F. ECONOMIC SCENARIO ANALYSIS

The 2023-24 Budget relies on forecasts and judgements about the future of the economy, based on information available at the time of preparation. These forecasts are subject to inherent uncertainties, such as changes in behaviours, evolving relationships between variables and unexpected events or shocks.

This Appendix complements the central economic outlook presented in Chapter 2 The Economy by quantifying some of the key risks to the outlook. It explores the impact of variations in key economic parameters on the economic outlook and general government tax revenues.

These scenarios were selected to cover plausible economic events that could affect New South Wales over the forecast horizon. The modelling takes account of linkages between key international, Australian and New South Wales economic aggregates. By using scenario analysis of this kind, we capture interdependencies within our economy that a partial sensitivity analysis would not capture.

The summary of these results should be interpreted with care because economic events tend to be unique in nature. The scenarios presented in this Appendix are unlikely to completely reflect any future shock to the State economy. Any departures from the specified scenario would result in different impacts on the economic and revenue outlook.

F.1 Impact of variations in key forecast assumptions

The economic and revenue impact of the scenarios below was modelled using the Centre of Policy Studies (CoPS) Victoria University Regional Model Tax (VURMTAX)[1] and is presented as deviations from baseline forecasts.

Scenario 1: Faster than expected return of interest rates to the neutral rate

In its August 2023 Statement on Monetary Policy, the Reserve Bank of Australia (RBA) forecast both headline and trimmed mean inflation to be within their 2-3 per cent target band by the end of 2025. This forecast was conditioned on a path for the cash rate that was broadly in line with expectations derived from surveys of professional economists and financial market pricing. This has the cash rate peaking at around 4¼ per cent by the end of 2023, before declining to 3¼ per cent by the end of 2025.

In this scenario, we assess the potential (upside) implications for our forecast should inflation prove to be less persistent than expected. This would allow the RBA to return interest rates to more neutral settings earlier than anticipated, which provides stimulus to economic activity, without worsening the inflation outlook. In this scenario, the fall in inflation momentum is due to a foreign price shock, which may reflect the impact of improving global supply chains on manufacturing input costs or a decline in some key commodity prices (such as oil prices).

[1] VURMTAX is a dynamic computable general equilibrium model of Australia's six states and two territories, with each region modelled as an economy in its own right. See Adams, Philip, Dixon, Janine and Horridge, Mark (2015), 'The Victoria University Regional Model (VURM): Technical Documentation, Version 1.0', CoPS/IMPACT Working Paper Number G-254 for more detail on the model.

This scenario sees the cash rate fall in each quarter from early 2024. Most of the decline in the cash rate relative to the baseline forecast occurs in 2024-25, which is on average around 1 percentage point below baseline for the year. This leads to the cash rate reaching its neutral rate, which NSW Treasury estimates to be around 2¾ per cent, around a year earlier than assumed in our central forecast. This lower interest rate environment is expected to stimulate investment activity, labour demand, and consumption relative to baseline.

Macroeconomic impact on the Budget and over the forward estimates

The positive stimulus from the earlier fall in interest rates boosts state final demand (SFD) relative to the baseline forecast over the forecast horizon. The biggest impact occurs in 2024-25, which corresponds to the largest reduction in the cash rate relative to the central forecast. In 2024-25, SFD is 1.1 per cent above baseline (see Table F.1). This positive effect diminishes over time as the temporary stimulus subsides, and the cash rate moves back into line with its baseline trajectory.

The earlier than expected reduction in interest rates stimulates real dwelling and non-mining business investment. This has flow-on effects to the labour market, as the demand for labour rises initially. There is an immediate fall in the unemployment rate of 0.1 percentage points in the year the RBA commences cutting the cash rate. The unemployment rate falls below baseline by 0.3 percentage points in 2024-25.

