2016

Review of the ACT Budget 2016-17

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Pegasus Economics is a boutique economics and public policy consultancy firm that specialises in strategy and policy advice, economic analysis, trade practices, competition policy, regulatory instruments, accounting, financial management and organisation development.

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1 *Executive Summary*

The Budget Papers present a headline operating balance of -$182 million, moving to a forecast surplus of $66m by 2019-20. The Territory's balance sheet is healthy, with a positive net worth rising from $17.1 billion to $17.7 billion over the Budget and forward estimates. However, net debt and net financial liabilities are also forecast to rise over the same period. There are considerable risks in the outlook, such that the planned deficits in the net operating balance and small operating results over the forward years from 2018-19 to 2019-20 mean that the Territory is exposed to a risk of incurring continuing deficits that would limit the capacity of future governments to deal with unanticipated adverse external shocks.

This report has been prepared by Pegasus Economics to assist the ACT Legislative Assembly's Select Committee on estimates 2016-2017 in its consideration and review of the 2016-17 ACT Budget.

The economic estimates for 2015-16 and forecasts for 2016-17 contained in the ACT Budget appear reasonable based on current trends. However, there are concerns that projections for ACT final demand returning to trend growth of around 4 per cent in the out years are overly optimistic in light ongoing Commonwealth fiscal consolidation.

The Territory's balance sheet is healthy, with a positive net worth rising from $17.1 billion to $17.7 billion over the Budget and forward estimates. However, net debt and net financial liabilities are also forecast to rise over the same period.

The Budget Papers present a headline operating balance of -$182 million, moving to a forecast surplus of $66 million by 2019-20. The revised outlook for 2016-17 reflects expected increases in revenue arising from increased land sales effect and increased taxation revenue, partially off-set by new spending decisions. However, large impacts on the budget aggregates arise from valuation effects, changes in the treatment of some transactions and other technical adjustments.

Revenue is expected to increase from an estimated outcome in 2015-16 of $4.7 billion to $5.1 billion in 2016-17. Revenue growth over the forward years largely reflects assumptions of continued growth in Commonwealth grants and ACT own source revenue.

Expenditure is forecast to grow over the budget and forward estimates from $5.4 billion in 2016-17 to $5.7 billion in 2019-20, before Superannuation Liability Valuation adjustments in the forward years. Changes in the 2016-17 Budget estimate are dominated by the effect of policy decisions, technical adjustments and the re-profiling and rollovers of agency expenses. While some offsets have been identified, they are often unspecific and general in nature, and it is difficult to assess their robustness.

2 Introduction

This report has been prepared by Pegasus Economics to assist the ACT Legislative Assembly's Select Committee on estimates 2016-2017 in its consideration and review of the 2016-17 ACT Budget. The report was required to be produced within a week of the presentation of the Budget to the Assembly. It is based on a desk-top review of the available documentation. There has been no consultation with officials or staff of the Assembly on the contents of the report.

2.1 Introduction

This report has been prepared for the ACT Legislative Assembly's Select Committee on estimates 2016-2017 to assist the Committee in its deliberations in relation to the 2016-17 ACT Budget.

2.2 Background

Pegasus Economics was engaged by the Legislative Assembly on 11 May 2016 to assist the Committee with its assessment of the Budget. Pegasus was required to prepare a report on the Budget within seven days of its presentation to the Assembly and to be available as required to assist the Committee in its subsequent deliberations.

2.3 Purpose

This report has been produced to assist the Committee in its consideration of the 2016-17 Budget. The report does not provide a complete or comprehensive summary of the 2016-17 Budget, or attempt to provide an assessment of the appropriateness of the spending, revenue and investment decisions reflected in the document.

Rather, the report seeks to explicate elements of the Budget and points to areas that the Committee may wish to explore or to seek further information in its consideration of the Budget.

2.4 Approach

This report is based on a desk-top review of the ACT Budget documentation presented to the Assembly on 7 June 2016. Pegasus Economics has consulted other documentation in the public domain including reports of the ACT Auditor-General, various Ministerial statements, Departmental reports and research literature.

The range of matters covered in this report relates to subjects raised by Committee members at a meeting with Pegasus Economics consultants on 24 May 2016. There has been no contact with officials or staff of the Assembly in the preparation of the report.

3 Economic Forecasts

The economic estimates for 2015-16 and forecasts for 2016-17 contained in the ACT Budget appear reasonable based on current trends. However, there are concerns that projections for ACT final demand returning to trend growth of around 4 per cent in the out years are overly optimistic in light ongoing Commonwealth fiscal consolidation.

A summary of current economic trends alongside the economic estimates and forecasts contained in the 2016-17 ACT Budget are provided in Table 1 below.

Table 1: Current outcomes and economic estimates and forecasts in the 2016-17 ACT Budget, percentage change

Indicator	Current outcomes to the end of March 2016[1]	ACT Budget 2015-16 estimates	ACT Budget 2016-17 estimates
State Final Demand[2]	2.8	2½	2½
Employment[3]	0.9	1	1¼
Wage Price Index	1.8	1¾	2
Consumer Price Index	1.0	¾	1

1. Through the year unless otherwise stated
2. In year average terms
3. Though the year to the end of April 2016 in trend terms

Sources: Australian Bureau of Statistics (ABS) (2016a); ABS (2016c); (2016d); (2016b); and ACT Government (2016)

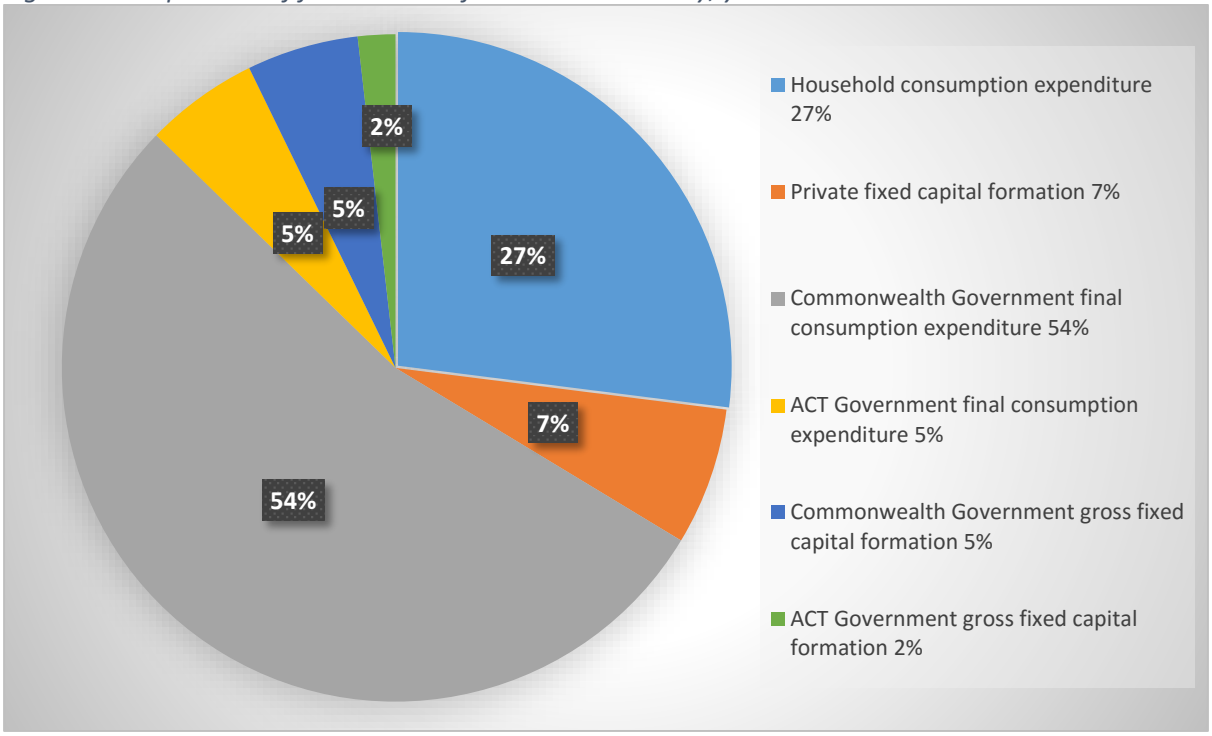
3.1 ACT Final Demand

The best and most immediate indicator of economic activity within the ACT is final demand. Estimates of gross state product (GSP) are only published annually with a significant time delay following the end of the financial year and quarterly estimates are not available. Because there is no timely way to a get gauge on GSP, it will not be considered further.

In the March 2016 national accounts released by the Australian Bureau of Statistics (ABS) (2016a) in early June, the ACT recorded the strongest demand growth in the country, growing by 1.3 per cent in the March quarter, compared only 0.1 per cent across the country as a whole. In light of the strong level of growth recorded in ACT final demand in the March quarter along with year average growth of 2.8 per cent for the year ended March 2016, growth in final demand is currently tracking ahead of the Budget estimate for 2015-16 and forecast for 2016-17of 2½ per cent growth. In light of this, the estimate and forecast of final demand are consistent with current trends.

Economic forecasting in a modern mixed economy usually focuses on the largest components which are generally household consumption and private investment. However, the ACT, as the seat of government for the Commonwealth Government, is an economy whose outcomes are heavily dependent on the consumption and to a lesser extent investment decisions of the Commonwealth. In the year to the end of March 2016, the Commonwealth represented around 59 per cent of total demand in the ACT economy, compared to household consumption that made up 27 per cent, private investment which made up 7 per cent, and 7 per cent for the ACT Government as illustrated in Figure 1 below.

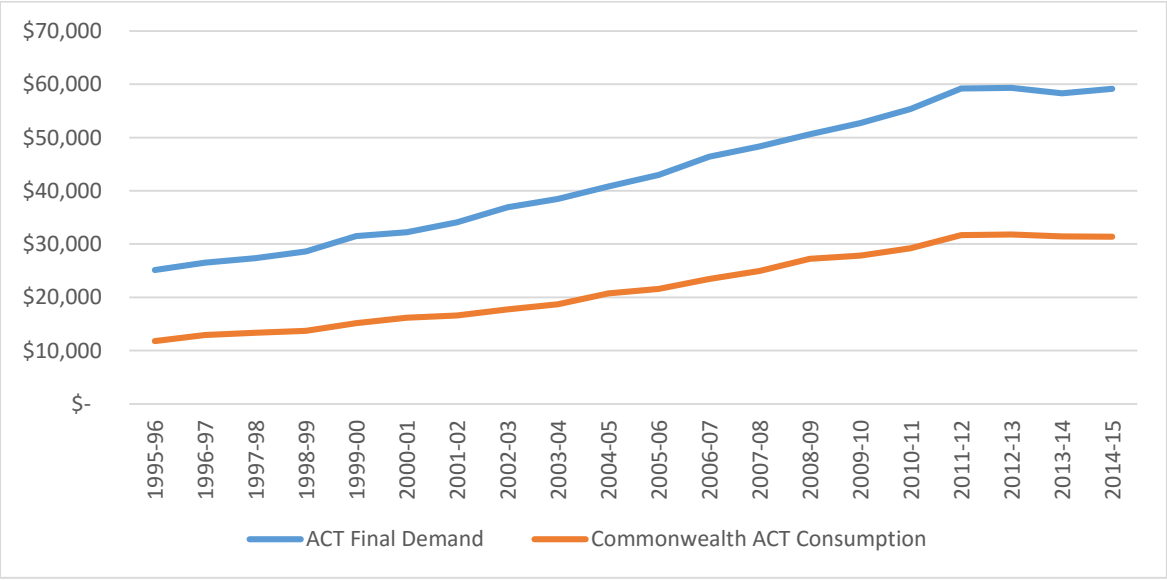
Figure 1: Components of final demand for the ACT economy, year ended March 2016



Source: ABS (2016a)

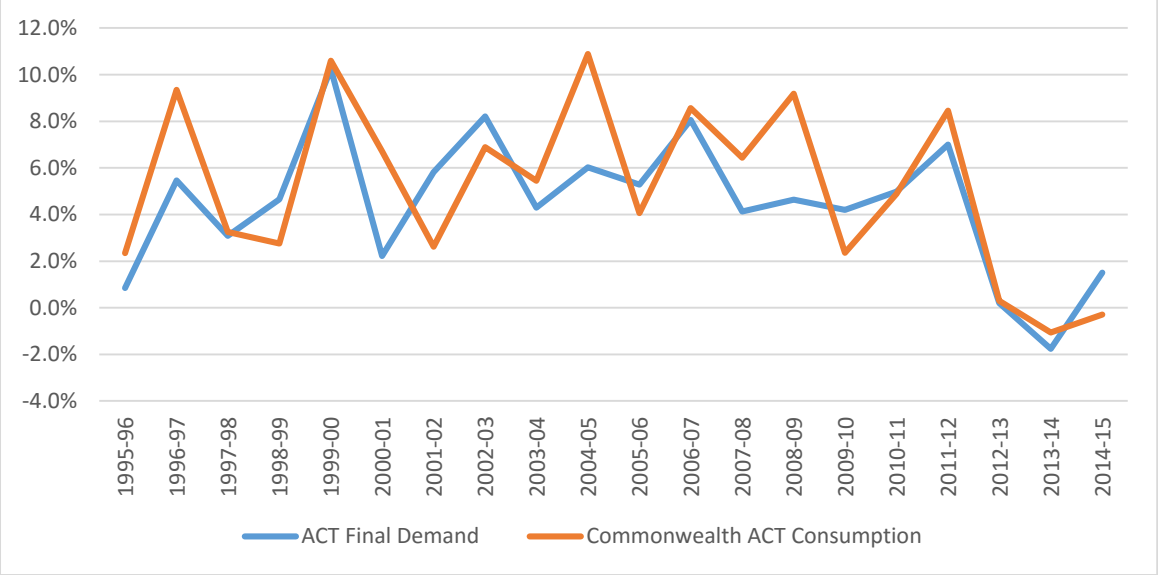
There is a close relationship between ACT final demand and the contribution of Commonwealth consumption expenditure to ACT final demand, as outlined in Figure 2 below, as well as between growth in ACT final and the growth of Commonwealth consumption expenditure in the ACT, as outlined in Figure 3.

