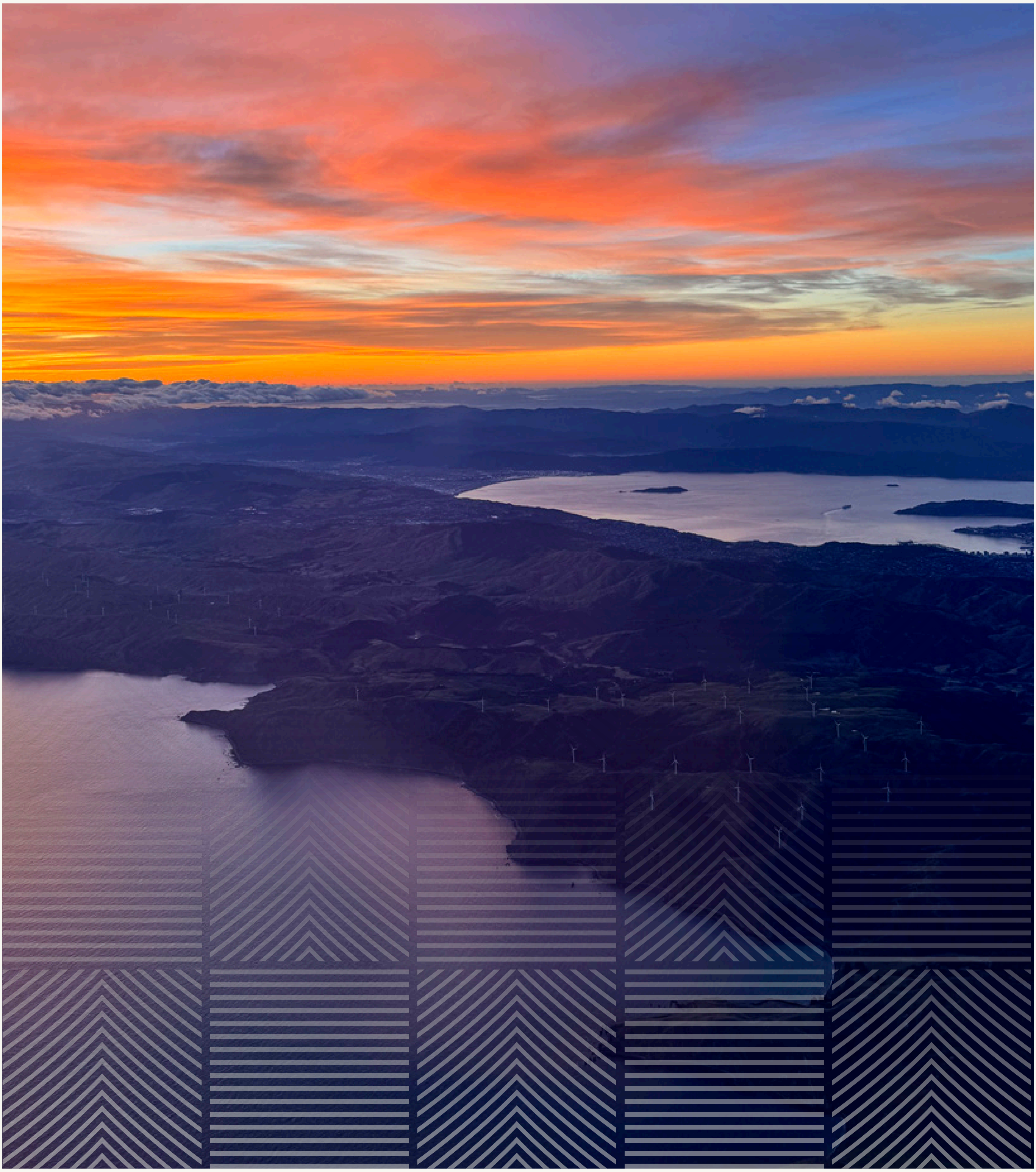
Reserve Bank of New Zealand
Te Pūtea Matua

Monetary Policy Statement.

November 2024



Policy assessment.

OCR 4.25% — OCR lowered further as inflation returns to target

The Monetary Policy Committee today agreed to reduce the Official Cash Rate by 50 basis points to 4.25 percent.

Annual consumer price inflation has declined and is now close to the midpoint of the Monetary Policy Committee's 1 to 3 percent target band. Inflation expectations are also close to target and core inflation is converging to the midpoint. If economic conditions continue to evolve as projected, the Committee expects to be able to lower the OCR further early next year.

Economic activity in New Zealand remains subdued and output continues to be below its potential. With excess productive capacity in the economy, inflation pressures have eased. Domestic price and wage setting behaviours are becoming consistent with inflation remaining near the target midpoint. The price of imports has fallen, also contributing to lower headline inflation.

Economic growth is expected to recover during 2025, as lower interest rates encourage investment and other spending. Employment growth is expected to remain weak until mid-2025 and, for some, financial stress will take time to ease.

Global economic growth is expected to remain subdued in the near term. Geopolitical conditions and policy uncertainty could contribute to increased economic and inflation volatility over the medium term.

The Monetary Policy Committee agreed that having consumer price inflation close to the middle of its target band puts it in the best position to respond to any shocks to inflation.

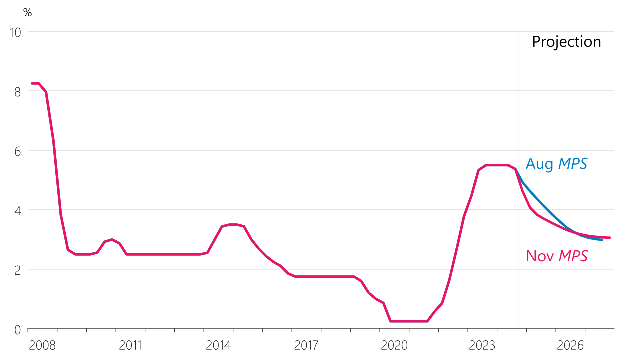
Meitaki, thanks.

Adrian Orr
Governor

Figure i.1

Official Cash Rate (OCR)

(quarterly average)



Source: RBNZ estimates.

Monetary Policy Framework

The Monetary Policy Committee operates and makes decisions under the monetary policy framework that comprises the following key components:

- the *Remit*;
- the *Charter*;
- the *Code of Conduct*; and
- the monetary policy strategy.

The corresponding documents to these components and additional information can be accessed on our website under the monetary policy framework.

Report and supporting notes published at:

www.rbnz.govt.nz/monetary-policy/monetary-policy-statement

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Thank you to RBNZ staff for photography in this report.

Cover: Mākara. Photo: Dean Hill

Monetary Policy Statement.
November 2024

Contents

The projections were finalised on 21 November 2024. The Official Cash Rate (OCR) projection incorporates an outlook for monetary policy that is consistent with the MPC's monetary policy assessment, which was finalised on 27 November 2024.

Chapter 01

Summary record of meeting

Wairoa River. Photo: Hamish Fitchett

Chapter 1. Summary record of meeting

Consumer price inflation is sustainably within the Monetary Policy Committee's 1 to 3 percent target range, and measures of core inflation are converging on the midpoint.

Restrictive monetary policy and subdued economic activity overseas have slowed domestic demand. Lower import prices have also contributed to lower inflation. Expectations of future inflation, the pricing intentions of firms, and spare productive capacity are consistent with the inflation target being sustainably achieved. This provides the context and the confidence for the Committee to further ease monetary policy restraint.

Global economic activity expected to remain subdued

Economic growth rates in the US and China are expected to slow over the year ahead, while the growth outlook for Europe remains sluggish. Headline inflation is close to target in most advanced countries, but some persistence in services inflation remains. Central banks are reducing interest rates, although the pace of monetary policy easing varies across countries due to differences in economic conditions. Global sovereign debt levels have increased markedly since 2020 and continue to expand. This creates risks of higher global bond yields and risk premia.

Significant spare productive capacity expected over the next year

Domestic economic activity remains below trend, as a result of weakness in demand for durable goods consumption and investment. This has been reflected in falling activity in interest rate sensitive sectors such as construction, manufacturing, and retail trade. In contrast, some services sectors have continued to grow.

Considerable spare productive capacity remains in the economy, although this is expected to steadily reduce over the projection period. Consistent with feedback from business visits, high frequency indicators suggest that the economy has stabilised in recent months. Economic growth is expected to recover from the December quarter, in part due to lower interest rates, but there is uncertainty around the exact timing and speed of the recovery.

The Committee noted that the projections incorporate the fiscal assumptions from the 2024 *Budget Economic and Fiscal Update*.

Labour market conditions easing

Wage growth is slowing, consistent with inflation returning to the target midpoint. Employment levels and job vacancies have declined, reflecting subdued economic activity. Unemployment is expected to continue rising in the near term since the labour market typically takes longer to recover than output. Net immigration to New Zealand has reduced significantly from high rates over recent history. The rate of migrant arrivals has slowed, and departures of New Zealanders have increased, partly in response to subdued labour market conditions relative to Australia.

Lower OCR passing through to mortgage rates

Market interest rates have declined in response to actual and expected OCR reductions. The decline in mortgage rates has been less than for wholesale rates, in part reflecting changes in the composition and cost of bank funding. The average rate on outstanding mortgages has now peaked at 6.4 percent and is expected to decline to 5.8 percent over the next 12 months as borrowers refix their mortgage interest rates at lower levels in line with a falling OCR.

No trade-off between meeting inflation objectives and financial stability

The Committee noted the findings of the Bank's November 2024 *Financial Stability Report*. Some households and businesses are experiencing financial stress. While non-performing loans remain low compared to past recessions, further financial stress is likely to emerge even as the economy recovers. The banking system remains well capitalised and in a strong financial position to support customers experiencing distress. The Committee agreed that there is currently no material trade-off between meeting inflation objectives and maintaining financial stability.

Inflation is expected to remain near the midpoint

Headline consumer price inflation has declined to close to the target midpoint, measures of core inflation are converging on the target midpoint, and inflation expectations at all horizons are close to the target midpoint. With significant spare productive capacity expected in the economy over the next 12 months, the Committee is confident that remaining inflation pressures will abate. Feedback from recent surveys and business visits suggest domestic price and wage setting behaviours are becoming consistent with inflation remaining sustainably at target.

There are near-term risks to the economic outlook

The Committee discussed two key uncertainties to the near-term outlook. While domestic price setting behaviour is now more in line with the Committee's inflation objective, members discussed uncertainty about the persistence of some components of inflation. The Committee also noted that, while lower interest rates are expected to underpin a recovery in the domestic economy, the exact speed and timing of the recovery is subject to uncertainty.

There is a risk of greater inflation volatility over the medium term

Geopolitical risks and climate-related energy and food risks pose uncertainty over the medium term. There may be higher relative price volatility and more unpredictability in aggregate inflation. The Committee agreed that having consumer price inflation close to the middle of its target band puts it in the best position to respond to any shocks to inflation.

The Committee agreed to lower the OCR

With headline inflation close to the midpoint and measures of core inflation converging on the midpoint, the Committee has more confidence to continue removing monetary policy restraint. The Committee agreed that a 50 basis point cut is consistent with their mandate of maintaining low and stable inflation, while seeking to avoid unnecessary instability in output, employment, interest rates and the exchange rate.

If economic conditions continue to evolve as projected, the Committee expects to be able to lower the OCR further early next year.

On Wednesday 27 November the Committee reached a consensus to lower the Official Cash Rate by 50 basis points to 4.25 percent.

Attendees:

Reserve Bank members of MPC:
Adrian Orr (Chair), Christian Hawkesby, Karen Silk, Paul Conway

External MPC members:
Bob Buckle, Carl Hansen, Prasanna Gai

Treasury Observer:
Tim Ng

MPC Secretary:
Chris Bloor

Chapter 02

Economic assessment and monetary policy outlook

Waimakariri River. Photo: Rebecca Williams

Chapter 2. Economic assessment and monetary policy outlook

Key points

Restrictive interest rates have reduced demand in the New Zealand economy, and this is contributing to lower inflation. Slower growth in government spending, falling net immigration, and subdued global growth are also dampening demand. There is currently spare supply capacity in the economy, following a prolonged period of excess demand. Reduced pressure on available resources and lower imported inflation have driven declines in Consumers Price Index (CPI) inflation. Annual CPI inflation has returned to within the Monetary Policy Committee's (MPC's) 1 to 3 percent target band, at 2.2 percent in the September 2024 quarter.

Global economic growth remains below potential, and inflation is declining in most of New Zealand's major trading partners. Most major central banks have been reducing policy interest rates, and financial market participants expect further reductions over the coming year. Economic growth in China has continued to slow, while growth in the US has remained higher than in other advanced economies. In aggregate, GDP growth in New Zealand's major trading partners is expected to continue at a similar pace through 2025. Low global goods inflation is contributing to lower prices for New Zealand's imports. Despite subdued global growth, prices for some of New Zealand's key commodity exports, including dairy and meat, have increased since the middle of this year.

Retail and wholesale interest rates have fallen in New Zealand since the middle of this year, easing financial conditions. Since the end of June, 1- and 2-year mortgage rates have fallen by slightly more than 1 percentage point. Actual and expected OCR cuts have been the main drivers of lower mortgage rates. Lower OCR expectations have also contributed to a small depreciation in the New Zealand dollar exchange rate since the August *Statement*.

The production measure of gross domestic product (GDP) declined by 0.2 percent in the June 2024 quarter, and likely contracted further in the September 2024 quarter. Declining GDP is consistent with a range of timely indicators of economic activity, and we assume that GDP declined by a further 0.2 percent in the September quarter. We assume that GDP growth resumes from the December 2024 quarter, as lower interest rates flow through into stronger demand.

Declining economic activity has contributed to increasing spare capacity in the New Zealand economy. We estimate that the output gap — the difference between GDP and potential output — has opened further to about -1.5 percent of potential. Subdued economic activity has contributed to weaker labour demand and increasing spare capacity in the labour market. The unemployment rate rose to 4.8 percent in the September 2024 quarter, and other measures of spare capacity in the labour market have also increased. We estimate that the New Zealand economy's potential growth rate has fallen over the past year, reflecting slower labour force growth due to declining net immigration.

Annual CPI inflation declined from 3.3 percent in the June 2024 quarter to 2.2 percent in the September 2024 quarter, returning to the MPC's 1 to 3 percent target band. Annual tradables inflation fell sharply to -1.6 percent in the September 2024 quarter, reflecting falling import prices, weak retail spending, and lower fuel prices. Non-tradables inflation — which measures price changes for goods and services less exposed to international competition — remains high, but is declining as a result of spare capacity in the economy and price- and wage-setting behaviour adapting to a low-inflation environment. Measures of core inflation have continued to decline. Business expectations for headline inflation at all horizons are now close to the 2 percent target mid-point.

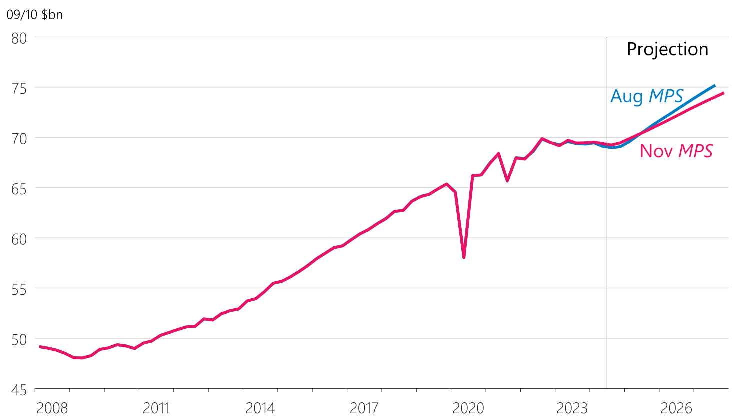
Conditional on our economic outlook, we project the OCR to continue to decline. As inflationary pressures have eased, the MPC has reduced the OCR. Price- and wage-setting behaviour are assumed to adapt to a low-inflation environment over time, further easing inflationary pressure. Lower interest rates are assumed to increase demand and output, contributing to a closing in the output gap and a recovery in labour market conditions over the medium term. Annual CPI inflation is projected to remain within the target band. Continued spare capacity is assumed to lead to further falls in non-tradables inflation, offsetting an assumed rise in annual tradables inflation to around 1 percent — about its historical average. The outlook for the OCR over the medium term is similar to the August *Statement*.

Economic assessment

Economic activity has declined further

Economic activity in New Zealand, measured by production GDP, declined by 0.2 percent in the June 2024 quarter (figure 2.1). This decline was foreshadowed by weakness in a broad range of timely indicators, such as business surveys, although GDP fell by slightly less than assumed at the time of the August *Statement*. Economic activity in New Zealand has been broadly unchanged over the past two years.

Figure 2.1
Production GDP
(seasonally adjusted)



Source: Stats NZ, RBNZ estimates.

Note: 09/10 $ refers to the deflator used. It is a chain-volume series expressed in 2009/10 prices.

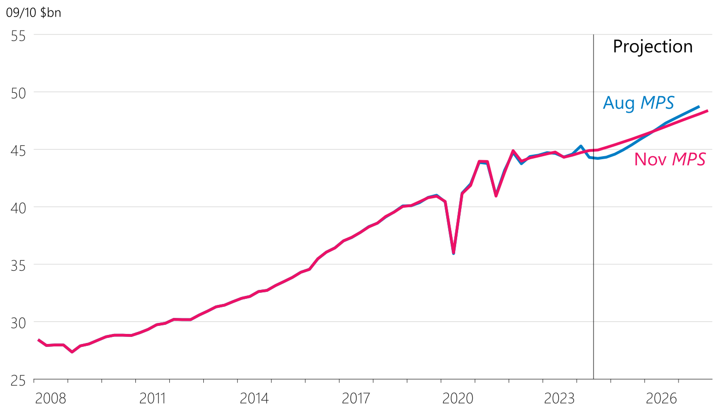
Indicators suggest that economic activity declined further in the September 2024 quarter. Although there is some variation, on balance, indicators suggest that GDP declined in the September 2024 quarter. Firms in the Quarterly Survey of Business Opinion (QSBO) reported slightly weaker trading activity in the quarter. The Performance of Manufacturing Index and Performance of Services Index continued to report declining activity. Filled jobs and employment also contracted in the quarter. In our recent talks with businesses, many reported that customer demand had weakened further through the middle of this year (see chapter 4.2).

