Yet good budgetary and economic times obscured mounting pressures on Commonwealth and state government budgets. In particular, health costs increased by 1 per cent of GDP, cuts amounting to 1 per cent of GDP were made to income tax and fuel excise and governments suffered through the global financial crisis. These hits to budgets were offset, however, by the price and economic effects of the mining boom.

The next decade is likely to be more difficult than the last. Real wages are likely to grow much more slowly. As the terms of trade fall, income growth per capita is likely to be much lower than we have come to expect through the last decade.⁹⁹ Falling terms of trade and lower economic growth will also make it harder to balance government budgets.

⁹⁹ Gruen (2012) p. 3; Eslake and Walsh (2011), Parkinson (2014). This is likely to be the case unless productivity growth rises quickly and to far above its historical average.

Budgets will face increasing pressures. Demand for health care is likely to continue to rise. As wages grow more slowly, inequality may increase, placing pressure on government to increase welfare spending. Australia's ageing population will also put more pressure on budgets in the form of Aged Pension and aged care costs.¹⁰⁰ Without changes, the Aged Pension could expand from 2.4 to 3.3 per cent of GDP by 2060.¹⁰¹

The increased capital expenditure over the last 10 years will continue to place pressure on budgets due to interest and depreciation expenses. These now account for 10 per cent of revenue in some states. Unless new revenue sources or spending cuts are found, these pressures may limit governments' ability to invest in new infrastructure, as Chapter 6 discussed.

Finally, new government spending will increase the pressure on budgets. Implementing the National Disability Insurance Scheme, reforms to school funding and a more expensive paid parental scheme will all make future budgets more difficult.

The title of Laura Tingle's 2012 *Quarterly Essay*, 'Great Expectations', aptly captured the political tendency to raise expectations about what government can and should deliver.¹⁰² As she pointed out, although governments have relinquished direct control of many institutions, from running airlines to setting interest rates, political rhetoric over the last decade has tended to

¹⁰⁰ IMF (2014a), pp. 27-28, Productivity Commission (2013), p. 143, 148

¹⁰¹ Productivity Commission (2013) p. 146

¹⁰² Tingle (2012)

imply that government can solve virtually any problem. Such expectations were easier to fulfil when real GDP was rising quickly, and government revenues were rising as a percentage of GDP.

While there may well be political pressures for government to increase living standards in more difficult economic times, there is little government can do. Community expectations about budgets are also likely to be disappointed. As the Secretary to the Treasury, Martin Parkinson, has pointed out, there is a “gap between community expectations and what governments can realistically do... [and] a gap between what citizens want from governments and what they are prepared to pay for those services”.¹⁰³

7.1 Macroeconomic influences on Australian budgets

Government budgets benefited from the strong terms of trade over the last decade. The prices of goods that generated taxes rose more quickly than the price of goods and services that governments bought (particularly foreign goods and Australian wages). Terms of trade have already fallen from their peak, and Treasury projects they will return to 2005-06 levels by 2019-20.¹⁰⁴ It is possible they will fall faster and further, back to the long-run average that prevailed between 1982 and 2002. This would mirror the history of other terms of trade changes around the world, which have tended to be symmetrical, falling back as far and as fast as they rose.¹⁰⁵ If Treasury projections are right, Australian

governments will be looking for 0.5 per cent of GDP in savings or tax increases to repair their budget balances. They could be looking for as much as 1.5 per cent of GDP in savings if terms of trade return to long run averages.

Australian government budgets are also benefiting from relatively benign economic conditions. Four years after the GFC, the economy of Australia and its major trading partners in Asia are close to their long run growth rates, even if the economies of many developed countries have not yet recovered to their pre-GFC size.

Combining these effects, one would expect Australian governments to be running comfortable surpluses at this point in the mining and economic cycles in order to pay back the stimulus spending of the GFC, and to absorb the likely hit to budget balances when the terms of trade return to more normal levels. Instead, Australian governments are relying on current minerals prices only declining slowly, and even then the effect will be to maintain current deficits or thin surpluses. Governments are very exposed to the risk of a scenario in which mining investment and earnings slow more quickly. Consequently there is a strong case for adjusting budget revenue and expenses sooner rather than later to prepare for this.

7.1.1 Terms of trade and minerals prices

The improvement in the terms of trade since 2003 as a result of the mining boom is estimated to have added around 1 to 2 per cent of GDP to the Commonwealth Government budget balance

¹⁰³ Parkinson (2014)

¹⁰⁴ Commonwealth of Australia (2013), Part2, p. 17

¹⁰⁵ Minifie, *et al.* (2013), p35

over the last few years, as Figure 37 shows.¹⁰⁶ The publicly reported cash balance was materially higher than the structural balance (what the budget outcome would have been without cyclical economic factors).

This free kick to the budget came because government revenues were boosted by high export prices,¹⁰⁷ while government expenses were more linked to import prices and local wages. When mining prices return closer to historic levels, these effects will unwind. Indeed there are signs this is already happening.¹⁰⁸

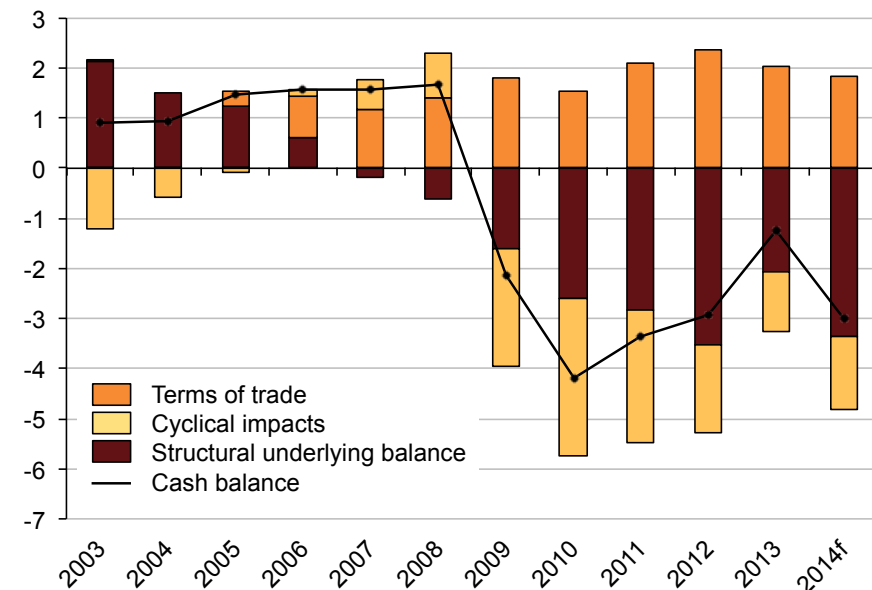
The speed of the decline in mineral prices is uncertain. Treasury expects they will only decline slowly in the near term,¹⁰⁹ reducing steadily over the long term as global supply increases.¹¹⁰ Treasury now estimates that the terms of trade will decline to their 2006-07 levels by 2017-18, and then continue to decline to 2005-06 levels by 2019-20. The projected decline to 2019-20 is outside the forward estimates period of the next three years.

The decline in the terms of trade may be faster and deeper than this. It is quite plausible that terms of trade could decline to about halfway between peak and the long-run average. If so, the price effect would reduce the Commonwealth budget balance by 0.6 per cent of GDP below current forecasts. Treasury scenario analysis suggest the flow-on effects on the economy and the

labour market would be much larger, albeit possibly offset by changes in the exchange rate.¹¹¹

Figure 37: Commonwealth budget balance

Per cent of nominal GDP



Notes: Financial years (i.e. 2003 is 2002-03). 2013f is the 2013-14 forecast in the 13-14 Budget. Stimulus allocated to cyclical; changes in company tax from the decade average due to depreciation allocated to cyclical. Depreciation rate assumed at 15 per cent. Terms of trade baseline is 2002-03.