Figure 2: ACT final demand and Commonwealth ACT consumption – 1995-96 to 2014-15 ($ million, constant 2013-14 dollars)



Sources: ABS (2016a)

Figure 3: Percentage Growth in ACT final demand and Commonwealth ACT Consumption Expenditure – 1995-96 to 2014-15



Sources: ABS (2016a)

According to the ACT Budget papers, projections for ACT final demand increase to the long-term trend rate of 4 per cent in the out years (ACT Government, 2016, p. 2). While Pegasus Economics raises no substantive issues in relation to the estimate and forecast presented in the 2016-17 Budget, we do have strong reservations as to whether it is feasible to assume that ACT final demand will return to a long run trend growth of around 4 per cent from 2017-18 onwards.

As can be seen in Figure 2 above, growth in Commonwealth ACT consumption expenditure has plateaued in real terms since 2012-13 and, as a consequence, growth in ACT final demand appears to have largely plateaued. In turn,

Figure 3 suggests that in recent years there has been a downward shift in the level of growth in Commonwealth ACT consumption expenditure, that in turn raises questions as to whether ACT final demand will return to trend growth of 4 per cent per annum in the foreseeable future.

While growth in ACT final demand along with Commonwealth ACT consumption expenditure can be expected to oscillate, we believe that the rate of growth in both for the time being has in all likelihood settled around a lower trend line than in the past, especially given the Commonwealth is facing a challenging fiscal environment in its planned move back towards surplus.

In its most recent Budget, the Commonwealth Government (2016, pp. 1-10) committed itself to a fiscal consolidation equivalent to 0.4 per cent of gross domestic product across the forward estimates. Similarly, the Opposition Labor Party (2016, p. 26) during the current federal election has also committed to returning the Commonwealth Budget to balance over the course of the next four years. So in effect, both political parties likely to form government after the federal election on 2 July have committed themselves to returning the Commonwealth budget back to surplus.

The ACT Government (2016, p. 27) has acknowledged that it has not incorporated the impact of the Commonwealth Government's additional efficiency dividend into its economic projections. The ACT Budget papers (ACT Government, 2016, p. 9) also indicate that the Commonwealth Government's additional $1.4 billion saving over the three years from 2017-18 to 2019-20 from an increase in its efficiency dividend on Commonwealth agencies (Commonwealth of Australia, 2016a) carries a risk to

the ACT economic outlook.[1] The ACT Government (2016, p. 3) suggests that around one third of this measure could impact upon the ACT economy.

Pegasus Economics believes that ACT final demand projections of around 2½ per cent growth may be more realistic for future projections in the current environment and that reference back to long term trends in an environment of generally improving budgetary conditions and favourable parameter changes for the Commonwealth Government no longer provides a useful reference point.

3.2 Employment

Employment growth through the year to the end of April 2016 for the ACT was 0.9 per cent in trend terms (Australian Bureau of Statistics, 2016c). Employment is traditionally a lagging indicator of economic activity, so it is likely to continue to grow with a pick-up in demand. On this basis, an estimate of employment growth of 1 per cent in 2015-16 and forecast of growth of 1¼ per cent in 2016-17 appears reasonable.

The employment situation for the ACT will be assisted by the Commonwealth Government (2016b, p. 133) workforce remaining roughly stable, with an overall 185 net reduction in positions in 2016-17 across Australia for an average staff level of 167,155 excluding military and reserves. However, with a reduction in the number of staff in the Commonwealth Department of Human Services of over 800, that has offices across the country, it is likely the ACT will enjoy a small net increase in Commonwealth employment during 2016-17.

3.3 Wage price index

The wage price index is currently running at 1.8 per cent through the year to the end of the March quarter 2016 (Australian Bureau of Statistics, 2016d), which is consistent with the ACT Budget estimate of 1¾ per cent for 2015-16. On this basis, a forecast of 2 per cent for 2016-17 appears reasonable and consistent given a slight improvement in labour market conditions.

3.4 Consumer price index

The consumer price index percentage change through the year to the end of the March quarter 2016 for the ACT was 1.0 per cent and 0.7 in year average terms to the year ended March 2016 (Australian Bureau of Statistics, 2016b), which is consistent with the ACT Budget estimate of ¾ per cent change through the year in 2015-16. For 2016-17, the budget forecast is for a slight acceleration from the outcome for 2015-16 to 1 per cent though the year. Given the subdued nature of inflation both nationally and within the ACT, the forecast for 2016-17 appears reasonable.

3.5 Population growth

Population is an indicator that is not particularly timely in its release by the ABS, as there is currently only one quarter of data available for the 2015-16 financial year. However, as far what is currently available goes, the ACT recorded population growth of 1.4 per cent through the year to the end of the September quarter 2015 (Australian Bureau of Statistics, 2016), is consistent with the ACT Budget estimate of 1.5 per cent growth in 2015-16.

3.6 Long Term Projections

Concerns regarding projections in relation to ACT final demand have already previously been expressed above in subsection 3.1. The only other projection that raises concern is in relation to the

[1] There is a $500 million discrepancy between the Commonwealth's efficiency dividend measure announced in its May Budget and the measure referred to by the ACT Government. The Commonwealth Government (2016a) refers to the measure as having an additional impost of $1.4 billion whereas the ACT Government (2016, p. 7) refers to the measure having an additional impost of $1.9 billion.

wage price index as it looks to be on the high side with projections of 3½ per cent growth given likely continuing constrained public sector wages growth in the Commonwealth sector.

4 Fiscal outlook

The Budget Papers present a headline operating balance of -$182m, moving to a forecast surplus of $66m by 2019-20. The revised outlook for 2016-17 reflects expected increases in revenue arising from increased land sales and increased taxation revenue, partially off-set by new spending decisions. However, large impacts on the budget aggregates arise from valuation effects, changes in the treatment of some transactions and other technical adjustments.

4.1 Overview

The Budget Papers present a headline operating balance of -$182m for 2016-17, including various adjustments, moving to a forecast surplus of $66m by 2019-20.

Table 2: General Government Sector Headline Net Operating Balance

	2015-16 Est. Outcome $'000	2016-17 Budget $'000	2017-18 Estimate $'000	2018-19 Estimate $'000	2019-20 Estimate $'000
Revenue	4,732,430	5,058,184	5,103,827	5,379,250	5,581,821
Expenses	5,130,825	5,403,749	5,312,167	5,528,706	5,711,559
Superannuation return adjustment	165,927	163,566	173,305	182,797	195,782
HEADLINE NET OPERATING BALANCE (excluding the Superannuation Liability Valuation)	**-232,468**	**-94,346**	**-35,035**	**33,341**	**66,044**
HEADLINE NET OPERATING BALANCE (including the Superannuation Liability Valuation)	**-232,468**	**-181,999**	**-35,035**	**33,341**	**66,044**

Source: ACT Government (2016, p. 32)

The table shows that revenue and expenses have increased relative to the 2015-16 estimated outcome, and continue to grow at relatively stable rates over the forward estimates period.

The major drivers of revenue growth over the Budget and forward estimates are the expectations of increased current grants from the Commonwealth, increases in own source taxation revenue and revenue from the sale of goods and services. Most other revenue sources are expected to show only modest growth or decline over the period.

The Budget Papers reveal a decline in the Territory's net operating result from an operating surplus of $22.9 million in 2010-11 to an operating deficit (excluding the Superannuation Liability Valuation) of $94.4 million in 2014-15. While there are numerous reasons for the deterioration in the fiscal position, the underlying explanation is that the costs of services provided by the ACT Government have exceeded the revenue increases over this period.

4.2 Budget classification and presentation issues

The budget aggregates incorporate a number of budget classification and presentation issues that impact on assessment of the Budget and comparisons with previous years. These adjustments are defensible as a way of accounting for underlying transactions that do not fit readily within the

Government Finance Statistics (GFS) reporting framework commonly adopted for the presentation of Australian Budgets, but they are complicated and can have significant impacts on how the Budget aggregates are interpreted and understood.

The following sections provide comment on the major adjustments and changes in presentation in the Budget aggregates.

Super return adjustment

The headline operating balance for 2016-17 includes an adjustment for long-term expected superannuation investment earnings.

The rationale for the use of this measure is that the Government does not operate a superannuation fund for employees and, under the Government Finance Statistics (GFS) reporting framework, capital growth on financial assets is not included as transactional revenue in the net operating balance. The Budget Papers do however include a superannuation interest cost and other superannuation expenses. The Budget Papers argue that the inclusion of the full amount of the long-term investment earnings is therefore considered necessary to provide an accurate assessment of the longer-term sustainability of the budget position (ACT Government, 2016, p. 42).

The attribution of some of these provisions to revenue and expenses is problematic in terms of the generally accepted GFS reporting framework. However, it is reasonable given the nature of government super schemes in Australia that Budget documents should make some provision for the emerging cost of these schemes and that the provisions be expressed in terms of closely comparable revenue and expense items as far as possible.

There are however some problematic elements of this adjustment that the Committee might wish to pursue.

The Budget Papers indicate that the super return adjustment is consistent with a long-term expected return objective of the Consumer Price Index (CPI) plus 5 percentage points. A discount rate basis of CPI+5% was in line with industry practice when this provision was introduced. However, we understand that in today's circumstances this appears to be a more aggressive earning rate than most actuaries would typically be using for the purposes of determining employer contribution rates to ensure that benefits accruing with service are being adequately funded.

There is also a question of whether the discount rates applied to the super return adjustment are consistent with the discount rate assumptions in the super interest cost reported in chapter 4 of Budget Paper 3. Our understanding is that this item represents an adjustment for the unwinding of the discount rate in the calculations of future liabilities. The Budget Papers do not however indicate the discount rate assumption used in these calculations. In order to ensure that the revenue and expense provisions are comparable, it would be desirable to ensure that a consistent discount rate assumption has been applied.

Super Liability Valuation

An additional adjustment made in this year's budget reflects the estimated Superannuation Liability Valuation outcome at 30 June 2016 and the flow-on impact to superannuation expenses in 2016-17 based on the prevailing low domestic interest rates. The estimated discount rate as at 30 June 2016 is 3.2 per cent, compared with an assumption of 6 per cent at the time of the 2015-16 Budget.

Our understanding is that the Australian Accounting Standards currently require superannuation liabilities in financial statements to be prepared on the assumption of a 6 per cent bond rate. While this provides consistency and reduces volatility in the preparation of accounts, in the case of a long-

period liability such as superannuation, this can imply a misleadingly low value for the present value of the government's superannuation liabilities.

The approach adopted in the year's Budget seeks to reduce the volatility of reporting while providing readers of the Budget with an estimate of the effect of a revaluation of the superannuation liability related to current discount rates.

Given the current low interest environment, the Committee might expect a similar adjustment in future years if the government continues to seek to align budget presentation with accounting standards and the current low bond environment persists. It is emphasised that this is a technical accounting adjustment that does not necessarily reflect actual changes in the ACT's superannuation obligations. The critical issue is that the ACT Government has access to the funds necessary to meet benefit payments as they become due.

Treatment of Light Rail

The Budget Papers indicate that the Light Rail Network will be pursued through a public private financing arrangement.

As the transaction has been constructed as a finance lease, only some of the payments will be recognised in the operating statement and the headline operating balance.

Under this arrangement, the government will make service payments over the life of the contract, covering the costs incurred in constructing, financing, maintaining and operating the network. At the end of the contract, the infrastructure will revert to Territory ownership (ACT Government, 2016, p. 351).

The Territory's contract service payments will be apportioned between a financing component, maintenance and operation costs, and a provision for reductions in the lease liability over time. The financing component is calculated at the rate implicit in the lease and is accounted for as an interest expense. The portion of the payment related to the maintenance/operating costs is accounted for as a supplies and services expense. In addition, the leased assets are depreciated over their useful life with depreciation expenses being recognised.

Table 3 below summarises the impact of the Light Rail project on the headline operating balance.

Table 3: Impact of Light Rail Project on the net operating balance

	2016-17 Budget $'000	**2017-18 Budget $'000**	**2018-19 Budget $'000**	**2019-20 Budget $'000**
Headline Net Operating Balance (HNOB) Impact				
Maintenance/Operation Costs	**-**	**-**	**22,189**	**25,376**
Interest	**-**	**-**	**17,915**	**21,252**
Depreciation	**-**	**-**	**10,511**	**14,015**
Total HNOB Impact	0	0	50,615	60,643

Source: ACT Government (2016, p. 352)

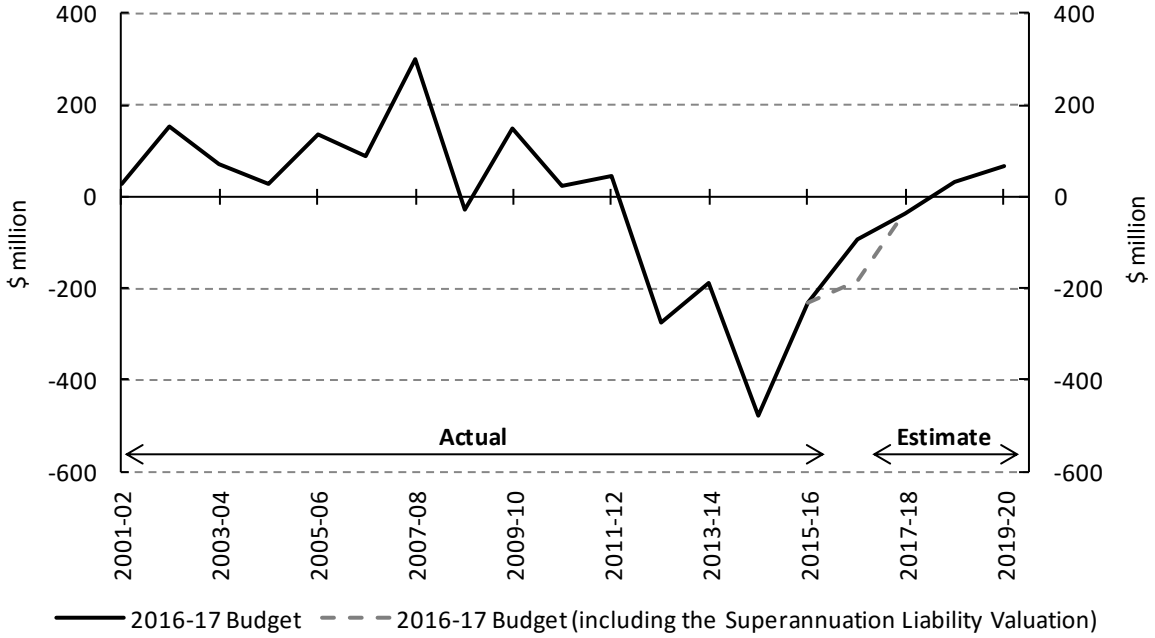
The table shows that interest, maintenance and operating costs and depreciation expenses will impact the Operating Statement and the headline operating balance from 2017-18, continuing into 2019-20 and beyond the forward estimates period.

