The Treasury

Budget 2022 Information Release

August 2022

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TE TAI ŌHANGA
THE TREASURY

Treasury Report: BEFU 2022 Preliminary Economic and Tax Forecasts

Date:	18 February 2022	**Report No:**	T2022/185
		File Number:	BM-3-6-1

Action Sought

	Action Sought	Deadline
Minister of Finance Hon Grant Robertson	**Note** preliminary BEFU 2022 economic forecasts show slightly weaker real economic activity than in HYEFU 2021 owing to Omicron and the effect of higher interest rates. Stronger wage growth and higher interest rates boost core Crown tax revenue $5.0 billion higher over the forecast period.	21 February 2022 Weekly Agency Meeting

Contact for telephone discussion (if required)

Name	Position	Telephone		1st Contact
Connor Gavin	Analyst, Forecasting	[39]	N/A (mob)	✓
Peter Gardiner	Manager, Forecasting		[35]	

Minister's Office Actions (if required)

Return the signed report to Treasury.

Note any feedback on the quality of the report	

Enclosure: No

Executive Summary

New Zealand's economy has performed strongly since the finalisation of the Half-Year Economic and Fiscal Update (HYEFU) 2021 forecasts considering the impacts of the Delta strain and associated public health restrictions. The decline in September quarter GDP was smaller than forecast, and over the December quarter the unemployment rate fell to a record low and economic activity partially recovered as public health restrictions eased.

The Omicron outbreak has a considerable impact on our forecasts. Internationally, the economic impact of Omicron had been short and sharp, characterised by constrained labour supply, disruptions to supply chains, and dampened consumer demand. However, the overall economic impact has been less severe than Delta outbreaks reflecting a shift away from lockdown restrictions.

Omicron is expected to drive the reduction in economic growth during the first half of 2022. March 2022 quarter growth is forecast to be 1.3%, 2.5% lower due to the impact of Omicron. **Activity is anticipated to partially rebound in the June** 2022 quarter reflecting the assumption that the outbreak will follow a similar pattern to that observed overseas and that the COVID-19 Protection Framework places less of a constraint on economic activity than the Alert Level Framework.

Economic growth is expected to be weakest in the year to June 2022 reflecting the cumulative impacts of Delta and Omicron outbreaks (Table 1). Growth bounces back above 4.0% the following year, before remaining a little below trend in the 2.0%-2.5% range for the final three years as higher interest rates dampen activity.

The labour market is currently exceptionally tight with the unemployment rate at a record low 3.2% and firms reporting record-high difficulty finding labour. **Constrained labour supply is a key driver of this tightness and is expected to remain** as Omicron outbreaks lead to greater worker absenteeism **but ease as the border reopens**. As in HYEFU, the border is assumed to reopen gradually from the start of 2022 in accordance with the Reconnecting New Zealand work programme.

The tight labour market, persistence in global supply disruptions, and resilient domestic demand are all contributing to persistent inflationary pressures. As these persist, the Reserve Bank of New Zealand will continue raising interest rates which will dampen demand through the impacts on house prices, household consumption, and business investment.

The global economic outlook, with similar drivers to the domestic outlook, leads to the current account deficit forecast to increase further than in HYEFU 2021 and peak at 6.5% in the September 2022 quarter. World economic growth over late-2021 was higher than anticipated, however growth for 2022 was revised down due to Omicron and tightening monetary policy. New Zealand's services trade remains constrained by border restrictions, however the reopening of the border through 2022 will gradually lift migrant and tourist flows. Prices for New Zealand's goods exports and imports will remain high with robust global demand and ongoing supply constraints.

While real **GDP growth is slightly weaker** than HYEFU 2021 forecasts over most of the forecast period, **higher inflation boosts nominal GDP** to be $2.5 billion above HYEFU forecasts in the 2026 June year. Core Crown **tax revenue is expected to be $5.0 billion higher over the forecast** period compared to HYEFU following higher than expected wage growth.

Table 1: Forecast summary

Year to June		**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Real GDP (AAPC)	Prelim BEFU 2022	5.4	0.7	4.0	2.1	2.3	2.5
	HYEFU 2021	5.1	0.8	4.9	2.2	2.3	2.3
Unemployment Rate	Prelim BEFU 2022	4.0	3.1	3.4	33.8	4.0	4.1
	HYEFU 2021	4.0	3.2	3.3	3.6	3.8	4.1
CPI Inflation (APC)	Prelim BEFU 2022	3.3	5.9	3.8	3.1	2.6	2.2
	HYEFU 2021	3.3	5.1	3.1	2.7	2.4	2.2
Nominal GDP ($bn)	Prelim BEFU 2022	342.0	360.2	393.1	415.2	437.0	459.1
	HYEFU 2021	339.7	362.8	393.9	414.7	435.8	456.5
	Change	2.3	-2.6	-0.8	0.5	1.3	2.5
Core Crown tax revenue ($bn)	Prelim BEFU 2022	98.0	102.6	113.8	120.1	127.3	134.5
	HYEFU 2021	98.0	103.0	114.4	121.0	128.6	136.3
	Change	0.0	0.4	0.6	0.9	1.3	1.8

Recommended Action

We recommend that you:

a **note** the Treasury's preliminary BEFU 2022 economic forecasts indicate slightly weaker real economic activity over the forecast period while inflation boosts nominal activity. The decline in real activity reflects the spread of Omicron and rising interest rates in response to persistently high inflation;

b **note** that tax revenues are higher than in HYEFU 2021. In total across the five years to June 2026, core Crown tax revenues forecasts are $5.0 billion higher than in HYEFU 2021; and

c **note** that the uncertainty around the economic outlook remain high, particularly in the short term due to Omicron and geopolitical tensions.