We expect the economy to expand over 2025

Timely indicators of economic activity have been mixed in October. Some indicators have improved slightly from earlier months, while others have deteriorated slightly. Businesses report that they are feeling more confident about the outlook for the economy, although these confidence measures historically have a weak relationship with actual economic outcomes.

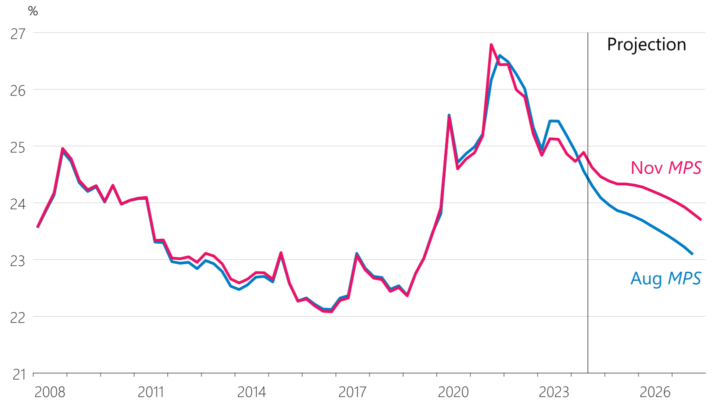
Economic growth is assumed to resume from the December 2024 quarter and increase over 2025, as lower interest rates support demand. Key mortgage and term deposit rates have fallen since the middle of the year, reflecting actual and expected future OCR cuts. Since the end of June, 1- and 2-year mortgage rates have fallen by slightly more than 1 percentage point (see chapter 5). Lower interest rates are assumed to support a recovery in demand, with GDP growth resuming in the December 2024 quarter and then increasing into 2025. Lower interest rates will take time to fully transmit to economic activity, with activity in some sectors likely to be more sensitive than others (see chapter 4.1).

Figure 2.2
Private consumption
(seasonally adjusted)



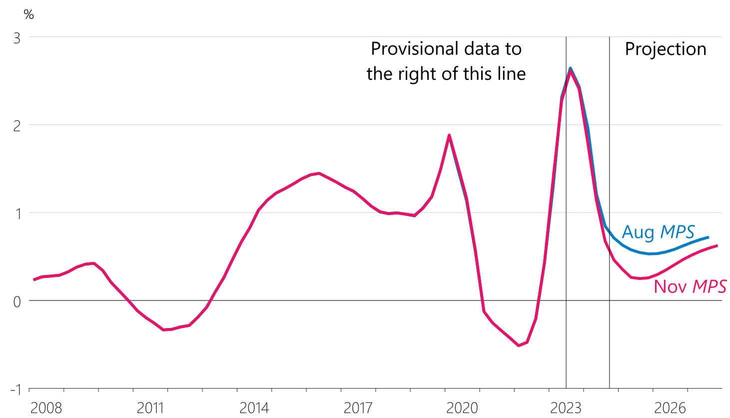
Source: Stats NZ, RBNZ estimates.

Figure 2.3
Government consumption and investment
(share of potential, seasonally adjusted)



Source: Stats NZ, RBNZ estimates.

Figure 2.4
Net immigration
(annual, share of working-age population)



Source: Stats NZ, RBNZ estimates.

Household spending is subdued

Household consumption growth is low, reflecting restrictive interest rates, weaker asset prices, and declining population growth. Annual household consumption growth was 0.3 percent in the June 2024 quarter. Consumption growth is assumed to increase over the three-year projection, supported by lower interest rates and, to a lesser extent, the income tax cuts that took effect on 31 July (figure 2.2).

Government spending is slowing

Government consumption is assumed to decline over coming quarters. Annual government consumption growth fell to -0.3 percent in the June 2024 quarter. Government consumption was stronger in the June 2024 quarter than our assumption in the August *Statement* that was based on *Budget* 2024. We assume that real government consumption declines further through to mid-2025, although this is partially offset by continued growth in government investment. While real government spending is projected to decline as a share of potential output, this decline is slower than assumed in the August *Statement*, reflecting a weaker outlook for potential growth (figure 2.3).

Private investment is declining

Business and residential investment are declining, but we assume they will recover next year. Business investment has continued to decline, reflecting weak demand and restrictive interest rates. Residential investment has also fallen further, consistent with restrictive interest rates and falling real house prices. We assume that residential and business investment recover from the beginning of 2025, reflecting recent and further decreases in interest rates and stronger economic activity.

Net immigration is slowing

Net immigration to New Zealand has slowed over the past year (figure 2.4). Migrant arrivals have slowed, and departures of New Zealanders have increased, partly in response to weakening economic and labour market conditions — particularly relative to Australia.

Declining net immigration is assumed to have broadly offsetting effects on inflationary pressure. Slower population growth is weighing on consumption growth and demand for housing. However, slower population growth is also resulting in slower growth in labour supply and therefore potential output. Our projections assume that annual potential growth has slowed from around 2.5 percent in late 2023 to around 1.5 percent at present, largely as a result of slowing net immigration. Weak productivity growth in New Zealand has also reduced potential growth.

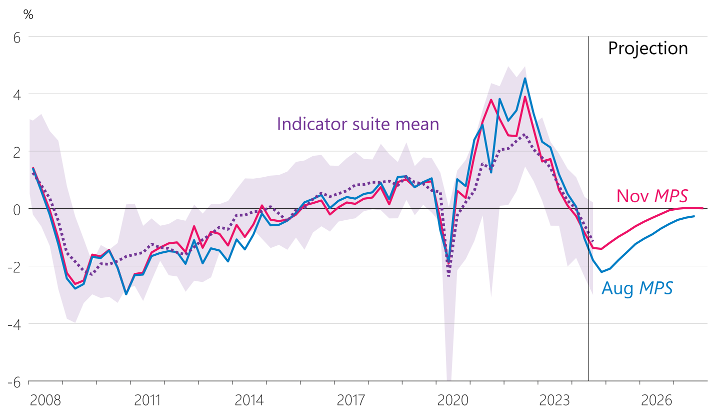
Spare capacity in the economy has increased

We estimate that the New Zealand economy is operating with spare capacity. Capacity pressures have continued to decline over 2024 as economic activity has remained broadly unchanged, and we estimate that the output gap is currently around -1.5 percent of potential GDP (figure 2.5). A range of indicators are consistent with increasing spare capacity in the economy. These include a historically high share of firms citing orders as the factor most limiting production in the September 2024 quarter QSBO and easing across measures of labour market pressure. Our assessment of the current output gap is slightly less negative than assumed in the August *Statement*, consistent with a smaller contraction in GDP in the June 2024 quarter than previously assumed and our suite of indicators of capacity pressure.

Figure 2.5

Output gap and indicator suite

(share of potential GDP, seasonally adjusted)



Source: Stats NZ, NZIER, MBIE, RBNZ estimates.

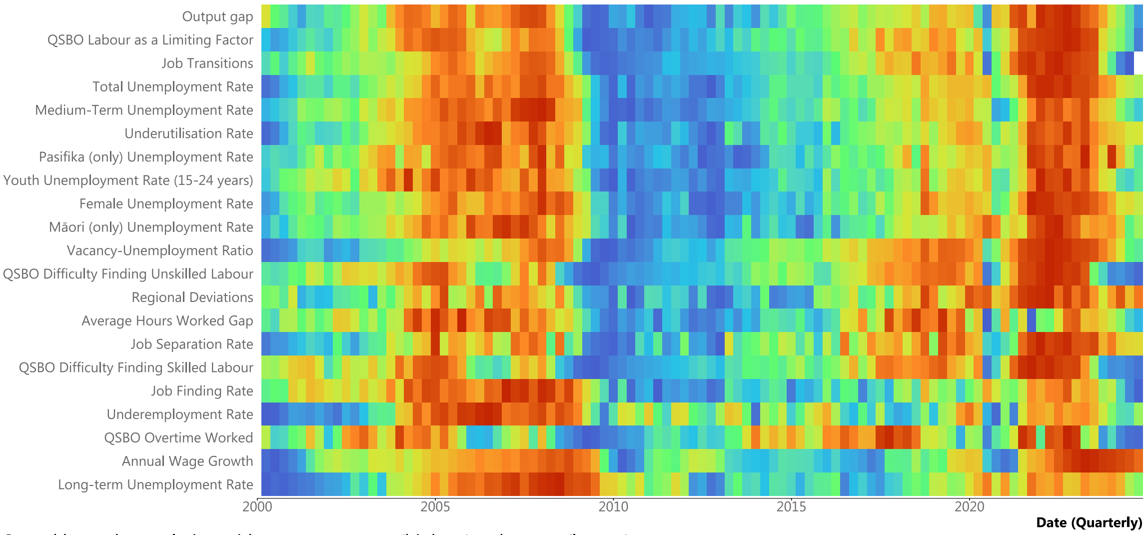
Note: The shaded area shows the range of indicators in the suite. The vertical line shows the final quarter of published GDP data.

The output gap is assumed to begin closing over 2025, as GDP growth recovers and potential growth remains low. GDP growth is assumed to exceed potential growth from early 2025 as lower interest rates contribute to higher demand, resulting in a steady reduction in spare capacity over the projection period.

Figure 2.6

Labour market indicator suite

Fill colour shows the standardised value for each variable compared to the ***weakest***, ***median*** *&* ***strongest*** *since 2000.*



Sorted by rank correlation with output gap, top (highest) to bottom (lowest).

Source: Stats NZ, NZIER, MBIE, RBNZ estimates.

Note: See Ball (2024), 'Assessing and communicating labour market indicators of inflationary pressure', *Analytical Note*, Reserve Bank of New Zealand.

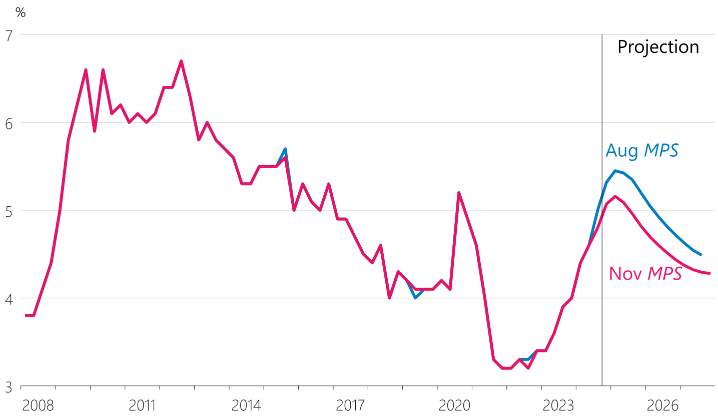
Labour market conditions have weakened further

Firms have reduced hiring as a result of weak economic conditions. Annual employment growth declined from 0.3 percent to -0.4 percent in the September 2024 quarter, compared to working-age population growth of 1.8 percent. Job vacancies remain significantly below pre-COVID-19 levels.

Figure 2.7

Unemployment rate

(unemployed people as a share of the labour force, seasonally adjusted)



Source: Stats NZ, RBNZ estimates.

A wide range of measures of labour market pressure have eased substantially over the past year (figure 2.6). Most of the measures in our labour market indicator suite are weaker than their average levels since 2000. The unemployment rate increased to 4.8 percent in the September 2024 quarter (figure 2.7). Businesses are reporting that it is much easier to find workers, and job transitions have slowed. Recent weakness in economic activity is assumed to flow through to further weakness in labour market conditions, with the unemployment rate projected to increase further to a peak of 5.2 percent in the March 2025 quarter. The unemployment rate is then assumed to steadily decline in line with the forecast recovery in GDP growth.

Easing labour market conditions and falling inflation are contributing to lower growth in nominal wages. Annual same-job wage growth, as measured by the Labour Cost Index (LCI, ordinary and overtime, private sector) was 3.3 percent in the September 2024 quarter, compared to a peak of 4.5 percent in early 2023. Growth in other broader wage measures have also eased. Wage growth is assumed to decline further, reflecting a lagged response to weaker labour market conditions and recent falls in headline inflation. This is consistent with feedback from our recent business visits, where firms in many industries reported smaller wage increases due to squeezed profit margins, increased availability of labour, and reduced cost-of-living pressures.

Global growth is below potential, and central banks are reducing policy rates as inflation falls

Growth in New Zealand's trading partners remains below potential, although there is variation between countries (see chapter 3). Growth in China has continued to slow, reflecting weakness in the property market and household consumption. Authorities in China are easing monetary policy and providing fiscal stimulus to support growth. In most advanced economies, restrictive interest rates have been reducing demand and GDP growth remains below potential. However, economic growth in the US has remained relatively robust, in part due to stronger productivity growth than elsewhere.

We assume trading-partner GDP growth continues at a similar pace in 2025. We assume that GDP growth in China and the US slows over 2025, but that this is mostly offset by higher growth in other economies.

Headline inflation in New Zealand's trading partners has continued to ease. Inflation is now close to central bank inflation targets in many economies. However, services inflation generally remains elevated, with recent declines in inflation mainly accounted for by lower prices for goods. Labour market conditions are weakening in most advanced economies, with unemployment rates rising and wage growth falling. However, in some economies, such as Australia, the labour market remains tight compared to history. Increasing spare capacity is expected to contribute to further declines in inflation in most economies over the coming year.

Most major central banks are easing monetary policy. A range of central banks have either continued or begun to reduce policy interest rates in recent months. Central banks have become more confident that inflation will settle near their targets as headline inflation has fallen and spare capacity has increased. In recent months, financial market participants have lowered their expectations for the pace of interest rate reductions in some economies, particularly the US.

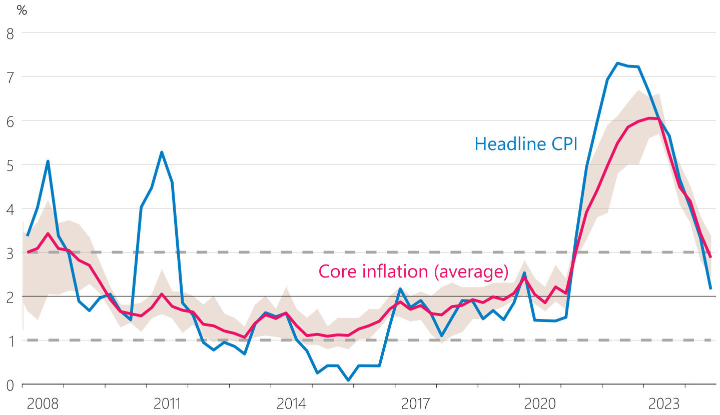
Global conditions are dampening New Zealand's imported inflation

World prices for New Zealand's imports have been declining as globally-traded goods prices decline. International oil prices have declined over 2024. We assume that import prices will ease slightly over the coming year as global inflationary pressure continues to wane. However, uncertainty about the path of import prices over the medium term is high, and dependent on developments in globalisation, trade barriers, shipping costs, and technology.

World prices for New Zealand's exports have increased slightly this year. Despite subdued global growth, prices for many of New Zealand's exports (including dairy and meat) have increased this year, reflecting a range of demand and supply factors. We assume that New Zealand's export prices will increase by slightly less than global headline inflation over the projection period.

The New Zealand dollar exchange rate has depreciated slightly on a trade-weighted basis since the August *Statement*. Declining domestic interest rates have put downward pressure on the New Zealand exchange rate, but this is being somewhat offset by falling interest rates in New Zealand's trading partners and higher prices for our export commodities.

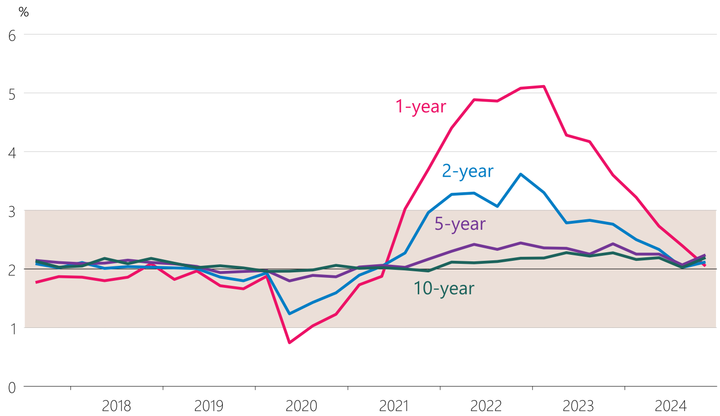
Figure 2.8
Headline and core inflation measures
(annual)



Source: Stats NZ, RBNZ.

Note: The dashed lines represent the MPC's 1 to 3 percent target range for inflation over the medium term. The shaded area shows the range of core inflation measures. The core inflation measures include the sectoral factor model, factor model, trimmed mean (30%), weighted median, and CPI excluding food and energy.

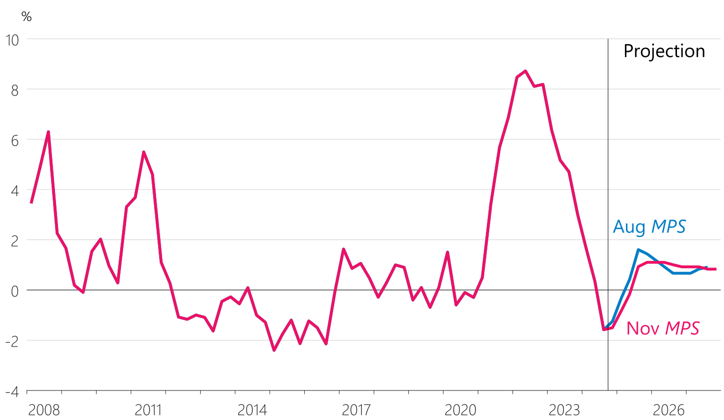
Figure 2.9
Business inflation expectations
(annual, years ahead)



Source: RBNZ's Survey of Expectations (Business).

Note: The shaded area represents the MPC's 1 to 3 percent target range for inflation over the medium term.

Figure 2.10
Tradables inflation
(annual)



Source: Stats NZ, RBNZ estimates.

Inflation has returned to within the 1 to 3 percent target range

Annual CPI inflation declined from 3.3 percent in the June 2024 quarter to 2.2 percent in the September 2024 quarter, returning to within the MPC's 1 to 3 percent target range (figure 2.8). This was marginally below the 2.3 percent expected at the time of the August *Statement*.