4.3 Medium term forecasts

The Budget Papers indicate that the government is pursuing a fiscal strategy that achieves an operating balance over time, offsetting temporary deficits with surpluses in other periods (2016, p.305)

Figure 4 illustrates the actual and forecast fiscal trajectory since 2001-02.

Figure 4: Headline Operating Balance



Source: ACT Government (2016, p. 42)

The planned return to surplus rests on a number of assumptions. The economic forecasts that underpin the Budget assume that increased Commonwealth spending will drive a strong ACT economy in the forward years. This is problematic. The achievement of an operating surplus in 2018-19 also requires growth in grants from the Commonwealth, growth in own taxation revenue and the generation of a large increase in other economic inflows, as well as the achievement of significant offsets against planned increases in expenditure.

Comment on the risks and uncertainties against these assumptions is set out in later sections of this report.

4.4 Return to surplus

The Budget Papers have articulated variations of the current fiscal strategy since at least 2010-11. However, successive Budgets have failed to achieve the forecast return to surplus.

Figure 5 compares the predicted trajectory of the fiscal balance presented in Budget Papers since 2010-11.

Figure 5: Forecast returns to surplus ($ million)

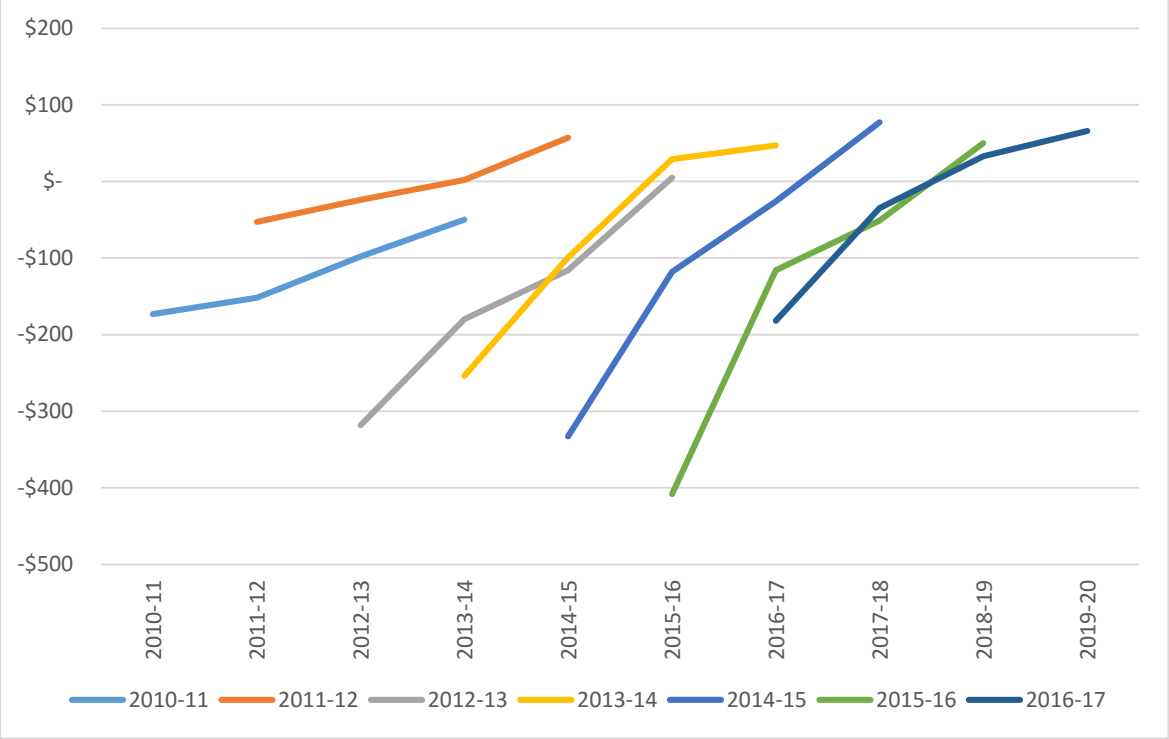


Figure 5 shows that:

- Every year, the budget is forecast to return to a small surplus in the last or second last of the forward years;
- After 2011-12, the balance has been revised downwards for each budget and forward year until 2017-18; and
- After 2011-12 up to the current Budget, the expected deficit has worsened at each successive Budget.

In each year between 2010-11 and 2016-17 the climb back to surplus has become longer and steeper.

In commenting on previous Budgets and Budget outcomes, independent commentators, including the ACT Auditor-General (2015, p. 12), have indicated that the achievement of planned operating surpluses have depended on achieving large reductions in the deficits in the net operating balance while generating large increases in other economic inflows.

To date, as the above Figure 5 illustrates, these requirements have proven difficult to achieve.

5 Revenue

Revenue is expected to increase from an estimated outcome in 2015-16 of $4.7 billion to $5.1 billion in 2016-17. Revenue growth over the Budget and forward years largely reflects assumptions of continued growth in Commonwealth grants, increases in ACT own source taxation revenue and gains from contributed assets (essentially returns from land sales).

5.1 Overview

ACT Budget revenue is expected to increase from an estimated outcome in 2015-16 of $4.7 billion to $5.1 billion in 2016-17.

The 2015-16 estimated outcome is almost $123 million higher than forecast. The increase is primarily due to higher revenue received from dividend and tax equivalent payments ($91 million) and increases in own taxation (almost $52 million) partially offset from lower interest income (almost $35 million).

The main sources of revenue over the Budget and forward years are summarised in Table 4 below.

Table 4: General Government Sector Revenue

	2015-16 Est. Outcome $'000	2016-17 Budget $'000	2017-18 Estimate $'000	2018-19 Estimate $'000	2019-20 Estimate $'000
Own Source Taxation	1,543,327	1,633,960	1,751,100	1,871,500	1,970,398
Commonwealth Grants	1,874,723	2,087,251	2,162,771	2,200,391	2,293,328
Gains from Contributed Assets	118,429	155,806	98,906	124,785	100,206
Sales of Goods and Services	476,411	479,416	504,001	519,408	529,257
Interest Income	133,836	116,210	117,197	106,154	112,564
Distribution from Financial Investments	28,300	36,391	45,293	47,615	50,573
Dividend and Income Tax Equivalents	420,448	405,808	282,238	364,778	382,900
Others	136,956	143,342	142,321	144,619	142,595
Total	**4,732,430**	**5,058,184**	**5,103,827**	**5,379,250**	**5,581,821**

Source: ACT Government (2016, p. 226)

The table shows that the increase of $326 million in the Budget in 2016-17 over the estimated 2015-16 outcome primarily reflects increased current grants from the Commonwealth of $170.7 million, a $90.6 million increase in own source taxation revenue and $37.4 million extra from gains from contributed assets (essentially returns from land sales). Offsetting these increases are lower interest income ($17.6 million), and dividend and tax equivalents income ($14.6 million).

Revenue growth over the Budget and forward years largely reflects growth in increased Commonwealth grants and ACT own source revenue.

5.1 Vertical fiscal imbalance

One particularly striking feature of the ACT Budget is the extent of vertical fiscal imbalance. Vertical fiscal imbalance refers to circumstances in which one level of government spends less than it collects in taxes and charges, while other levels of government spend more than they raise from taxes and charges. Typically, the central government is the one that spends more than it collects in revenue. This is certainly the situation in case of the ACT Government whereby the Commonwealth Government will be responsible for providing 41 per cent of the ACT's revenue in 2016-17 and the ACT only funds 32 per cent of its revenue from its own source taxation receipts.

It is widely perceived that accountability problems arise from vertical fiscal imbalance. A commonly discussed and widely supported accountability principle is that sub-national governments should be accountable to constituents for the revenues at their disposal. This means constituents of a sub-national jurisdiction should have a good grasp of the costs of providing their sub-national government's services. Put another way, sub-national governments have been perceived to be more likely and better able to allocate, scrutinise and otherwise manage their expenditures efficiently if they have control of their revenues.

The degree to which a sub-national government would be held accountable for the revenues at its disposal would increase with the extent of financing through taxes and charges imposed on constituents by that government. Ideally, taxation and charging effort by the sub-national government would be closely matched to revenue requirements. Sub-national taxes should at least be large enough to impose a noticeable burden on constituents.

The ACT Government (2016, p. 226) acknowledges that it suffers from a number of revenue raising disadvantages in comparison with other jurisdictions as the bulk of economic activity is generated by Commonwealth Government expenditure within the ACT and the Commonwealth exempts itself from ACT payroll tax.

In the event that it is not possible to completely overcome the problem of vertical fiscal imbalance, the importance of sub-national governments having responsibility *at the margin* for raising their own revenues has also been strongly emphasised in the literature (Bahl & Bird, 2008, p. 8) (Oates, 2008, p. 326). In this case, decisions to expand government expenditure programs would be made having full regard to the additional political and economic costs of raising the revenue. The critical requirement is that, regardless of the form of sub-national taxation, sub-national governments should control the effective tax rate at the margin (Bird & Smart, 2010, p. 78).

If sub-national governments are to be expected to act responsibly and in the interests of their residents they should face what is known as a so-called 'hard budget constraint': that is, they should be able to increase or decrease spending only by increasing or decreasing their revenues in such a way that they are publicly responsible for the consequences of their actions (Bird & Smart, 2010, p. 78). With more explicit sub-national taxes that actually touch their pockets directly there may be both more incentive and more opportunity for citizens to figure out what is going on—and, in a democracy, perhaps even hope to do something about it.

However, the ACT Government doesn't even have responsibility for raising their own revenue at the margin as around 52 per cent of the increase in revenue in the ACT Budget in 2016-17 will come from the Commonwealth, and as such, does not face a hard budget constraint.

A branch of the fiscal federalism literature has emphasised that heavy reliance on intergovernmental transfers could undermine the fiscal discipline and expenditure and cost scrutiny linked to accountability. The concept of *soft budget constraints* refers to situations where sub-national

governments can look to authorities at higher levels, typically the central government, to bail them out of their fiscal problems of continuing deficits and a growing stock of public debt (Oates, 2008, p. 319). Such an expectation of assistance obviously in turn undercuts the incentives for more responsible fiscal behaviour. The provision of health services by the ACT Government, that is reviewed in the following section, suggests that scrutiny and fiscal discipline is somewhat lacking when compared to other jurisdictions.

5.2 Tax reform

The ACT Government has committed itself to rebalancing its tax base through an ongoing process of gradually reducing and eventually eliminating various taxes on insurance premiums and conveyances (sometimes referred to as stamp duty on the sale of land) over a 20 year period and replacing the shortfall through an increase in the general rates system.

The ACT Government's approach is in line with a number of recent landmark reports on the tax system.

The report entitled *Australia's Future Tax System: Report to the Treasurer* (Henry, Harmer, Piggott, Ridout, & Smith, 2010a, p. 473), more commonly known as the Henry Tax Review, opined that insurance taxes were not only inefficient leading to under-insurance or non-insurances, but were also inequitable. Insurance taxes reduce the return for any given cost of an insurance policy, meaning that people and businesses must pay more to achieve the same level of risk reduction, in turn deterring people and businesses from entering the insurance market or purchasing an adequate amount of insurance. It is also inequitable because rates of non-insurance (for building and content insurance) generally decline with higher incomes and non-insurance can also be higher for demographic groups, such as retirees with mortgages and single parents, making people with less financial means more vulnerable and exposed in the event of loss.

The Henry Tax Review was of the view that stamp duty on conveyancing discouraged people from changing their housing to better suit their requirements because of the high transaction costs imposed by stamp duty for doing so:

> Ideally, there is no place for stamp duty in a modern Australian tax system. Stamp duty generate large efficiency costs, as they discourage turnover in property and tax improvements as well as land. The tax also imposes a higher burden on people who need to move, which is not equitable. (Henry, Harmer, Piggott, Ridout, & Smith, 2010, p. 263)

The Henry Tax Review recommended the abolition of stamp duty on conveyancing and its replacement with other taxes:

> Ideally, there would be no role for any stamp duties, including conveyancing stamp duties, in a modern Australian tax system. Recognising the revenue needs of the States, the removal of stamp duty should be achieved through a switch to more efficient taxes, such as those on broad consumption or land bases. (Henry, Harmer, Piggott, Ridout, & Smith, 2010, p. 263)

While the ACT Government has accepted that taxes on insurance and conveyances should be abolished, similar problems are raised in relation to duties on motor vehicle registrations and transfers.

Duties on new vehicles and the transfer of used vehicles discriminate against, and add to the cost of, changing ownership of vehicles, including buying new vehicles (Freebairn, 2002, p. 411). By

distorting consumer preferences resulting in less vehicle ownership transfers, stamp duties result in efficiency losses.

Both the Industry Commission (1997) and the Henry Tax Review (Henry, Harmer, Piggott, Ridout, & Smith, 2010a) have been scathing in their assessments of stamp duties on cars. According to the Industry Commission (1997, p. 129):

> Stamp duty imposes large efficiency costs on motorists, the automotive industry and the economy. It distorts economic behaviour by deterring motorists from purchasing or transferring vehicles, and deterring automotive firms from rationalising property.

Similarly, according to the Henry Tax Review (Henry, Harmer, Piggott, Ridout, & Smith, 2010a, p. 399):

> These taxes mean that people purchase new vehicles and scrap old vehicles less often, and reduce the overall demand for cars. They mean that some people will continue driving vehicles not suited to their present needs. For example, an older couple whose children have left home might delay getting a smaller car. Alternatively, a young couple may delay upgrading to larger family car when they have children, because of the additional cost.

KPMG Econtech (2010, pp. 44-45) estimated the average and marginal excess burden at 38 cents in the dollar in relation to the imposition of motor vehicle duties on businesses and warned this was likely to be an under-estimate. KPMG Econtech (2010, p. 44) rated the excess burden of motor vehicle stamp duty as high.

In addition to efficiency losses due to the distortion of consumer preferences, duties result in an older car fleet with greater pollution and less safety (Freebairn, 2002, p. 411). The problems with an ageing motor vehicle fleet is there exists a strong relationship between vehicle age and severity of accident injuries, have higher levels of noxious emissions, and have worse fuel economy and higher CO_2 emissions.