Peter Gardiner
Manager, Forecasting

Hon Grant Robertson
Minister of Finance

Treasury Report: BEFU 2022 Preliminary Economic and Tax Forecasts

Purpose of Report

1. This report provides an overview of the Treasury's preliminary economic and tax forecasts for BEFU 2022. These forecasts underpin the preliminary fiscal forecasts currently being compiled. Annex 1 provides tables with additional details on the economic forecasts, including changes since HYEFU 2021.

2. Based on these preliminary forecasts, you will receive advice on your fiscal strategy for Budget 2022 on 3 March (T2022/244 refers). Following discussion with you at Budget Matters on Monday 7 March, the Treasury will provide further material to enable fiscal strategy decisions to be taken by Budget Ministers. As noted in relation to Budget 2022 timeframes (T2021/2720 refers), Budget Ministers 6 on Friday 1 April 2022 will allow for final package decisions to be informed by final economic and tax forecasts, which will be finalised on 24 and 31 March, respectively. This is ahead of Cabinet's consideration of the Budget package on Monday 11 April 2022.

3. For the Treasury's forecasts to reflect as many Budget decisions as possible, we encourage you to take the majority of your Budget 2022 decisions at Budget Ministers 5 on Tuesday 22 March 2022 with these decisions confirmed at Budget Ministers 6.

4. The preliminary economic and tax forecasts have been finalised earlier in the year than usual. The preliminary economic forecasts have involved more of a top-down approach than usual with relatively greater focus on key aggregates such as GDP, inflation, and some labour market measures. For the final forecasts, Treasury will do a more detailed assessment of individual sectors, and plan to undertake a range of business talks and test forecasts with an external economists panel.

Key Assumptions for the Preliminary Economic Forecasts

5. New Zealand is expected to remain in the **Red and Amber settings** of the COVID-19 Protection Framework for most of the first half of 2022. Amber and Red settings are assumed to reduce GDP by 1%-3% and 2%-3%, respectively.

6. **Border assumptions** are broadly consistent with HYEFU 2021. The international border is assumed to have a phased reopening from the start of 2022. The announced Reconnecting New Zealand plan is broadly consistent with this, leaving the medium-term forecasts of services exports and imports largely unchanged. The initial focus on the return of New Zealand residents abroad will have little impact on services exports but may provide a boost to imports. A material increase in international tourism expenditure is unlikely until the second half of the year and will be influenced by the extent of self-isolation requirements.

7. The **neutral interest rate** has been reduced from 3% to 2.75% over the forecast period to be more consistent with other forecasters and given developments since the Reserve Bank of New Zealand (Reserve Bank) started increasing interest rates. Rising interest rates are now expected to have a greater contractionary impact on activity.

8. **Fiscal support** has increased by a net $5 billion over 2021/22 and 2022/23 relative to HYEFU 2021. We will update our overall fiscal assumptions based on our understanding of the Budget package before the economic forecasts are finalised on 24 March.

9. **Annual net migration** remains unchanged from HYEFU, gradually rising to 27,700 in the June 2024 quarter and subsequently reaching 40,800 by the end of the forecast period.

10. The **Trade-Weighted Index (TWI) exchange rate** is 5.7% lower in the March 2021 quarter relative to HYEFU before increasing at the same rate over the forecast period.

11. **Global oil prices** are around 12% higher throughout the forecast period in line with recent pressures and trends.

Economic Outlook

New Zealand's economic position has been strong heading into 2022…

12. The Delta outbreak **negatively impacted** New Zealand's economic activity over the last half of 2021, although the economy again demonstrated its resilience. Data outturns show the New Zealand economy has been more adaptable and resilient to the COVID-19 pandemic than forecast. This performance has also been broad based, with the unemployment rate dropping to a record low, robust demand leading to a lesser drop in real GDP than expected in the September 2021 quarter and tax revenue exceeding forecasts.

13. **Activity rebounded** following the Delta outbreak as public health restrictions eased. This was reflected in card spending and the New Zealand Activity Index both picking up. However, uncertainty about the course of the pandemic and continued cost, price, and labour market pressures are weighing on business confidence. Higher-than-expected inflation has similarly put pressure on household spending. Overall, we anticipate that real GDP for the December 2021 quarter will be around 1% higher than forecast in HYEFU.

…but international experience suggests Omicron will have a short and sharp economic impact

14. Internationally, Omicron outbreaks weighed heavily on economic activity in the first quarter of 2022 through three key channels (Figure 1):

    a Labour supply disruption as the high transmissibility of Omicron caused widespread worker absenteeism;

    b Consumer demand weakening in response to outbreaks; and

    c Global supply chains remaining disrupted, particularly as China continues to pursue an elimination strategy in the face of the highly infectious variant.

15. The impact of Omicron on labour supply and consumer demand is expected to be **transitory.** Public health restrictions that require cases and contacts to self-isolate increase worker absenteeism, therefore reducing hours worked and overall economic activity. While this disruption abroad was severe at the peak of new cases, it quickly eased as case numbers fell.