Source: Minifie et al. (2013)

¹⁰⁶ Estimates by Treasury officials in 2010 are consistent with estimates compiled by the OECD, the IMF, and in Deloitte Access Economics (2012)

¹⁰⁷ McDonald, et al. (2010)

¹⁰⁸ Swan (2013)

¹⁰⁹ Commonwealth of Australia (2013), p. 12

¹¹⁰ Ibid., p. 12

¹¹¹ Treasury (2013a) Budget Paper 1, Statement 3, Appendix A

When minerals prices decline, nominal economic growth rates and government revenues will reduce, increasing the pressure on government budgets. If terms of trade fall faster than Treasury projections, and revert to their long-run average, they could reduce Commonwealth revenues and budget balance by 2 per cent of GDP, as Figure 38 shows.

To be prepared for this scenario, Australian governments would need to be running a budget balance 1 to 2 per cent of GDP higher than ordinary economic indicators would suggest. As discussed below, major economic indicators for Australia and the world suggest the Australian economy is now growing close to trend, and that governments should have a net budget surplus, even without the contribution of the terms of trade.

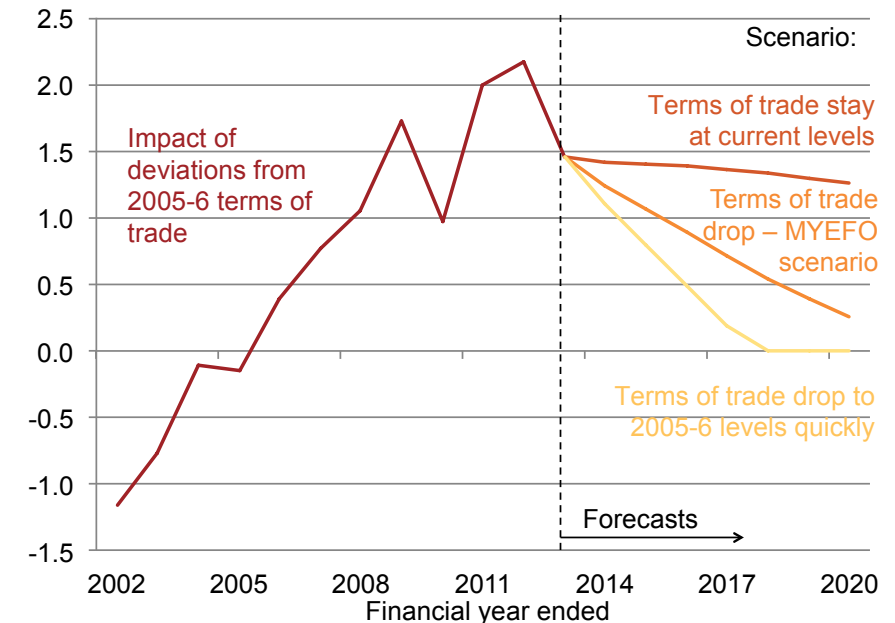
Government revenues in some states also benefited from a surge in royalties as volumes increased, and some states increased royalty rates. But total royalties collected are just \$10.6 billion, or 0.7 per cent of GDP, so the potential impact on Australian government budgets of royalty payments falling with mining prices is relatively small.

How significant is the risk of lower terms of trade? It is inherently difficult to forecast the minerals prices that drive Australia's terms of trade. They may stay stronger for longer given high demand from the continuing economic development of a range of countries, and relatively slow increases in supply due to consolidation of the global mining industry, declining ore grades, and slowing construction.¹¹² Iron ore prices have fallen from around \$US135 a tonne in December 2013 to \$112 in April 2014,

¹¹² Eslake (2011)

having rebounded after falling to as low as \$104 in March 2014.¹¹³ The Australian Bureau of Resources and Energy Economics (BREE) forecast the price will fall to \$US97 a tonne by 2017.¹¹⁴

Figure 38: Impact of terms of trade on Commonwealth tax revenues
Per cent of GDP



Source: Grattan analysis of ABS (2013b) cat. no. 5204.0; ABS (2013e) cat. no. 5506.0; Commonwealth budget papers for 2002-03 to 2013-14; McDonald et al. (2010).

¹¹³ IMF (2014b); McGrath (2014)

¹¹⁴ BREE (2014). Analysts such as Goldman Sachs forecast a period of oversupply in 2014, pushing down prices further to around \$85 a tonne by 2017: Goldman Sachs (2013)

7.1.2 Economic growth

Australian economic growth has a material impact on budgets from year to year. The gap between forecast and actual economic growth and prices has typically added or subtracted in the order of \$5 to \$10 billion from Commonwealth revenues over the last decade.¹¹⁵

Australia is no longer at the bottom of the economic cycle. Instead, the economy is probably at or above the average performance that can be expected over the next decade or two. GDP growth is close to its average over the 2000s and inflation is inside the RBA's target of 2 to 3 per cent. Unemployment has edged up, and Australian rates of unemployment and under-employment are higher than if the economy were running at full capacity. Participation rates have stalled for almost all age-groups over the last 2 years, ending seven years of strong growth, as Figure 39 shows.

Nevertheless, current rates of participation and unemployment are consistent with other recent periods of low unemployment outside the boom years of 2005-2008.¹¹⁶

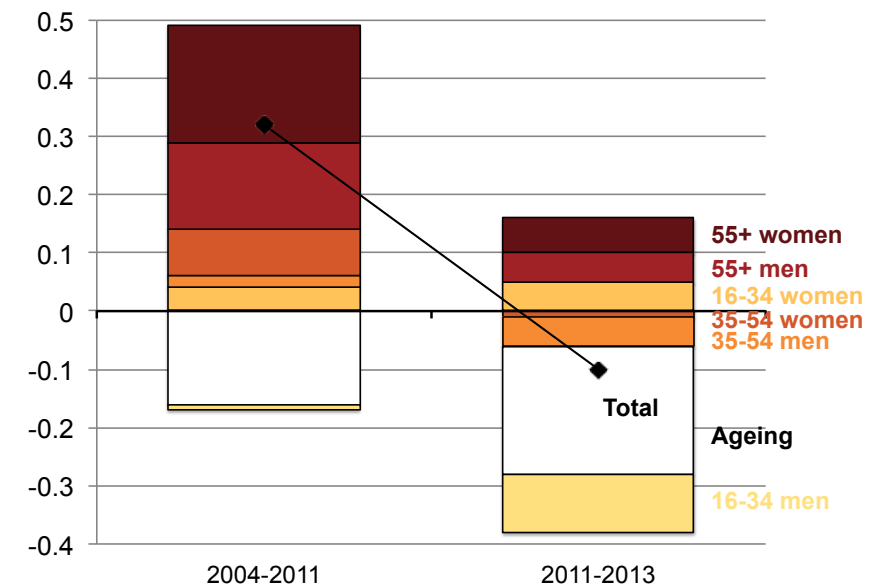
The fact that commodity prices are higher than during the pre-GFC boom, and that terms of trade are higher than almost any period in the last 60 years, is a big boost to national income.

Yet much of Australia's good fortune is driven by the economic performance of its trading partners. While the world economy has slowed post-GFC, Australia's main trading partners have roared

ahead at growth rates only a little below their mid-2000s boom. As a consequence, Australian commodity export volumes are higher than ever. Iron ore exports are *double* their pre-GFC level.

There are some weaknesses in the Australian economy that might improve. The high dollar is impeding growth in trade-exposed industries, particularly manufacturing and international services such as higher education. Economic growth may also be boosted

Figure 39: Annual change in participation rate
Percentage points change in workforce participation per year



Source: Borland (2013)

¹¹⁵ See Chessell, *et al.* (2012)p. xviii, xxi

¹¹⁶ RBA (2013), ABS (2014d) cat 6202 Table 01

as new mining capacity begins production. A key will be how much of this revenue stays in Australia, either as dividends for shareholders or tax and royalties for governments. However, the RBA estimates that foreigners own about 80 per cent of the resources sector,¹¹⁷ and in the absence of a well-designed resource rent tax, their profits are only captured in Australia through state mining royalties and company tax of 30 per cent which acts as a “final tax” for foreign shareholders.

Whatever the fate of this revenue, economic growth is normally slower after the peak of a mining boom than before.¹¹⁸ The history of previous mining booms around the world suggests that manufacturing industries typically rebound strongly afterwards. But these rebounding industries typically add less to economic growth than is subtracted by the slowing resources sector.¹¹⁹

Therefore, the current economic conditions may be about as good as it gets. Australian budgets should not expect a significant improvement from the economy ‘returning to normal’. Economic conditions that are generally close to long-run trends suggest that at this point in the economic cycle, Australia governments should be posting comfortable surpluses.