The positive uptake in employment generates gains for households, through higher real wages of around 0.3 per cent in 2025-26 and 2026-27. This, along with a reduction in mortgage rates, helps lift disposable income and stimulate consumption. While there is an immediate positive lift in household consumption in the year the RBA reduces interest rates, the largest gains in household consumption occur in 2024-25 and 2025-26. This reflects the lagged impact of lower interest rates.

Domestic activity in aggregate contributes around 1.1 and 0.5 percentage points to the uplift in real gross state product (GSP) in 2024-25 and 2025-26 respectively (see Chart F.1). However, the overall impact on GSP in the scenario is muted somewhat by weaker net exports, which fall every year over the forecast horizon. This is due to a real appreciation of the exchange rate, as global inflation is assumed to soften relative to domestic inflation, boosting imports and dampening exports relative to baseline.

Real GSP is higher relative to the baseline by 0.2 per cent in 2023-24 and 0.5 per cent in 2024-25. This positive initial effect gradually winds back over the forecast horizon as spare capacity in the economy is diminished (the output gap closes).

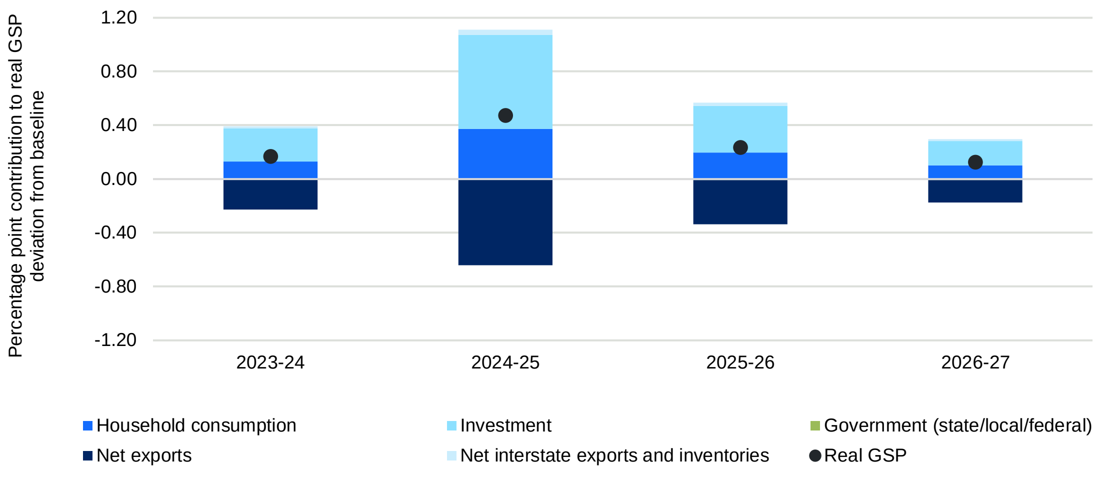
Table F.1: Effect on major economic parameters from a faster than expected return of interest rates to the neutral rate[(a)]

Financial year estimate[(a)]	2023-24	2024-25	2025-26	2026-27
State final demand	0.4	1.1	0.5	0.3
Gross state product	0.2	0.5	0.2	0.1
Employment	0.1	0.3	0.1	0.0
Unemployment rate	(0.1)	(0.3)	(0.1)	0.0
Consumer price index	0.0	0.1	0.0	0.0
Nominal wages	0.1	0.2	0.3	0.3
Terms of trade	0.2	0.6	0.3	0.2

(a) Figures reported are the per cent change in the level of each parameter relative to the baseline. The unemployment rate is in percentage points deviation.

Source: CoPS, Victoria University and NSW Treasury

Chart F.1: Higher household consumption and investment lift domestic activity



Source: CoPS, Victoria University and NSW Treasury

Revenue impact on the Budget and over the forward estimates

Stronger domestic economic activity flows through to higher tax collections across most categories of government revenue, particularly in 2024-25 when the impact of the interest rate decline peaks. Both commercial and residential transfer duty revenues rise significantly, with transfer volumes and housing prices elevated relative to the baseline. The State's GST revenue also increases, bolstered by robust consumer spending and dwelling investment. However, a decrease in royalty revenue, stemming from reduced export volumes and falls in world prices, slightly offsets these tax collection gains.