16. However, the impact of Omicron on global supply chains may be more **persistent.** Exporters and importers will continue to be challenged in the near term by rising input costs and scarce labour supply, as well as slowing demand from China. High container freight costs show little sign of easing, which will also put pressure on importers and exporters. Although disruption and prices were expected to ease over 2022, the supply impact of Omicron could mean disruption is more persistent.

Figure 1 – Trading Partner Growth

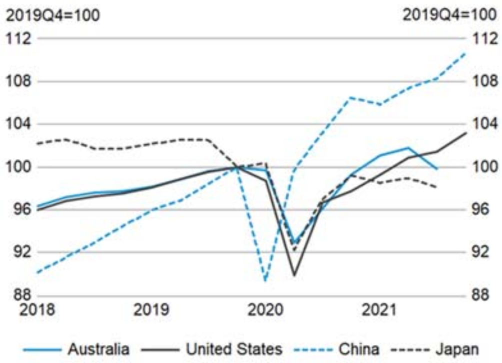
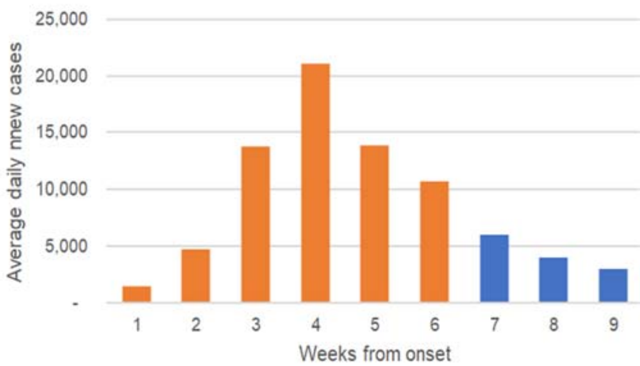


Figure 2 – Assumed Case Path



New Zealand's economic activity is lower in early-2022 but followed by a partial rebound…

17. The **emergence of Omicron** in New Zealand and the timing and magnitude of the outbreak will define economic developments over the first half of 2022. The COVID-19 Protection Framework is expected to have a smaller impact on activity compared to higher levels of the Alert Level Framework as it enables more activity to occur provided businesses use Vaccine Passes. However, households and businesses will face greater disruption from illness and much larger numbers entering self-isolation.

18. Following stronger than expected real GDP growth in late 2021, **March 2022 quarter growth** is forecast to be 1.3%, 2.5% lower due to the impact of Omicron. The estimated impact of Omicron is based on infection paths in comparative countries and adjusting for New Zealand's population (Figure 2). It is broadly similar to the economic impact in other countries.

Figure 3: Real GDP

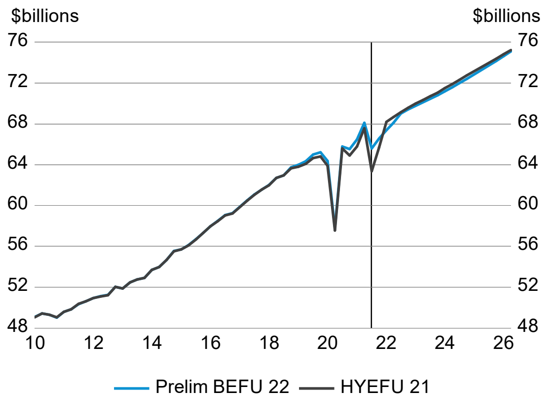
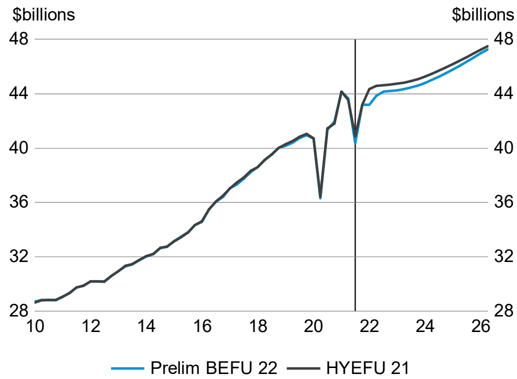


Figure 4: Real Private Consumption



19. A **partial recovery** in the level of activity is expected in the June 2022 quarter (Figure 3). This assumes infection rates peak in the March 2022 quarter and that the Omicron wave is relatively short-lived. The level of real GDP is forecast to remain slightly below HYEFU over the forecast period due to tighter monetary conditions to control inflation, which dampens house prices, private consumption and residential investment (Figure 4). As in HYEFU, exports are expected to make a significant contribution to growth as international tourism gradually returns with the easing of travel restrictions from the September 2022 quarter.

… while the tight labour market gradually softens as activity eases…

20. The **labour market is exceptionally tight** right now. In the December 2021 quarter, the unemployment rate reached a record-low 3.2% as employment continued growing (Figure 5). Difficulty finding labour is at record highs and continues to be the primary constraint on production as reported in the New Zealand Institute of Economic Research's Quarterly Survey of Business Opinion (QSBO).

21. This tightness is **expected to remain** with high demand for labour and low inward migration over the short term. Although the constraints on labour supply are expected to ease over 2022 in line with the Reconnecting New Zealand work programme, labour demand is expected to persist. In the December quarter QSBO, a net 9.9% of firms planned to increase headcount in the next quarter.