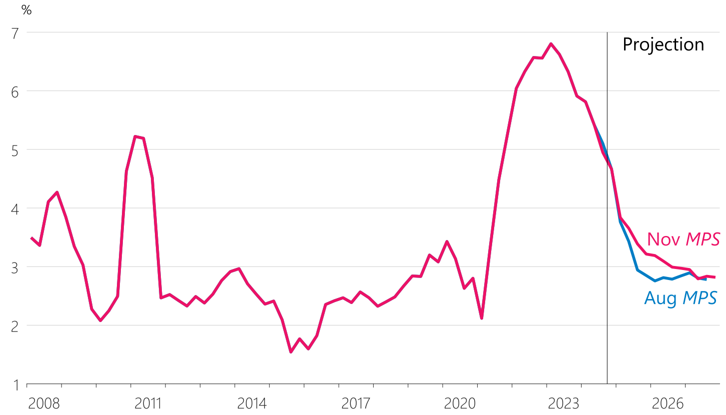
Measures of annual core inflation declined further in the September 2024 quarter, and the average of these measures has also returned to within the target range. Core inflation has declined rapidly since mid-2023, consistent with slower inflation across a broad range of items. Annual core inflation is higher than headline inflation, but available quarterly core inflation measures suggest that the underlying trend in inflation is converging towards the 2 percent target mid-point.

Survey measures indicate that firms expect inflation to remain near the 2 percent target mid-point. Firms' inflation expectations are now close to 2 percent across all time horizons (figure 2.9).

Annual tradables inflation dropped sharply to -1.6 percent in the September 2024 quarter (figure 2.10). Annual tradables inflation is now below pre-COVID-19 average levels. Lower fuel prices have contributed substantially to lower tradables inflation, reflecting both tax changes and lower international oil prices. However, there have also been broad-based falls in inflation across tradables items over the past year, reflecting lower import prices and weak domestic demand.

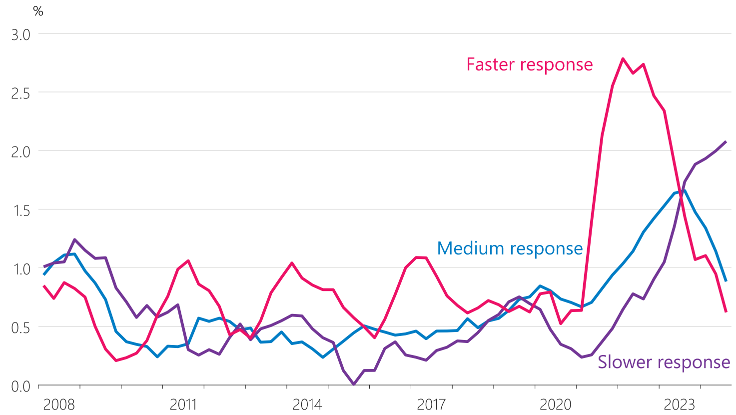
Annual tradables inflation is assumed to increase to around 1 percent over the projection period. Prices for some tradables items such as fuel, vegetables, and international airfares have fallen sharply from high levels over the past year. Annual tradables inflation is assumed to increase to around pre-COVID-19 average levels as these large price falls drop out of the annual calculation.

Figure 2.11
Non-tradables inflation
(annual)



Source: Stats NZ, RBNZ estimates.

Figure 2.12
Non-tradables inflation by monetary policy sensitivity
(quarterly, 4-quarter moving average)



Source: Stats NZ, RBNZ estimates.

Note: Non-tradable sub-groups are ordered by most statistically negative to most statistically positive response to an unanticipated OCR increase. 'Faster response' groups represent the top third of these groups by responsiveness. 'Medium response' groups represent the middle third by responsiveness, and 'Slower response' groups represent the lowest third by responsiveness. Based on Patel (forthcoming), 'Estimating monetary policy passthrough to non-tradables inflation', *Analytical Note,* Reserve Bank of New Zealand.

Annual non-tradables inflation declined from 5.4 percent to 4.9 percent in the September 2024 quarter (figure 2.11). This was slightly lower than we expected at the time of the August *Statement*. Non-tradables inflation remains elevated. However, non-tradables inflation has become less broad-based across components over time, as increasing spare capacity and easing cost pressures contribute to falling inflation rates for some items.

Inflation for insurance and administered goods and services remains high. High inflation in these groups, which tend to have a lower responsiveness to monetary policy, is increasingly accounting for high non-tradables inflation (figure 2.12). Insurance inflation is contributing significantly to non-tradables inflation, as premiums rise in response to severe damage from storms and floods last year. However, the pace of insurance inflation eased in the September 2024 quarter and we expect this trend to continue. Central and local government charges are contributing significantly to non-tradables inflation. Local authority rates, road user charges, and prescription costs have increased significantly over the past year. Cheaper early childhood education prices following the start of the FamilyBoost rebate scheme on 1 July have provided a small offset.

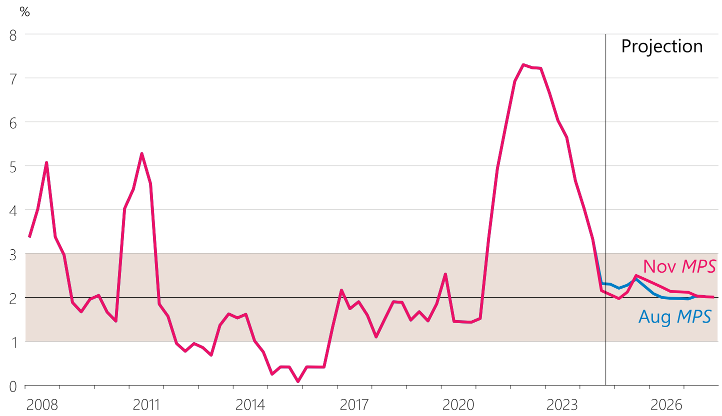
Reduced discretionary spending is weighing on inflation for some categories. Weaker demand is flowing through to lower inflation rates or price falls for some non-tradable categories. Restaurant and takeaway meal price inflation has eased significantly over the past year. Domestic airfares and accommodation prices are around 10 percent lower than a year ago.

Housing-related inflation is easing. Dwelling construction cost inflation has eased to below-average rates, as new housing demand has continued to weaken. Annual rent inflation as measured in the CPI has eased slightly, but remains at an elevated level. However, rental inflation for new tenancies has fallen sharply over recent months, which will flow through to lower CPI rent inflation over time if sustained.

Annual non-tradables inflation is assumed to fall further over the medium term. The current spare capacity in the economy is expected to flow through to lower cost pressures and non-tradables inflation over time. Lower inflation for insurance and administered items will also contribute to lower non-tradables inflation, although this is expected to be partly offset by increases in household electricity prices. The pace of easing in non-tradables inflation will partly depend on how quickly wage- and price-setting behaviour adapts to a low-inflation environment (see chapter 4.1 of the August *Statement*).

Annual headline inflation is forecast to remain within the 1 to 3 percent target range and be close to the mid-point over most of the projection period (figure 2.13). Annual headline inflation is assumed to remain close to 2 percent in the near term, consistent with declines in survey measures of business pricing intentions. Annual headline inflation is expected to increase slightly over the second half of 2025, accounted for by a return of tradables inflation to around its historical average, before settling close to the 2 percent target mid-point over 2026.

Figure 2.13
CPI inflation
(annual)



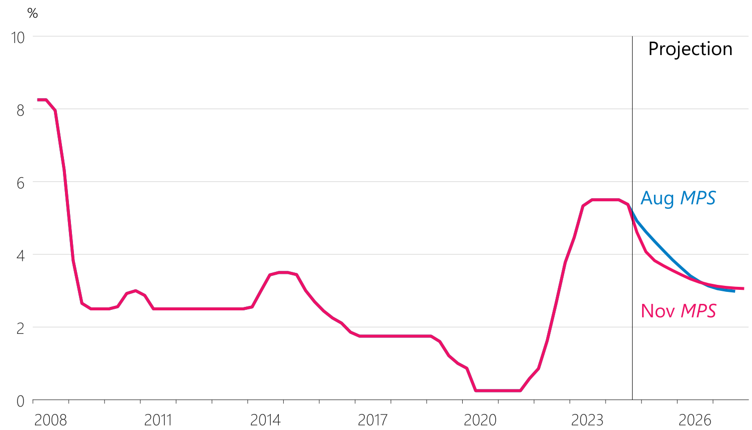
Source: Stats NZ, RBNZ estimates.

Note: The shaded area represents the MPC's 1 to 3 percent target range for annual CPI inflation over the medium term.

Monetary policy outlook

Conditional on the central economic outlook, we project the OCR to decline further over time (figure 2.14). Inflationary pressures are assumed to decline over the medium term, as a result of spare capacity in the economy and wage- and price-setters adapting to a low-inflation environment. This allows monetary policy to become less restrictive over time. The outlook for the OCR is similar to the August *Statement* over the medium term.

Figure 2.14
OCR
(quarterly average)



Source: RBNZ estimates.

Chapter 03

Global developments and outlook

Fiordland National Park. Photo: Luisa Gaspar

Chapter 3. Global developments and outlook

This chapter outlines recent developments as of 21 November 2024.

The global economy is emerging from a period of significant shocks, but uncertainty remains. Inflation in developed economies has or is returning to levels experienced prior to the COVID-19 pandemic and subsequent period of economic volatility. Economic growth in our trading partner economies is variable, but subdued overall. As inflationary pressures have eased in these economies, monetary policy has been loosening.

Economic growth in most of New Zealand's trading partners is below potential and expected to decline slightly over the next year. Our expectation for GDP growth in Australia is slightly lower than at the time of the August *Statement* but has been offset by a slightly improved outlook in most of our other trading partners.

Headline inflation is at, or close to, target in most advanced economies. Services inflation remains elevated, but labour markets across advanced economies are continuing to weaken gradually. This is assumed to lead to a slowdown in services inflation.

Many advanced economy central banks have begun or continued to lower their policy rates since our August *Statement*. The pace of these cuts has varied across central banks, primarily due to differences in the strength of both growth and inflation in each economy. This is also influencing the extent of further reductions in policy rates expected by financial market participants. Some of the most significant revisions in market participants' expectations for the path of policy rates are for the US. Some stronger-than-expected labour market data and expectations of higher inflationary pressure after the US election mean the Federal Reserve is expected to lower its policy rate by less than expected at the time of the August *Statement*.

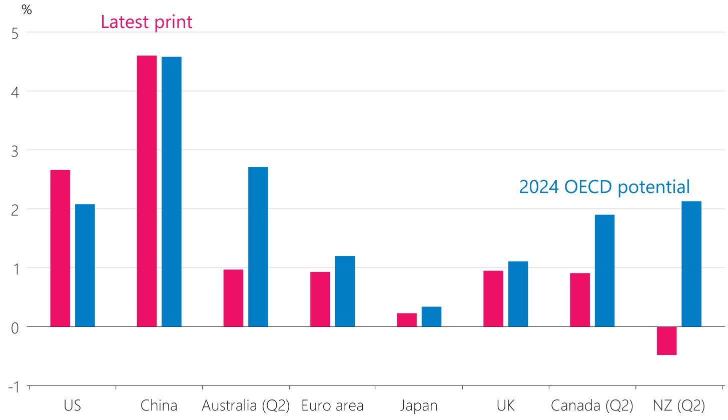
Long-term sovereign bond yields are broadly higher across advanced economies in response to heightened uncertainty following the US election. Shorter-term sovereign bond yields have moved in line with recent changes in near-term policy rate expectations.

US equity prices have increased significantly since the August *Statement*. Anticipation of lower corporate taxes and less regulation under the incoming US government has improved US investor risk sentiment. Outside the US, investor risk sentiment has been less strong and international equity markets have not increased in value by as much as US share price indices. The US dollar has strengthened, reflecting both higher expected interest rates and increased trade uncertainty.

Figure 3.1

GDP growth compared to OECD potential growth estimates

(annual)



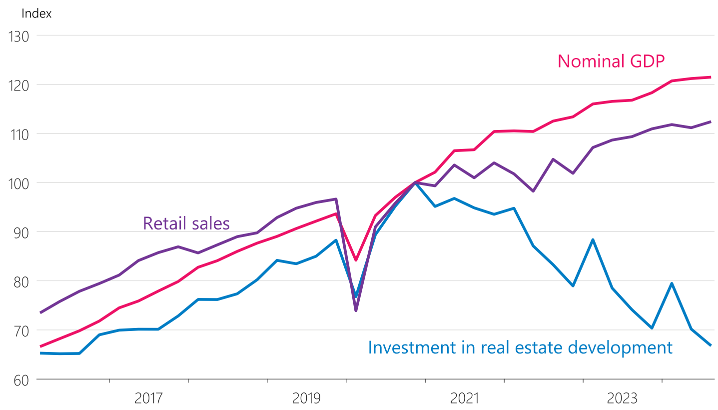
Source: Haver Analytics, OECD.

Note: GDP growth data are for the September 2024 quarter unless otherwise specified.

Figure 3.2

Spending measures in different sectors of the Chinese economy

(index=100 in the December 2020 quarter, seasonally adjusted)



Source: Haver Analytics.

Global growth remains below potential

Global economic growth is expected to fall slightly over the next year. Growth in New Zealand's key trading partners is expected to decline from 2.9 percent to 2.8 percent in 2025. Growth in both the US and China is expected to slow over the coming year. On the other hand, growth in other advanced economies is expected to increase in 2025.

Growth in most of our key trading partners remains at or below OECD estimates of potential. This is consistent with an easing in capacity pressures across advanced economies (figure 3.1). The US remains an outlier, continuing to grow above potential at an annual rate of 2.7 percent in the September 2024 quarter.

Economic growth in China remains weak

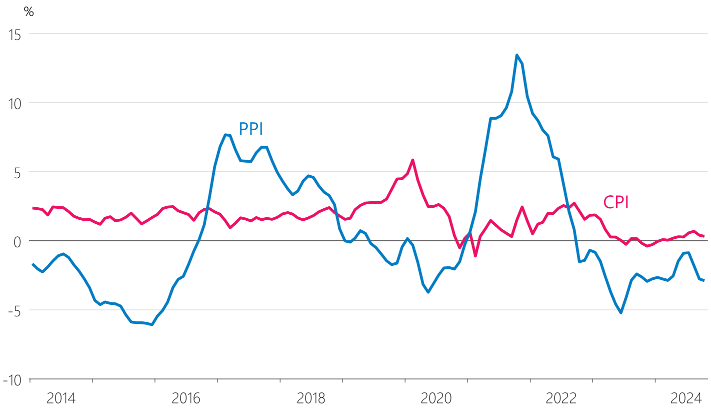
China's economic growth is slowing down. Annual GDP growth in China has slowed from an average of 6.6 percent between 2017 and 2019, to 4.6 percent in the September 2024 quarter. This has been influenced by both structural and cyclical factors and is closely linked to the weak property market. Since 2021, Chinese property market activity has declined materially following regulatory tightening on leverage in the sector. This has led to broad weakening of the economy and declining home prices that have negatively affected household consumption as people's wealth has shrunk (figure 3.2). Growth is assumed to marginally miss the government's 5 percent target for 2024, before falling to a 4.5 percent annual growth rate in 2025.

Weak household demand and strong goods supply have kept inflation low in China. The slowdown in the property market has reduced household consumption, contributing to weak consumer price inflation. At the same time, strong growth in production has led to an increased supply of manufactured goods and raw materials, reducing producer prices. China's annual headline CPI inflation rate was 0.3 percent in October 2024, while annual Producer Price Index (PPI) inflation was -2.9 percent (figure 3.3).

Figure 3.3

Chinese consumer and producer price inflation

(annual)



Source: Haver Analytics.

Chinese authorities have responded to the recent weakness in economic growth through a range of policy support measures. The People's Bank of China has further eased financial conditions by lowering its key policy interest rates and reserve ratio requirements for banks, as well as providing liquidity support for the stock market. Fiscal authorities intend to restructure local government debt, lowering interest costs. This should support the financial positions of local governments, which are important providers of capital investment. Further measures to bolster the housing market have included lowering existing mortgage rates and support for new lending to the sector.

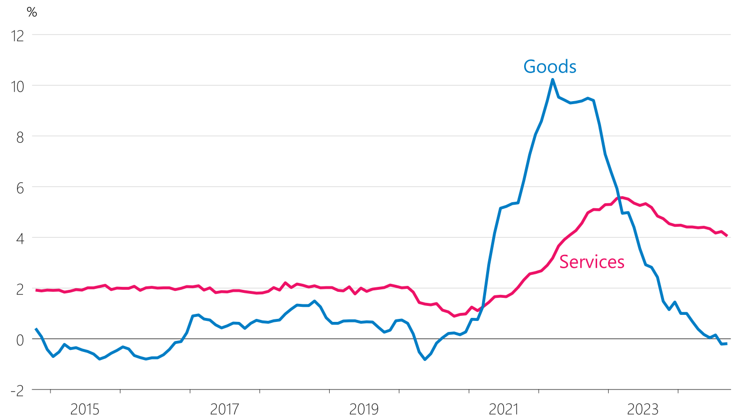
The economic impact of recent policies is unclear. Chinese equity prices increased significantly in response to initial policy announcements, but have since declined as the specific details have fallen short of investor expectations.

China's slowdown is affecting New Zealand via the trade channel. A slowing Chinese economy is affecting demand for New Zealand exports like wood, dairy and tourism. Declining producer prices in China are also putting downward pressure on New Zealand import prices. Over the medium term, slower growth in China is expected to remain a headwind for New Zealand's economic growth.

Inflation continues to decline towards central bank targets

Headline inflation has been falling and is now close to target in most advanced economies. Much of this recent disinflation has been accounted for by goods, including volatile components such as petrol (figure 3.4). Petrol prices have been lower because international oil prices have declined over recent months. The slowdown in services inflation remains a more gradual process.

Figure 3.4
Advanced economies' aggregate inflation
(annual)



Source: Haver Analytics.

Note: Advanced economies' aggregate inflation is calculated by Haver Analytics using CPI inflation series weighted by economies' shares of world GDP based on purchasing power parity estimates from the IMF. Economies included in the sample are the US, UK, euro area, Japan, Canada, and South Korea.

Figure 3.5
Brent crude oil prices

Source: Bloomberg.

Brent crude oil prices have fallen by around 7 percent since the August *Statement*. The anticipated slowdown in economic growth in the US and China has weighed on oil prices (figure 3.5). Geopolitical tensions between Iran and Israel continue to pose a risk to oil supply, but markets are not incorporating a significant risk premium into prices, given Iran's relatively small share of global oil supply and the extent of spare OPEC+ production capacity.