Stamp duty also creates a distortion in the car accessories market in favour of 'after market' suppliers because stamp duty is applied to accessories when included at the time of car purchase, whereas it does not apply when purchased after the vehicle is bought. Differing rates of stamp duty between the States and Territories also creates incentives for people to register and pay stamp duty in other jurisdiction in order to minimise their tax obligations.

Following the recommendation of its ACT Taxation Review (Quinlan, Smithies, & Harding, 2012), the ACT Government (2012, p. 6) agreed that stamp duty on motor vehicle transfers should be continued and because its ideal replacement of a road user charge system would be best progressed through a national agreement between all the States and Territories. However, the ACT Government has already effectively abolished duties on the registration of new vehicles that emit less than 130 grams of CO2 per kilometre travelled that are zero rated under its green vehicle rating system. While not wanting to enter debates the merits surrounding the environmental benefits of such a program, it is suggested that most, if not all, new vehicles emitting less than 130 grams of CO2 per kilometre travelled is beyond the immediate financial means of most except those of fairly affluent means. This in turn raises concerns in relation to vertical equity through those of more modest means

limited to purchasing higher emitting vehicles and consequently paying much more in duty than someone more affluent purchasing a Tesla vehicle for example.[2]

In stage 2 of its Tax Reform the ACT Government is changing the charging structure for general rates so that it becomes more equitable between different housing types. From 1 July 2017, the ACT Government will change the general rates calculation for multi-unit dwellings to base it on the total average unimproved land value (AUV) of the land rather than the individual AUV of the unit, in order to establish greater equity in general rates paid between houses and units. This change is being phased in over two years. This change seems justified on the basis of horizontal equity that requires people of the same means to pay the same amount of tax in the event house prices and unit dwellings have similar prices.

5.3 Raising the thresholds for payroll tax

The ACT Government is increasing the payroll tax free threshold from $1.850 million to $2 million in 2016-17. The ACT Government (2016, p. 165) claims this initiative will support small to medium businesses in the ACT, with approximately 40 businesses in the ACT becoming exempt from payroll tax in 2016-17.

It appears rather incongruous for the ACT Government to be complaining about the disadvantages it faces in terms of its ability to tax while at the same time eroding one of the few tax bases that it has available at its disposal.

The Henry Tax Review saw taxes on labour as relatively efficient (ie less distortionary than other alternatives) because labour is a relatively immobile factor of production. While the Henry Tax Review was supportive of payroll tax in principle, it was highly critical of the manner in which has been applied by States and Territories:

> Existing payroll taxes are more complex and less efficient than they could be because of tax-free thresholds and other exemptions. (Henry, Harmer, Piggott, Ridout, & Smith, 2010, p. 293)

The ACT Government's change further adds to this problem as articulated by the Henry Tax Review. The Henry Tax Review concluded that the current system of payroll tax across Australia was less efficient than it could be because it pushes some workers into the untaxed (or exempted) sectors who would be more productive in the taxed sector (Henry, Harmer, Piggott, Ridout, & Smith, 2010, p. 295). This has the effect of reducing average labour productivity and in turn national income (economic growth).

Within the economics literature, a payroll tax has a similar impact to a broad based consumption tax.

5.4 Safer Families Initiative - hypothecated taxes

One striking feature of the ACT Budget is the use of hypothecated taxes, with the new Safer Families Levy being the most recent addition. Views in the public finance and economic literature are mixed as to efficacy of hypothecated taxes.

Hypothecated taxes, sometimes called earmarked taxes, are those whose revenue is designated to be spent on a particular programme or use (Doetinchem, 2010). A strongly hypothecated tax is one

[2] Vertical equity requires individuals having higher abilities to pay contribute more than those with lower capacities.

where the revenue funds a particular program or service solely and entirely (Keable-Elliott, 2014, p. 15).

Several arguments have been advanced in support of hypothecated taxes, including the following:

- *Accountability and trust:* Rather than paying taxes into a perceived *black hole*, hypothecated taxes provide taxpayers with in-built accountability for public spending (Doetinchem, 2010).
- *Transparency:* Hypothecated taxes can educate people about the cost of particular services. Taxpayers can then make better informed decisions about the balance between tax burden and level of services provided (Doetinchem, 2010).
- *Public support:* In some cases, hypothecation can even generate public support for tax increases. This, however, is highly dependent on whether the service set to benefit from the earmarked tax is perceived to merit it (Doetinchem, 2010).

However, it has been suggested that where hypothecation is not strong or is weak then it can undermine the arguments in favour (Keable-Elliott, 2014, p. 22). There are also several arguments against hypothecated taxes:

- Governments have generally opposed the widespread adoption of hypothecated taxes on the grounds that spending priorities should not be determined by the way in which money is raised (Seely, 2011, p. 1). In turn, hypothecated taxes ties the hands of government, by taking decisions on spending decisions away from government discretion, constraining the ability of governments to deal with economic cycles (Doetinchem, 2010).
- It raises concerns that it could exempt the tax revenues in question from appropriate scrutiny and potential cuts (Doetinchem, 2010).
- Many proposals for earmarked taxation might be termed tokenism, making little contribution to informed decision making (Seely, 2011, p. 3). In turn, government spending might fall prey to how emotive it proves to be with the electorate.
- Hypothecated taxes have been accused of contributing to inappropriate levels of spending, linking spending not to the requirements of the services but to unrelated macroeconomic circumstances. Severing the link between need and provision risks wasteful spending when the tax base is buoyant and insufficient budgets when it is depressed.

The Henry Tax Review (Henry, Harmer, Piggott, Ridout, & Smith, 2010a, p. 356) opined that hypothecation may be desirable if there is a close connection between the source of the funds and their subsequent use. This was on the basis that the tax provides signals to producers about the demand for the particular good or service, and thus the levy or charge effectively becomes a user charge for the provision of goods or services which in turn promotes efficient resource allocation.

In the case of Safer Families Levy, the link between the source of funds and their subsequent use is tenuous at best, suggesting that perhaps an increase in general rates may have been more appropriate to fund the range of initiatives intended.

5.5 Dividends

Total dividends in 2016-17 are expected to be $272.5 million in 2016-17, a decline of $17.5 million from the level expected to be collected in 2015-16. Dividends are expected to fall again in 2017-18 to $197.6 million, rising again to $281.4 million in 2019-20.

Table 5 provides a summary of dividends received from the Territory's PTEs and financial investments.

Table 5: Dividends

2015-16 Budget $'000		2015-16 Est. Outcome $'000	2016-17 Budget $'000	2017-18 Estimate $'000	2018-19 Estimate $'000	2019-20 Estimate $'000
	Dividends					
69,172	**Dividends – Icon Water**	**76,171**	**71,774**	**74,828**	**90,876**	**104,886**
500	**Dividends – CIT Solutions**	**500**	**500**	**500**	**500**	**500**
107,043	**Dividends – Land Development Agency**	**163,616**	**149,273**	**71,032**	**114,385**	**118,560**
50,858	**Dividends from Financial Investments**	**49,900**	**50,990**	**51,206**	**53,954**	**57,452**
227,573	Total Dividends	290,187	272,537	197,566	259,715	281,398

Source: ACT Government (2016, p. 244)

The table shows that the major driver of these changes is the large difference in expected dividends from the Land Development Agency between 2016-17 and 2017-18 and the growth in dividends from Icon Water in the later years of the forward estimates.

The Budget Papers provide some information on the 2015-16 and 2016-17 transactions. The increase in dividends from the Land Development Agency are primarily driven by increased land sales activity (ACT Government, 2016, p. 245).

However, limited information is provided on the reason for the level or timing of dividends in the Budget and the forward year. In our view, dividends and other capital returns from PTEs should be driven by the capital and investment requirements of the business, as they will ultimately determine the longer term returns to shareholders, rather than short-term budgetary considerations. In the absence of further information on how these payments relate to the future capital requirements of the Territory's trading enterprises it is difficult to assess the reasonableness of the magnitude or timing of the returns provided to the shareholder at this time.

6 Expenditure

Expenditure is forecast to grow over the budget and forward estimates from $5.4 billion in 2016-17 to $5.7 billion in 2019-20, before Superannuation Liability Valuation adjustments in the forward years. A large number of new initiatives have been announced. While offsets have been identified, they are often unspecific and general in nature, and it is difficult to assess their robustness.

6.1 Overview

Forecast expenses of $5.4 billion in 2016-17 (including the Superannuation Liability Valuation adjustment) represent an increase of $273.0 million, or 5.3 per cent, over the expected 2015-16 outcome.

Table 6 sets out the aggregate expenses for the budget and forward years.

Table 6: Budget and forecast estimates for expenses, 2015-16(est.), 2016-17 and 2017-18 to 2019-20

	2015-16 Est. Outcome $'000	2016-17 Budget $'000	2017-18 Estimate $'000	2018-19 Estimate $'000	2019-20 Estimate $'000
Expenses	**5,130,825**	**5,403,749**	**5,312,167**	**5,528,706**	**5,711,559**
Superannuation return adjustment	**165,927**	**163,566**	**173,305**	**182,797**	**195,782**

Source: ACT Government (2016, p. 32)

The table shows that expenses are expected to grow over the forward estimates period to $5.7 billion in 2019-20. This represents growth of 5.7 per cent over the 2016-17 Budget estimate. However, this is before any adjustment is made to account for Superannuation Liability Valuation in the forward years.

The major areas of growth in expenses over the Budget and forward estimates occur in Health, Education, Transport and Communications and in an "Other Purposes" category (ACT Government 2016, p. 173).

This growth is the consequence discretionary policy decisions combined with activity and cost pressures:

- Health expenses are expected to increase as a result of growth in activity and costs (policy decisions to expand health services are claimed to be almost fully offset);
- the forecast increase in Education is primarily driven by expected growth in the operational costs of schools;
- Transport and Communications expenses increase from 2018-19 largely due to the investment in Light Rail Public Private Partnership; and

- the increase in Other Purposes expenses over the forward estimates largely reflects interest expense on borrowings to finance infrastructure investment and on the $1 billion loan from the Commonwealth in relation to the Asbestos Eradication Scheme.

The Budget Papers claim that underlying expenses are forecast to grow at an annual average rate of 2.7 per cent, broadly consistent with the forecast in the 2015-16 Budget (2016, pp.36-7). It is unclear precisely how underlying expenses have been calculated, but they appear to exclude the Superannuation Return adjustment and the Superannuation Liability Valuation adjustment. On this basis, underlying the rate of growth in underlying expenses appears to have been moderated for 2016-17, but appears to be growing slightly faster over 2015-16 and the forward years than was forecast in the 2015-16 Budget.

6.2 New initiatives

The Budget contains over one hundred expense initiatives totalling $433.2 million over the budget and forward years. However, $134.9 million of this amount is expected to be offset from within the health funding envelope (2016, p.71);

The largest clusters of initiative include:

- additional investment in health services ($139 million over the budget and forward years);
- additional support of $35.1 million over the budget and forward years for the concessions program;
- expenditure of $34.2 million over the budget and forward years to prepare sites for sale and relocate tenants as part of the Better Public Housing program; and
- a Safer Families package of initiatives totalling $21.4 million over the budget and forward years (ACT Government 2016, pp.36-7).

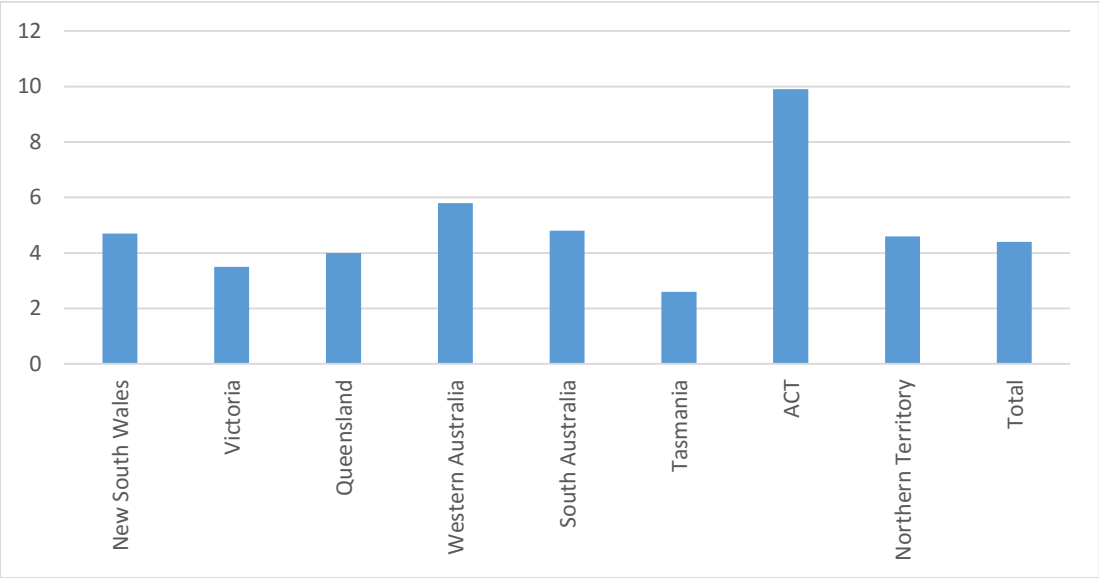
6.3 Health

With expected expenditure of $1,553 million in 2016-17, health represents just over 30 per cent of ACT Government expenditure making it the largest single expenditure item. According to the ACT Government (2016, p. 52) expenditure on health services has increased by around 8.5 per cent per year over the decade to 2014-15.

While the ACT Government (2016, p. 181) makes claims to providing quality and efficient services, the available evidence suggests the public provision of health services are not efficient when compared to service provision in other jurisdictions.

While figures from the Australian Institute of Health and Welfare (2015) supports the ACT Government's claim of strong expenditure growth in relation to public hospitals, they further show that funding growth in recurrent expenditure in real price terms (excluding capital depreciation) in the ACT between 2009-10 and 2013-14 of 9.9 per cent per annum on average, has been outstripping the rest of the country at just over twice the national average.