22. Unemployment is forecast to **drop slightly** to 3.1% throughout most of 2022 before rising at a faster rate than at HYEFU 2021 to 4.1% at the end of the forecast period. Employment growth remains positive throughout the forecast period, albeit declining to an annual growth rate of 0.8% in late 2023.

23. This **ongoing tightness** is expected to increase wage growth and maintain an elevated level of labour force participation. Annual wage growth is forecast to reach a peak of 5.6% in the June 2023 quarter and remain elevated above 4.5% for most of the forecast period (Figure 6). Meanwhile labour force participation decreases marginally to 70.9% from the September 2022 quarter onward.

Figure 5: Unemployment

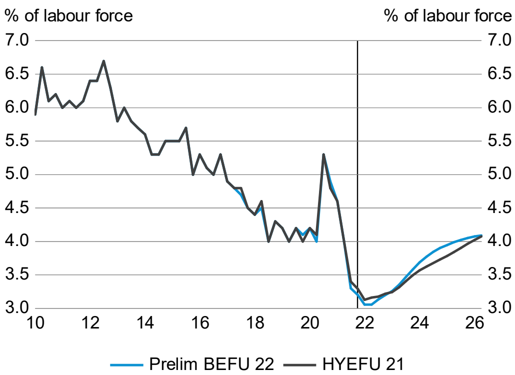
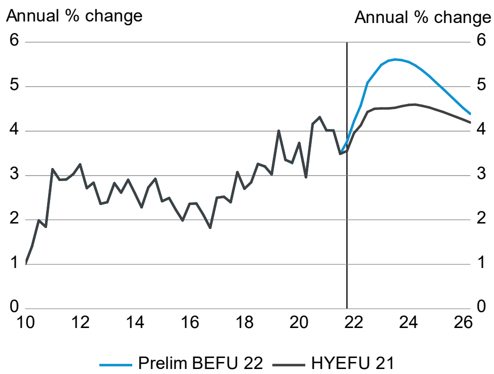


Figure 6: Wage Growth



…and the rise interest rates continue in response to persistent inflation…

24. Consumer Price Index (CPI) inflation is at a **three-decade high** owing to resilient demand, ongoing capacity constraints, and COVID-19 influenced supply shortages. CPI inflation rose 1.4% in the December quarter to be up 5.9% in the year, exceeding the HYEFU forecasts of 5.5% (Figure 7). The cost of petrol and building a house were the main drivers of the annual increase, at 30% and 16%, respectively. Annual tradables inflation was 6.9% compared to non-tradables inflation of 5.3%, highlighting that international pressures from supply chain disruptions and rising world energy prices exceeded domestic pressures from housing and the tight labour market.

25. **Annual inflation** is forecast to peak at 6.3% early this year and remain elevated for most of 2022 before reducing to the 2% midpoint of the Reserve Bank Monetary Policy Committee's inflation target. Recently published data suggests that forecast inflation could peak above 6.5%. International pressures related to global supply chain disruptions and rising world energy prices are expected to ease over the year ahead, while domestic inflationary pressures from housing costs and the tight labour market are expected to remain.

26. Differing **impacts of Omicron** have offsetting implications for inflation. Lower aggregate supply and supply chain disruption increases capacity constraints while lower aggregate demand alleviates this pressure. To the extent that lower supply dominates, Omicron would add to already high inflation pressures.

27. The **Reserve Bank** will continue increasing interest rates over 2022 in response to elevated inflation. Short-term interest rates are forecast to peak slightly higher than in HYEFU at 3.3% starting in the September 2023 quarter (Figure 8). The reduction in our neutral interest rate assumption noted earlier means that this interest rate pathway reduces activity more than assumed in HYEFU by removing excess demand quicker and lowering inflationary pressures in the economy.

Figure 7 – CPI Inflation

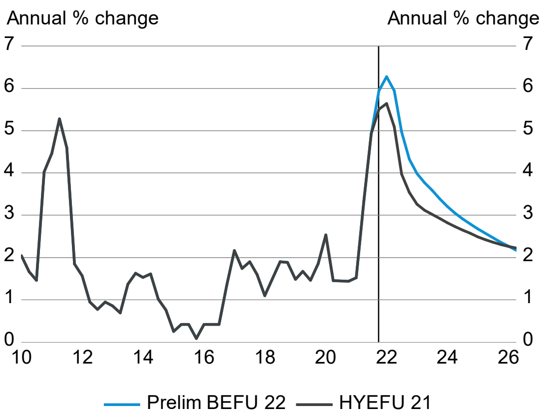
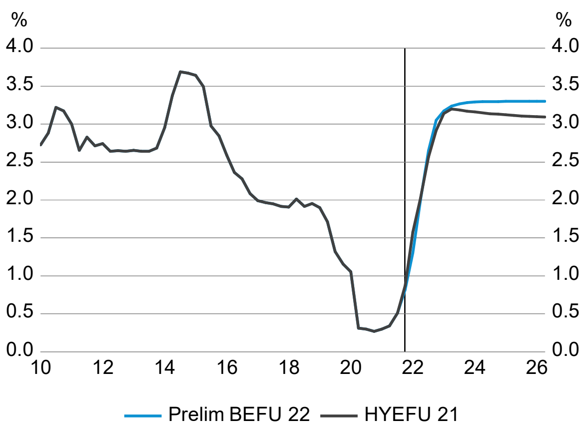


Figure 8 – 90-day interest rate



…leading to house prices decreasing slightly in the short term

28. The fall in house prices in December and January suggests the **market has started to turned**. House prices fell 0.9% in January 2022 according to the Real Estate Institute of New Zealand House Price Index, the first consecutive monthly decline since May 2020. This takes annual growth to 19.9% from the 30.6% high in August 2021. Falling prices and lower sales indicate that rising interest rates and tightening lending conditions in recent months have had an impact on reducing demand. Mortgage advisors are reporting lower demand for mortgages as well as a lower willingness to provide mortgages from mortgage providers.