Excess demand in labour and housing markets have been key reasons for persistence in services inflation across advanced economies. Annual services inflation remains between 4 and 5 percent in many advanced economies. As demand for labour moderates, wage inflation is expected to continue declining, thereby contributing to reduced services inflation. In addition, while CPI rental inflation remains elevated, growth in new or advertised rents appears to be waning in many advanced economies.

Most major central banks have lowered their policy rates

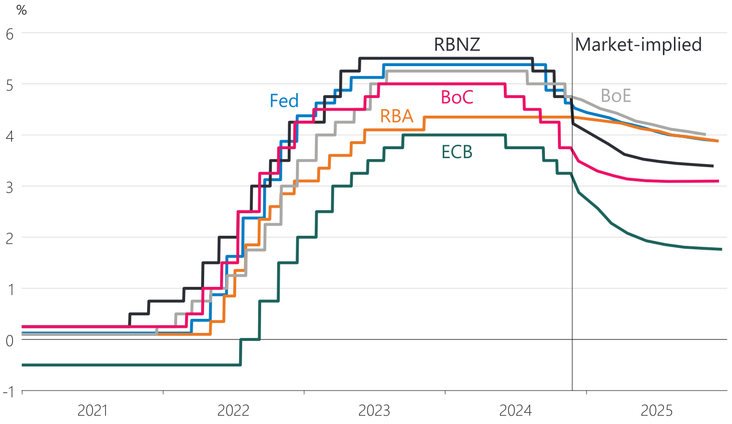
Most advanced economy central banks have lowered their policy rates since the August *Statement*. The pace of easing across advanced economies has varied and is expected to continue to do so. Market participants' pricing of future policy rates imply that the European Central Bank and RBNZ are expected to lower their policy rates by between 100 and 150 basis points over the next 12 months. The majority of that easing is expected to occur over the next six months (figure 3.6). The Federal Reserve, Bank of England and Reserve Bank of Australia are expected to reduce policy rates more slowly in the near term, with only 40 to 90 basis points of cuts expected over the next 12 months. The Bank of Canada is expected to lower its policy rate by around 65 basis points over the next year, after cutting its policy rate more quickly over this year.

Much of this difference can be explained by differences in macroeconomic conditions. Economies that are expected to reduce their policy rates at a faster pace have experienced a more significant easing in labour market conditions and weaker economic activity since the start of 2024. Many of these economies are also already near their headline inflation target and have lower rates of core inflation (figure 3.7).

Sovereign bond yields have increased, particularly at longer terms

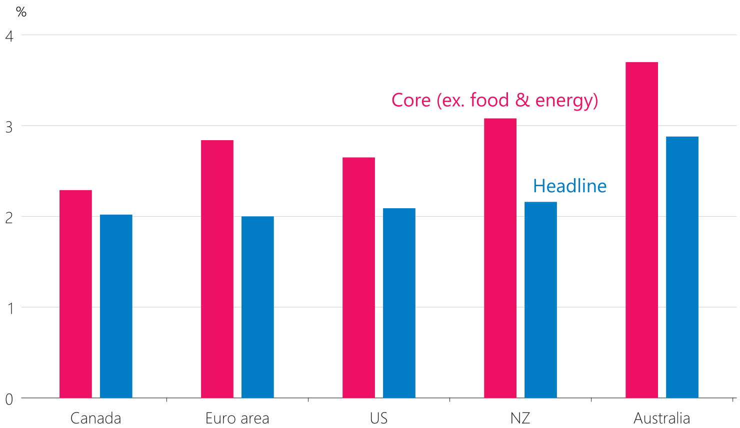
Changes in market participants' expectations of policy rates across major economies have flowed through to changes in short-term bond yields. Stronger-than-expected economic data in the US, particularly with respect to the labour market, has led the US 2-year Treasury yield to increase by around 40 basis points since the August *Statement*. UK 2-year yields have moved around 80 basis points higher over the same period. This was partly due to their latest budget implying more expansionary fiscal policy than investors had expected. Australian 2-year yields have increased by around 45 basis points, as expectations of market participants for the beginning of policy rate cuts have been pushed further into 2025 due to stronger-than-expected labour market and inflation data.

Figure 3.6
Market-implied path of policy rates



Source: Bloomberg.

Figure 3.7
Headline and core inflation
(annual)



Source: Haver Analytics.

Note: Core inflation represents the rate of inflation excluding food and energy prices. CPI inflation data are shown for all economies other than the US, which uses personal consumption expenditure. Data for Australia and New Zealand are released quarterly, with the most recent release from the September 2024 quarter. Data for the other economies are released monthly, with the most recent data from October, other than the US which is from September.

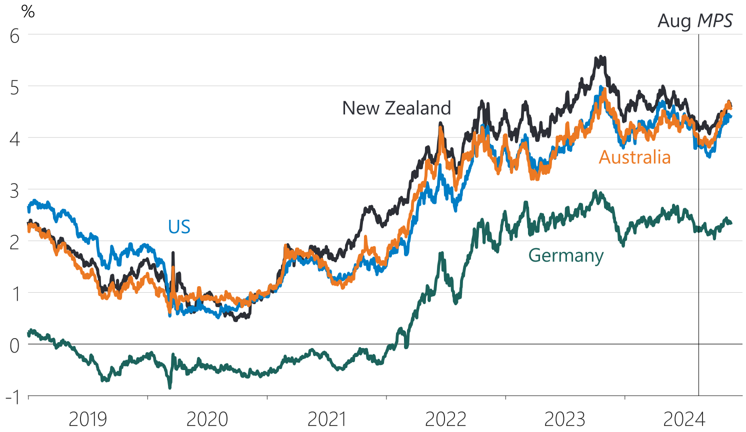
Long-term sovereign bond yields have increased significantly more than short-term yields, largely in response to the US election. Market participants' expectations of wider fiscal deficits in the US, increased economic uncertainty and slightly higher inflation expectations have led investors to demand a greater premium on longer-term assets relative to comparable short-term assets (the term premium). Developed economy term premia are highly correlated. Recent increases in US term premia have flowed through to higher 10-year sovereign yields globally (figure 3.8). 10-year sovereign bond yields in the US, Australia, and the UK are around are 60 basis points higher than at the time of the August *Statement,* while German and French 10-year yields have increased by around 15 basis points, as weakness in their domestic conditions offset the global trend higher.

US equity prices have increased following the US election

Some stronger-than-expected US economic data and the US election result have contributed to higher US equity prices. The S&P 500 has increased 9 percent since the August *Statement* (figure 3.9). Expectations of market participants for lower corporate tax rates and less regulation have improved the outlook for corporate earnings. These factors have supported US equity prices, offsetting the impact of higher sovereign bond yields. However, equity prices outside the US have not performed as strongly. This likely reflects investors' concerns that the incoming US administration's policies may reduce global growth and trade.

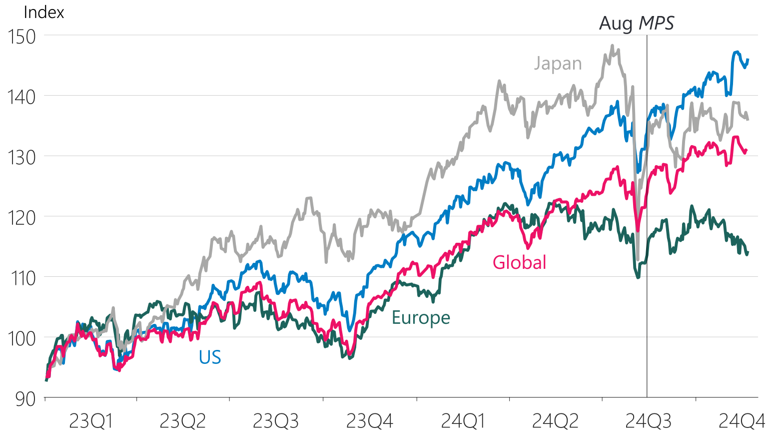
Increased global trade uncertainty is supporting US dollar strength. Since the August *Statement*, the US dollar has appreciated 3.6 percent against a broad range of currencies. Higher interest rates in the US are supporting the US dollar. In addition, ongoing uncertainty surrounding US foreign and trade policy has led to a depreciation in some currencies more sensitive to global trade.

Figure 3.8
10-year sovereign yields



Source: Bloomberg.

Figure 3.9
Global equity prices
(index = 100 on 1 January 2023)



Source: Bloomberg.

Chapter 04

Special topics

Aramoana Beach. Photo: Rachael Grant

Chapter 4. Special topics

Before the publication of each *Statement*, RBNZ staff provide analyses of some topical issues to the Monetary Policy Committee.

Topics for the November *Statement* included:

1. Trends in production sectors of the New Zealand economy
2. Summary of recent business visits
3. Real interest rates and their effect on the economy

Special topics in the past 12 months

Topic	Date/publication
Price-setting behaviour in a low-inflation environment	August 2024 *Statement* (Chapter 4)
Comparing macroeconomic conditions in economies at different stages of monetary policy easing	August 2024 *Statement* (Chapter 4)
Non-tradables inflation in New Zealand	May 2024 *Statement* (Chapter 4)
Recent trends in New Zealand's exporting sector	May 2024 *Statement* (Chapter 4)
The effect of higher shipping costs on inflation and the OCR	February 2024 *Statement* (Chapter 4)
The effect of the Government's proposed policies on monetary policy	February 2024 *Statement* (Chapter 4)
Monetary policy transmission lags	November 2023 *Statement* (Chapter 4)

1 Trends in production sectors of the New Zealand economy

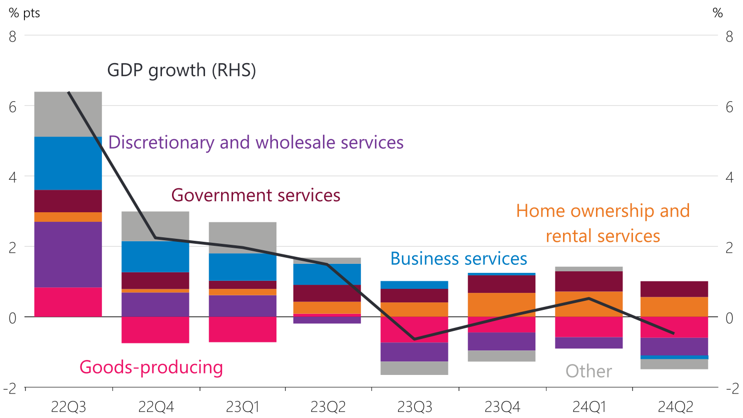
Summary

- **The level of production GDP in New Zealand has been broadly unchanged since 2022**.
- **Production sectors of the economy that are typically more sensitive to monetary policy have tended to be weaker over the past 2 years**. This is consistent with restrictive monetary policy reducing demand in the New Zealand economy over this period.
- **Sectors that are typically less sensitive to monetary policy have performed better than those that are more sensitive**. For example, services more directly related to government spending have grown moderately over the last 2 years.
- **As monetary policy eases, we expect that a faster recovery in sectors that are more sensitive to monetary policy will support economic growth**. We will continue to monitor timely indicators of activity in production sectors to assess how much and how quickly lower interest rates flow through to demand.
- **Factors other than monetary policy will also influence the production sector mix of economic growth**. For example, international developments, changes in net immigration, and fiscal policy settings will influence economic activity over coming years.

Figure 4.1

Contributions to production GDP growth by sectors of the economy

(annual)



Source: Stats NZ, RBNZ estimates.

Note: 'Goods-producing' sectors include construction, utilities, and manufacturing. 'Discretionary and wholesale services' include retail trade, accommodation and food, arts and recreational services, wholesale trade, and transport, warehousing and postal services. 'Home ownership and rental services' include owner-occupier property operations, real estate, and rental services. 'Government services' include education and training, public administration and safety, and healthcare and social assistance services. 'Business services' include financial and insurance services, information, media and telecommunications services, and other professional, scientific, or technical services. 'Other' refers to the primary sector, unallocated taxes, the seasonal balancing item, and chain-linked residual.

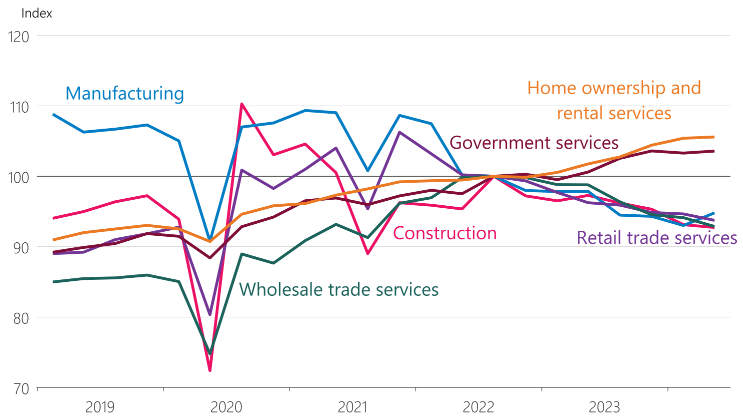
Sectors that are more sensitive to monetary policy have accounted for most of the weakness in GDP since 2022

Economic activity in New Zealand has been broadly unchanged over the past 2 years. Weak activity has been mainly concentrated in sectors of the economy that are typically more sensitive to changes in monetary policy (see box A). These sensitive sectors include goods-producing sectors and discretionary and wholesale service — particularly the construction, manufacturing, and retail trade sectors. Declining activity in these sectors has contributed to the weakness in GDP (figures 4.1 and 4.2).

Figure 4.2

Economic activity in selected sectors

(seasonally adjusted, index = 100 in the September 2022 quarter)



Source: Stats NZ, RBNZ estimates.

The stronger-performing production sectors since 2022 have been those that are typically less sensitive to monetary policy. Sectors that are heavily influenced by government spending — such as health and public administration — have continued to grow. In addition, more home building over the past 2 years has contributed to growth in owner-occupier property operations.

This pattern of performance by production sector is consistent with restrictive monetary policy reducing demand in the New Zealand economy over this period. This is different from past recessions in New Zealand, which have most often been caused by external shocks or droughts.[1]

Lower interest rates are expected to support quicker recoveries in more monetary policy sensitive sectors

We expect activity to recover faster in sectors more sensitive to monetary policy as interest rates decline. Monetary policy has eased, with the MPC reducing the OCR from August 2024. While sectors more sensitive to monetary policy have been weaker over the past 2 years, we expect that these sectors will recover more quickly in response to lower interest rates. Our central projection assumes that economic activity recovers from the December 2024 quarter, supported by stabilising and then increasing activity in more sensitive sectors (see chapter 6).

Factors other than monetary policy will also influence the production sector mix of economic growth. International developments, changes in net immigration, and fiscal policy settings are some of the key factors that could cause deviations from our central projections.

We will continue to monitor timely indicators of activity in these sectors to assess how lower interest rates pass through to demand. The degree to which demand and economic growth respond to lower interest rates will influence inflation, making them important determinants of future monetary policy settings.

1 See Reddell and Sleeman (2008), 'Some perspectives on past recessions', *Bulletin*, Reserve Bank of New Zealand.

Box A:
Sensitivity of different production GDP sectors to monetary policy

We estimate the sensitivity of different sectors of the economy to changes in monetary policy. We analysed the response across production sectors of the economy to an unanticipated change in the OCR over six quarters.[2] Our sample consists of quarterly sector-level production GDP data from 2001 to 2019. We omit the period since the COVID-19 pandemic because of the extreme volatility observed during this time.

We rank sectors of the economy by their sensitivity to monetary policy and sort them into three groups: high, medium, and low sensitivity categories. This grouping was based on how large the estimated reaction to the OCR change was. Table A.1 presents selected sectors of GDP in each sensitivity group.

Table A.1

Selected production GDP sectors by their sensitivity to monetary policy (shares of GDP in brackets)

High sensitivity	Medium sensitivity	Low sensitivity
Construction (7%)	Financial and insurance services (6%)	Public administration services (4%)
Manufacturing (9%)	Professional, scientific, and technical services (11%)	Healthcare services (7%)
Retail trade (5%)	Owner-occupier property operations (8%)	Primary (6%)
Arts and recreation (3%)		

2 It is challenging to isolate monetary policy's impact on the economy because monetary policy is set in response to changes in the inflation outlook. Further, OCR changes themselves are outcomes of macroeconomic conditions. We controlled for this in our analysis by estimating the effects of monetary policy 'shocks'. Shocks refer to changes in monetary policy that are independent of other changes to the inflation outlook (see chapter 4.1 in the November 2023 *Statement*).

2 Summary of recent business visits

Summary

- **We regularly meet with a range of businesses to improve our industry knowledge and understanding of current economic conditions and challenges that businesses face**. Over September and October, RBNZ and Treasury staff spoke with 85 businesses across Whangārei, Auckland, Hamilton, Tauranga, Hawkes Bay, Taranaki, Palmerston North, Wellington, Nelson, Blenheim, Christchurch, and Queenstown.
- **Most businesses reported that demand for their goods and services remained weak, but some reported that activity had started to recover in October**. Demand had been notably weaker for retail, hospitality and construction sectors over 2024. Many businesses reported that consumers had become more price sensitive, reducing overall spending, especially on discretionary items.
- **Most businesses expected demand to improve**. Businesses believed that the worst of the economic downturn had likely occurred and expected a recovery in economic activity in 2025.
- **Businesses were facing elevated costs but were increasingly unable to pass these on to consumers due to weak demand**. Most businesses said cost increases had begun to slow down, but they expected costs to remain at an elevated level. High costs and less ability to increase prices have squeezed profit margins for many businesses.
- **Investment intentions were mixed**. Businesses with stronger balance sheets (higher net worth) were most likely to be undertaking or about to start new investments. Businesses with weaker balance sheets were more likely to prioritise managing the current high-cost environment.
- **Labour market conditions had eased considerably**. Some businesses reported having made redundancies or reducing staff hours. Many reported that the number of applicants for new roles had increased significantly. Easing labour market conditions were reported to be leading to smaller wage increases than in recent years.
- **Overall, feedback from businesses supports our near-term projections for economic activity and inflation**. We expect GDP to grow in the December 2024 quarter, increasing further in 2025 as lower interest rates boost demand. Reduced pricing power reported by businesses is consistent with waning inflationary pressure.