Table F.2: Effect on major revenue parameters from a faster than expected return of interest rates to the neutral rate[(a)]

Financial year estimate[(a)] ($, million)	2023-24 $m	2024-25 $m	2025-26 $m	2026-27 $m
Payroll tax	25	78	54	40
Transfer duty	391	1106	354	151
Land tax	0	7	28	40
Royalties	(6)	(19)	(9)	(4)
GST revenue	100	292	114	58
Other revenue	12	35	12	(2)
Total revenue	**522**	**1500**	**553**	**284**

(a) Figures reported are the change in the level of each parameter relative to the baseline.

Source: CoPS, Victoria University and NSW Treasury

Scenario 2: Larger than expected impact of interest rates in slowing the economy

Since May 2022, the RBA has increased the cash rate by a cumulative 400 basis points to 4.10 per cent to combat high inflation in Australia.

The impact of higher interest rates is working its way through the economy, with consumer spending growth and inflation both slowing in 2023. The forecast assumes a relatively soft landing for the State economy, with only a gradual increase in unemployment from the December quarter 2023. However, there is still considerable uncertainty on the total impact of the RBA's tight monetary policy stance. This is particularly since a large number of fixed-rate mortgages are still set to roll-over to higher variable mortgage rates over coming months.

In this scenario, we assess the potential (downside) implications for our forecast should the economy slow more than expected, but the RBA remains constrained by high inflation. Despite weaker economic growth, this scenario assumes that inflation remains elevated in the near-term — in line with the baseline forecast — due to either persistence in global commodity prices or domestically generated services inflation. This prevents the RBA from responding to the weaker economic activity initially via faster interest rate reductions.

The NSW economy experiences a recession in 2023-24 under this scenario. This is assumed to be caused by simultaneous increases in risk aversion for both businesses and households, which reduces the incentive to invest and consume. For households, this would involve spending falling to levels more consistent with consumer sentiment which has been at a depressed level for some time.

A more severe slowdown in economic activity than forecast also leads to a larger than expected increase in the unemployment rate.

Macroeconomic impact on the Budget and over the forward estimates

Businesses reduce their investments and households increase their precautionary savings as their appetite for risk lowers, with both household consumption and real investment falling more than 4 per cent below baseline in 2023-24. This has a large immediate negative impact on SFD, which falls to 3.3 per cent below baseline in 2023-24, the recession year (see Table F.3).

The economy partially rebounds in the following year, although the level of real investment and household consumption both remain more than 2.0 per cent below baseline. By 2026-27, these effects diminish as the level of output returns to baseline.

The drag on domestic economic activity reduces capital utilisation and the demand for labour, driving an increase in the unemployment rate. This increase in unemployment further constrains consumer spending. Weaker labour market conditions lead to a reduction in real wages of more than 0.3 per cent below baseline from 2024-25 onwards. The persistent impact here stems from the slow adjustment in wages, which reflects institutional factors such as the proportion of workers on award wages and the lagged pass through of inflation to changes in the minimum wage.

Weaker wages growth improves the competitiveness of domestic firms compared to their international counterparts. This causes exports to rise, and imports to shrink. The improvement in net exports negates some of the impact on GSP from a downturn in SFD, adding 2.4 percentage points to the per cent deviation in real GSP in 2023-24 (see Chart F.2).

Overall, real GSP immediately declines below baseline by 1.0 per cent in 2023-24. As the economy recovers and the output gap closes, real GSP is 0.6 per cent and then 0.3 per cent below baseline in 2024-25 and 2025-26 respectively.