Classic Keynesian fiscal policy maintains that a country should have budget surpluses when the economy is growing strongly, and budget deficits when the risks of stalling are high. On this basis, the substantial budgetary stimulus that Australia employed at the bottom of the economic cycle needs to be counter-balanced

by budget surpluses even at mid-points in the economic cycle. Yet the current government’s statement of fiscal strategy, ‘to restore public sector finances by returning the budget to sustainable surplus... by 2023-24’,¹²⁰ implies a much slower return to surplus than would be expected at this point in the economic cycle.

The budgetary surpluses appropriate at this point in the economic cycle are on top of the buffer that may be needed if Australia’s terms of trade reduce, affecting prices in ways that would reduce government budget balances by about 1 to 2 per cent of GDP, as Section 7.1.1 discusses.

7.1.3 Economic forecasts

Budgetary forecasts depend on economic forecasts. If the latter are systemically optimistic or pessimistic, then the medium-term outlook may need to be revised. In the 2000s, budget outcomes were often about 1 per cent of GDP better than forecast, and since the GFC they have generally been about 1 per cent worse than forecast, as Figure 40 shows.

The variations are primarily in revenues, not expenses.¹²¹ Before the GFC, Treasury tended to underestimate the strength of growth in the global and Australian economies, and in the terms of trade, causing it to underestimate taxation revenue.¹²² Since the GFC, Treasury has generally overestimated the budget outcome by about 1 per cent of GDP. About half of this is due to

¹¹⁷ Connolly and Orsmond (2011)

¹¹⁸ Aitkin, *et al.* (2014)

¹¹⁹ See Minifie, *et al.* (2013) for a discussion of how other industries bounce back.

¹²⁰ Treasury (2013b), p. 26

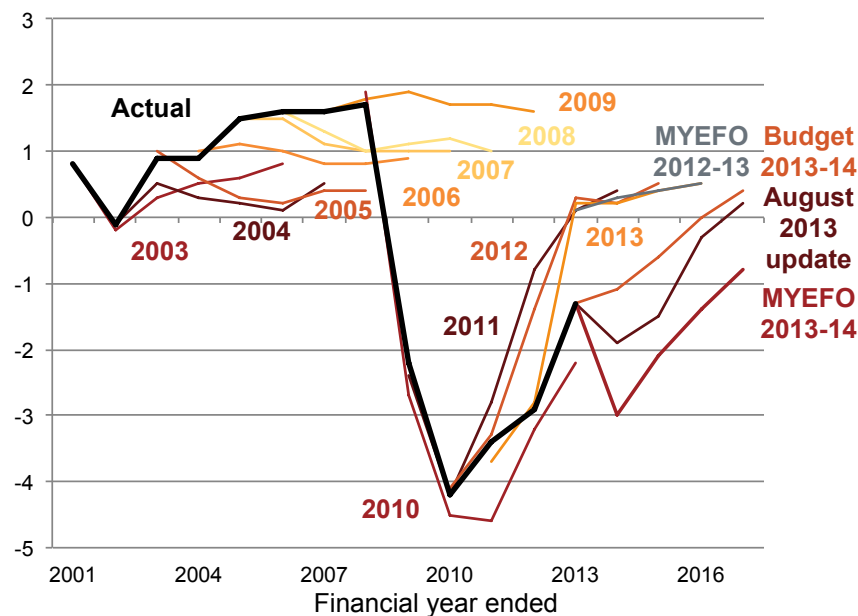
¹²¹ Deloitte Access Economics (2013), p. 17

¹²² Chessell, *et al.* (2012), p. xviii

overestimating the strength of global and Australian economic growth.¹²³

Figure 40: Actual and forecast underlying cash balance, Commonwealth budget

Per cent of GDP, year of forecast labelled



Source: Treasury (multiple years), Commonwealth of Australia (2013)

Estimating economic growth is inherently difficult: an RBA analysis found that half of its forecasts for GDP growth for the

following year were out by 1.2 per cent or more. Private sector forecasts are similarly inaccurate.¹²⁴ These forecasting issues are likely to balance out over the economic cycle, however. Treasury has now corrected its previous systemic overestimation of company tax revenues in its forecasts.¹²⁵

More recently, Treasury revised down its forecasts since the 2012-13 Mid-Year Economic and Fiscal Outlook (MYEFO). The deficit is worse by \$17 billion, due to a \$9 billion (one-off) grant to the Reserve Bank, \$4 billion in spending decisions and \$4 billion due to lower income, primarily personal income tax. These revised forecasts also include the impact of election commitments such as the repeal of the carbon and mining taxes, the introduction of the “Direct Action” response to climate change, and the implementation of paid parental leave.¹²⁶

7.1.4 Balance sheet risks

Government net debt is created by year-to-year budget deficits, and any major liabilities assumed by government that turn out to be unrecoverable. Only financial sector contingent liabilities are likely to be material to total government debt, and government is unlikely to have to pay for them given current policy settings.

The Commonwealth sets out its major contingent liabilities in its ‘Statement of Risks’, part of each year’s budget papers. Many of these risks are substantial, several are described as “unquantifiable”, but few are likely to result in the Commonwealth government taking on a debt of tens of percentage points of GDP.

¹²⁴ Tulip and Wallace (2012), p. 40

¹²⁵ See above section 5.4

¹²⁶ Commonwealth of Australia (2013), pp.19-22

¹²³ Ibid., p. 37

The largest risk is a government assuming the bad debts of major financial institutions. During the GFC the Commonwealth guaranteed the deposits of Australians, and provided guarantees for the wholesale borrowing of Australian banks. As recent events in Spain, Iceland, Ireland and Cyprus have shown, taking on these liabilities can add materially to total government debt.

Yet despite the stresses of the GFC, Australia's financial institutions remain in relatively good health. Australia's strong emergence from the GFC was in part good luck, as its banks were short of deposits given its long-running negative balance of payments, and so did not lend to sub-prime mortgages or to governments that subsequently encountered difficulties. As well, the Australian property market did not suffer a rapid collapse. In part this was due to good management as many bank managers had been part of banks that came near to failing in 1990, and APRA actively discouraged more risky lending in the years before the GFC.¹²⁷ Whether by good luck or good management, the failure of a substantial financial institution in Australia appears unlikely in the foreseeable future given current policy settings.

7.2 Spending pressures on Australian budgets

Future government budgets will come under pressure from rising political expectations and specific policy promises. Social and economic trends, particularly growing demand for health services, may also increase pressures.¹²⁸ Rising inequality as a result of increasing returns to the more highly educated may also create

pressure for additional welfare spending, particularly if income inequality increases with the slowing of the mining boom. The ageing population will place additional pressure due to lower workforce participation and increased costs, including Aged Pension and aged care. Yet the impact may be mitigated if policy reforms to increase workforce participation are put in place. States' recent capital expenditure will also put increasing pressure on budgets in the form of interest and depreciation expenses.

7.2.1 Health costs

Health dominated the increase in government spending above GDP over the last decade. Health costs are likely to continue to increase as a percentage of GDP. As Chapter 4 discusses, the primary driver of increasing health costs over the last decade was *not* an ageing population, but rather increased services for all ages. Without concerted policy changes, these trends are likely to continue. The 2010 Intergenerational Report (IGR) forecast that health costs would grow by 3 per cent of GDP over the following 40 years, with 1.3 per cent of GDP a result of the increased scope of health services.¹²⁹ Actual growth due to servicing in just the last decade was an additional 1 per cent of GDP, and about 2 per cent of GDP after adjusting for the terms of trade boom, a growth substantially faster than the IGR projection.¹³⁰

¹²⁷ McDonald and Morling (2011)

¹²⁸ The IMF (2014a) notes that both health care and pensions will be impacted by ageing populations, see p. 22

¹²⁹ Treasury (2010a)

¹³⁰ If economy-wide prices grew at the CPI over the past decade, health spending would have been about two percentage points above its 2002-3 proportion of GDP. As the terms of trade boom lifted economy-wide prices, this meant government had additional revenues to pay for increasing health costs. However, we expect economy-wide prices to move with CPI over the coming

If the scope of health services continues to increase at the rate of the last decade, health will demand an additional 2 per cent of GDP in government budgets by 2023.