Demand remained weak but businesses expected activity to improve

Businesses across the board reported experiencing weak domestic demand over the past 12 months. Restrictive interest rates and the high cost of living were cited as reasons for lower consumer spending on discretionary items. Regionally, demand in the South Island had been more resilient than demand in the North Island. This may have reflected the effect of public sector employment cuts, more indebted households being concentrated in Wellington and Auckland, and a stronger tourism recovery in Queenstown.

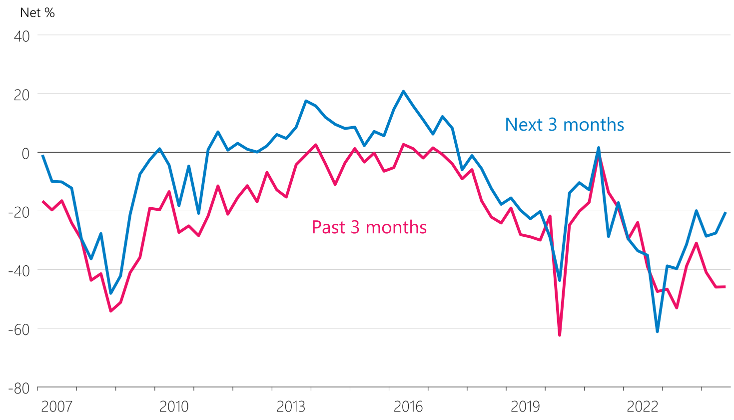
Demand was notably weakest in sectors that are more sensitive to high interest rates, such as retail, hospitality, and construction (see chapter 4.1). Businesses reported that consumers had become more price sensitive, affecting activity more in the retail and hospitality sectors. As the cost of living increased, consumers reduced discretionary spending and switched to cheaper alternatives. Businesses had also observed this behaviour from international tourists, noting the cost to visit New Zealand had increased and this was affecting tourist budgets.

Activity in the construction sector had been mixed. Commercial construction had been more resilient than residential. However, construction firms that rely on local and central government projects were struggling following reduced spending and delays in decisions about government projects. Despite weak demand, confidence in the outlook for construction had improved following interest rate cuts and the announcement of the Government's Fast-Track Approvals Bill.

The recovery in the tourism sector was reportedly slowing. Businesses in the tourism sector reported that the outlook for international visitors was flattening below pre-COVID-19 levels. An increase in the cost of travelling to New Zealand, partly due to higher levies and fees, was reported as being a contributor to slowing growth.

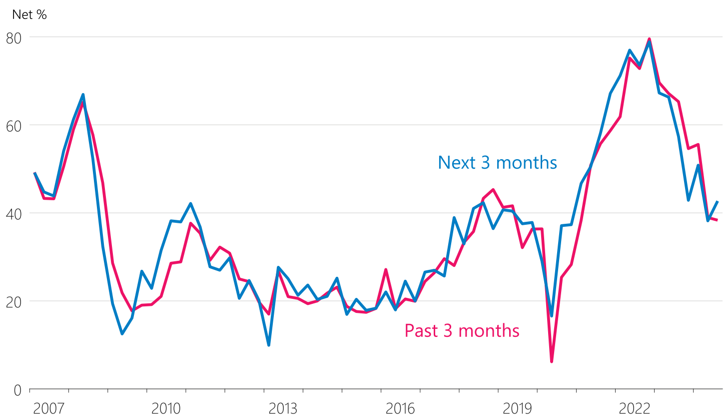
Some businesses reported that activity was beginning to recover, and most expected economic activity to increase in 2025. A number of businesses reported that demand was weakest around July, with some recovery in demand over October. Most businesses expected activity to improve over 2025 as lower interest rates support demand. However, a minority of businesses believed it might take longer for demand to recover due to the impact a higher cost of living has had on households.

Figure 4.3
QSBO economy wide profitability
(seasonally adjusted)



Source: NZIER.

Figure 4.4
QSBO economy wide average costs
(seasonally adjusted)



Source: NZIER.

Businesses were facing elevated costs and were increasingly unable to pass these on to consumers

A common theme in business surveys and our business visits was that firms' profit margins were being squeezed. Businesses reported an increase in the cost of doing business, but weak demand had prevented businesses from passing higher costs on to consumers (figure 4.3). Energy, insurance, and council rates were cited as the main non-labour cost pressures for most businesses. Some businesses also reported an increase in compliance costs, such as health and safety or climate disclosure requirements. While the size of cost increases was reported as being lower than last year, most businesses expected costs to remain at these higher levels. This aligns with what businesses reported in the September 2024 Quarterly Survey of Business Opinion (QSBO) (figure 4.4).

International shipping costs remain elevated but had eased from their post-COVID-19 peak. Some businesses exposed to international shipping costs expected costs to remain high as shipping contracts are repriced for next year. Additionally, increased berthing costs and weak demand for imports had meant global shipping carriers were more likely to send ships elsewhere, rather than to New Zealand, as returns were better offshore.

Near-term investment intentions were mixed

Investment intentions were relatively strong among businesses with strong balance sheets. However, businesses with weaker balance sheets were prioritising managing the current high-cost environment and strengthening their balance sheets, such as by paying down debt, rather than investing. Some businesses reported they would increase investment once they saw an improvement in their cashflow.

In general, businesses reported an increase in uncertainty around government policy. This was particularly notable in the agriculture and construction sectors. Some businesses reported holding off on investments while they awaited more certainty from the Government.

Some businesses, largely in primary industries, reported difficulties in accessing funding. Funding access was therefore limiting their ability to invest and grow their business.

Labour market conditions have eased

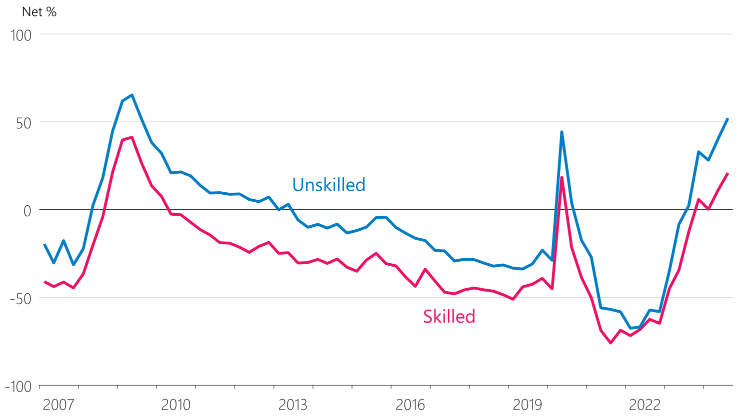
All businesses we spoke to reported that the labour market had eased. This was consistent with recent business surveys and official labour market data (figure 4.5). Some businesses reported having made redundancies or reducing staff hours, and many reported that the number of applicants for new roles had increased significantly. As is usually the case, certain skilled labour, such as engineers, tech-related roles, and project managers, remained difficult to find.

Businesses reported that easing labour market conditions were leading to smaller wage and salary increases than in recent years. However, while wage increases have fallen relative to the past couple of years, wage inflation remained slightly elevated compared to before the COVID-19 pandemic. Businesses often reported 3 to 5 percent wage increases for this year, which aligns with official labour data (figure 4.6). Businesses expected wage inflation to ease next year, partly reflecting lower headline inflation.

Figure 4.5

QSBO ease in finding labour

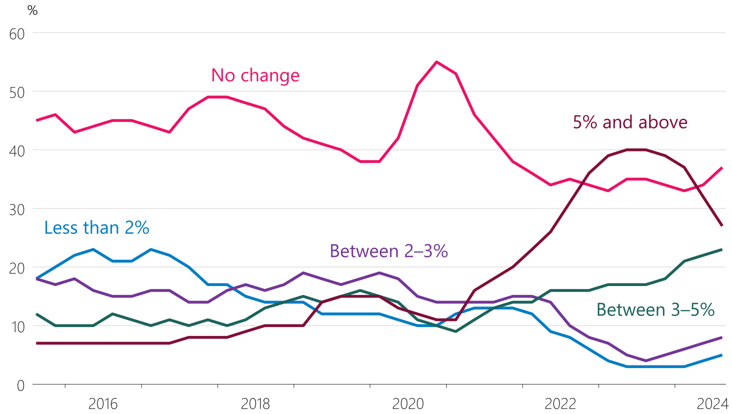
(seasonally adjusted)



Source: NZIER.

Figure 4.6

Distribution of annual labour cost index movements



Source: Stats NZ.

Immigration visa processing times and visa policy changes were affecting businesses that hire from offshore. Businesses reported a reduction in efficiency due to delays in workers starting.

Overall, feedback from businesses supports our near-term projections for economic activity and inflation. We expect GDP to grow in the December 2024 quarter, increasing further in 2025 as lower interest rates boost demand. Reduced pricing power reported by businesses is consistent with waning inflationary pressure.

3 Real interest rates and their effect on the economy

Summary

- **Investment and household spending are expected to increase as real interest rates fall**. Real interest rates are declining as nominal interest rates drop faster than expected inflation, which will boost economic activity through greater spending and investment. A wide range of measures of real interest rates are falling. As an example, 1-year mortgage rates have fallen from about 7.2 percent in May to 6 percent currently. Business expectations for inflation in a year's time have fallen from 2.7 percent to 2 percent over the same period.
- **Real interest rates — nominal interest rates adjusted for expected inflation — are an important determinant of economic outcomes**. For instance, household saving decisions depend on both the nominal returns on savings, and on expectations for how the purchasing power of savings will change. Real interest rates, rather than nominal interest rates, drive behaviour in macroeconomic models like the RBNZ's main forecasting model, NZSIM.[3]
- **Different measures of real interest rates produce different estimates for the level and change in real interest rates**. We compare the main real interest rate measure used in NZSIM to a range of alternatives. The real rate in NZSIM is in line with the average of this range, and both have declined in recent months. However, the range of real rate estimates has widened since the beginning of the year, so the pace of decline depends on the measure.
- **As real interest rates fall, our projections assume that this will support an increase in the output gap**. As monetary policy is assumed to become less restrictive, lower real rates support a period of GDP growth above potential, as the output gap increases to a higher level. Real interest rates are close to the neutral interest rate in the medium term, supporting a return of the output gap to around zero.

3 See Austin and Reid (2017), 'NZSIM: A model of the New Zealand economy for forecasting and policy analysis', *Bulletin*, Reserve Bank of New Zealand.

Real interest rates influence economic behaviour

Real interest rates are an important determinant of economic outcomes. In macroeconomic models like the RBNZ's main forecasting model, NZSIM, real interest rates, rather than nominal interest rates, determine the effect of monetary policy on economic activity and inflation.[4]

Households and firms adjust their behaviour based on real interest rates and their expectations for how they will evolve in the future. For example, household saving decisions depend on both the nominal returns on savings (the nominal interest rate), and on expectations for how the purchasing power of savings will change (inflation expectations). If someone expects prices to fall, they may delay purchases even if nominal interest rates are low. If someone expects a high rate of inflation, they may spend more now to avoid higher prices in the future, even if the nominal interest rate they would receive on their savings is high.

Real interest rates can be measured in different ways

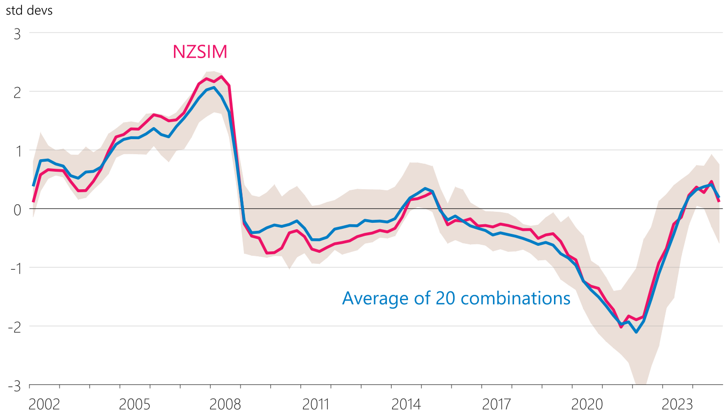
There are many ways to measure real interest rates, based on different choices of nominal interest rates and inflation expectations.[5] For instance, different nominal interest rates such as wholesale interest rates (like swap rates), mortgage rates, and deposit rates all influence economic behaviour. There are also multiple ways to measure inflation expectations. These can be derived from economic models of behaviour or based on surveys of households and firms.

Different measures of real rates can produce different estimates for the level and change in real interest rates. Figure 4.7 shows the main real interest rate measure used in NZSIM against the average and range of 20 measures of short-term real interest rates. These measures are calculated using combinations of different nominal interest rates and different measures of inflation expectations.[6]

Figure 4.7

Real interest rates

(standardised, quarterly average)



Source: RBNZ estimates.

Note: The shaded area shows the range of real rate measures. The range includes combinations of five nominal interest rates (NZSIM's mortgage rate measure, the OCR, 1-year mortgage rate, 6-month term deposit rate, and 1-year swap rate) and four measures of inflation expectations (NZSIM's measure, the 1-year measure from the RBNZ *Survey of Expectations (Business)*, the 1-year measure from the RBNZ *Household Survey of Expectations*, and short-term inflation expectations from the RBNZ's neutral interest rate suite). Measures have been standardised to make them comparable given differences in historical averages and degrees of variability between measures.

4 Although nominal interest rates also affect the transmission of monetary policy independently through a number of channels, such as by affecting the borrowing capacity of households, macroeconomic models often exclude these channels to reduce complexity.

5 Real interest rates can also be calculated using actual inflation outcomes, rather than expected inflation. However, for understanding behaviour and decision-making (rather than historical outcomes), inflation expectations are more appropriate.

6 The main real interest rate measure in NZSIM uses a mortgage rate measure as the nominal interest rate. This mortgage rate measure is based on the OCR, plus a representative spread between mortgage rates and wholesale rates at popular borrowing terms. The inflation expectations measure used in NZSIM is modelled as depending on its previous value and the most recent inflation data, meaning that it adapts over time to changes in actual inflation (see chapter 4.1 of the August *Statement*).

The real rate in NZSIM is in line with the average of a range of measures. The NZSIM real rate measure has generally tracked the average of this range closely over time, including over the past year. However, the range of estimates has widened since the beginning of this year. This reflects divergences in both nominal interest rate measures and inflation expectations measures.

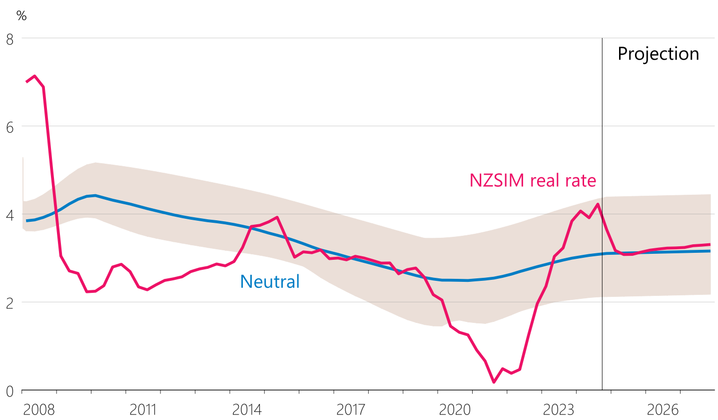
Real interest rates are falling, but the pace of decline depends on the measure. The average and range of real rate measures, along with the NZSIM measure, have begun to decline in recent months. This is because declines in nominal interest rates have outpaced falls in inflation expectations. However, some measures of real rates have fallen much more quickly than others. It is uncertain which of these measures are most important for influencing household and firm behaviour. This means there is uncertainty about the degree to which monetary policy is becoming less restrictive. However, this analysis shows that the NZSIM measure is broadly representative of the range of real interest rates that are likely to influence behaviour.

Falling real interest rates support an increase in the output gap

We assume falling real interest rates support an increase in the level of the output gap in our projections. Real interest rates are assumed to fall into early 2025, as nominal interest rates decline faster than inflation expectations (figure 4.8). Lower real interest rates support demand through a range of channels, supporting higher household consumption, residential investment, and business investment. Real interest rates are assumed to remain near the neutral interest rate over the medium term, which supports the output gap to increase to around zero.

A change in the level of real interest rates transmits to a change in the level of the output gap, with a lag. In our projections, lower real interest rates support an increase in the output gap, even though monetary policy is becoming less restrictive, rather than stimulatory. This is because in economic models like NZSIM, the level of real rates affects the level of the output gap. In New Zealand, changes in interest rates typically take 1 to 2 years to have their full impact on economic activity and the output gap. During this transmission period, a reduction in the level of real interest rates will temporarily boost GDP growth relative to potential as the output gap increases. Once transmission to the output gap is complete, the lower real rate level will no longer be boosting GDP growth, but will still be contributing to a higher level of the output gap than before the reduction.

Figure 4.8
Neutral and real interest rates
(quarterly average)



Source: RBNZ estimates.

Note: The real interest rate is the mortgage rate measure used in NZSIM. The neutral interest rate is the average neutral real interest rate from the RBNZ's neutral interest rate suite, plus the trend mortgage rate to OCR spread assumed in NZSIM. The shaded area represents the range of estimates from different measures in the neutral interest rate suite. Measures from the neutral interest rate suite are projected into the future using their most recent value.

Chapter 05

Domestic financial conditions

Hooker Valley. Photo: Jamie Antwis

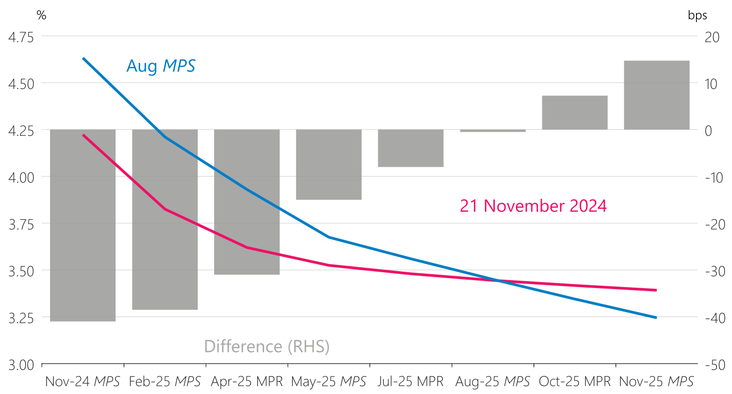
Chapter 5
Domestic financial conditions

Monetary policy affects economic activity and inflation by influencing financial conditions in New Zealand. These financial conditions include the interest rates at which households and businesses save and borrow, the exchange rate, and other factors such as credit availability. This chapter outlines recent developments in financial conditions in New Zealand as of 21 November 2024.