29. House prices are expected to **ease slightly** over the next two years as demand and supply rebalance (Figure 9). House prices decline 2.1% by the end of 2023 as rising interest rates and tight lending conditions reduce demand. The strong pipeline from building consents will also expand housing supply over this period.

30. Residential investment fell 6.1% in the September 2021 quarter but is expected to **rebound** in early 2022 before decreasing over the remainder of the forecast period (Figure 10). Delta restrictions led to delays in projects that improved as restrictions eased throughout the December 2021 quarter. Construction activity over the year ahead will be supported by the strong pipeline of work. Residential investment is then expected to decrease from September 2022 with rising interest rates, elevated construction cost pressures, and low population growth.

Figure 9 – House Prices

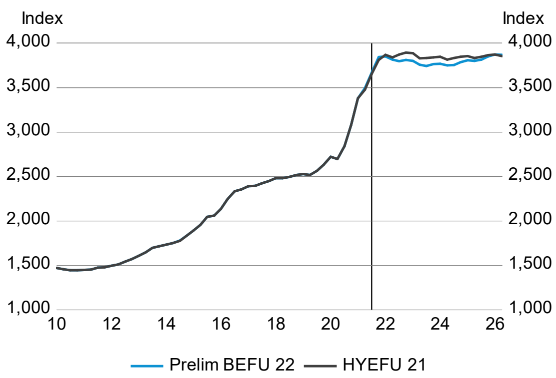
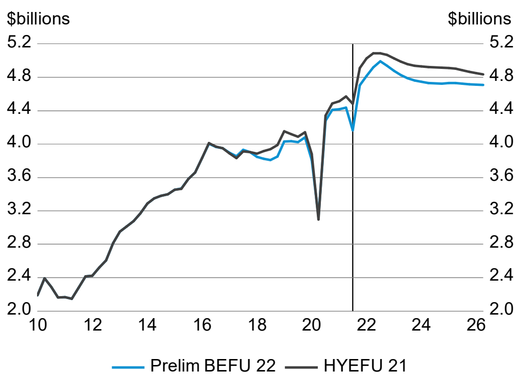


Figure 10 – Residential Investment



Tighter international monetary policy conditions soften the world economic outlook…

31. **Global growth** in 2021 exceeded the HYEFU forecasts. China, Australia, and the United States all beat expectations in the latest data released. This stronger growth seen in the December 2021 quarter reflected a faster than anticipated recovery from Delta outbreaks and a partial easing of supply chain pressures.

32. World growth has been **revised down** through the latter half of 2022, predominately due to high inflation prompting faster monetary policy tightening. In the United States in January, annual CPI inflation hit 7.5% and the unemployment rate fell to 4.0%. Global interest rates are expected to increase quickly and consistently through to the end of 2022, demonstrated by significant upward revisions to market's expectations of policy interest rates for the United States and Australia to 1.8% and 1.1%, respectively, by the end of the year. The unwinding of fiscal stimulus from the earlier stages of the pandemic will add additional headwinds to growth in Australia and the United States.

…and New Zealand's current account deficit increases

33. The prices of New Zealand's **goods exports** are expected to remain elevated. Robust demand for New Zealand's goods exports and global supply issues are contributing to higher prices. At the end of 2021, strong demand drove higher prices as highlighted by the ANZ Commodity Price Index reaching a new record high in January. High prices for meat and dairy are expected to continue in the near term as global supply remains tight, supporting the terms of trade, though prices for horticulture and forestry exports are falling from recent highs.

34. The **current account deficit** is forecast to increase more than in HYEFU 2021 (Figure 11). Despite the generally strong outlook for export prices, import prices are also higher and forecast to weaken the terms of trade compared to HYEFU. Goods import volumes were stronger than anticipated in the September 2021 quarter, while export volumes were somewhat weaker, flowing through to a weaker trade balance in the near term. Combined with the lower terms of trade, as well as higher interest rates weakening the income balance, this results in a larger current account deficit that is forecast to peak at 6.5% in the September 2022 quarter. The gradual recovery in services exports once border restrictions are eased is forecast to narrow the current account deficit, reaching 4.3% in the June 2026 quarter.

Nominal GDP returns to HYEFU levels as inflation remains elevated

35. Despite the slightly softer outlook for real activity than in HYEFU, higher inflation pushes **nominal GDP** $2.5 billion above the HYEFU forecast in the final year of the forecast period (Figure 12). Over the entire forecast period, nominal expenditure GDP is less than $1 billion different with much of the higher nominal GDP later in the forecast period offset by weaker initial activity.