7.2.2 Welfare

Welfare is the largest category of government expenditure, comprising 22 cents of every dollar spent by Australian governments. Future budgets are therefore sensitive to changes in welfare spending.

The purposes of welfare are contested. Almost all political theories agree that welfare payments should enable the most disadvantaged to pursue worthwhile opportunities and to live lives they have reason to value. Other theories, less universally accepted, aim to reduce inequality of outcomes and opportunities more generally. According to some economic analysis and some political theories, if incomes before taxes and payments become less equal, there is likely to be pressure to increase welfare to redress the balance. The pressures are likely to be greater if richer households are seen to gain the vast bulk of the benefits of economic growth.¹³¹

The real incomes of poor Australian households have generally risen over the last decade. At the same time tertiary graduates earn less of a premium than elsewhere in the OECD, perhaps because the mining boom has kept wages relatively high for those with fewer skills.

decade, with the price of healthcare continuing along its current trend. This implies an increase in share of GDP of about 2 per cent by 2022-23.

¹³¹ For more detailed analysis of inequality issues see Daley, *et al.* (2013).

But if the mining boom slows, inequality is likely to increase and absolute incomes will grow more slowly.¹³² This may increase the pressure for Australian governments to spend more on welfare.

In particular, government may face pressure to increase Newstart payments, which have fallen in real terms while Aged Pension payments increased much faster than CPI due to indexation arrangements and policy decisions.¹³³

The rapid growth of inequality in the rest of the world suggests that inequality in Australia may grow much faster in future, particularly if lower skilled workers are less in demand after the mining boom. If this happens, inevitably there will be more calls for governments to increase taxes and payments to reduce inequality. These calls are likely to be louder if poorer households are not seeing any growth in real income. Real household incomes have declined for three of the last five quarters.¹³⁴

Reducing inequality in these circumstances would impose substantial pressures on government budgets, particularly the Commonwealth's, which includes most welfare payments. Even in

¹³² Minifie, *et al.* (2013) see p. 15 for a discussion of how the mining boom has impacted employment and wages, countering the international trend towards increased inequality.

¹³³ In 1991 the Aged Pension was indexed to 25 per cent male total average weekly earnings, whereas unemployment benefits were left indexed to the consumer price index. Subsequently in 2009 the Rudd government lifted the rate again to 27.7 per cent of male earnings Department of Social Services (2014). A review is being conducted into the working age welfare payments including Newstart and the Disability Support Payments. The review however excludes the Age Pension and family assistance payments. Buckmaster (2014)

¹³⁴ National Centre for Social and Economic Modeling (NATSEM) analysis discussed by Uren (2014)

Australia's highly targeted tax-payment system, if Australian household income inequality follows its historic trend for another decade, it would cost 0.5 to 1.5 per cent of GDP to maintain the current level of household income inequality.

In practice, attempts to redistribute more widely drive at least some welfare payments. For example real spending on the Age Pension, after adjusting for the ageing of the population, is \$8 billion a year more than a decade ago. This suggests that the estimated budget pressure from welfare increases of 0.5 to 1.5 per cent of GDP may be conservative.

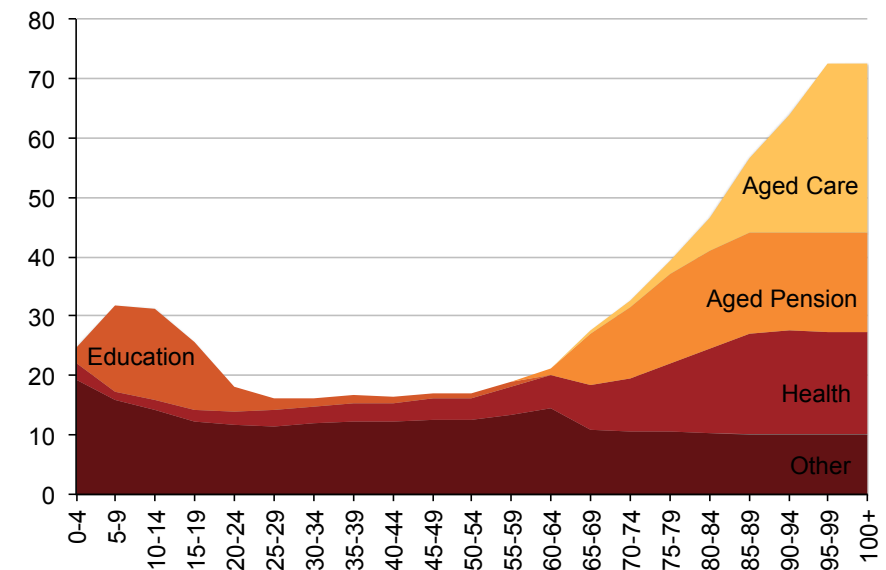
Unfortunately, higher taxes and payments inevitably impose inefficiencies, and often reduce incentives for workforce participation. Policy changes that increase participation rates among low-income households can have lower costs and do more to reduce inequality, although inevitably there are fewer guarantees that such policies will have the desired impact.

7.2.3 Ageing

The ageing of the population has not yet had much impact on Australian government budgets. It will have more impact over the next decade in aged care and health as substantially more people move into their 70s and 80s, as Figure 41 shows.

The impact on the budget can be offset by taxation and welfare reforms that encourage greater workforce participation by older Australians. Chapter 8 discusses these potential policy changes.

Figure 41: Age-related government spending
\$ thousands per person, 2011-12



Note: Selected categories of expenditure. Includes Commonwealth, states and territories. 'Other' includes the Disability Support Pension, Parenting Payment, Family Tax Benefit, Disability Support Services (both Australian Government and state and territory), Other social security and welfare payment, Defence and other expenditures and other state and territory expenditures not classified elsewhere.

Source: PC (2013) Figure 5.1

An ageing population will also substantially affect budgets if pension benefits and eligibility grow faster than GDP. The cost of pensions increased substantially over the last decade, as discussed in Chapter 4.5. Under current policy settings, these costs will continue to grow. The Productivity Commission estimates that the cost of pensions may increase by 0.4 per cent

of GDP in the next 10 years and to 3.3 per cent of GDP by 2060.¹³⁵

Changes will be needed to make the pension system more sustainable.¹³⁶ The public debate is beginning to acknowledge that Australia's current spending on Aged Pensions is unsustainable. Accordingly, the Australian Government has mooted changes, including raising the eligibility age to 70, tightening assets tests to include the family home and lowering generous indexation arrangements.¹³⁷

Aged care cost Australian governments \$17 billion in 2012-13 – 1.1 per cent of GDP – with most of it spent on residential care.¹³⁸ The Productivity Commission estimates that these costs may increase to 2.6 per cent of GDP by 2059-60.¹³⁹ Demand for these types of services will only increase with an ageing population, placing additional significant pressure on budgets if governments continue to meet the majority of costs. However, reforms recommended by the Productivity Commission, if they are implemented, may reduce the cost to government.

¹³⁵ Productivity Commission (2013) p. 146. The IMF (2014a) estimates that pension spending will increase by 0.7 per cent of GDP by 2030.