Overall, domestic financial conditions have become less restrictive since the August *Statement*. Wholesale interest rates, such as interest rate swaps, have decreased at short terms but increased at longer terms compared to immediately before the August *Statement*. This steepening of wholesale interest rate curves in New Zealand has been in line with developments in wholesale interest rates across advanced economies. Retail interest rates, including mortgage and term deposit rates, have moved lower since the August *Statement*, particularly at shorter terms. The New Zealand dollar exchange rate has moved slightly lower on a trade-weighted basis since the August *Statement*.

Figure 5.1

Market participants' expectations for the OCR



Source: Bloomberg.

Note: The blue line shows market participants' expectations for the OCR immediately before the August *Statement*. Each data point represents market participants' expectations of the level of the OCR at a given point in the future, as measured by overnight indexed swap pricing.

Market participants expect a faster decline in the OCR in the near term

Markets are pricing a faster decline in the OCR at upcoming decisions than at the time of the August *Statement*. Market participant expectations for the OCR can be inferred from prices for overnight indexed swap contracts. As of 21 November 2024, market participants expect 90 basis points of cuts to the OCR by February 2025, a faster pace of cuts than priced at the time of the August *Statement* (figure 5.1). This is consistent with market participants' expectations that the faster pace of OCR cuts will continue in the near term, after the OCR was cut 50 basis points at the October Monetary Policy Review.

Beyond August 2025, expectations of market participants for the OCR have increased. Market pricing indicates participants expect an OCR of around 3.40 percent in November 2025, up from 3.25 percent at the time of the August *Statement*.

Shorter-term domestic wholesale interest rates have decreased since the August *Statement*, while longer-term rates have increased. An interest rate swap involves the exchange of fixed and floating interest rate payments between two parties over a specified period.[7] The level of interest rate swaps will be approximately equal to market participants' expectations for average short-term market interest rates over the term of the swap.

7 Interest rate swap rates are wholesale interest rates often used as a benchmark by financial institutions in setting other interest rates in the economy. They can provide a guide to market participants' expectations for the policy rate over specific horizons.

Short-term wholesale rates have fallen, but long-term rates have increased

The reduction in market participants' expectations for the OCR at upcoming meetings has led to lower short-term wholesale rates. The 1-year swap rate has decreased around 70 basis points since the August *Statement* (figure 5.2). However, higher offshore long-term wholesale interest rates, particularly in the US (see chapter 3), have led to an increase in longer-term wholesale interest rates in New Zealand. The 10-year swap rate has increased by around 30 basis points since the August *Statement*. The interest rate swap curve has steepened because of these moves.

Similar dynamics have been seen in the New Zealand Government Bond (NZGB) yield curve. Yields on NZGBs with a maturity of 2 years or more have increased since the August *Statement*, consistent with market pricing for higher interest rates, both domestically and overseas.

The New Zealand dollar has depreciated slightly

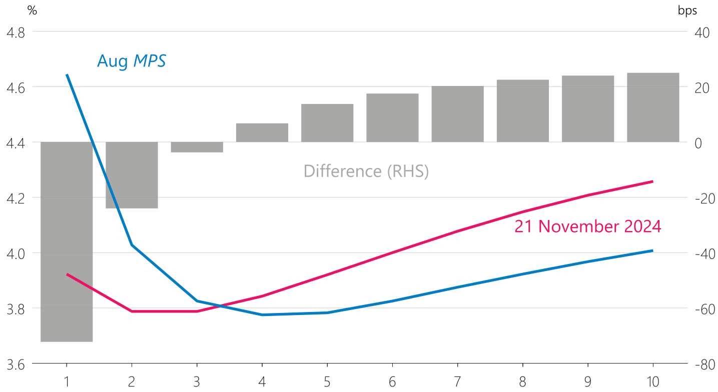
The New Zealand dollar exchange rate has moved slightly lower on a trade-weighted basis since the August *Statement* (figure 5.3). US factors have been a key driver of foreign exchange markets. The US dollar has appreciated significantly against other major currencies as markets have reacted to the US election result. Some New Zealand short-term wholesale rates, such as the 2-year swap rate, have declined further below the equivalent interest rates in the US and Australia. Lower interest rates in New Zealand compared to some of our key trading partners reflect different expectations for growth, inflation and monetary policy (see chapter 3).

Increases in New Zealand's key export commodity prices and improving global risk sentiment tend to be correlated with a higher New Zealand dollar. Prices of key export commodities in New Zealand — particularly dairy — have increased since the August *Statement*, supporting the New Zealand dollar.

Figure 5.2

New Zealand interest rate swap rates

(terms in years)

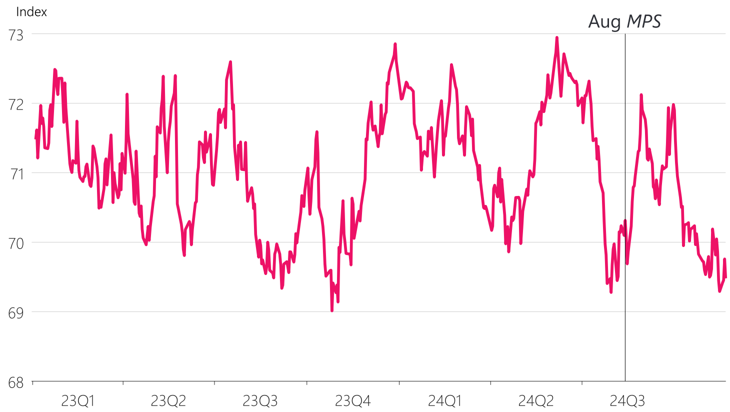


Source: LSEG.

Figure 5.3

New Zealand dollar trade-weighted index

(nominal)

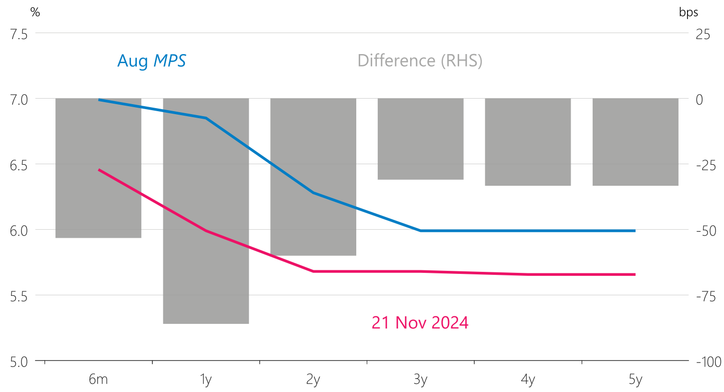


Source: RBNZ.

Measures of risk sentiment have improved over the same period. US equities are higher, and the VIX measure of US equity volatility has decreased. Bond market volatility measures have decreased in recent weeks. However, moves in measures of risk sentiment may be driven by US-specific factors, and may have supported the New Zealand dollar by less than usual.

Overall, the moves in commodity prices and risk sentiment since the August *Statement* have partly offset the influence of more negative interest rate differentials on the New Zealand dollar.

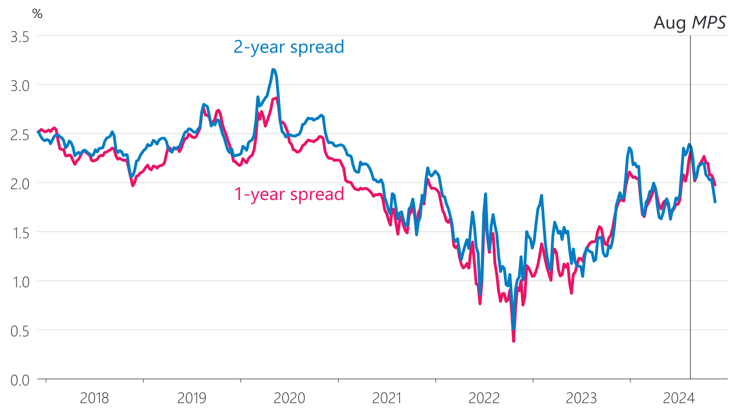
Figure 5.4
New Zealand mortgage rates
(terms in years)



Source: interest.co.nz.

Note: The mortgage rates shown are the average of the latest advertised fixed-term rates on offer from ANZ, ASB, BNZ, and Westpac for mortgages with a loan-to-value ratio of less than 80%.

Figure 5.5
New Zealand 1- and 2-year mortgage rates as a spread to equivalent swap rates



Source: interest.co.nz, Bloomberg.

Mortgage rates have declined at all terms since the August *Statement*, with shorter-term rates declining by more than longer-term rates (figure 5.4). Since the start of 2024, most new mortgage flows have been directed towards terms of 1 year or less, with the 6-month term becoming the most popular in recent months. Since the August *Statement*, the 6-month mortgage rate has fallen by around 50 basis points and the 1-year rate by around 90 basis points. Over the same period, the spread between the 1-year mortgage rate and the 1-year swap rate narrowed slightly (figure 5.5). Lower loan and mortgage rates reduce borrowing costs, encouraging households and firms to spend and invest. At the same time, lower returns on savings further discourage saving, boosting consumption and investment.

Mortgage and term deposit rates have declined

The average yield on the stock of mortgages is expected to decline in coming months. This is because most mortgage holders who are rolling off fixed rate mortgages or who are switching from floating to fixed, will move to lower interest rates than they have been paying. A lower average yield on the stock of mortgages indicates that average household mortgage interest payments are declining.

Term deposit rates have also declined at all terms since the August *Statement*. These declines have followed a similar pattern to mortgage rates, with shorter-term rates declining by more than longer-term rates. The spreads between the 6-month and 1-year term deposit and equivalent wholesale rates have increased since the August *Statement*, putting upward pressure on bank funding costs (figure 5.6). Equivalent spreads on other types of deposits, such as bonus saver and transaction accounts, have also increased, but remain at relatively low levels.

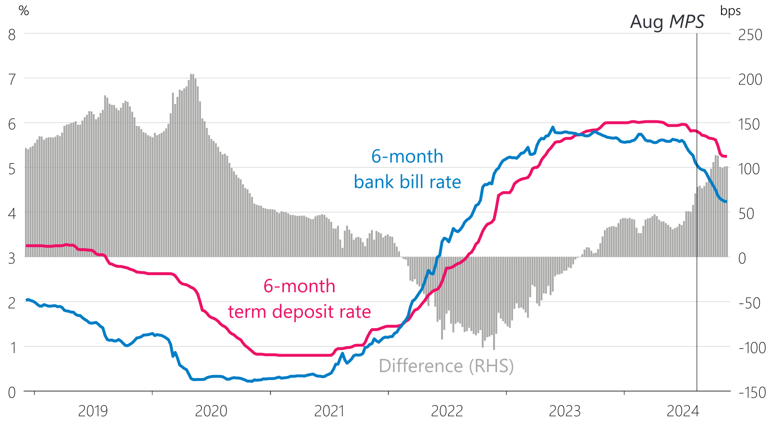
Banks have strong funding positions

Banks remain well funded and have strong liquidity buffers. The core funding ratio is a measure of banks' funding stability. This has fallen in recent months but, at around 90 percent, remains elevated compared to both the 75 percent regulatory minimum and historical levels. Banks will pay down the remaining $13 billion of borrowing taken out under the Funding for Lending Programme by the end of 2025.

Credit growth has remained subdued despite financial conditions becoming less restrictive. The September *Credit Conditions* Survey shows increases in credit availability, particularly for mortgages and consumer credit over the past 6 months. Credit availability for business and agricultural borrowers was broadly unchanged over this period. Respondents to the survey expect credit demand to improve over the next 6 months from relatively subdued levels.

Figure 5.6

Spread between the 6-month term deposit rate and the 6-month bank bill rate

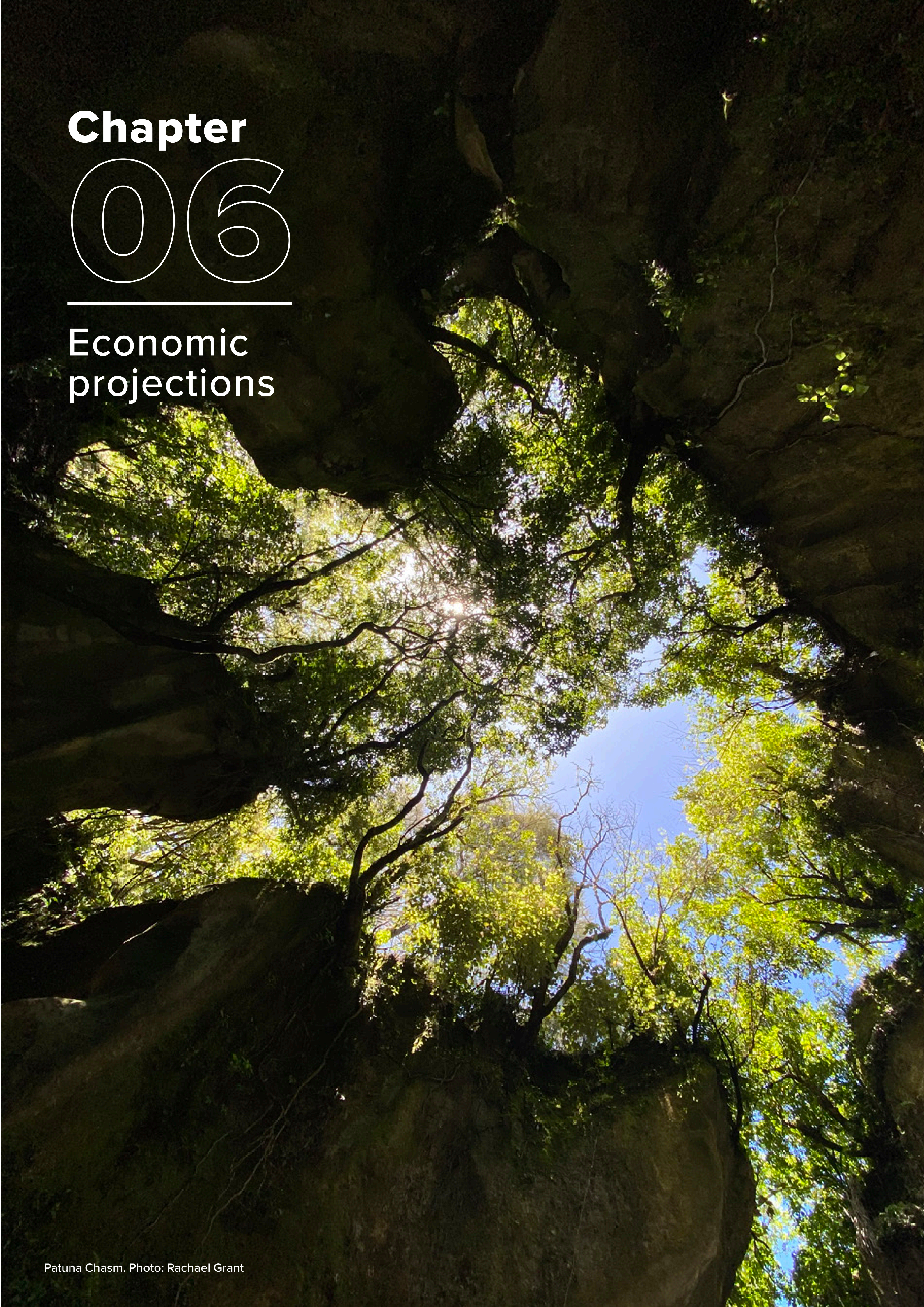


Source: interest.co.nz, Bloomberg.

Note: The term deposit rates shown are the average of the latest fixed-term rates on offer from ANZ, ASB, BNZ, and Westpac. Bank bill rates represent the rates at which banks are willing to borrow from, or lend to, one another at terms of up to 6 months.

Chapter 06

Economic projections



Patuna Chasm. Photo: Rachael Grant

Chapter 6. Economic projections

This chapter summarises the baseline economic projections that MPC members considered when making their policy assessment. The projections were finalised on 21 November 2024.

Economic activity and the labour market have been weak, and we estimate that the output gap is negative. Annual headline inflation is now close to 2 percent. However, the decline in inflation has mostly been accounted for by a sharp fall in tradables inflation to a negative rate. We assume tradables inflation will rise to more normal levels over the projection period. Therefore, non-tradables inflation needs to decline to be consistent with headline inflation being near 2 percent on a sustainable basis.

We assume that the negative output gap puts further downward pressure on non-tradables inflation over the next year. This brings non-tradables inflation to a level consistent with headline inflation near the target mid-point as tradables inflation reverts to its long-run average. We assume lower interest rates support a recovery in the output gap across the projection. This implies a period of economic growth above the potential growth rate.

We project the output gap to remain sufficiently negative to keep inflation within the 1 to 3 percent target band, and near the mid-point over the medium term. We assume that price-setting behaviour adapts to a low-inflation environment over the medium term, easing inflationary pressure. As price-setting behaviour adapts, the OCR declines to around the middle of our estimated band of neutral rates.

The New Zealand labour market has continued to weaken. The unemployment rate increased further to 4.8 percent in the September 2024 quarter, and employment has decreased. Due to usual lags between economic activity and the labour market, the unemployment rate is expected to continue to rise to a peak of 5.2 percent in early 2025 before gradually recovering.

These projections rely on a set of key assumptions about the global and domestic factors influencing the economy. These include:

- the magnitude and persistence of recent weakness in economic activity;
- the level of potential GDP and the extent to which the output gap has declined recently;
- the pace at which price-setting behaviour adapts to a low-inflation environment;
- the speed at which labour market and wage pressures ease and the effects of these factors on household spending and core inflation;
- the extent to which economic activity strengthens in response to lower interest rates;
- the outlook for net immigration and the extent to which it contributes relatively more to aggregate demand or labour supply;
- the extent to which activity, inflation and trade policy in our key trading partners affect domestic financial conditions, demand for New Zealand's goods and services exports, and prices for imports; and
- the extent to which government consumption and investment evolve consistent with the fiscal forecasts — including final operating allowances — in *Budget* 2024.

There is significant uncertainty about these assumptions.