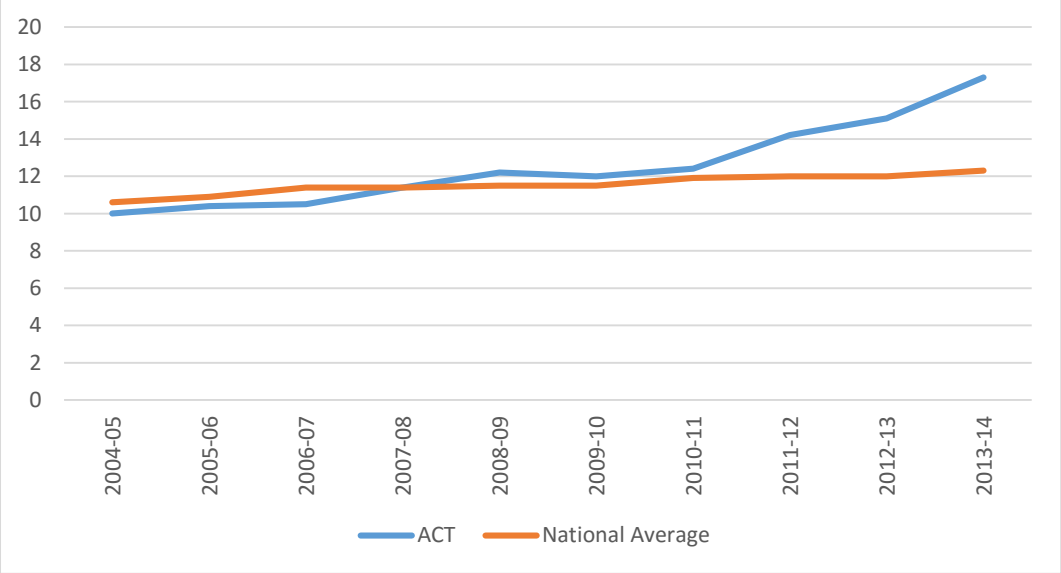
Figure 6: Percentage growth in recurrent expenditure ($ 2013-14 constant prices) (excluding depreciation) for public hospitals 2009-10 to 2013-14



Source: Australian Institute of Health and Welfare (2015)

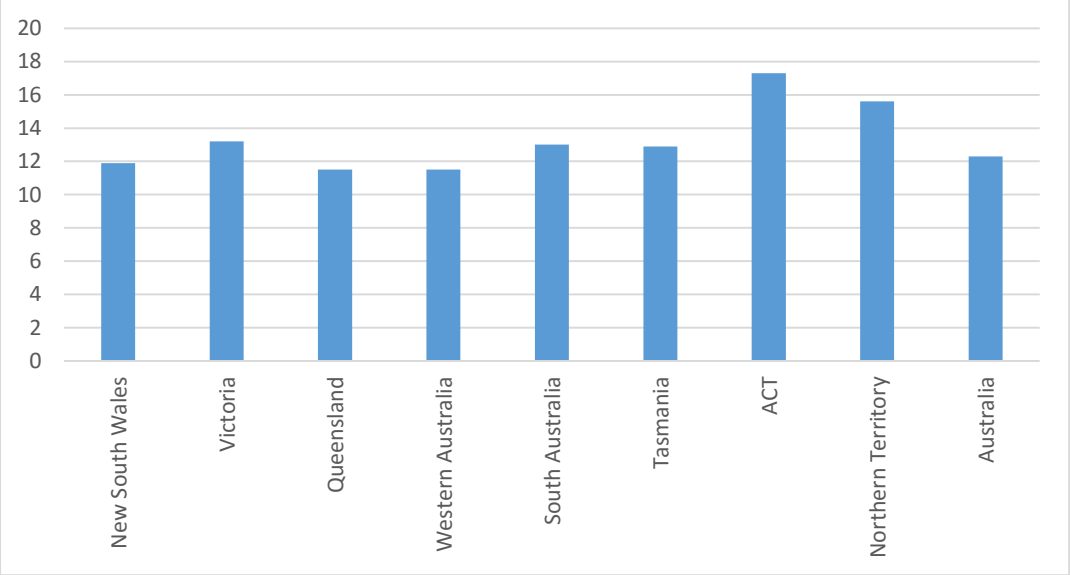
The level of staffing in the ACT public hospital system on a per capita basis from 2004-05 to 2013-14 has gone from just below the national average to the highest in the country. While there is the caveat on these figures in that residents from surrounding regions in New South Wales also use the ACT public hospital system, this still does not explain the substantial increase over and above the rest of the country in relation to staffing levels over the period.

Figure 7: Average full time equivalent staff per 1000 persons for public hospitals 2009-10 to 2013-14



Source: Productivity Commission (2016)

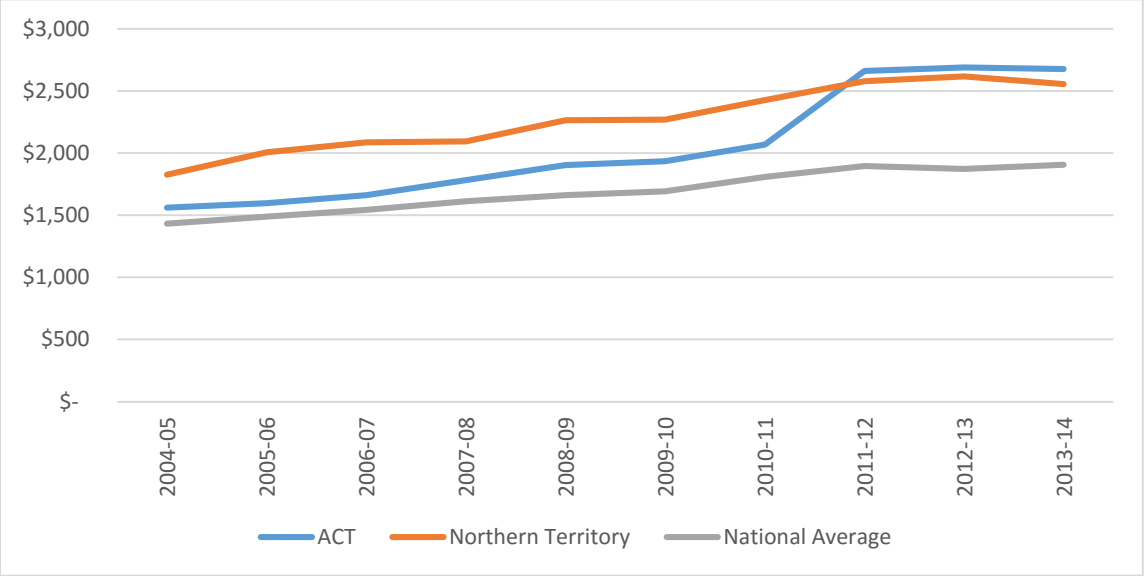
Figure 8: Average full time equivalent staff per 1000 persons for public hospitals 2013-14



Source: Productivity Commission (2016)

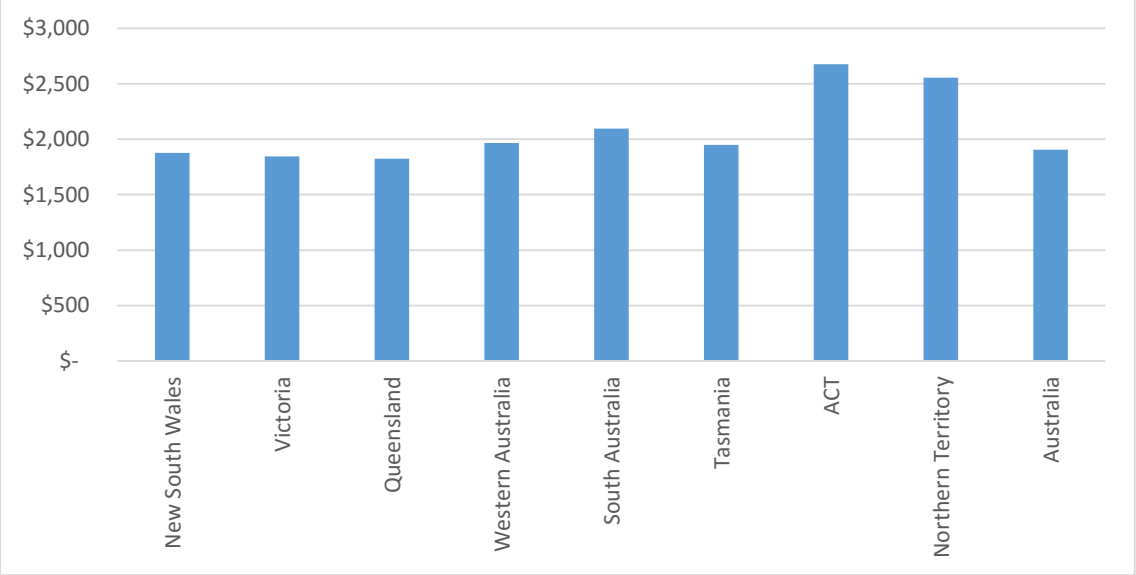
While growth in per capita staffing in ACT public hospitals has outstripped the rest of the country, costs on a per capita basis from 2004-05 to 2013-14 have also increased in comparison to the rest of the country as well with the Northern Territory that is used as a proxy for locational disadvantage.

Figure 9: Recurrent expenditure per person for public hospitals 2004-5 to 2013-14 (2013-14 constant prices)



Source: Productivity Commission (2016)

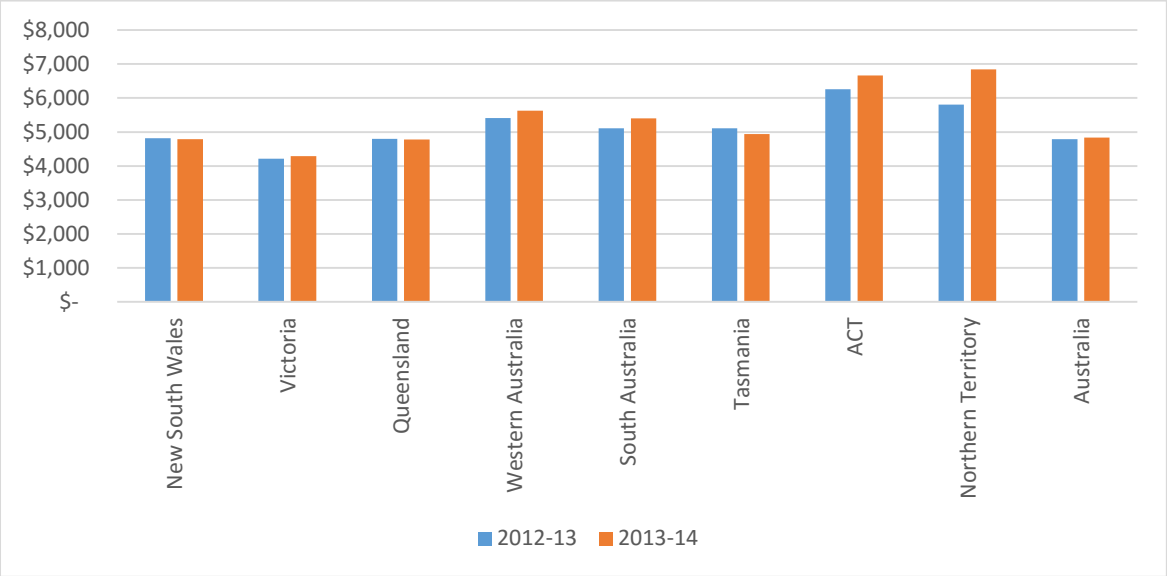
Figure 10: Recurrent expenditure per person for public hospitals 2013-14 (2013-14 constant prices)



Source: Productivity Commission (2016)

On two indicators used to measure the efficiency of public hospitals, the ACT is currently the second worst in the country only behind the Northern Territory. 'Recurrent cost per casemix-adjusted separation' is the average cost of providing care for an admitted patient (overnight stay or same day) adjusted with cost weights for the relative complexity of the patient's clinical condition and of the hospital services provided (Productivity Commission, 2016, p. 11.38).

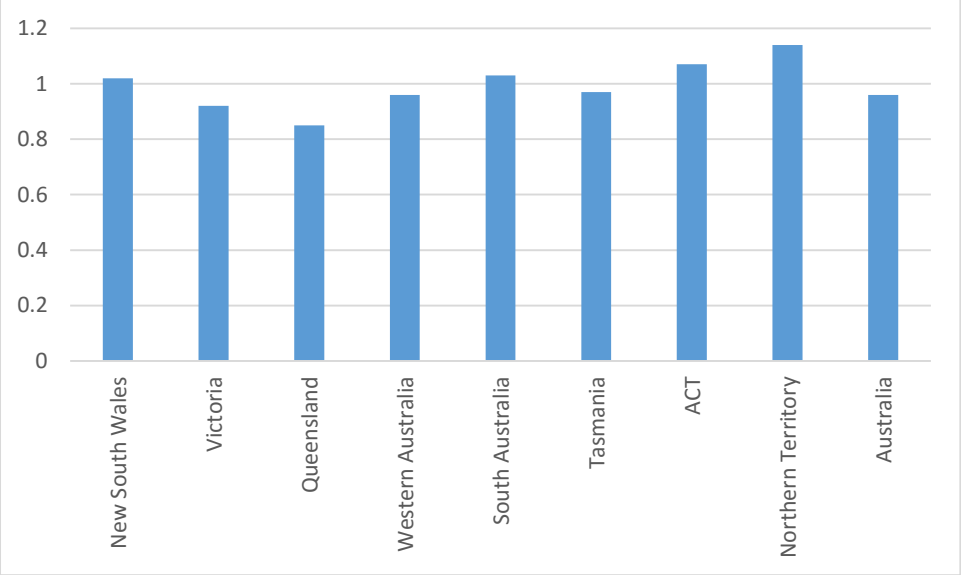
Figure 11: Recurrent cost per case-mixed adjusted separation for public hospitals 2012-13 to 2013-14 (excluding depreciation)



Source: Productivity Commission (2016)

'Relative stay index' is defined as the actual number of acute care patient days divided by the expected number of acute care patient days, adjusted for casemix (Productivity Commission, 2016, p. 11.40). Casemix adjustment allows comparisons to take account of variation in types of service provided but not other influences on length of stay. The relative stay index for Australia for all hospitals (public and private) is one. A relative stay index greater than one indicates that average length of patient stay is higher than expected given the jurisdiction's casemix distribution. A relative stay index of less than one indicates that the number of bed days used was less than expected.

