B. FISCAL RISKS AND BUDGET SENSITIVITIES

The 2017-18 Budget is prepared, in part, on forecasts and assumptions that are subject to variation. This appendix identifies the risks inherent in the budget and presents the budget result impact of various sensitivities as a result of changes in select variables. Each sensitivity estimate adopts the same forecasts and assumptions used in preparing this Budget, for all variables other than that being tested.

The summary of key sensitivities should be used as a 'rule of thumb' estimated impact from a change in the variable presented. Unless otherwise specified, the sensitivities assume a 1 per cent change to the relevant factor each year.

Throughout this appendix, a positive value improves the budget result, whereas a negative value weakens the budget result.

Revenue risks and sensitivities

State taxation revenue

The Government collects taxation revenue from a range of sources, including land tax, payroll tax and transfer duties on property sales. The amount of revenue generated from these taxes is dependent on a number of economic variables such as wage inflation, employment growth rates, and growth in property sales – any change in these variables may result in changes to the actual taxation revenue collected.

Table B.1: Revenue sensitivities – state taxation revenues

Revenue source and assumptions	2017-18 Budget	2018-19 Fo	2019-20 orward estim	2020-21 ates	2017-18 Sensitivities
	\$m	\$m	\$m	\$m	Constitutios
State tax revenues					
Factors affecting state tax revenues					+ 1% movement
Dwelling sales	72	76	81	84	in factor
Employment	96	101	106	111	
Compensation of employees	96	101	106	111	

The Government's collection of transfer duty from the sale of property is sensitive to changes in the price or volume of property transfers. Higher property prices or increased property transfer volumes will increase transfer duty revenue.

Another source of taxation revenue is receipts from payroll tax. This is sensitive to variations in the level of employment and the level of wages in the economy. If employment increases or the level of wages across New South Wales rise more than expected, excluding the public sector, this could result in increased payroll tax revenue each year.

Commonwealth grants and GST revenue

The Commonwealth Government provides grants to New South Wales in the form of GST revenue, National Agreement and National Partnership payments.

GST revenue received by New South Wales is dependent on the amount of GST revenue collected nationally (the pool size), the State's share of this revenue (its relativity) and its population size. Changes to the GST pool or the relativities are a risk to State revenue. Strong revenue performance in New South Wales coupled with weaker performance in other states could put further downward pressure on the NSW relativity and GST distribution.

Table B.2: Revenue sensitivities – GST

Revenue source and assumptions	2017-18 Budget	2018-19 Fo	2019-20 rward estima	2020-21 ates	2017-18 Sensitivities
	\$m	\$m	\$m	\$m	Constitutios
Good and Services Tax Revenue (a)					
Factors affecting NSW GST revenue					
NSW population	119	119	119	123	+ 1% movement in factor
GST pool size	176	176	176	182	
NSW relativity		176	176	182	

⁽a) The GST pool is currently estimated at \$62.3 billion in 2017-18. The NSW adjusted population share (population multiplied by relativity) is estimated to be 28.2 per cent in 2017-18. State GST relativities for 2017-18 have already been determined by the Commonwealth Treasurer and will not change, so no sensitivity is calculated.

If the population increases, GST receipts will increase whilst the cost of services also increases as more people place a greater demand on government services. An increase in the total GST pool will increase the GST receipts New South Wales receives. An increase in the NSW relativity factor will increase the share of GST revenue that New South Wales receives relative to other States.

Changes to National Agreement and National Partnership payments can impact revenue, expenses and the budget result, however, as this funding can be volatile it is difficult to forecast budget sensitivity. Volatility can arise from new programs and projected infrastructure projects, the termination of existing agreements, and re-profiling in the timing of payments to the State.

Royalties

A royalty is the amount charged by the State for the transfer of the right to extract a mineral resource. The primary source of royalties within New South Wales is from the sale of coal, which is charged as a percentage of the value of production. Mining royalties are affected by three factors:

- coal export volumes an increase in coal export volumes increases the quantity of coal on which royalties are charged and so increases royalty income
- coal export prices an increase in the coal export price increases the value of coal on which royalties are charged and so increases royalty income
- changes in the exchange rate an appreciation of the Australian-US exchange rate reduces the Australian dollar value of coal exports, putting downward pressure on royalties.

Table B.3: Revenue sensitivities - royalties

Revenue source and assumptions	2017-18 Budget	2018-19 Fo	2019-20 orward estim	2020-21 ates	2017-18 Sensitivities
	\$m	\$m	\$m	\$m	Constitution
Royalties ^(a)					
Factors affecting NSW Royalties					
Change in coal export volumes (Mt)	15	14	13	13	+ 1% movement in factor
Change in coal export prices (\$US)	15	14	14	14	III ladioi
Change in Australian-US dollar exchange rate	(15)	(14)	(13)	(14)	

⁽a) Royalty sensitivities do not include changes to non-coal revenue or to the composition rates of coal production.