Figure 11: Current Account Balance

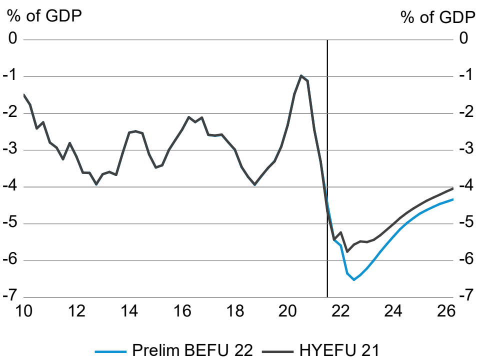
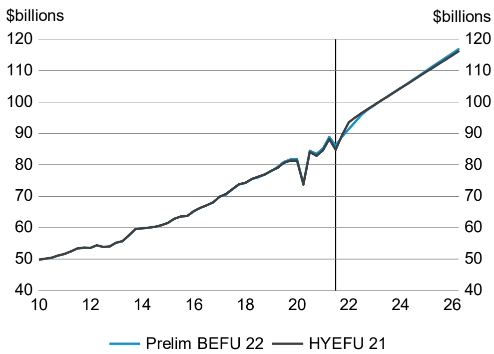


Figure 12: Nominal GDP



Tax outlook

36. **Core Crown tax revenue** is expected to be $5.0 billion higher over the forecast period compared to the 2021 HYEFU forecasts. This increase is largely driven by stronger **wage growth** which lifts income tax more than proportionately to nominal GDP (Table 2). As a result, source deductions, which is mostly PAYE on incomes, increased $3.7 billion compared to HYEFU. This is weighted more towards the end of the forecast period.

37. Higher-than-expected **interest rates** are also a key contributor to higher tax revenue. Higher interest rates have reduced investment returns and the interest component of non-resident withholding tax (NRWT). As a result, forecasts of both net other persons tax and corporate tax have increased $1.5 billion and $0.7 billion, respectively.

Table 2: Estimated core Crown tax revenue forecast change since 2021 HYEFU[1]

June years, $ billions	2022	2023	2024	2025	2026	Totals
2021 Half-year Update	102.6	113.8	120.1	127.3	134.5	
% of GDP	28.3	28.9	29.0	29.2	29.5	
Forecasting changes by tax type:						
Source deductions	+0.2	+0.3	+0.7	+1.1	+1.4	+3.7
Net other persons tax	+0.2	+0.4	+0.3	+0.3	+0.3	+1.5
Corporate tax	+0.3	+0.2	+0.1	-	+0.1	+0.7
GST	-0.1	-0.1	-0.1	-	+0.2	-0.1
All other taxes	-0.2	-0.2	-0.1	-0.1	-0.2	-0.8
Total change	***+0.4***	***+0.6***	***+0.9***	***+1.3***	***+1.8***	***+5.0***
2022 Budget Update (prelim)	**103.0**	**114.4**	**121.0**	**128.6**	**136.3**	
% of GDP	28.6	29.1	29.1	29.4	29.7	
Nominal GDP						
2021 Half-year Update	362.8	393.9	414.7	435.8	456.5	
2022 Budget Update (prelim)	360.2	393.1	415.2	437.0	459.1	
Total nominal GDP change	*-2.6*	*-0.8*	*+0.5*	*+1.2*	*+2.6*	*+0.9*

Comparison to Bank Forecasts

38. The Treasury's preliminary BEFU 2022 forecasts are **broadly similar** to the latest forecasts of the major domestic banks. On average, bank forecasters are slightly more optimistic about GDP growth over the forecast period. Bank inflation forecasts are similar to the Treasury's, although we expect higher interest rates are required to bring inflation back toward the Reserve Bank Monetary Policy Committee's inflation target. Likewise, consensus forecasts of the unemployment rate pathway are similar to the Treasury's forecast. It is unclear the extent to which other forecasters have incorporated assumptions on the economic impacts of the Omicron outbreak in New Zealand.

Risks to the Central Forecasts

39. There are several upside and downside risks to our central forecasts that could lead to different outcomes for the economy and tax revenue.

[1] At the time of writing, the data required to calculate core Crown tax forecasts has not yet been collected from departments. The estimated movement in the core Crown tax forecast is based on the movement in the unconsolidated tax forecast, adjusted for the likely movement in the forecasts of principal core Crown tax eliminations, e.g. GST paid by the Crown and departments, and income tax paid by the New Zealand Super Fund. Preliminary fiscal forecasts will be reported to you in mid-March.

40. **Public health restrictions** under the COVID-19 Protection Framework are assumed to be a mix of Red and Amber over the first half of the year. This results in Omicron having a short but sharp shock in the March 2022 quarter with a partial rebound in the June 2022 quarter. Future community outbreaks that require stricter restrictions will likely lead to weaker economic activity and, depending on frequency and length, could have long-term scarring effects.

41. Economic activity over the forecast period is dampened by **rising interest rates**. The extent to which rising interest rates reduce activity is uncertain, particularly as New Zealand has not experienced a tightening cycle since before the Global Financial Crisis. A stronger response of activity to rising interest rates will result in downward risk to real GDP and upward risk to unemployment. Conversely, a weaker response will result in upward risk to real GDP and downward risk to unemployment.

42. **Global inflation** has been persistent, with elevated oil prices and supply chain disruptions expected to ease toward the middle of the year. If inflationary pressures persistent longer than this expectation, more aggressive monetary policy tightening would likely be taken, exerting downward risk to the central real GDP forecast, vice versa.

43. **Supply chain disruptions** are expected to remain persistent. If supply chain disruption subsides sooner, then there will be upside risk with a reduction in cost pressures, stronger trading partner growth, and an increase to the terms of trade. Alternatively, if an Omicron outbreak occurs in China while it pursues its zero-COVID policy, then the disruption to its consumer demand and supply chains would be severe.