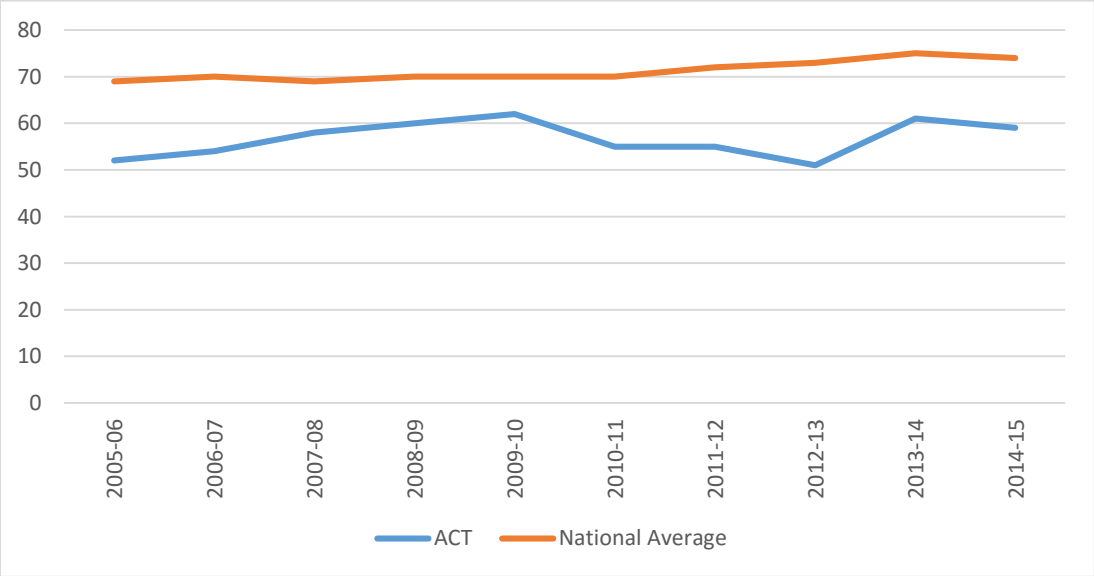
Figure 12: Relative stay index for public patients in public hospitals 2013-14



Source: Productivity Commission (2016)

While previously well documented, out of all the jurisdictions in 2014-15, the ACT recorded the worst performance overall for emergency waiting times against the benchmarks set by the Australasian Triage Scale (Productivity Commission, 2016). In 2014-15 against four out of the five triage category benchmarks, the ACT performance was under the national average, and in three out of the five categories was worst across all jurisdictions.

Figure 13: Percentage of emergency patients seen within triage category timeframes – public hospitals 2005-06 to 2014-15

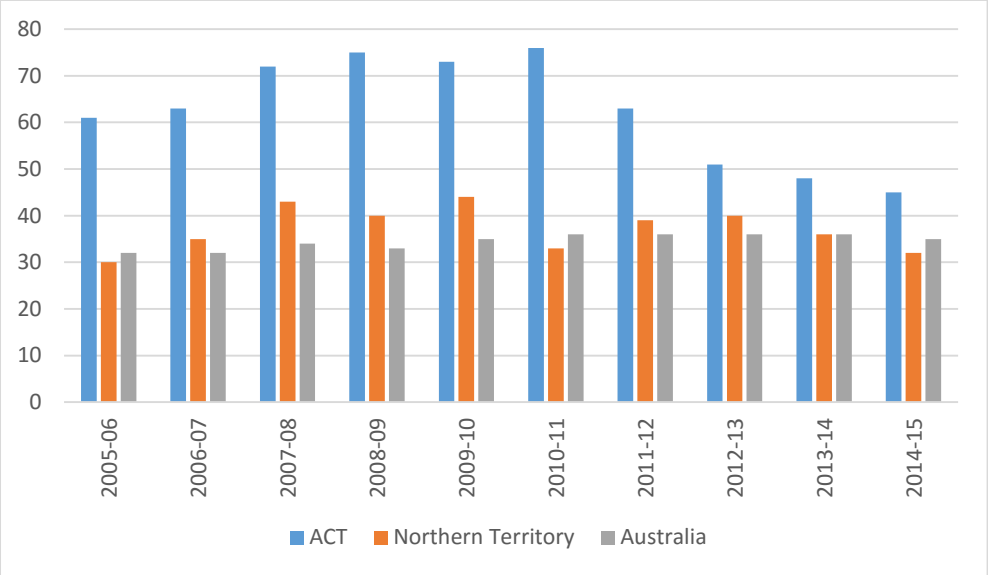


Source: Productivity Commission (2016)

These results provide some justification for the ACT Government's decision to provide additional funding for emergency department services at Canberra and Calvary Hospitals. In 2016-17 the ACT Government is providing $466,000 for an extra emergency department physician at Calvary Hospital, costing $1.9 million over four years, and additional funding for the emergency department at Canberra Hospital of $3.8 million in 2016-17, costing almost $29 million over four years.

In terms of elective surgery waiting times within public hospitals, there has been a dramatic reduction in waiting times since 2011-12. Since 2012-13, the ACT no longer has the worst waiting lists in the country at the 50th percentile (surpassing the performance of New South Wales).[3] However, the performance of the ACT still lags around 29 per cent behind the national average.

Figure 14: Waiting times for elective surgery in days for public hospitals at the 50th percentile



Source: Productivity Commission (2016)

The dramatic improvement in waiting lists since 2011-12 coincided with a significant uplift in recurrent expenditure per person for public hospitals.

While the ACT Government appears to making a virtue out of the amount of spending it provides for the provision of health services or the level of inputs, the available evidence suggests the health system is not terribly efficient when compared to other jurisdictions. Arguably the ACT Government should put greater focus on the level of its health outputs. In turn, claims of efficient service delivery should be treated with caution.

6.4 Light Rail project

The Light Rail project will not have significant impacts on the Budget from 2018-19.

The Government expects to make a $375 million lump sum payment to the consortium at the end of construction, and then monthly service and lease payments for a period of 20 years.

Impacts payments on the headline operating balance will consist of a financing component, maintenance and operation costs, and a provision for reductions in the lease liability over time.

Table 7 below summarises the impact of the Light Rail project on the main Budget aggregates.

[3] The 50th percentile represents the time it takes for 50 per cent of patients on elective surgery waiting lists to be admitted.

Table 7: Light Rail impact on headline operating balance

	2016-17 Budget $'000	2017-18 Budget $'000	2018-19 Budget $'000	2019-20 Budget $'000
Headline Net Operating Balance (HNOB) Impact				
Maintenance/Operation Costs	-	-	22,189	25,376
Interest	-	-	17,915	21,252
Depreciation	-	-	10,511	14,015
Total HNOB Impact	**0**	**0**	**50,615**	**60,643**
Assets and Liabilities				
Lease Asset[2]	-	-	690,220	676,205
Lease Liability	-	-	325,460	316,707
Total Impact on Net Assets	**0**	**0**	**364,760**	**359,498**
Payments to Canberra Metro				
Service Payments	-	-	40,375	55,381
Capital Contribution	-	-	375,000	-
Total Payments	**0**	**0**	**415,375**	**55,381**

Source: ACT Government (2016, p. 352)

Under the terms of the lease arrangement, initial payments are expected to total around $40.4 million in 2018-19 and $55.4 million in 2019-20.

6.5 Asbestos Eradication

Revised estimates have been provided for the Asbestos Eradication Scheme.

The impact on the operating balance is forecast to fall from -$75.3 million in 2015-16 to -$18.0 million in 2016-17, declining over the forward estimates period to -$4.8 million in 2019-20.

Total cash payments estimated over the life of the Asbestos Eradication Scheme (excluding contingency) are $929 million. This is $39 million lower than the 2015-16 Budget estimate of $968 million. This is mainly due to a reduction of $40.5 million in expected house and land purchase costs, and $3.6 million in demolition and remediation costs, partially offset by Asbestos Taskforce costs of $5 million (ACT Government 2016, p. 344).

The following table provides a summary of the impacts of the Asbestos Eradication Scheme on the headline operating balance.

Table 8: Asbestos Eradication Scheme impact on headline operating balance

	2015-16 $'000	2016-17 $'000	2017-18 $'000	2018-19 $'000	2019-20 $'000
2015-16 Budget					
Financial Assistance Package	**-39**	**0**	**0**	**0**	**0**
Other Costs	**-11,416**	**-6,312**	**-5,769**	**-5,864**	**-4,432**
Purchase Costs	**-37,990**	**-3,504**	**-2,230**	**-956**	**0**
Assisted Private Demolition	**0**	**0**	**0**	**0**	**0**
Contingency	**-9,077**	**-1,521**	**-1,521**	**-1,521**	**-1,571**
Total HNOB Impact (including contingency)	-58,522	-11,338	-9,520	-8,341	-6,003
2016-17 Budget					
Financial Assistance Package	**-3,920**	**-2,000**	**0**	**0**	**0**
Other Costs	**-10,148**	**-9,912**	**-6,028**	**-5,936**	**-4,557**
Purchase Costs	**-56,126**	**-2,561**	**-2,008**	**-1,006**	**-221**
Assisted Private Demolition	**-5,095**	**0**	**0**	**0**	**0**
Contingency	**0**	**-3,509**	**0**	**0**	**0**
Total HNOB Impact (including contingency)	-75,289	-17,981	-8,036	-6,942	-4,778

Source: ACT Government (2016, p. 346)

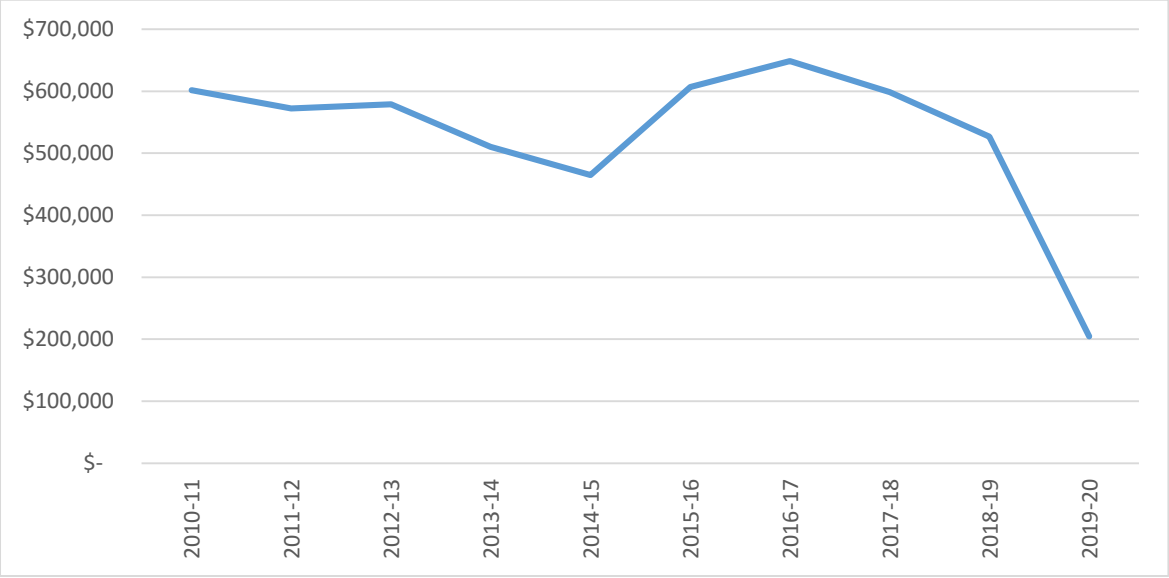
The table shows a deterioration in the impact on the operating balance compared with the estimates provided in the 2015-16 Budget, reflecting higher purchase and other costs.

A discussion of risks attached to these estimates is provided at section 9 of this report.

6.6 Capital Works Program

The Budget forecasts that capital works expenditure in 2016-17 will increase to a record $648.5 million, up from an expected outcome of $606.3 million in 2015-16 (ACT Government, 2016, p. 210). The actual and estimated level of capital works expenditure is provided in Figure 15 below.

Figure 15: Actual and Estimated Capital Works Expenditure Summary – 2010-11 to 2019-12 $'000



Sources: ACT Government (2015, p. 183) & (2016, p. 210)

One noticeable aspect of the forwards estimates for capital works expenditure is the levelling off of spending from 2017-18 onwards with a dramatic decline in 2019-20. This is outlined further in Table 9 below.

Table 9: Estimated Capital Works Expenditure 2015-16 to 2019-20

2015-16 Estimated $'000	2016-17 Estimated $'000	2017-18 Estimated $'000	2018-19 Estimated $'000	2019-20 Estimated $'000
$606,631	$648,506	$598,511	$526,892	$204,741

Source: ACT Government (2016, p. 210)

The projected budget surpluses in the out years are predicated on capital works expenditure being some $121.6 million less in 2018-19 than the 2016-17 estimate and some $443.7 million less in 2019-20 than the 2016-17 estimate. While some curtailment in the level of capital works expenditure is not without precedent, the steep decline in estimated capital works expenditure in 2019-20 in excess of $400 million from current levels (in both 2015-16 and 2016-17) is inconsistent based on recent history. Expense items associated with a ratcheting up of capital works expenditure in 2019-20 would have implications for the projected budget surplus of some $66 million in 2019-20.

6.7 Savings and offsets

The fiscal strategy outlined in the Budget Papers relies on the achievement of a number of savings and offsets.

The Safer Families package of initiatives will be partially funded through a new Safer Families Levy of $19.1 million.

The expansion of health services is expected to be offset from savings of $129.8 million within the health funding envelope (ACT Government, p.71).

Chapter 3 of Budget Paper 3 sets out a number of other claimed expense and capital offsets totalling $103.8 million over the Budget and forward years.

However, the claimed offsets vary in the level of detail and justification provided. In some cases, the claimed offsets are adequately explained; where, for example, the offset represents an alternative use of unspent funds. In other cases, the offsets appear to rely on efficiencies still to be identified across a range of as yet unidentified Directorates and activities. In several cases, no explanation is provided for the claimed offset. Offsets of $0.9 million are identified in relation to the Asset Repair and Maintenance Scheme and an offset of $7.5 million related to workers' compensation is identified (ACT Government 2016, pp.85, 88). However, no detail is provided in Chapter 3 on how either of these savings are to be achieved.

The total value of the claimed offsets is significant in terms of the overall budget aggregates and often represents a large proportion of the value of the expense initiative.

The following Table 10 provides a summary of the offsets claimed against a range of expense and capital initiatives sourced from the description of initiatives in chapter 3 of Budget Paper 3.