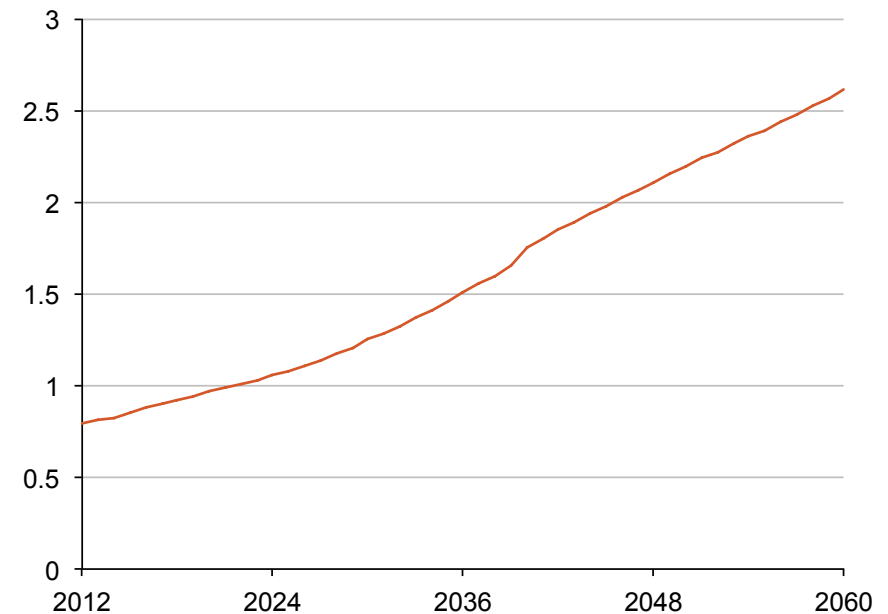
¹³⁶ IMF (2014a) p. 27 Stevens (2014) also notes that due to the demographic shift, more people will be moving into retirement and fewer people entering the workforce over time. As a result, governments need to focus on the medium term issue of the ageing population rather than the individual budget year outcomes. Stevens (2014)

¹³⁷ Maher (2014)

¹³⁸ Other types of care include home care and support.

¹³⁹ Productivity Commission (2013) p. 150. This is greater than that projected by the Intergenerational Report of 2010 which suggested an increase to 1.8 per cent of GDP by 2049-50.

Figure 42: Projected real increases in aged care costs
Per cent of GDP



Source: Productivity Commission (2013) Figure 5.12

Political pressure to continue these levels of age related expenditure is likely to grow. As the age of the median voter increases, a greater proportion of the electorate will have a vested interest in broader eligibility and higher benefits for aged pensions. In the medium run, this is where an ageing population will exert most pressure on government budgets. The electoral demography is an argument for changing policy sooner rather than later. The politics will only become more difficult as time

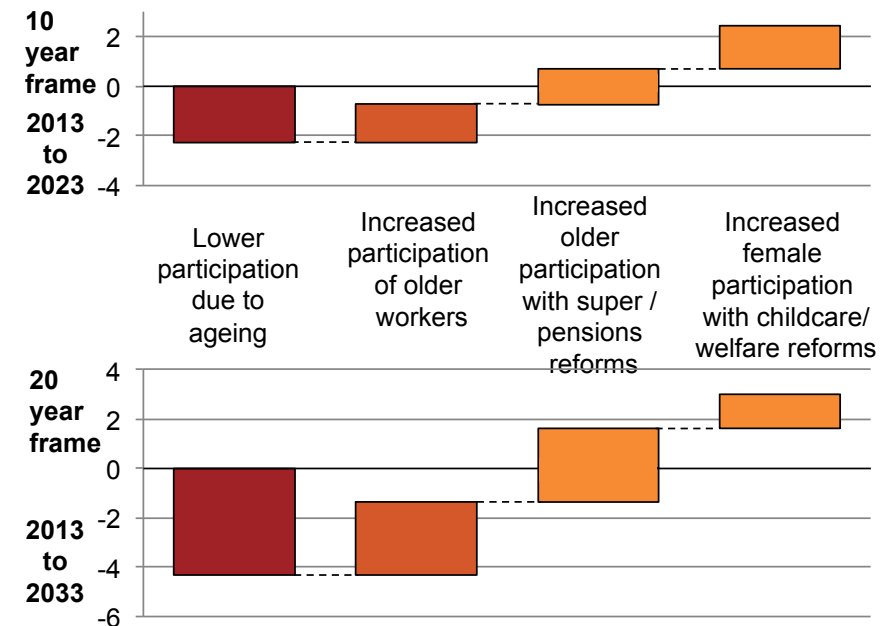
passes and the population ages.¹⁴⁰

The impact of ageing on government budgets depends on both demography and workforce participation. If more older people work, then economic output is higher, governments collect more in taxes, and pension expenses are lower.

Participation may even increase, despite ageing, if older age workforce participation is reinforced by policy change to increase the age of access to the Age Pension and superannuation.¹⁴¹ Without change in the participation rate of each age group, overall participation will reduce over the next decade. If participation rates of older age groups continue to increase, however, then overall participation rates will only fall slightly in the next decade, although they will probably fall more substantially thereafter, as Figure 42 shows.

Policy reforms along the lines of those identified in Grattan Institute's 2012 report, *Game-changers*, would more than

Figure 43: Changes in labour force participation rates
% of total population who participate in workforce



Note: 'lower participation due to ageing' assumes current age-specific participation rate of each age cohort. 'Increased participation of older workers' assumes participation rate of each age cohort continues to increase at 50% of current trends. 'Super / pension reforms' are to lift age of access to pension and superannuation to 70, as specified and modelled in Daley et al (2012a). 'Increased female participation with childcare/welfare reforms' assumes reforms to tax, welfare and childcare subsidies, as specified and modelled in Daley et al (2012a).
Source: Grattan analysis of ABS (2012e); Daley et al (2012a); ABS (2008) 3222.0 T A9.

counteract the impact of demography on participation, leading to substantially *higher* participation than there is now. Such reforms are promising opportunities for governments to improve their

¹⁴⁰ Thanks to Jeff Borland for this insight

¹⁴¹ Increased female workforce participation across age brackets will also provide substantial benefit to the economy if women with young children take home more of their earnings after paying tax, giving up welfare benefits, and paying for childcare. More in-depth analysis on this issue is provided in Daley, et al. (2012).

medium term budget position by increasing participation, and therefore increasing income and consumption tax revenues while reducing pension expenditure. See Chapter 8 for a discussion of potential policy reform.

7.2.4 Capital expenditure

States and territories have increased capital expenditure significantly in the last 10 years as Chapter 6 shows. As a result, governments face ongoing budget pressure through increased interest and depreciation expenses that cannot be compressed. These costs will be borne on an annual basis for the length of the debt and life of the assets.

Future infrastructure investment, expected under Coalition-National Government policy, will add to these expenses, placing ongoing pressure on budgets.¹⁴²

7.3 Commitments beyond the forward estimates

Government commitments to spending beyond the forward estimates could reduce budget balances by around \$29 billion, or 1.2 per cent of GDP, within the next few years, as Figure 44 shows.

¹⁴² The Prime Minister has signaled his intention for increased infrastructure investment by wanting to be known as the 'Infrastructure Prime Minister'. Abbott (2013), Abbott (2013). Future intended capital expenditure by the Commonwealth Government is yet to be made clear. However, the Productivity Commission notes that without reform to the process for selecting infrastructure projects, increased spending will 'increase cost to users, taxpayers, the community generally, and the provision of wasteful infrastructure'. Productivity Commission (2014), p. 2

The Mid-Year Economic and Fiscal Outlook (MYEFO), released in December, incorporated the budget impact of most of the government's election commitments within the forward estimates. This included abolishing the carbon price and mining tax, cutting company tax, increasing paid parental leave, and implementing Direct Action climate policy.¹⁴³ However, the government made a number of commitments that have a significant budget impact beyond 2017.

The government has now committed to the rollout of the National Disability Insurance Scheme in all jurisdictions,¹⁴⁴ and costs will ramp up significantly beyond the forward estimates as the scheme is fully implemented.¹⁴⁵ Furthermore, recent reports of the scheme's trials costing much more than anticipated suggest the total cost of delivery may be even higher than estimated.¹⁴⁶ Costs for the 'Schools First' funding agreement (previously known as the Gonski reforms) also rise significantly beyond 2017.