44. The **Russia-Ukraine** situation adds further downside risk to global growth through 2022. In the event of escalating tensions, the direct impacts on New Zealand are expected to be modest due to its relatively small trade flows with the region. Higher global commodity prices, however, could weaken the terms of trade and fuel domestic CPI inflation further. Indirect impacts could also result from supply chain disruption, falling confidence in wider Europe, and financial market volatility.

45. **Annual net migration** is assumed to gradually rise to 40,800 by the end of the forecast period. Immigration policy changes that reduce annual net migration would reduce New Zealand’s available labour force, placing downward pressure on consumption and real GDP growth. Future Economic and Fiscal updates will incorporate any indicated shifts in migration policy.

Annex 1: Forecast summary tables

Table A1: Summary of economic forecasts, June years

Annual average percentage change, unless otherwise specified

June Years	2018	2019	2020	2021	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast
Private consumption	4.7	4.1	-0.9	7.8	-0.3	3.7	1.1	2.1	2.5
Public consumption	4.0	3.1	6.4	8.1	7.7	2.0	-0.1	0.2	0.9
TOTAL CONSUMPTION	**4.5**	**3.9**	**0.8**	**7.9**	**1.6**	**3.3**	**0.8**	**1.6**	**2.1**
Residential investment	-1.0	1.4	-4.4	16.6	6.0	5.5	-3.1	-0.6	-0.3
Business investment*	12.2	4.7	-3.7	3.8	-0.2	9.2	4.5	2.6	2.5
TOTAL INVESTMENT	**8.6**	**3.9**	**-3.9**	**6.9**	**1.4**	**8.2**	**2.4**	**1.8**	**1.8**
Stocks (contribution to GDP growth)	0.2	-0.5	-0.2	0.3	0.7	-0.6	0.0	-0.0	0.0
GROSS NATIONAL EXPENDITURE	**5.8**	**3.3**	**-0.6**	**7.9**	**2.6**	**3.9**	**1.2**	**1.7**	**2.1**
Exports	3.9	3.4	-5.0	-11.1	2.7	7.7	6.5	5.0	4.1
Imports	8.4	2.3	-5.9	-4.2	14.2	4.7	2.5	2.5	2.6
EXPENDITURE ON GDP	**4.6**	**3.6**	**-0.4**	**5.9**	**-0.2**	**4.2**	**2.0**	**2.2**	**2.4**
GDP (PRODUCTION MEASURE)	**3.6**	**3.1**	**-1.0**	**5.4**	**0.7**	**4.0**	**2.1**	**2.3**	**2.5**
- annual % change, June quarter	3.6	2.6	-10.2	17.9	0.0	3.0	2.1	2.4	2.5
Other Output Measures									
Real Gross National Disposable Income	3.9	2.9	0.8	5.1	0.2	3.4	2.0	2.3	2.4
Nominal GDP (Expenditure Basis)	7.3	4.9	2.7	7.3	5.3	9.1	5.6	5.3	5.0
Potential GDP	2.9	2.6	-0.4	5.3	-0.0	4.1	2.6	2.6	2.6
Output gap (June qtr,% of potential)	1.1	1.2	-0.9	2.2	1.4	1.0	0.5	0.2	0.1
Total Population (thousands, mean quarter ended)	4,893	4,972	5,087	5,115	5,152	5,198	5,250	5,311	5,377
Real GDP per capita (Production basis)	1.7	1.4	-3.0	4.0	0.0	3.1	1.1	1.2	1.2
Labour Market									
Employment	3.6	2.0	1.6	0.7	3.5	0.9	0.8	1.1	1.3
Unemployment Rate (June quarter)	4.5	4.0	4.0	4.0	3.1	3.4	3.8	4.0	4.1
Labour Productivity (Hours worked basis)	-0.6	0.6	0.1	1.8	1.8	-0.5	1.3	1.2	1.1
Wages (QES average hourly ord time earnings, APC)	2.8	4.0	3.0	4.0	4.6	5.6	5.5	4.9	4.4
Monetary Conditions									
90-day Bank Bill Rate (June quarter ave)	2.0	1.7	0.3	0.3	2.0	3.2	3.3	3.3	3.3
10-year Bond Rate (June quarter ave)	2.8	1.8	0.8	1.7	2.6	2.9	3.2	3.4	3.5
TWI (June quarter ave)	73.8	72.7	69.7	74.7	72.6	73.4	73.8	73.9	74.0
- annual % change (June quarter)	-3.5	-1.5	-4.1	7.3	-2.8	1.1	0.5	0.2	0.1
Price Measures									
CPI Inflation (ann % change, June quarter)	1.5	1.7	1.5	3.3	5.9	3.8	3.1	2.6	2.2
Consumption Deflator	1.3	1.6	1.8	1.5	4.6	4.1	3.5	3.0	2.7
GDP Deflator	2.6	1.3	3.2	1.3	5.5	4.8	3.5	3.0	2.6
House Price Inflation (ann % change, June qtr)	3.6	1.5	7.1	29.7	9.1	-1.5	-0.2	1.4	1.8
Key Balances									
Current account balance ($ million)	-10,222	-10,805	-4,689	-11,372	-22,882	-23,552	-21,397	-20,215	-19,921
Current account balance (% of GDP)	-3.5	-3.5	-1.5	-3.3	-6.4	-6.0	-5.2	-4.6	-4.3
Terms of Trade (goods) - SNA Basis	4.6	-3.4	4.4	-0.4	2.0	-0.2	-0.4	-0.5	-0.5
Net International Investment Position (%GDP)	-52.2	-54.3	-56.9	-45.3	-50.5	-52.3	-54.7	-56.6	-58.2