Table 10: Expense and capital offsets

Initiative title	**2016-17 Budget $'000**	**2017-18 Estimate $'000**	**2018-19 Estimate $'000**	**2019-20 Estimate $'000**	**Total $'000**
Digital Canberra – Support for the Chief Digital Officer to improve government services	500	0	0	0	500

Healthy Weight Initiative – Healthy Canberra	200	0	0	0	200
Sport and Recreation – Asset Repair and Maintenance Scheme – Year four	904	0	0	0	904
Supporting Aboriginal and Torres Strait Islander Peoples – Indigenous Enterprise Development	100	100	0	0	200
Workers' Compensation – Supplementing agency costs	7847	0	0	0	7847
Better Schools – Enhancing quality assurance of schools	300	300	300	300	1200
Better Schools – Improving teacher quality – Scholarships for teachers	100	100	100	0	300
Better Schools – Schools for All	4350	2443	1738	754	9285
Better Schools – Strengthening and promoting Ngunnawal culture and history	150	150	0	0	300
Safer Families – Trauma Understanding and Sensitive Teaching (TRUST) Project	60	60	0	0	120
Leading Australia in responding to climate change – Reducing energy use in ACT Government buildings	350	350	350	350	1400
Reforming Emergency Services – Aero-medical services and hangar upgrade	25	103	105	108	341
Reforming Emergency Services – Improving emergency responses – Website and emergency warning system upgrades	79	81	83	85	328
Improving Our City – Gateway to Canberra – Landscaping of Pialligo Avenue	310	0	0	0	310
Better Services – Extension to Woden Cemetery – Stage 1 (Associated Expenses)	0	31	46	49	126
Better Public Transport – Trial of electric buses	300	0	0	0	300
Expenses Subtotal	**14875**	**3718**	**2722**	**1646**	**22961**
Better Services – Extension to Woden Cemetery – Stage 1 (Capital)	392	166	0	0	558
Caring for our Environment – Water Quality Improvement – Contributions to the Basin Priority Project	27000	30000	17671	0	74671

ACT Corrective Services – Information management	1055	479	23	23	1580
Better Public Transport for Woden and Weston Creek – New Woden bus depot	0	0	0	2700	2700
Better Services – Improved asset management	0	0	300	550	850
Better Services – Improving libraries – Self-service check out and improved access	0	0	143	318	461
Capital Subtotal	**28447**	**30645**	**18137**	**3591**	**80820**
Total	**43322**	**34363**	**20859**	**5237**	**103781**

In the absence of further information on the nature and likely impacts of these offsets, and how they have been costed, it is difficult to assess how achievable and sustainable some of them may prove to be.

Further discussion of this issue is provided in the risks section of this report.

7 Assets and Liabilities

The Territory's balance sheet is healthy, with a positive net worth rising from $17.1 billion to $17.7 billion over the Budget and forward estimates. However, net debt and net financial liabilities are also forecast to rise over the same period. At the same time, the Territory's defined benefit superannuation liability is estimated to continue to grow to approximately $7.0 billion by 30 June 2020. The funded portion of the defined benefit superannuation liability is projected to increase over the Budget and forward years. Calculations of super liabilities however depend significantly on the rate used to measure the present value of superannuation payments in future years.

7.1 Overview

The Budget Papers include information on management of the Territory's assets and liabilities.

The following Table 11 presents the key balance sheet measures for the General Government Sector (GGS).

Table 11: General Government Sector Key Balance Sheet Measures

	2015-16 Est. Outcome $m	2016-17 Budget $m	2017-18 Estimate $m	2018-19 Estimate $m	2019-20 Estimate $m
Net Debt (excluding super)	**1,832.5**	**2,080.2**	**2,103.8**	**2,902.7**	**2,581.3**
Net Financial Liabilities	**8,871.1**	**5,496.5**	**5,659.6**	**6,411.5**	**6,226.7**
Net Worth	**13,220.6**	**17,100.2**	**17,316.4**	**17,515.6**	**17,735.9**

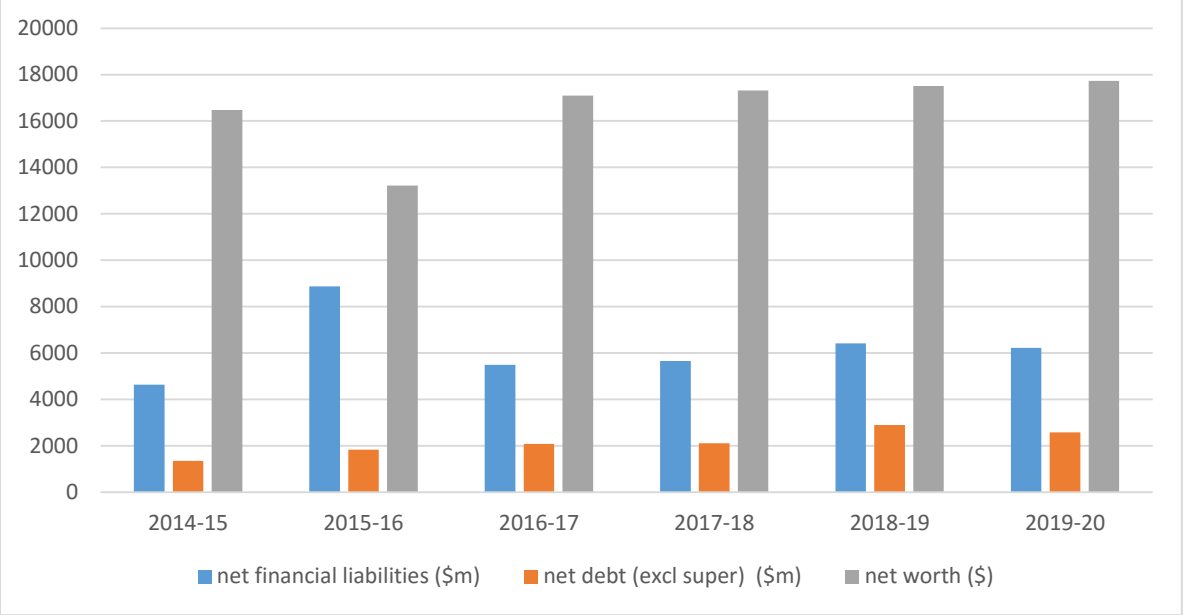
Source: ACT Government (2016, p. 289)

Net worth is positive and is forecast to increase from $17.1 billion to $17.7 billion across the budget and forward estimates.

It should be noted however that net debt (excluding super) and net financial liabilities are also forecast to continue to grow over the same period.

The following Figure 16 illustrates the scale of these measures relative to net worth.

Figure 16: Assets and liabilities



7.2 Net Debt

Net debt is a key balance sheet measure in the Government Finance Statistics framework. It represents the sum of deposits held, advances received and borrowings less the sum of cash and deposits, advances paid, investments, loans and placements.

Net debt takes account of gross debt liabilities, which include market and Commonwealth borrowings, and liabilities such as those associated with the impact of public private partnerships such as the Light Rail project. It should be noted however that the ACT Budget measure of new debt excludes super liabilities.

The projections of net debt have changed considerably since the 2015-16 Budget.

The apparent reduction in net debt over the Budget and forward years relative to forecasts in the 2015-16 Budget reflects the removal of provisions in those years for the Light Rail, which was included as a debt-funded capital project in the 2015-16 Budget, as well as higher capital distributions in relation to forecast sales under the land rent scheme.

Despite these adjustments, net debt continues to increase across the Budget and forward years, reflecting an increase in the gap between the Territory's financial assets and gross financial liabilities. Over a longer time-period, net debt has increased from a negative position of -$735.9 million in 2010-11 (in which General Government sector cash reserves and investments were higher than the Territory's gross debt liabilities) to a forecast of $2,581.3 million in 2019-20 (ACT Government, 2016, p. 420).

The large increase in net debt from 2018-19 is largely due to the inclusion of lease liabilities associated with the Light Rail project (ACT Government, 2016, p. 289).

However, limited information is provided to explain the components of growth in net debt between 2015-16 and 2017-18.

7.2 Net financial liabilities

Net financial liabilities is a broad measure of GGS liabilities that includes net debt and superannuation liabilities. Net financial liabilities are calculated as total liabilities less financial assets

(such as cash reserves and investments). It takes into account all non-equity financial assets but excludes the value of equity held by the General Government sector in public corporations.

Net financial liabilities are forecast to increase in 2015-16 compared to the original budget by $3,207 million. This increase is mainly due to a higher than forecast superannuation liability arising from a change in the discount assumption used to value the liability. The discount rate assumption used in the estimated outcome is 3.2 per cent, compared to a long-term discount rate assumption of 6 per cent. This rate has been used to better reflect the expected value of the superannuation liability at 30 June 2016.

The increase in net financial liabilities in comparison with the 2015-16 Budget also reflects provisions resulting from a revision to the estimated timing of settlements for the Asbestos Eradication Scheme (ACT Government, 2016, p. 290).

In 2016-17, net financial liabilities are forecast to decrease by $3,375 million compared to the 2015-16 estimated outcome. This decrease is largely due to a return to the long-term discount rate assumption of 6 per cent to value the superannuation liability.

Across the forward estimates, net financial liabilities are forecast to increase until they peak in 2018-19, then declining in 2019-20.

We note that if the current low interest rate environment and current accounting policies are maintained, the forward year estimates may be subject to similar adjustments in the future to revalue the superannuation liability.

7.3 Net worth

Net worth reflects the value of all financial and non-financial assets (such as land, plant and equipment) less liabilities, including superannuation liabilities. It is an economic measure of wealth that reflects the contribution of the Territory government's overall net asset position to national wealth.

As with the projections for net debt, net worth is expected to decrease in 2015-16 compared to the original Budget estimates. This reflects the increase in revaluation of superannuation liabilities, changes in the estimated timing of settlements for the Asbestos Eradication Scheme and revised funding arrangements for the Light Rail project described in previous sections of this report.

Net worth is forecast to increase from $17.1 billion to $17.7 billion across the budget and forward estimates.

7.4 Superannuation

Around one third of current full time employees are members of Commonwealth defined benefit superannuation schemes that are closed to new ACT employee members.

Table 12 sets out the most recent estimation of the Territory's super liability.

Table 12: Defined Benefit Superannuation Liability

	2015-16 Est. Outcome $'000	2016-17 Budget $'000	2017-18 Estimate $'000	2018-19 Estimate $'000	2019-20 Estimate $'000
Opening Liability	**8,485,855**	**9,704,977**	**6,242,964**	**6,501,030**	**6,750,522**
Service Cost	**233,494**	**268,926**	**131,841**	**127,415**	**122,785**
Interest Cost	**315,401**	**315,534**	**375,236**	**389,906**	**404,003**
Benefit Payments	**-196,914**	**-230,525**	**-249,013**	**-267,830**	**-288,251**
Actuarial (Gain)/Loss	**867,139**	**-3,815,946**	**0**	**0**	**0**
Closing Liability	9,704,977	6,242,964	6,501,030	6,750,522	6,989,060

Source: ACT Government (2016, p. 296)

The table shows that the Territory's defined benefit superannuation liability is estimated to grow to approximately $7.0 billion by 30 June 2020. The service cost associated with the accrual of employee superannuation benefits is forecast to decrease over time as ACT employee members leave the schemes through resignation or retirement. The interest cost is forecast to increase due to the unwinding of the discount rate as past benefits accrued by ACT employee members come closer to payment.

These calculations however depend critically on the rate used to measure the present value of superannuation payments in future years.

The apparent reduction between 2015-16 and 2016-17 in the closing liability is primarily a function of the reversion to the long term discount rate in the calculation of the super liability. The 2016-17 Budget estimates for the liability and emerging cost payments have also been reduced to reflect a number of other factors related to salary, pension indexation, crediting rates and exit rates (ACT Government, 2016, p. 396).

The funded portion of the defined benefit superannuation liability over the Budget and forward years is projected to increase as illustrated in Table 13 below.

Table 13: Superannuation Liability Funding

	2015-16 Est. Outcome $'000	2016-17 Budget $'000	2017-18 Estimate $'000	2018-19 Estimate $'000	2019-20 Estimate $'000
Superannuation Liability	**9,704,977**	**6,242,964**	**6,501,030**	**6,750,522**	**6,989,060**
Investments	**3,448,912**	**3,627,877**	**3,820,304**	**4,027,509**	**4,329,200**
Unfunded Liability	6,256,065	2,615,087	2,680,726	2,723,013	2,659,860
Funding Percentage	36	58	59	60	62

Source: ACT Government (2016, p. 298)

Calculations in this table are also influenced by the super liability adjustment described in previous sections. The large decrease in the unfunded superannuation liability of $3,596.2 million from $6,256.1 million at 30 June 2015 to $2,659.9 million at 30 June 2020 therefore depends significantly on the rate used to measure the present value of superannuation payments in these future years.

8. Fiscal sustainability

Net debt and net financial liabilities impose a relatively small burden on the overall Territory economy. However, net debt is growing steadily through the Budget and forward estimates period and has increased significantly since 2010-11, outstripping growth in net worth over the same period. A comparison of previous budget forecasts shows that governments have consistently deferred the return to surplus while posting increasingly larger operating deficits.

8.1 Overview

The concept of fiscal sustainability refers to the capacity of a government to meet its financial obligations as they arise in the future.

In the short-term fiscal sustainability requires that a government can meet all of its immediate spending programs, income transfer programs, and debt servicing commitments. An indicator of short-term fiscal sustainability is the level of budget deficit, which is the shortfall between government expenditure and revenue. For fiscal policy to be sustainable over the long-term, there is generally a presumption that a government which has debt outstanding must sooner or later be prepared to turn around its budgetary position by running budget surpluses in order to able to pay back its loans.

Over the longer term, fiscal sustainability has been defined as the ability of government to meet all of its financial obligations into the future based on current policy settings without incurring an excessive debt accumulation (Blanchard, Charouaqui, Hagemann, & Sartor, 1990).

Various measures of fiscal sustainability are available.

The Budget Papers present the key balance sheet measures as a percentage of Gross State Product (GSP).

These ratios are set out in Table 14 below.

Table 14: General Government Sector Key Balance Sheet Measures

	2015-16 Est. Outcome	2016-17 Budget	2017-18 Estimate	2018-19 Estimate	2019-20 Estimate
Net Debt to GSP (%)	**5.1**	**5.6**	**5.4**	**7.1**	**6.0**
Net Financial Liabilities to GSP (%)	**24.8**	**14.9**	**14.6**	**15.8**	**14.6**
Net Worth to GSP (%)	**37.0**	**46.4**	**44.7**	**43.1**	**41.5**

Source: ACT Government (2016, pp. 289,290,291)

These ratios show that net debt and net financial liabilities impose a relatively small burden on the overall Territory economy.

8.2 Indicators of sustainability

Ratios of net worth and net financial liabilities provide useful indicators of the financial position at a point in time. However, these ratios in themselves only provide limited information on the

sustainability of a jurisdiction's ability to maintain its budget position or to absorb unexpected shocks.