It is Coalition policy to restore defence spending to historic levels of 2 per cent of GDP.¹⁴⁷ The budget papers also note that a return to Australia's commitment to spend 0.5 per cent of gross national income on development aid would involve a significant increase above current forward estimates provisions.¹⁴⁸

¹⁴³ Commonwealth of Australia (2013) p. 3

¹⁴⁴ Western Australia is the final state to establish trial sites: Abbott (2014)

¹⁴⁵ Commonwealth of Australia (2013), p. 21

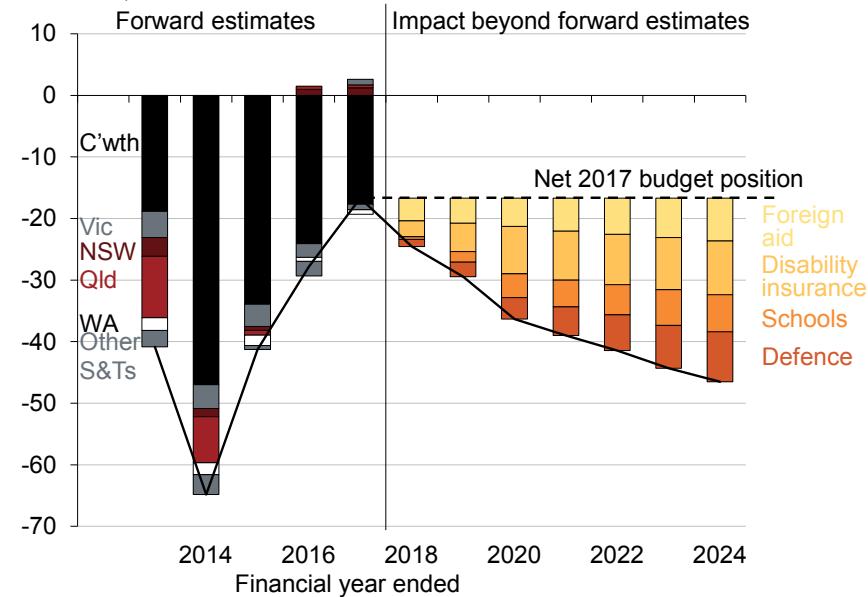
¹⁴⁶ Harrison (2014)

¹⁴⁷ Loughnane (2013c)

¹⁴⁸ Commonwealth of Australia (2013)p. 21

Figure 44: Budget impact of government policy commitments

Nominal \$ bn



Note: 'Foreign aid' shows the budget impact of a return to official development assistance of 0.5 per cent of gross national income from 2018. 'Disability insurance' shows MYEFO estimates of costs beyond the forward estimates of the NDIS. 'Schools' shows the estimated impact of the 'Schools First' funding agreement on Commonwealth and state budgets. 'Restore defence spending' shows budget impact of a return to 2009-10 spending levels as a percentage of GDP from 2017.

Source: Grattan analysis of Commonwealth and State budget papers and Mid-Year Economic and Fiscal Outlook, 2013-14; Loughnane (2010); Loughnane (2013c).

8 Budget solutions

8.1 Possible reform choices

Governments will have to make difficult choices to fix the structural budget deficits they face. In the 2013 report *Balancing Budgets: Tough Choices We Need*, Grattan Institute presented a series of options for budget reform.

We do not suggest that any Australian government will – or should – implement all the proposed options. However, we have tried to identify as many choices as possible that would both make a material difference to budget outcomes and not have unacceptable social or economic side-effects. Australian governments may find many of the choices unpalatable, but given the size of their long-term budget challenge, it will be hard for them to repair budgets without facing at least some of them. If they are all ruled off the table then Australians are entitled to ask whether their governments are serious about restoring budget balances.

All the budget choices presented are politically difficult. If they were easy, they would already have been made. Australia's governments are small by OECD standards, and our public sector operates more efficiently than most.¹⁴⁹ This makes it harder to find savings by cutting waste and shrinking non-essential services.

¹⁴⁹ OECD (2012a); OECD (2012b)

Box 6: Commitments of the new government

The new Commonwealth Government made a number of election commitments, not considered in the *Balancing Budgets* report, that would have a significant effect on the long-term budget balance. Further budget improvement would be achieved by not enacting some of these proposals:

- Expanded paid parental leave: an extra \$2 billion a year going mostly to middle- and upper-income families.¹⁵⁰
- Cutting company tax results in foregone revenue of over \$3 billion per year.¹⁵¹
- Changes to climate policy – the net effect of abolishing the carbon price and associated industry compensation, and introducing Direct Action – costs about \$4.5 billion a year.¹⁵²
- Increasing defence spending – the commitment to increase defence spending from 1.6 to 2 per cent of GDP in 10 years – will cost around \$8 billion at full implementation.¹⁵³

Although these commitments were offset by budget improvements elsewhere (such as a levy on large companies, the abolition of the schoolkids bonus, and cuts to the public service and foreign aid),¹⁵⁴ these improvements could be enacted without the accompanying spending, thereby improving the budget balance.

Note: All costings are at full implementation, in \$2013

¹⁵⁰ Grattan analysis of Loughnane (2013a); PBO (2013b)

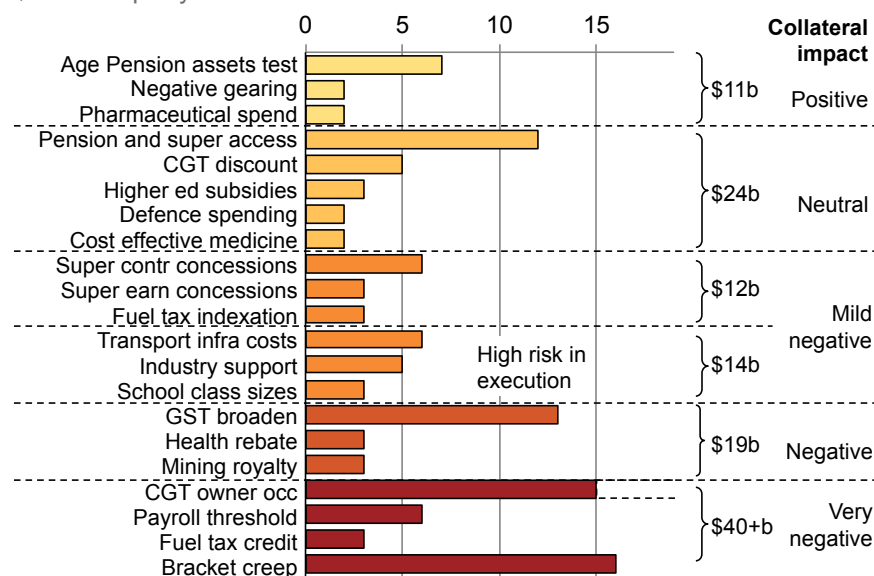
¹⁵¹ Grattan analysis of PBO (2013b)

¹⁵² Grattan analysis of *ibid.*

¹⁵³ Grattan analysis of Loughnane (2013b); Thomson (2013)

¹⁵⁴ See PBO (2013b); Hockey and Robb (2013)

Figure 45: Budgetary impact of possible budget choices
\$2013 bn per year



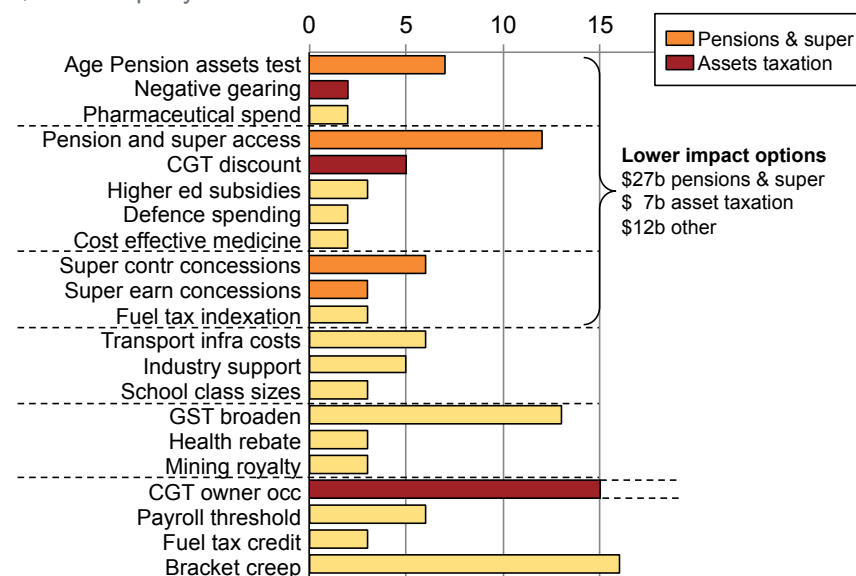
Note: Proposals considered that would generate less than \$2 billion are not shown. These include congestion charges, grants to first home-buyers, middle-class welfare, public sector efficiency, avoidable hospital costs and end-of-life care. Collateral impacts include impacts on economic growth, disproportionate impact on people in the bottom 20% of incomes, and impacts on other social objectives: see Daley, McGannon, et al. (2013a) pp. 20-22

Source: Daley et al 2013

The budgetary and collateral impacts of the 20 choices analysed in *Balancing Budgets* are summarised in Figure 45.