* Total investment excluding residential

Table A2: Change in economic forecasts from HYEFU 2021, June years

Annual average percentage change, unless otherwise specified

June Years	2018	2019	2020	2021	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast
Private consumption	0.1	-0.1	-0.1	0.3	-1.5	0.3	0.0	0.1	0.3
Public consumption	0.2	-0.6	-0.4	1.3	2.9	0.2	-0.7	-0.6	-0.3
TOTAL CONSUMPTION	**0.1**	-0.2	-0.1	0.6	-0.4	0.3	-0.2	-0.1	0.2
Residential investment	-0.9	-2.3	1.8	-1.1	-2.9	2.1	-1.0	-0.1	0.8
Business investment*	0.2	0.8	0.8	-0.7	-3.1	-0.6	0.4	0.0	0.4
TOTAL INVESTMENT	**-0.1**	0.1	1.0	-0.9	-3.1	0.2	0.0	-0.0	0.5
Stocks (contribution to GDP growth)	-0.0	0.0	0.2	-0.2	0.4	-0.3	-0.0	0.0	-0.0
GROSS NATIONAL EXPENDITURE	**0.0**	-0.1	0.4	-0.0	-0.6	-0.2	-0.1	-0.0	0.2
Exports	0.0	0.0	-0.0	0.3	0.6	0.6	0.2	-0.1	-0.0
Imports	-0.0	0.0	-0.0	0.1	2.0	-0.3	-0.5	-0.3	0.2
EXPENDITURE ON GDP	**0.0**	-0.1	0.4	0.0	-0.5	-0.1	0.1	0.0	0.2
GDP (PRODUCTION MEASURE)	**-0.0**	0.2	0.4	0.2	-0.1	-0.9	-0.1	-0.0	0.2
- annual % change, June quarter	*-0.0*	0.4	-0.0	0.5	-1.6	0.6	-0.2	0.0	0.2
Other Output Measures									
Real Gross National Disposable Income	-0.0	0.2	0.4	0.1	0.0	-1.1	-0.1	-0.1	0.1
Nominal GDP (Expenditure Basis)	-0.0	0.1	0.5	0.2	-1.5	0.6	0.4	0.2	0.3
Potential GDP	0.0	0.0	0.2	-0.2	0.3	-0.5	-0.0	-0.0	-0.0
Output gap (June qtr,% of potential)	-0.2	0.2	0.0	0.6	-0.1	-0.3	-0.4	-0.3	-0.1
Total Population (thousands, mean quarter ended)	**0**	**0**	**0**	**-2**	**-3**	**-3**	**-3**	**-3**	**-3**
Real GDP per capita (Production basis)	**-0.0**	**0.2**	**0.3**	**0.2**	**-0.1**	**-0.9**	**-0.1**	**-0.0**	**0.2**
Labour Market									
Employment	0.0	0.0	-0.0	0.0	-0.2	-0.1	-0.1	-0.0	0.1
Unemployment Rate (June quarter)	-0.1	0.0	-0.1	0.0	-0.1	0.0	0.1	0.1	0.0
Labour Productivity (Hours worked basis)	-0.0	0.2	0.3	0.2	0.2	-0.9	-0.0	-0.0	-0.0
Wages (QES average hourly ord time earnings, APC)	-0.0	-0.0	-0.0	0.0	0.4	1.1	0.9	0.5	0.2
Unit Labour Costs (Hours worked basis)	0.0	-0.2	-0.4	-0.2	0.1	1.8	1.0	0.7	0.3
Monetary Conditions									
90-day Bank Bill Rate (June quarter ave)	0.0	0.0	0.0	0.0	-0.0	0.0	0.1	0.2	0.2
10-year Bond Rate (June quarter ave)	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	0.0
TWI (June quarter ave)	0.0	0.0	0.0	0.0	-4.6	-4.8	-4.9	-5.0	-5.0
- annual % change, June quarter	0.0	0.0	0.0	0.0	-6.1	-0.3	-0.1	-0.0	-0.0
Price Measures									
CPI Inflation (ann % change, June quarter)	0.0	0.0	0.0	0.0	0.9	0.6	0.3	0.1	-0.0
Consumption Deflator	-0.0	-0.1	-0.1	0.1	0.1	0.6	0.4	0.2	0.1
GDP Deflator	-0.0	0.2	0.1	0.2	-1.0	0.7	0.3	0.1	0.1
House Price Inflation (ann % change, June quarter)	0.0	0.0	0.0	0.6	-1.2	-1.3	0.2	0.9	1.1
Key Balances									
Current account balance ($ million)	-3	1	6	-129	-2003	-2113	-1313	-1133	-1451
Current account balance (% of GDP)	-0.0	-0.0	0.0	-0.0	-0.6	-0.5	-0.3	-0.2	-0.3
Terms of Trade - SNA Basis	0.0	0.0	0.0	-0.2	1.5	-0.7	0.0	-0.0	-0.0

* Total investment excluding residential