It is important for example to assess these indicators in terms of the government's ability to service its debts, either from external revenue or from earnings on its investments.

Movements in the ratios over time may give a better guide to the sustainability of a jurisdiction's fiscal position. While these ratios are subject to volatility (valuations of assets and liabilities can fluctuate, for example, depending on financial markets and other factors), one measure of sustainability might be that the ratios were relatively stable or declining over time, or that they were growing more slowly than the growth in investments and income earning assets.

Figure 17 provides an illustration in the movement of these ratios over time.

Figure 17: Movements in key balance sheet indicators

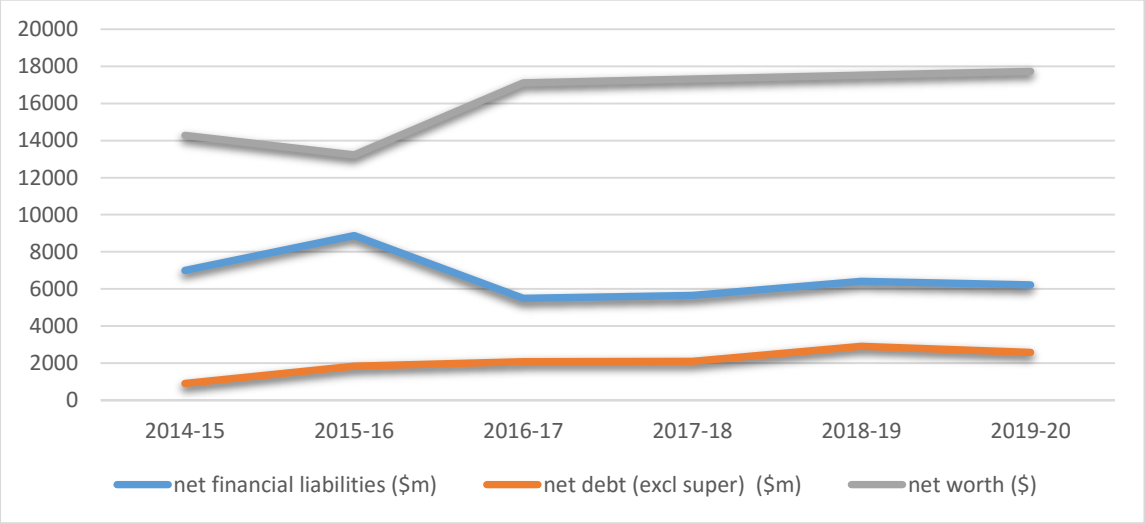


Figure 17 shows steady growth in net debt since 2014-15. Over a longer period, net debt has increased from a surplus position of -$735.9 million in 2010-11 to a forecast of $2,581.3 million in 2019-20 (2016, p.420), a $3,317.2 million turnaround, and almost double the growth in net worth over the same period.

Figure 17 also and illustrates the extent to which the Budget Paper measures based on net worth and net financial liabilities have been influenced by the revaluation of super liabilities between 2015-16 and 2016-17.

8.3 Other indicators

Other ratios might provide better indicators of the capacity of the Territory government to service its liabilities. ACT Budget Papers up to 2013-14 provided ratios expressed as a proportion of government revenue. The ACT Auditor-General has also used a broader range of measures in recent reports on its financial audits including:

- Assets to liabilities coverage;
- Short term assets to short term liabilities coverage; and
- Financial assets to liabilities coverage (ACT Auditor-General, 2015, pp. 12-13).

In measuring the capacity of the government to service its debts, it would also be relevant to consider the relationship between anticipated interest expenses on borrowings and revenue and between interest expenses and financial assets.

Table 15 sets out the relationship between the cost of borrowings and revenue and total financial assets.

Table 15: Additional sustainability indicators

	2015-16 Est. Outcome	2016-17 Budget	2017-18 Estimate	2018-19 Estimate	2019-20 Estimate
Interest on borrowings ($m)	177.4	187.5	201.0	212.1	226.2
Total revenue ($m)	4,732.4	5,058.2	5,103.8	5,379.3	5,581.8
Total financial jnvestments ($m)	4,591.4	4,523.7	4,744.2	4,977.1	5,334.7
Interest to revenue (%)	3.6	3.7	3.9	3.9	4.1
Interest to financial investments (%)	3.9	4.1	4.2	4.3	4.2

Source: ACT Government (2016)

The Territory's interest expenses on borrowings are in fact relatively low compared to overall revenue (3.7 per cent), but have grown by 6 per cent in 2016-17 over 2015-16 and will grow by 27.5 per cent between 2015-16 and 2019-20 (ACT Government, 2016, p. 176).

The ratio of interest on borrowings to financial investments is also low, and relatively stable over the Budget and forward years.

These ratios are indicative but are not definitive, and judgements also need to be made about the amount of risk that a community wishes to accept in the fiscal outlook. These ratios do not suggest that the ACT has an immediate sustainability issue, though the recurrence of large deficits and delays in the return to surplus does point to a deteriorating sustainability position over time and increased vulnerability to unanticipated events and external shocks.

9 Risks

There are a number of risks and uncertainties attached to the Budget estimates. These include economic and fiscal risks. The Budget makes assumptions about the future level of Commonwealth spending in the ACT and about the level of Commonwealth grants to the ACT. Previous sections have also pointed to the sensitivity of the Budget aggregates to technical assumptions including those related to the rate used to measure the present value of superannuation payments in future years.

9.1 Overview

The planned deficits in the net operating balance and small operating results over the forward years from 2018-19 to 2019-20 mean that, if unexpected adverse events occur, the Territory is exposed to a risk of incurring continuing large deficits.

The Budget Papers provide a statement of the risks attached to the outlook over the Budget and forward years.

However, the Budget Papers do not quantify the sensitivity of the Budget aggregates on a number of important risk factors, and a number of the additional risks and pressures can be identified.

9.2 Risks to the outlook and revenue

A tighter Commonwealth budgetary position poses medium term risks to the ACT government's own source taxation arising from reduced population growth flowing through into lower collections from general rates as well as from the sale of ACT Government goods and services.

To the extent that fiscal consolidation at the Commonwealth level impacts on ACT land values, a reduction in Commonwealth spending in the ACT presents a threat to revenue in the short to medium term from the Land Release Program that in turn could reduce the flow of dividends from the Land Development Agency.

The Budget Papers acknowledge these risks:

> Over the medium term, a prominent risk is the effect of the Australian Public Service efficiency dividend increases from 2017-18. The impact of this policy decision on employment and the wider economy in the Territory is potentially significant, with around one third of the Australian Public Service employed in the ACT. (ACT Government, 2016, p. 423)

An alternative to identifying these risks in the risk statement would have been to make allowance that the Commonwealth budgetary position has changed and that economic growth in the ACT will probably not return to a trend associated with a more buoyant Commonwealth budgetary position in the Budget forecasts.

On the other hand, through its pursuit of tax reform and its reducing reliance on conveyance duties and increasing reliance on general rates, the ACT's own source taxation is probably now much less dependent on prevailing economic conditions within the Territory to maintain collections in the short term.

While the Budget Papers provide a useful Appendix setting out the sensitivity of the Budget aggregates to a range of economic parameters, they do not include measures of the sensitivity to critical variables such as population growth, Commonwealth employment, economic activity or land values.

9.3 Fiscal risks

Overview

A number of risks attached to the fiscal position are outlined in the statement.

The major risks and uncertainties include:

- the level of future Commonwealth funding for the National Disability Compensation Scheme;
- uncertainties around the expiry of existing National Partnership Payments in relation to early childhood education, homelessness and skills reform and the funding implications of new arrangements in relation to Adult Public Dental Services and Pay Equity for the Social and Community Services Sector; and
- the impact of long-term financial and demographic assumptions on the Territory's accrued liability for defined benefit superannuation schemes. The valuation of the liability is most sensitive to the discount rate, inflation, wages growth, rates of retirement and resignation, investment returns, benefit stream election, and mortality rates.

9.4 Program and other risks

The Budget includes a number of other program related risks and pressures.

Light Rail

Potential risks to the ACT's fiscal position arising from public private partnerships are identified in the statement, but risks attached to the Light Rail project are mostly outside the Budget and forward estimates period.

Asbestos Eradication

There are some risks attached to the achievement of Budget estimates for the Asbestos Eradication Scheme.

Costs associated with the financial assistance and purchase phases of the Scheme are largely known. We understand that purchase prices and demolition costs have been greater than originally estimated. The Government has indicated however that the costs of the demolition phase to date is manageable within budget (ACT Government, p.343).

However, the sales phase of the Scheme has only recently commenced and the market response to the cleared blocks of land remains uncertain.

As 20 May 2016, only two auctions had been held; nine blocks were sold during or just after these auctions. A further two auctions were held on 26 and 31 May 2016; however, the outcomes of

these auctions have not been included in the Budget. Five former owners who held first refusal rights have accepted the purchase price to buy back their remediated blocks.

The overall impact of this program now depends primarily on achieving budgeted gains on the sale of remediated land that the Territory acquired as part of the scheme. This will depend on a range of factors including land prices, the number owners who decide to buy their land back, market responses to these unusual land offerings and the timing of sales.

Workers Compensation Scheme

The Budget Papers identify additional expenses of $15.2 million required to supplement agency costs to cover increases in the workers' compensation Comcare insurance premium for a number of agencies across government (ACT Government 2016, p.88). An offset of $7.5 million is identified in association with this measure.

Little additional information is provided on the reasons for this increase, the nature of the offset or any likely impacts on the forward years.

The Budget Papers indicate that Government is considering new workers' compensation scheme arrangements from 2017-18. Depending on the nature of this scheme, and its success in limiting future insurance premium increases, there are potential risks of additional adverse impacts on expenses.

Savings offsets

The Budget Papers identify a large number of offsets to individual initiatives.

The identified offsets total over $200 million. However, these offsets are often unspecific and general in nature, and in some cases are not fully explained.

We note that while previous year Budgets have also incorporated claimed offsets, the ACT Budget documentation does not provide a reconciliation of past savings achieved against claimed offsets. While some information is provided on efficiencies achieved in administrative functions, these savings are not generally quantified or traced to specific savings initiatives or time-periods (ACT Government 2016, p.181). This complicates the task of assessing the Government's track record in delivering on identified offsets.

In the absence of further information on the nature and likely impacts of the offsets incorporated in the Budget and forward estimates, and how they have been costed, it is difficult to assess how achievable and sustainable they may prove to be.

Bibliography

ACT Auditor-General. (2015). *ACT Auditor-General's Report: 2014-15 Financial Statements - Report 10/2015.* Canberra.

ACT Government. (2012). *Government Response to the ACT Taxation Review.* Canberra.

ACT Government. (2015). *Australian Capital Territory Budget 2015-16 - Budget Paper No. 3 Budget Outlook.* Canberra.

ACT Government. (2016). *Australian Capital Territory Budget 2016-17 for Canberra - Budget Paper 3: Budget Outlook.* Canberra.

Australian Bureau of Statistics. (2016). *Australian Demographic Statistics, Sep 2015 - ABS Cat no. 3101.0.* Canberra.

Australian Bureau of Statistics. (2016a). *Australian National Accounts: National Income, Expenditure and Product, Mar 2016 - ABS Cat no. 5206.0.* Canberra.

Australian Bureau of Statistics. (2016b). *Consumer Price Index, Australia, Mar 2016 - ABS Cat no. 6401.0.* Canberra.

Australian Bureau of Statistics. (2016c). *Labour Force, Australia, Detailed - Electronic Delivery, Apr 2016 - ABS Cat no. 6291.0.55.001.* Canberra.

Australian Bureau of Statistics. (2016d). *Wage Price Index, Australia, Mar 2016 - ABS Cat no. 6345.0.* Canberra.

Australian Institute of Health and Welfare. (2015). *Hospital resources 2013-14 - Australian hospital statistics.* Canberra.

Australian Labor Party. (2016). *10 Year Plan for Australia's Economy.* Canberra.

Bahl, R., & Bird, R. (2008). Subnational Taxes in Developing Countries: The Way Forward. *Public Budgeting & Finance, 28*(4), 1-25.

Bird, R., & Smart, M. (2010). Assigning State Taxes in a Federal Country. In M. Institute, *Australia's Future Tax and Transfer Policy Conference : proceedings of a conference* (pp. 72-94). Canberra: Commonwealth of Australia.

Blanchard, O., Charouaqui, J., Hagemann, R. P., & Sartor, N. (1990). The Sustainability of Fiscal Policy: New Answers to an Old Question. *OECD Economic Studies*(15 Autumn).

Commonwealth of Australia. (2016). *Budget 2016-17: Budget Strategy and Outlook Budget Paper No. 1 2016-17.* Canberra.

Commonwealth of Australia. (2016a). *Budget 2016-17 - Budget Measures Budget Paper No. 2 2016-17.* Canberra.

Commonwealth of Australia. (2016b). *Budget 2016-17 - Agency Resourcing Budget Paper No. 4 2016-17.* Canberra.

Doetinchem, O. (2010). *Hypothecation of tax revenue for health.* Geneva: World Health Organisation.

Freebairn, R. (2002). Opportunities to Reform State Taxes. *Australian Economic Review, 35*, 405-422.

Henry, K., Harmer, J., Piggott, J., Ridout, H., & Smith, G. (2010). *Australia's Future Tax System: Report to the Treasurer, Detailed Analysis Volume 1.* Canberra: Commonwealth of Australia.

Henry, K., Harmer, J., Piggott, J., Ridout, H., & Smith, G. (2010a). *Australia's Future Tax System: Report to the Treasurer, Detailed Analysis Volume 2.* Canberra: Commonwealth of Australia.

Industry Commission. (1997). *The Automotive Industry: Volume 1 - The Report.* Report No. 58, Melbourne.

Keable-Elliott, I. (2014). *Hypothecated taxation and the NHS.* London: CentreForum.

KPMG Econtech. (2010). *CGE Analysis of the Current Australian Tax System.* Canberra.

Oates, W. E. (2008). On The Evolution of Fiscal Federalism: Theory and Institutions. *National Tax Journal, LXI*, 313-334.

Productivity Commission. (2016). *Report on Government Services 2016: Volume E.* Canberra.

Quinlan, T., Smithies, M., & Harding, A. (2012). *ACT Taxation Review.* Canberra: ACT Government.

Seely, A. (2011). *Hypothecated taxation.* London: House of Commons Library.