Some clear themes emerge from the analysis, as Figure 46 shows. Proposals for better targeting of support for older people –

Figure 46: Budgetary impact of possible budget choices by theme
\$2013 bn per year



Note: Proposals considered that would generate less than \$2 billion are not shown. These include congestion charges, grants to first home-buyers, middle-class welfare, public sector efficiency, avoidable hospital costs and end-of-life care.

Source: Daley et al 2013

both pensions and superannuation (shown in orange) – are generally larger and more attractive than other alternatives. Just four choices could improve the budget balance by \$27 billion a year.¹⁵⁵ Reform of assets taxation (shown in red), particularly

¹⁵⁵ There is some interaction between the Age Pension asset test proposal and the retirement age proposal. If the retirement age is lifted, the *additional* savings

negative gearing and the CGT discount, could yield \$7 billion a year. Of the other reforms, broadening the GST is large and relatively attractive. Some of the remaining tax exemptions are less attractive – they may have survived for good reasons. Tax increases could do more to improve budget balances, but they usually have more negative side effects. A number of cost reductions have smaller side effects, but their budgetary impact is also often smaller.

8.2 Packaging reform

All the proposals presented would leave some people worse off, at least in the short run. In the last decade, governments have been averse to making decisions that create identifiable losers.¹⁵⁶ Instead, potential losers were compensated with other measures, which generally drew on large and growing surpluses. In the current environment of substantial and increasing deficits, losers can no longer be paid off.

Yet it is important for pain to be shared: people may be more willing to accept the burden if they understand that everyone is experiencing some pain. It is also harder for special-interest groups to claim that their interests should not be adversely affected when everyone in the community is sharing the burden.

For these reasons, big and difficult reforms may be best introduced in a package. A package can show the magnitude of the problem and that the burden is widely shared. It can also

include some (smaller) spending increases that mitigate the impacts on those worst off and least able to absorb adverse change.

A package that would both focus on the most attractive opportunities identified in our prioritisation and distribute the burden across the community, affecting both rich and poor, would:

- broaden the GST to include fresh food and private spending on health and education;
- raise the pension and super age to 70;
- include the primary residence in the Age Pension asset test, while allowing people to continue to claim a pension, although its value would be recovered from the recipient's estate;
- limit superannuation tax concessions so that only \$10,000 a year can be contributed before tax, and those over 60 years old pay 15 per cent rather than no tax on earnings.

The proposals in this package would contribute about \$37 billion a year towards balancing budgets. The package picks up many of the proposals that would do most to improve budget balances, with relatively limited side effects

It would affect both rich and poor. Broadening the GST would affect all income groups, but hit low-income earners hardest, although compensation could reduce most of the impact. Raising the pension and superannuation age would affect all income groups. Including the primary residence in the Age Pension asset test would primarily affect middle-income earners – people doing

from reforming the Age Pension asset test are reduced as fewer people are old enough to qualify for the Age Pension.

¹⁵⁶For example, see Megalogenis (2012); Tingle (2012)

well enough to own their own house, but not so well that they do not qualify for the Age Pension.¹⁵⁷ Limiting superannuation tax concessions would mainly affect high-income earners, who reap most of the benefits of tax concessions for contributing more than \$10,000 a year to superannuation.

The package would probably slightly reduce inequality overall, which is consistent with some – but by no means all – efforts to improve budget balances around the world.¹⁵⁸

The major sensitivity with the package is that all the reforms appear to affect older Australians more. This may be more perception than reality, but it would need to be addressed.

Increasing the pension and superannuation preservation age mainly affects those aged about 50 to 55 in the short term. Assuming that the eligibility ages are lifted gradually, those already retired would be unaffected. All Australians who are under 50 today will share the burden in the future as they age. Many under the age of 45 may believe that increase is inevitable – and in any case the effect is at least 20 years away.

Including owner-occupied dwellings in the assets test primarily affects those over 65 – although these rules will of course apply to everyone when they are older. Limiting superannuation contribution tax concessions would affect high wage earners in all age groups, but particularly those over the age of 60. This group

¹⁵⁷ People in this cohort are likely to be middle-income earners over their lifetimes, and although their income in retirement is likely to be less than when working, their disposable incomes can often be relatively high: see Phillips and Nepal (2012)

¹⁵⁸ Rawdanowicz, *et al.* (2013), p. 27-28

currently pays much lower rates of income tax than do younger people on similar incomes. Those who are younger will also miss out on current, generous arrangements as they age.

Broadening the GST affects the spending of all Australians. Older Australians who are not working are likely to prefer other tax changes such as income tax increases that inherently affect them less.

The skew of Australia's current tax and welfare systems explains why the proposed package would have a greater impact on older Australians in the short term. Our tax and welfare system is generally tightly targeted to those most in need. The biggest exception is pension and superannuation systems, which are substantially 'age-based' rather than 'needs based'. Reforming these arrangements is a high priority that would substantially improve budget balances with relatively limited side effects.

Other packages might be designed around a different combination of proposals. The key task is to group together major reforms in ways that demonstrate that everyone in the community is sharing the burden of budget repair.

Further detail of potential reforms is provided in *Balancing Budgets*.¹⁵⁹ Other proposals for budget reform were made by the National Commission of Audit in May 2014.¹⁶⁰ Further analysis is required to understand both the costs and benefits of these proposals.¹⁶¹

¹⁵⁹ Daley, *et al.* (2013a)

¹⁶⁰ National Commission of Audit (2014)

¹⁶¹ McGannon and Daley (2014)

9 A bluffer's guide to budgets

9.1 General economic and financial terms

Gross domestic product or GDP is a measure of the size of a country's economy. In 2012-13, Australia's GDP is forecast to be approximately \$1,564 billion or \$1.6 trillion.¹⁶²

Inflation measures how much prices have increased over time. It is often measured by the change in the **Consumer Price Index (CPI)** which tracks the prices of what a typical household buys.

As a result of inflation, a loaf of bread costs more today than several years ago. Consequently, \$1 today buys less than \$1 bought in 2000. **Nominal prices** are the prices you see in the shop at the time. **Real prices** remove the effects of inflation so that a dollar has a constant value – it buys the same number of loaves of bread in any year. Real prices provide more meaningful comparisons of spending in different years. Real prices are often expressed in dollar values for a particular year, e.g. 2013 dollars.

In the context of budgets, **nominal spending** is the amount listed in the budget papers each year. **Real spending** removes the effect of inflation so we can compare how spending has actually changed. For example, if government purchases medicines that increase in price by 3 per cent each year, and government spending increases at 3 per cent per year, government buys the same amount of medicine every year. While its nominal spending grows at 3 per cent each year, its real spending is constant.

¹⁶² Commonwealth of Australia (2013); ABS (2014b) Table 30.

A **price deflator** converts nominal values into real values, and is based on a measure of inflation. The nominal price divided by the price deflator is the real price.

Production is how much is produced in an economy. **Economic growth** measures the increase in production from time to time.

Productivity measures how much is produced by a given input. **Labour productivity**, for example, measures how much is produced per hour worked. **Capital productivity** measures how much is produced for every dollar invested. **Productivity growth** measures how much more is produced with the same inputs.

The labour force **participation rate** is the proportion of working-age adults (16 years and older) who are either working or looking for work. The **labour force** includes the unemployed, but not people who are retired, institutionalised, or at home caring for children.

Australia, like most developed countries, has an **ageing population**. People are living longer on average, so a greater proportion of the population is older. This **demographic change** is likely to have big effects on society over time, affecting participation rates, tax collection, and government spending, particularly health and aged pensions

The **Organisation for Economic Co-operation and Development (OECD)** is a Paris-based think-tank whose members and funders are rich countries. It includes most developed countries.