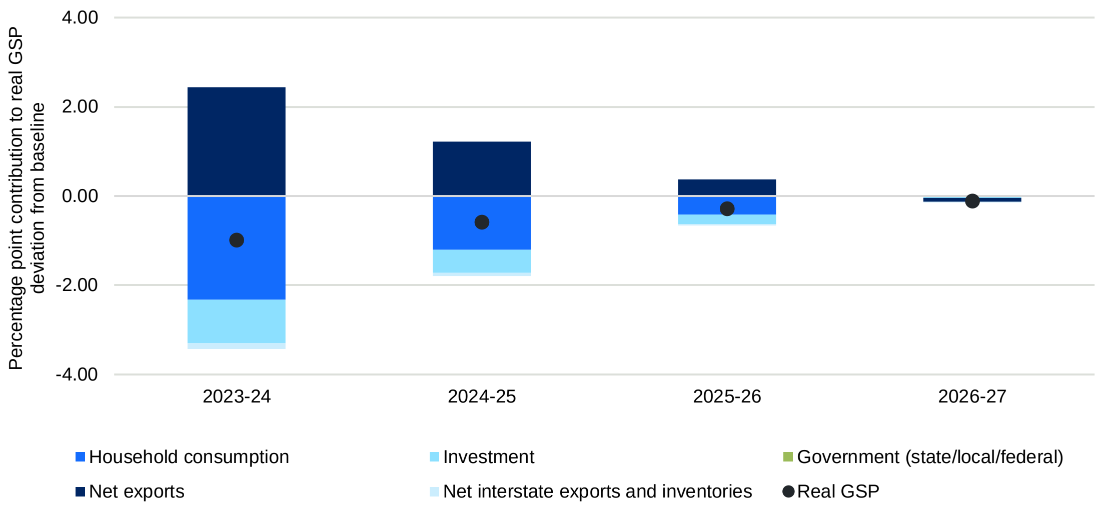
Table F.3: Effect on major economic parameters from a larger than expected impact of interest rates in slowing the economy[(a)]

Financial year estimate[(a)]	2023-24	2024-25	2025-26	2026-27
State final demand	(3.3)	(1.7)	(0.6)	(0.0)
Gross state product	(1.0)	(0.6)	(0.3)	(0.1)
Employment	(0.3)	(0.2)	(0.1)	(0.0)
Unemployment rate	0.4	0.2	0.0	(0.0)
Consumer price index	(0.3)	(0.2)	(0.1)	(0.0)
Nominal wages	(0.5)	(0.5)	(0.4)	(0.4)
Terms of trade	(0.5)	(0.3)	(0.2)	(0.1)

(a) Figures reported are the per cent change in the level of each parameter relative to the baseline. The unemployment rate is in percentage points deviation.

Source: CoPS, Victoria University and NSW Treasury

Chart F.2: Trade sector improves to mitigate some of the downturn in domestic economic activity



Source: CoPS, Victoria University and NSW Treasury

Revenue impact on the Budget and over the forward estimates

The economic downturn results in decreased tax collections across most categories of government revenue. The decline in household consumption reduces the national GST pool, leading to a decrease in NSW GST revenue. Lower employment and wages over the forecast horizon also lead to lower payroll tax collection. Residential and commercial transfer duty collections are particularly impacted, as housing prices fall and transaction volumes contract. Coal royalties rise in contrast, due to the real depreciation of the exchange rate and the expansion of export volumes.

Table F.4: Effect on major revenue parameters from a larger than expected impact of interest rates in slowing the economy[(a)]

Financial year estimate[(a)] ($, million)	2023-24 $m	2024-25 $m	2025-26 $m	2026-27 $m
Payroll tax	(92)	(83)	(66)	(51)
Transfer duty	(720)	(489)	(321)	(234)
Land tax	0	(90)	(141)	(164)
Royalties	117	58	12	(14)
GST revenue	(498)	(288)	(126)	(34)
Other revenue	(363)	(157)	(12)	63
Total revenue	**(1555)**	**(1049)**	**(654)**	**(434)**

(a) Figures reported are the change in the level of each parameter relative to the baseline.

Source: CoPS, Victoria University and NSW Treasury