Table 6.1

Key projection assumptions

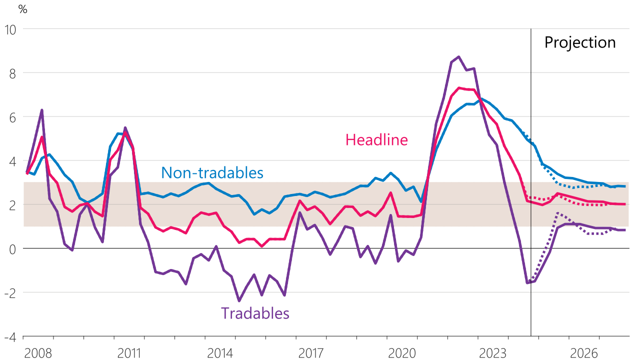
Key factors	
Global factors	• Market expectations for future policy interest rates in our trade partners have increased across the forecast period since the August *Statement*, due largely to a resilient US economy and expectations of expansionary US fiscal policy. All else equal, higher offshore interest rates put downward pressure on the New Zealand dollar exchange rate. • However, prices for most of New Zealand's key export commodities, particularly dairy, have increased in recent months. A stronger outlook for export prices has resulted in a stronger outlook for New Zealand's terms of trade. The improved outlook for the terms of trade puts upward pressure on the New Zealand dollar exchange rate. • The stronger terms of trade and higher world interest rates have had broadly offsetting effects on the exchange rate in our projection. The New Zealand dollar trade weighted index (TWI) is assumed to remain at 69.5 over the projection.
Domestic capacity pressures	• The output gap is less negative across the forecast, owing to a higher starting point (-1.4 percent of potential GDP in the December 2024 quarter) and faster easing of monetary policy, relative to the August projection. • The output gap is expected to begin to recover in the March 2025 quarter, in response to declining real interest rates. The decline in real interest rates supports an increase in the output gap via a period of above-potential growth (see chapter 4.3). • The decline in the output gap since mid-2022 has been largely induced by tighter monetary policy and less accommodative fiscal policy. Likewise, less restrictive monetary policy is expected to result in a recovery in the output gap. Sectors of the economy that are typically more sensitive to monetary policy have tended to be weaker over the past 2 years and are expected to lead the recovery in economic growth (see chapter 4.1).
Price-setting behaviour	• Price-setting behaviour is assumed to adapt to a low-inflation environment over time, meaning its contribution to inflationary pressure declines over the projection period. At the August *Statement*, we updated our assumption so that behaviour adapts more quickly to low inflation than previously (see chapter 4.1 of the August *Statement*).
Economic growth	
Potential output	• We have made two sets of adjustments in our modelling of potential GDP: - We have updated our estimates of potential output over the COVID-19 period. These historical adjustments reflect updated judgements and assumptions about how productivity and potential labour inputs evolved over this period, particularly during and after lockdowns. - We now assume potential output is more responsive to changes in population growth. The main effect of this is that, over both history and the forecast, potential growth is more sensitive to changes in net immigration. • A downward revision to our net immigration projection since the August *Statement* means we now assume labour force growth contributes less to potential growth. This change affects both aggregate supply and demand (i.e. lower potential growth is met with lower GDP growth). Therefore, the net effect of lower net immigration on inflation pressure is small. However, this change has contributed to a lower GDP growth forecast in the medium term. • The supply of goods and services is expected to continue to increase, supported by continued population growth through immigration that expands the productive capacity of the economy. After recently being negative in annual growth terms, productivity growth is assumed to recover towards its pre-COVID-19 average over the medium term.

Production	• We assume that the economy contracted by 0.2 percent in the September 2024 quarter. GDP is assumed to resume modest growth in the December 2024 quarter, with a period of above-potential growth beginning in 2025. • We assume that spare capacity has emerged and will diminish gradually through 2025 and 2026.
Consumption	• Consumption has been growing slightly below its trend growth rate over the past year. Consumption growth is assumed to increase as monetary policy is eased.
Residential investment	• Residential investment has been falling for 2 years as restrictive interest rates have dampened housing demand and made development projects less viable. • Dwelling consents have stabilised over the past year and have increased slightly in the September 2024 quarter. We assume residential investment will begin to recover in early 2025 in response to lower mortgage rates and higher house prices.
Business investment	• Business investment began to decline about a year ago, prior to which it had remained strong due to the capacity constrained economy. Business investment is expected to begin to recover in the second half of 2025, slightly later than the rest of the economy, with a lagged response to the recovering output gap.
Government	• Government spending is assumed to be consistent with the fiscal forecasts — including final operating allowances — in *Budget* 2024, adjusted for a higher starting point based on June 2024 quarter GDP data. • Total government spending continues to decline as a share of potential GDP over the projection horizon.
Exports and imports	• Over the medium term, goods export volumes are assumed to grow at a similar pace to the rest of the economy. The continued recovery in tourism exports is expected to cause total export growth to be slightly faster than overall economic growth. • Import volumes are assumed to evolve in line with other components of GDP. • Our projections do not include any effects from possible future changes in international trade policies.
Inventories	• Since early 2023, a significant decrease in inventories has occurred. The drawdown in inventories has meant less production activity has taken place for a given level of demand. As the economy begins to recover, we expect inventories growth to return to normal levels.
Difference in production and expenditure measures of GDP	• In principle, different approaches to GDP measurement should be equal. In practice however, divergences can occur due to measurement difficulties. Based on Stats NZ's current estimates, expenditure GDP growth has been stronger than production GDP growth over the past 10 years, but the difference was larger than usual in the June 2024 quarter. • The production measure is generally considered to be the better measure to reflect the level of and changes in economic activity quarter-to-quarter. This is the measure we use to assess aggregate economic growth and the output gap. However, our forecasting framework uses the expenditure components to model how output will evolve based on estimated behavioural relationships. Therefore, the gap between published production and expenditure measures means that most components of expenditure GDP have a stronger starting point level as a share of potential GDP in this projection. However, it is the overall output gap — which is determined by how these components change over the projection — which affects inflationary pressure. Although the growing production-expenditure difference does not affect the outlook for interest rates in this projection, it does add to our uncertainty about the current state of the economy.

Labour market	
Employment and wages	• The New Zealand labour market has continued to ease. The unemployment rate increased further to 4.8 percent in the September 2024 quarter. Employment has decreased. • The labour market tends to lag developments in the broader economy, and employment growth is expected to remain subdued over the next year. • Same-job wage growth has eased substantially. With weak labour market conditions and headline inflation remaining within the target band, we expect wage growth to remain around its pre-COVID-19 average of about 0.5 percent per quarter over the medium term. • The unemployment rate is expected to continue to increase to a peak of 5.2 percent in early 2025, before declining. The lower unemployment rate projection relative to the August *Statement* is consistent with a less negative output gap projection.
Migration	• Net immigration has continued to decline — although remains positive — with elevated departures and decreasing arrival numbers. We expect working-age net immigration to continue to decrease, declining to a quarterly low of 2,500 in the March 2025 quarter before increasing gradually to around 7,500 per quarter by the end of the projection. This forecast accounts for differences in the relative strength of the Australian and New Zealand labour markets. The tight Australian labour market is encouraging New Zealand workers to leave for job opportunities in Australia. However, as labour market conditions in New Zealand improve from the second half of 2025, we expect net immigration to gradually return toward its pre-COVID-19 average. • Net immigration is currently assumed to have a minimal effect on inflation pressure in our forecast, as the additional supply of workers and demand for goods and services are broadly offsetting.
Inflation	
Headline	• Annual headline CPI inflation decreased to 2.2 percent in the September 2024 quarter, returning to the inflation target band. • Annual headline CPI inflation is currently below all core inflation measures. Low tradables inflation has contributed significantly to lower headline inflation. In the medium term, a decline in non-tradables inflation from its current level is required to sustainably meet the inflation target, because tradables inflation is assumed to increase to around its historic average.
Non-tradables	• Non-tradables inflation is projected to decline from its elevated level, due to a negative output gap and price-setting behaviour adapting to a low-inflation environment. We project annual non-tradables inflation will reach a level consistent with the inflation target mid-point at the end of 2025. The non-tradables forecast is slightly higher than in the August *Statement* because of the less negative output gap.
Tradables	• Annual tradables inflation has decreased rapidly over the past year, declining to -1.6 percent in the September 2024 quarter. Prices for some tradables items such as fuel, vegetables, and international airfares in particular have declined from high levels. Annual tradables inflation is expected to increase to around pre-COVID-19 average levels as these large price falls drop out of the annual calculation.

Charts

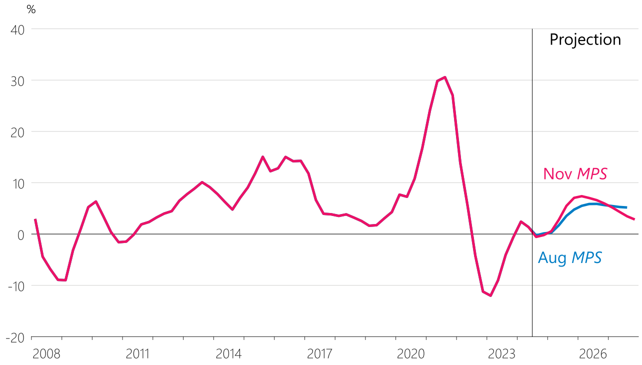
Figure 6.1
Inflation components
(annual)



Source: Stats NZ, RBNZ estimates.

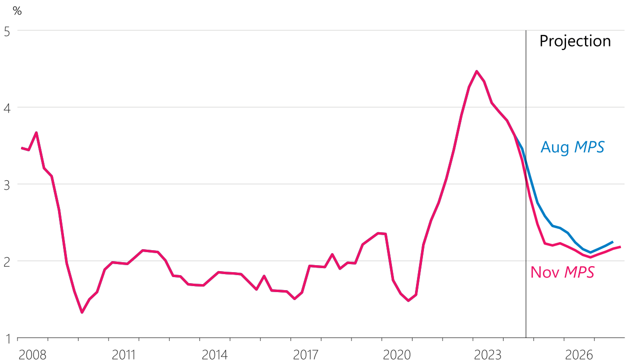
Note: Dotted lines show the projections from the August *Statement*. The shaded area represents the MPC's 1 to 3 percent target range for annual CPI inflation over the medium term.

Figure 6.4
House price growth
(annual)



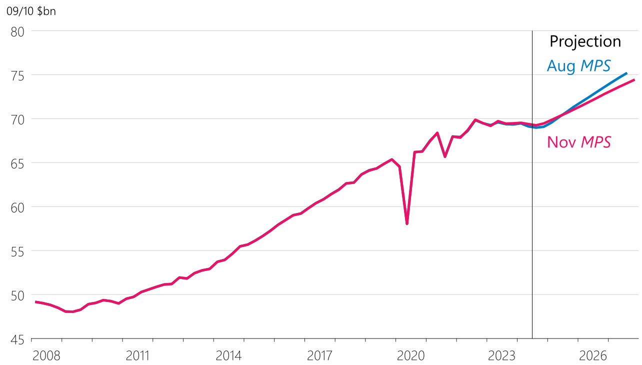
Source: CoreLogic, RBNZ estimates.

Figure 6.2
Private sector LCI wage inflation
(annual)



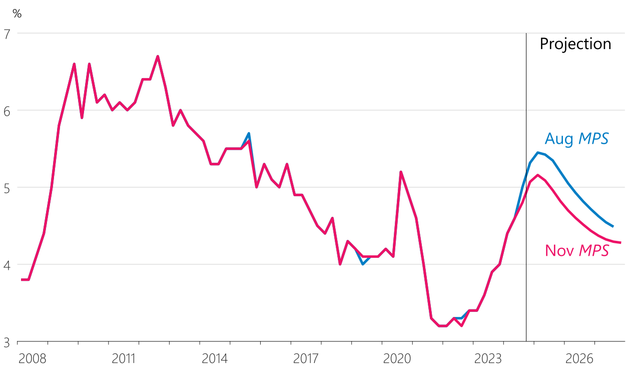
Source: Stats NZ, RBNZ estimates.

Figure 6.5
Production GDP
(quarterly, seasonally adjusted)



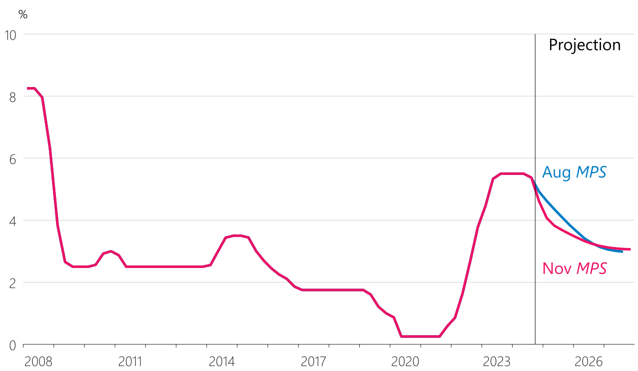
Source: Stats NZ, RBNZ estimates.

Figure 6.3
Unemployment rate
(unemployed people as a share of the labour force, seasonally adjusted)



Source: Stats NZ, RBNZ estimates.

Figure 6.6
OCR
(quarterly average)



Source: RBNZ estimates.

Chapter 07

Appendices

Mount Ruapehu. Photo: Magnus Åstebøl

Chapter 7. Appendices

Appendix 1: Statistical tables

Table 7.1

Key forecast variables

		GDP growth Quarterly	CPI inflation Quarterly	CPI inflation Annual	Unemployment rate	TWI	OCR
2022	Mar	-0.2	1.8	6.9	3.2	72.6	0.9
	Jun	1.3	1.7	7.3	3.3	72.1	1.6
	Sep	1.7	2.2	7.2	3.2	70.6	2.7
	Dec	-0.6	1.4	7.2	3.4	70.8	3.8
2023	Mar	-0.5	1.2	6.7	3.4	71.3	4.5
	Jun	0.8	1.1	6.0	3.6	71.0	5.3
	Sep	-0.4	1.8	5.6	3.9	70.6	5.5
	Dec	0.0	0.5	4.7	4.0	70.8	5.5
2024	Mar	0.1	0.6	4.0	4.4	71.6	5.5
	Jun	-0.2	0.4	3.3	4.6	71.4	5.5
	Sep	**-0.2**	0.6	2.2	4.8	70.9	5.4
	Dec	**0.3**	**0.4**	**2.1**	**5.1**	**69.9**	**4.6**
2025	Mar	**0.6**	**0.5**	**2.0**	**5.2**	**69.5**	**4.1**
	Jun	**0.6**	**0.5**	**2.1**	**5.1**	**69.5**	**3.8**
	Sep	**0.6**	**1.0**	**2.5**	**5.0**	**69.5**	**3.7**
	Dec	**0.6**	**0.3**	**2.4**	**4.8**	**69.5**	**3.6**
2026	Mar	**0.6**	**0.5**	**2.3**	**4.7**	**69.5**	**3.4**
	Jun	**0.6**	**0.5**	**2.2**	**4.6**	**69.5**	**3.3**
	Sep	**0.6**	**0.9**	**2.1**	**4.5**	**69.5**	**3.2**
	Dec	**0.6**	**0.3**	**2.1**	**4.4**	**69.5**	**3.2**
2027	Mar	**0.6**	**0.4**	**2.1**	**4.4**	**69.5**	**3.1**
	Jun	**0.6**	**0.4**	**2.0**	**4.3**	**69.5**	**3.1**
	Sep	**0.5**	**0.9**	**2.0**	**4.3**	**69.5**	**3.1**
	Dec	**0.5**	**0.3**	**2.0**	**4.3**	**69.5**	**3.1**

Table 7.2

Measures of inflation, inflation expectations, and asset prices

	2023				2024			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
Inflation (annual rates)								
CPI	6.7	6.0	5.6	4.7	4.0	3.3	2.2	
CPI non-tradables	6.8	6.6	6.3	5.9	5.8	5.4	4.9	
CPI tradables	6.4	5.2	4.7	3.0	1.6	0.3	-1.6	
Sectoral factor model estimate of core inflation	5.8	5.8	5.3	4.7	4.2	3.6	3.4	
CPI trimmed mean (30% measure)	6.1	6.0	5.5	5.0	4.5	3.8	2.7	
CPI weighted median	5.6	6.6	5.0	4.4	4.4	3.5	2.8	
GDP deflator (expenditure)	5.2	5.6	6.8	3.8	4.1	3.1		
Inflation expectations								
RBNZ Survey of Expectations – inflation 1 year ahead	5.1	4.3	4.2	3.6	3.2	2.7	2.4	2.0
RBNZ Survey of Expectations – inflation 2 years ahead	3.3	2.8	2.8	2.8	2.5	2.3	2.0	2.1
RBNZ Survey of Expectations – inflation 5 years ahead	2.4	2.4	2.3	2.4	2.3	2.3	2.1	2.2
RBNZ Survey of Expectations – inflation 10 years ahead	2.2	2.3	2.2	2.3	2.2	2.2	2.0	2.2

Table 7.3

Measures of labour market conditions

(seasonally adjusted, changes expressed in annual percent terms, unless specified otherwise)

	2023				2024		
	Mar	Jun	Sep	Dec	Mar	Jun	Sep
Household Labour Force Survey							
Unemployment rate	3.4	3.6	3.9	4.0	4.4	4.6	4.8
Underutilisation rate	9.1	9.9	10.4	10.7	11.2	11.8	11.6
Labour force participation rate	72.1	72.4	72.1	71.9	71.5	71.7	71.2
Employment rate (% of working-age population)	69.6	69.8	69.3	69.0	68.4	68.4	67.8
Employment growth	3.1	4.4	3.1	2.8	1.1	0.3	-0.4
Average weekly hours worked	33.5	33.5	33.6	33.6	33.8	33.2	33.3
Number unemployed (thousand people)	103	110	119	123	135	143	148
Number employed (million people)	2.90	2.93	2.94	2.95	2.94	2.94	2.93
Labour force (million people)	3.01	3.04	3.06	3.07	3.07	3.08	3.08
Extended labour force (million people)	3.09	3.14	3.15	3.16	3.17	3.19	3.17
Working-age population (million people, age 15 years+)	4.17	4.21	4.24	4.27	4.29	4.30	4.32
Quarterly Employment Survey — QES							
Filled jobs growth	2.2	6.5	6.1	4.3	3.5	-0.2	-1.3
Average hourly earnings growth (private sector, ordinary time)	8.3	7.7	7.0	6.6	4.8	4.0	3.2
Other data sources							
Labour Cost Index growth, adjusted (private sector, ordinary and overtime)	4.5	4.3	4.1	3.9	3.8	3.6	3.3
Labour Cost Index growth, unadjusted (private sector, ordinary time)	6.1	6.1	5.7	5.7	5.2	4.8	4.5
Estimated net working-age immigration (thousands, quarterly)	33.2	34.2	23.3	12.1	7.2	6.5	3.4
Change in All Vacancies Index*	-11.5	-25.2	-8.7	-32.3	-18.0	-30.9	-13.5

Note: The All Vacancies Index is produced by MBIE as part of the monthly Jobs Online report, which shows changes in job vacancies advertised by businesses on internet job boards. The unadjusted Labour Cost Index (LCI) is an analytical index that reflects quality change in addition to price change (whereas the official LCI measures price changes only). For definitions of underutilisation, the extended labour force, and related concepts, see Stats NZ (2016) 'Introducing underutilisation in the labour market'.