9.2 Macroeconomics

Many measures of economic activity – such as GDP, unemployment and interest rates – move in cycles. During a boom, economic output increases, unemployment drops, and interest rates typically rise. Conversely, during busts, unemployment increases, interest rates fall, and GDP growth slows (or becomes negative). This is known as the **economic cycle**.

The **terms of trade** is the ratio of export prices to import prices for a country. Crudely, it measures the tonnes of coal Australia must export in order to import a plasma-screen TV. When terms of trade rise, Australia earns more plasma screen TVs per tonne of coal. If terms of trade fall, Australia would need to export more tonnes of coal to buy the same number of televisions.

From the mid-2000s, increased international demand for Australian minerals raised their price relative to other goods. Mining became very profitable. More mines were dug, increasing employment in the mining sector, as well as related industries (such as construction). Increasing demand for Australian minerals contributed to the rise in the value of the Australian dollar. These effects together are known as the **mining boom**.

The **global financial crisis (GFC)** is a common term for the financial crisis of 2007-08, which led to the 2008-12 global recession. Australia fared considerably better than most of the developed world during and after the crisis, but even so, economic growth slowed and government budgets were placed under greater pressure than in earlier years.

9.3 Budgets

9.3.1 Revenue

Revenue is all money the government collects. It is made up of:

- Taxes, including:
 - **Income taxes** – taxes paid by individuals on their earnings
 - **Company tax** – taxes paid by companies on their profits. When firms purchase new equipment, they are not generally allowed to deduct the entire cost from their revenues all at once. Instead, they allocate a portion of the investment to each year of its useful life. For some types of asset, Australian tax rules allow **accelerated depreciation**: firms can claim a greater share of the initial investment cost each year than the usual portion. This means that firms claim the cost of the capital more quickly, and so the firm's cost of investing decreases. Because firms pay less tax while they are claiming this greater portion of costs, accelerated depreciation reduces government revenues in the short term.
 - **Sales taxes** – such as the Goods and Services Tax
 - **Excises** – sales taxes levied on a particular product, such as fuel, cigarettes, or alcohol.
 - **Customs duties** - taxes on imported items, including clothing and cars
 - Other taxes, including **resource rent taxes** ('mining taxes')

and **carbon pricing**.

- Sale of goods and services
- Income received from investments, such as dividends from government-owned companies, and interest.
- **Royalties** – In Australia, states own resources and mining companies purchase them. Royalty revenues are the sales of these minerals to mining companies. Royalties are generally levied either as a fixed rate per tonne, or as a percentage of the total value.
- Grants from other levels of government

9.3.2 Tax expenditures

- When governments exempt certain types of transactions or taxpayers from an otherwise general tax, the foregone revenue is known as a **tax expenditure**. Tax expenditures are usually justified on the basis that they serve a particular policy objective better than does direct spending. Although tax expenditures are often less discussed than revenue or expenditure, they are a significant component of government budgets.

9.3.3 Expenditure

Expenditure is all money the government spends. It includes:

- Payments to individuals, such as the Age Pension and

unemployment benefits.¹⁶³

- Transfers to other levels of government
- Purchases of goods and services. This includes purchase of physical goods as needed, as well as the purchase of services from many different entities. For example, a government might purchase job retraining services from a private company or not-for-profit organisation rather than employ staff directly to deliver the training.
- Salaries and other expenses for employees, including front-line staff such as teachers and nurses as well as administrative staff.

9.3.4 Capital expenditure

Capital expenditure is money spent on building infrastructure, which can also be referred to as fixed or non-financial assets. **General government capital expenditure** is money spent on government infrastructure that is used to deliver services for the community. Examples include hospitals, schools, rail infrastructure and roads.

Government-owned corporations, or **public non-financial corporations**, also spend capital funding on infrastructure. Examples include water boards, railway corporations and electricity generators and distributors where state owned.

¹⁶³ These payments are sometimes called 'transfers' or 'welfare transfers'. This report uses 'transfers' to refer to payments by the Commonwealth to the states; welfare transfers are called 'payments' or 'benefits' to avoid confusion.

However these corporations deliver services typically on a user pay basis. In some instances, these corporations deliver infrastructure and services on behalf of the general government. However, accounting methods for recording this varies between states.

Public-Private Partnerships (PPPs) – a private financing mechanism for public infrastructure such as hospitals, schools and transport infrastructure such as rail and roads. Private providers are contracted to finance, design, build and operate infrastructure that is leased back to the state.

Capital expenditure costs include:

- **Net acquisition of non-financial assets** – the total change in the value of infrastructure over a year. It includes the purchase of, or expenditure on capital assets, less the sales of any capital assets, depreciation and any other changes such as the revaluation of assets.
- **Depreciation** – the annualised cost of consuming a fixed asset or infrastructure over the number of years the asset is expected to last.
- **Interest expenses** – interest paid on debt used to finance capital expenditure.

When governments finance capital expenditure through borrowing, it is recorded as a component of **net debt**. This is the total debt owed which includes borrowings, deposits and advances received by government, less any cash and

investments held by government and loans made to other parties.

9.4 Terms used in the budget papers

Commonwealth and State governments in Australia each publish a collection of documents every year in May or June that set out the government's economic and fiscal plans for the next year. These are generically called the **budget papers**.

Since economic conditions change through the year, governments also update their estimates of revenue and expenses late in the year. The Commonwealth update is called the **Mid-Year Economic and Fiscal Outlook (MYEFO)**. They also publish an updated set of figures before each election in the **Pre-election Fiscal Outlook (PEFO)**. State governments publish equivalent documents under different names.

Budget papers generally contain figures for revenue and expenditure for the previous financial year, the current financial year (sometimes called the **budget year**), and the next three financial years. This three-year period is called the **forward years** and the figures are known as the **forward estimates**.

Figures for the previous, current and next financial year are generally presented as **estimates**. Sometimes figures for the past year are presented as **actual** figures and the current year as **budgeted** figures. The figures for the final two years of the forward estimates are generally presented as **projections**.

Government expenses and revenues vary with the economic cycle. During a boom, profits and incomes increase, resulting in more taxes being paid; unemployment also falls, reducing

expenses. During a bust, the opposite happens. The **cyclical balance** component of the budget is the proportion of revenues and expenses that occur due to the economic cycle. Once we subtract this from the cash balance, we arrive at the **structural balance**. Determining the cyclical balance depends on modelling assumptions about the relationship between the economic cycle, expenses, and revenues.

9.5 Surplus, deficits and debt

A **budget deficit** occurs when a government collects less in revenues than it spends in any given year. A **budget surplus** occurs when revenues are greater than expenditures in a year. **Government debt** is the total debt that a government owes, and may come from governments running deficits several years in a row. **Gross debt** is the total amount of debt the government has. **Net debt** is the gross debt minus the value of assets the government owns (such as the Future Fund).

9.6 Federal financial relations

In Australia, the Commonwealth government collects most of the taxes, while State governments deliver most of the services. To correct this imbalance, the Commonwealth transfers money to the States in several ways:

- Some funding, such as the money collected via the GST, is given to States as **untied funding**. It can be spent however the State chooses.
- Most of the rest of the funding is given to the States as **tied funding**. This funding is given to the States on the condition

that they use it for a particular purpose. There are two types of tied funding: **Specific Purpose Payments (SPPs)** are relatively large amounts of money to be spent in general areas, such as schools or housing. **National Partnership Payments (NPPs)** are smaller amounts of money more closely tied to a particular policy goal, such as improving literacy and numeracy, or mental health reform.

- A small amount is paid by the Commonwealth ‘through’ the states to other bodies, mostly non-government schools and local governments. States do not control how this money is spent; they just pass it on to the Commonwealth-identified recipient. These payments are sometimes known as **on-passings**.

In this report, we use the term ‘**transfers**’ to refer to untied and tied funding from the Commonwealth to the States. Where we present combined Commonwealth and state expenditures, these transfers are treated as state expenditure unless otherwise specified. On-passings are always treated as Commonwealth expenditure.

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