Expense risks and sensitivities

General risks

Employee-related expenses represent the Government's largest operating expense. This consists of wages, salaries and superannuation expenses. The size of the workforce, new enterprise bargaining agreements and discount rates are important drivers of employee-related expenses. Any changes in these parameters could have a significant impact on the budget result. Since 2011, this risk has been managed through the NSW public sector wages policy.

Furthermore, actual growth in demand for government services may exceed current projections. This presents a further risk to expenses as increased staffing may be required to maintain the quality of the Government's services.

The Government also incurs other operating expenses, which capture the non-labour costs of delivering services to customers in New South Wales. These include repair, maintenance and the depreciation of assets. The cost of maintaining the State's assets would change if there were substantial changes in the size and growth of the State's asset base. Expenses could also be impacted if the assets' useful lives or level of depreciation were to materially change.

Table B.4: Expense sensitivities

Expense source and assumptions	2017-18 Budget	2018-19 Fo	2019-20 rward estima	2020-21 ates	2017-18 Sensitivities
	\$m	\$m	\$m	\$m	Constitutios
Expenses					
Factors affecting expenses					+ 1% movement
Change in public sector wages and salaries	(315)	(337)	(352)	(359)	in factor
Change in prices of goods and services	(196)	(188)	(191)	(191)	
Government services demand growth					2.404
Factors affecting expenses					+ 0.1% movement in factor
Change in health and transport expense funding	(34)	(34)	(36)	(37)	

To facilitate the provision of essential community services, the public sector purchases goods and services. A component of this is public sector wages. Upward pressure on wages such as a legislated increase in wages policy or a policy decision to increase the size of the workforce could worsen the budget result.

An increase in the prices of goods and services, namely inflation, in New South Wales has a two-fold effect on the budget result. Inflation will directly increase the amount of tax and own source revenue collected and hence increase revenues, but will also increase the cost of goods and services expenditure. The aggregate impact is predicted to worsen the budget result.

Health and transport make up a large proportion of public sector expenditure. An increase in demand for these services will worsen the budget result. Likewise a decrease in Commonwealth Government contributions to health and transport services will worsen the budget result, on the basis that the level of service is maintained.

Investment returns and borrowing costs

The budget is susceptible to the performance of global financial markets and changes in interest rates. Investment returns below those estimated will have a negative impact on revenues. Higher interest rates will result in higher borrowing costs for new borrowings while lower interest rates reduce new borrowing costs.

Liability risks and sensitivities

Superannuation liabilities

Liabilities for superannuation and long service leave are forecast based on a wide range of parameters. These include assumptions around salary growth, inflation, investment returns and discount rates. A change in any of these parameters may affect the actual liabilities of superannuation and long service leave. The long service leave liability is also subject to variations in the rate of employee retention.

Table B.5: Superanr.	nuation	liabilities
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Net financial liabilities (NFL) source and assumptions	2017-18 Budget	2018-19 2019-20 2020-21 Forward estimates			2017-18 Sensitivities
	\$m	\$m	\$m	\$m	Constitutios
Superannuation liabilities					
Factors affecting superannuation liabilities					
Change in public sector wages and salaries	(170)	(320)	(440)	(550)	+ 1% movement in factor
Change in Sydney CPI	(650)	(1,350)	(1,950)	(2,750)	
Change in investment return (a)	350	730	1,120	1,550	
Change in discount rate (b)	9,700	•••			
Factors affecting superannuation liabilities					
Change in public sector wages and salaries	160	300	410	510	- 1% movement in factor
Change in Sydney CPI	620	1,300	1,870	2,650	
Change in investment return (a)	(350)	(720)	(1,100)	(1,500)	
Change in discount rate (b)	(11,100)	•••			

⁽a) A positive effect (e.g. improved investment returns) reduces NFL (improves the financial position), while a negative effect (e.g. higher public sector wages) increases NFL (weakens the financial position).

An increase in public sector wages or an increase in CPI, as described in the previous section, will increase superannuation entitlements of those employees on a defined benefits scheme still in the workforce and increase the superannuation liability of the Government. An increase in the investment return will increase the proportion of the defined benefit that is funded and will hence improve the budget result. For an explanation of the unfunded superannuation liability, refer to Chapter 7 of this *Budget Statement*.

⁽b) Effect of a 1 percentage point increase in the indicated factor (discount rate, interest rate or rate of return).

Specific fiscal risks

Federal financial relations and taxation reform

Future reform to the roles and responsibilities for expenditure between the Commonwealth Government and the states, and changes to revenue bases could have significant fiscal implications for New South Wales. The Government will continue to pursue and secure sustainable federal financial arrangements to enable the State to meet its service delivery responsibilities.