*The All Vacancies Index is a non-seasonally adjusted series.

Table 7.4

Composition of real GDP growth

(annual average percent change, seasonally adjusted, March years, unless specified otherwise)

	Actuals								Projection		
March year	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Final consumption expenditure											
Private	6.4	4.8	4.5	2.4	0.2	6.0	2.6	0.6	**1.2**	**2.0**	**2.4**
Public authority	1.9	3.8	3.3	5.8	6.9	8.0	2.0	-0.3	**-1.1**	**-0.9**	**0.7**
Total	**5.4**	**4.6**	**4.3**	**3.2**	**1.8**	**6.5**	**2.5**	**0.4**	**0.6**	**1.3**	**2.0**
Gross fixed capital formation											
Residential	8.8	-1.8	-0.1	2.7	2.2	3.2	-0.6	-5.1	**-3.1**	**5.2**	**6.9**
Other	0.0	10.0	7.1	2.7	-2.9	12.6	2.9	-1.0	**-0.8**	**1.9**	**3.9**
Total	**2.3**	**6.7**	**5.2**	**2.7**	**-1.7**	**10.2**	**2.1**	**-2.0**	**-1.3**	**2.6**	**4.5**
Final domestic expenditure	4.6	5.1	4.5	3.0	1.0	7.3	2.4	-0.2	**0.2**	**1.6**	**2.6**
Changes in inventories*	0.1	0.2	-0.2	-0.2	-0.3	0.6	-0.1	-1.4	**0.7**	**0.4**	**0.1**
Gross national expenditure	**4.8**	**5.6**	**4.3**	**2.7**	**-0.3**	**8.5**	**2.6**	**-1.5**	**0.8**	**2.1**	**2.7**
Exports of goods and services	2.0	3.8	3.3	0.2	-17.9	2.4	5.6	8.3	**1.0**	**3.1**	**2.8**
Imports of goods and services	5.1	7.8	4.8	1.4	-15.7	17.1	4.5	-1.2	**1.9**	**3.3**	**3.8**
Expenditure on GDP	**3.9**	**4.3**	**3.9**	**2.5**	**0.0**	**4.7**	**2.7**	**0.7**	**0.4**	**1.9**	**2.4**
GDP (production)	3.8	3.4	3.5	2.4	-0.4	4.6	2.7	0.3	**-0.1**	**2.0**	**2.4**
GDP (production, March qtr to March qtr)	3.3	3.5	3.5	0.7	4.5	0.6	2.0	0.5	**0.5**	**2.3**	**2.4**

* Percentage point contribution to the growth rate of GDP.

Table 7.5

Summary of economic projections

(annual percent change, March years, unless specified otherwise)

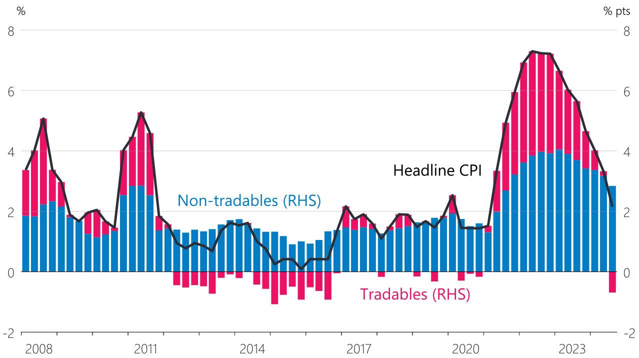
	Actuals								Projection		
March year	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Price measures											
CPI	2.2	1.1	1.5	2.5	1.5	6.9	6.7	4.0	**2.0**	**2.3**	**2.1**
Labour costs	1.5	1.9	2.0	2.4	1.6	3.1	4.5	3.8	**2.5**	**2.2**	**2.1**
Export prices (in New Zealand dollars)	4.1	3.3	1.2	6.9	-5.9	20.9	1.2	-2.1	**6.9**	**1.6**	**1.6**
Import prices (in New Zealand dollars)	1.2	1.7	4.1	2.4	-2.5	18.8	8.1	-3.8	**2.5**	**-1.0**	**0.2**
Monetary conditions											
OCR (year average)	2.0	1.8	1.8	1.2	0.3	0.5	3.1	5.5	**4.9**	**3.6**	**3.2**
TWI (year average)	76.5	75.6	73.4	71.7	72.4	74.0	71.2	71.0	**70.4**	**69.5**	**69.5**
Output											
GDP (production, annual average % change)	3.8	3.4	3.5	2.4	-0.4	4.6	2.7	0.3	**-0.1**	**2.0**	**2.4**
Potential output (annual average % change)	3.4	3.2	3.1	2.5	-0.2	1.8	3.1	2.5	**1.7**	**1.5**	**1.8**
Output gap (% of potential GDP, year average)	0.1	0.3	0.7	0.6	0.2	3.1	2.7	0.6	**-1.2**	**-0.7**	**-0.1**
Labour market											
Total employment (seasonally adjusted)	5.9	2.9	1.5	2.6	0.1	2.5	3.1	1.1	**-0.5**	**1.6**	**2.1**
Unemployment rate (March qtr, seasonally adjusted)	4.9	4.4	4.2	4.2	4.6	3.2	3.4	4.4	**5.2**	**4.7**	**4.4**
Trend labour productivity	0.6	0.6	0.6	0.7	0.6	0.3	0.1	0.0	**0.1**	**0.2**	**0.4**
Key balances											
Government operating balance* (% of GDP, year to June)	1.5	1.9	2.4	-7.3	-1.3	-2.6	-2.3	**-2.5**	**-2.8**	**-1.8**	**-0.6**
Current account balance (% of GDP)	-2.6	-3.1	-3.9	-2.4	-2.7	-6.7	-8.6	-6.6	**-6.0**	**-4.6**	**-4.3**
Terms of trade (SNA measure, annual average % change)	2.1	4.5	-2.1	2.0	-1.0	0.4	-5.0	-1.3	**3.2**	**4.2**	**1.6**
Household saving rate** (% of disposable income)	-1.8	-2.0	-1.3	1.4	7.6	2.4	-3.0	**-1.3**	**-1.7**	**-1.3**	**-0.1**
World economy											
Trading-partner GDP (annual average % change)	3.5	4.0	3.5	1.7	-0.4	6.2	2.9	3.1	**2.8**	**2.8**	**2.8**
Trading-partner CPI (TWI-weighted)	1.9	1.8	1.4	2.4	0.8	4.1	4.8	2.2	**2.1**	**2.0**	**2.1**

* Government operating balance is a model-based estimate of OBEGAL divided by nominal GDP in the projection. The estimate is partial because it relies on projections for some components from the *Budget* 2024.

** Household saving rate data up to the year to March 2023 have been updated based on national accounts (income and expenditure) published by Stats NZ on 15 November 2024. Other reported forecasts for nominal expenditure GDP components are based on June 2024 quarter GDP data.

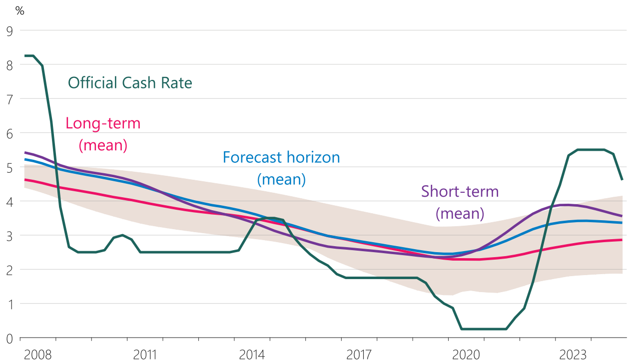
Appendix 2: Chart pack

Figure 7.1
Composition of CPI inflation
(annual)



Source: Stats NZ.

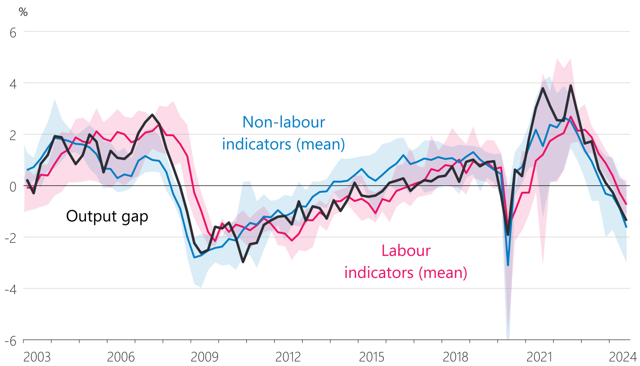
Figure 7.4
OCR and nominal neutral OCR indicator suite
(quarterly average)



Source: RBNZ estimates.

Note: The shaded area indicates the range between the maximum and minimum values from our suite of long-run nominal neutral OCR indicators. See Castaing et al. (2024), 'Estimates of New Zealand's nominal neutral interest rate', *Bulletin*, Reserve Bank of New Zealand.

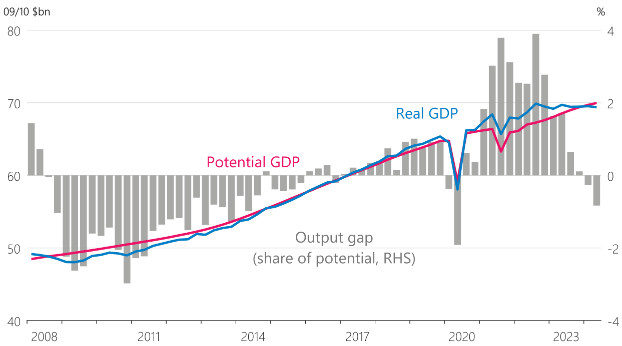
Figure 7.2
Output gap and output gap indicators
(share of potential)



Source: NZIER, MBIE, Stats NZ, RBNZ estimates.

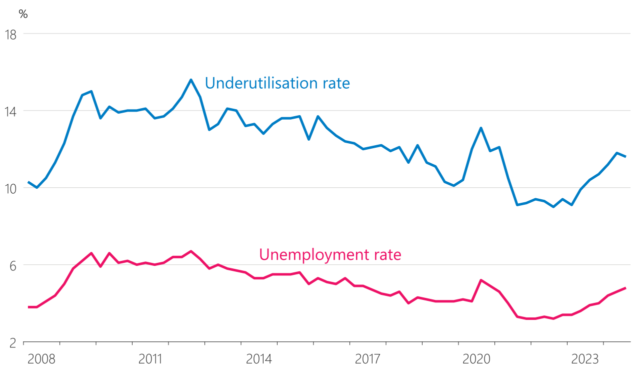
Note: The output gap indicators based on information from labour market surveys are shown separately from the other indicators. For each group of indicators, the shaded area shows the range of values and the line shows the mean value. The output gap estimate in the final quarter is based on our near-term GDP estimate.

Figure 7.5
GDP and potential GDP
(seasonally adjusted)



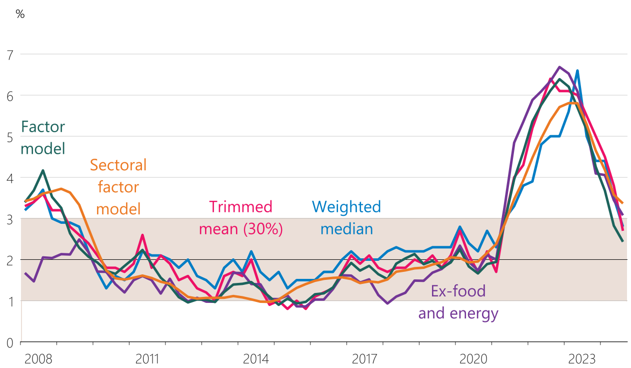
Source: Stats NZ, RBNZ estimates.

Figure 7.3
Unemployment and underutilisation rates
(seasonally adjusted)



Source: Stats NZ.

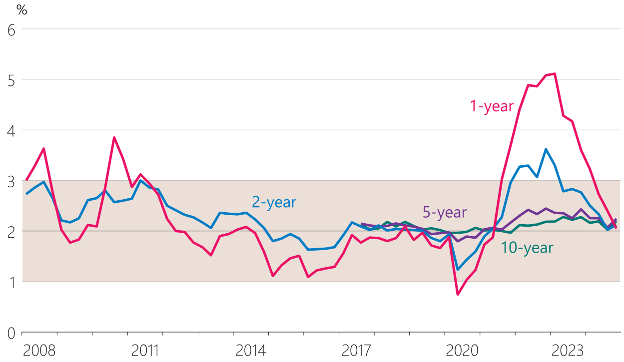
Figure 7.6
Measures of core inflation
(annual)



Source: Stats NZ, RBNZ estimates.

Note: Core inflation measures exclude the GST increase in 2010. The shaded area represents the MPC's 1 to 3 percent target range for annual CPI inflation over the medium term.

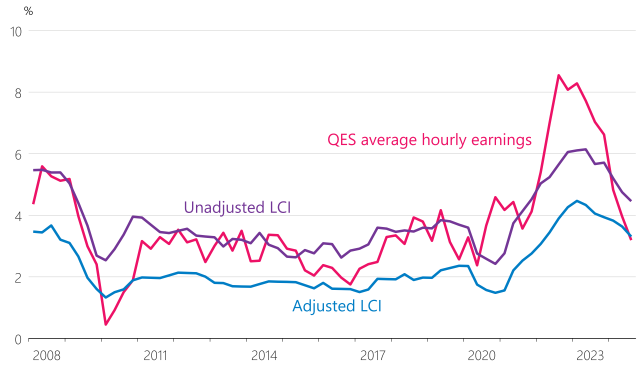
Figure 7.7
Inflation expectations
(annual, years ahead)



Source: RBNZ *Survey of Expectations (Business).*

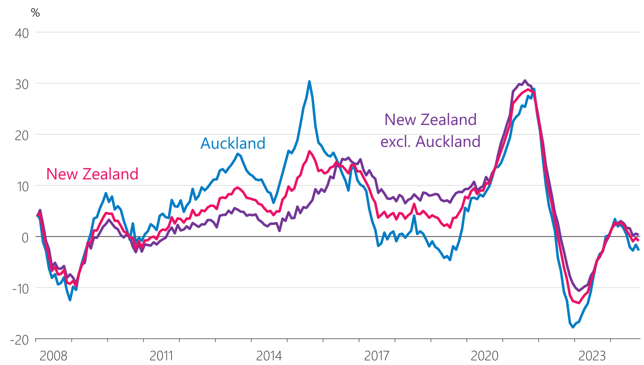
Note: The shaded area represents the MPC's 1 to 3 percent target range for annual CPI inflation over the medium term.

Figure 7.8
Private sector wage growth
(annual)



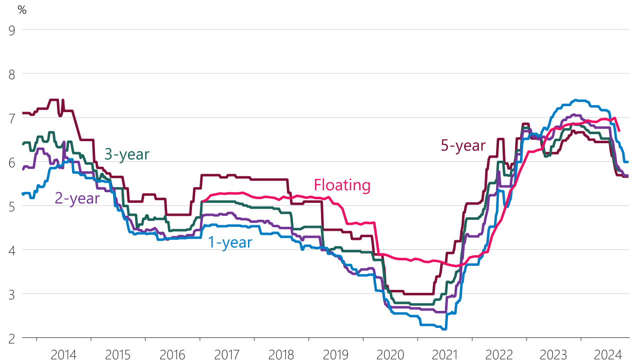
Source: Stats NZ.

Figure 7.9
House price inflation
(annual)



Source: REINZ.

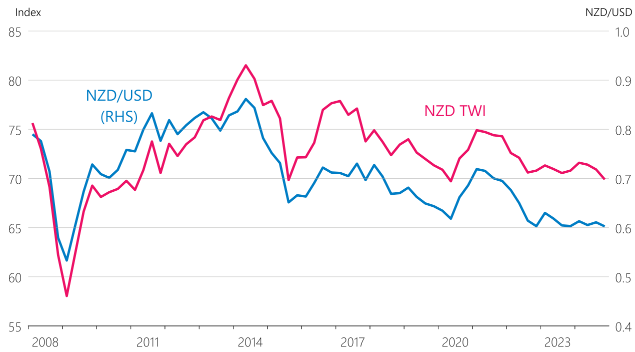
Figure 7.10
Mortgage interest rates



Source: interest.co.nz, RBNZ estimates.

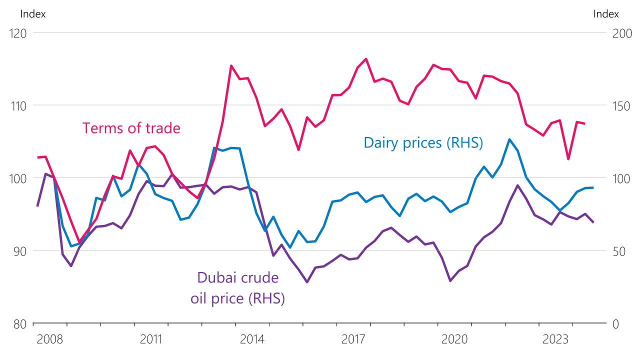
Note: The rates shown for the fixed terms are the average of the advertised rates from ANZ, ASB, BNZ, and Westpac, shown as weekly data. The floating rate represents the monthly yield on floating housing debt from the RBNZ *Income Statement* survey.

Figure 7.11
New Zealand dollar exchange rates
(quarterly average)



Source: NZFMA, RBNZ.

Figure 7.12
Terms of trade, dairy and oil price indices
(index=100 in the September 2008 quarter, quarterly average)



Source: Stats NZ, Global Dairy Trade, LSEG, RBNZ estimates.

Reserve Bank
of New Zealand
Te Pūtea Matua