Monetary Policy Statement
August 2020
Statement of the MPC’s monetary policy strategy

The Monetary Policy Committee’s (MPC) monetary policy strategy is its overarching plan for how it will formulate monetary policy under different circumstances to achieve its objectives.\(^1\) It outlines a consistent approach to how the MPC intends to achieve its objectives across time, accounting for trade-offs and uncertainty. Agreeing on and publishing a strategy promotes transparency, public understanding, and accountability.

Monetary policy framework and objectives

Under the *Reserve Bank of New Zealand Act 1989* (the Act), the MPC is responsible for formulating monetary policy to maintain a stable general level of prices over the medium term and to support maximum sustainable employment.\(^2\) Operational objectives for monetary policy are set out in the *Remit*. The current *Remit* sets out a flexible inflation targeting regime, under which the MPC must set policy to:

- keep future annual inflation between 1 and 3 percent over the medium term, with a focus on keeping future inflation near the 2 percent mid-point; and
- support maximum sustainable employment, considering a broad range of labour market indicators and taking into account that maximum sustainable employment is largely determined by non-monetary factors.

In pursuing these objectives, the *Remit* requires the MPC to have regard to the efficiency and soundness of the financial system, seek to avoid unnecessary instability in the economy and financial markets, and discount events that have only transitory effects on inflation.

The Reserve Bank’s flexible inflation targeting framework and the MPC’s monetary policy strategy reflect the fact that:

- low and stable inflation is monetary policy’s best long-run contribution to the well-being of New Zealanders;
- in the short to medium term, monetary policy can influence real variables such as employment, and hence policy trade-offs can arise; and
- monetary policy is more effective if the Bank’s policy targets are credible, so policy should be formulated in a way that ensures credibility is maintained.

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2 These economic objectives contribute to the overall purpose of the Act, which is to promote the prosperity and well-being of New Zealanders, and contribute to a sustainable and productive economy. See *monetary policy framework* for more information on New Zealand’s monetary policy framework, including the full text of the *Remit*. 
Key aspects of monetary policy strategy

The MPC practises forecast targeting, which means that it sets monetary policy such that it expects to achieve its inflation and employment goals in the medium term. In most instances the MPC aims to return inflation to the target mid-point within a one to three year horizon. The appropriate horizon at each policy decision will vary based on how different policy paths will contribute to maximum sustainable employment, whether price-setters' expectations are consistent with the inflation target, and other considerations such as the balance of risks to the MPC’s central economic outlook.

The MPC does not attempt to return inflation and employment to target immediately, because monetary policy actions take time to transmit through the economy. Attempting to return inflation to target too quickly would result in unnecessary instability in the economy and financial markets. The 1 to 3 percent target range for inflation provides the MPC with flexibility to ensure that managing inflation variability does not come at the cost of excessive variability in the real economy. For similar reasons, the MPC does not attempt to offset events that are expected to have only transitory effects on inflation.

The MPC takes into account both its inflation and employment objectives when setting policy. In the long run, no trade-off exists between the MPC’s objectives. In the short to medium term, there may be situations where monetary policy can move one objective closer to target only at the cost of the other, resulting in a trade-off. When a trade-off does arise, the MPC will consider outcomes for both objectives in setting policy. In general, if employment is projected to be below its long-run sustainable level, the MPC would let inflation overshoot the target mid-point for a time, and vice versa.

The MPC responds to both deviations above target and deviations below target. The MPC sets policy to stabilise employment near its maximum sustainable level, and to return inflation to the 2 percent target mid-point, regardless of whether inflation is currently below or above target. This approach helps to anchor inflation expectations at the target mid-point and promotes sustainable growth and employment by dampening fluctuations in the business cycle.

The MPC considers the balance of risks to its objectives that arise from uncertainty about the economic outlook and the transmission of its policy decisions. In general, the MPC will incorporate likely future developments into its central economic projections and set monetary policy in response. However, the MPC will also take into account risks to its central projections when setting policy.

The MPC has regard to the efficiency and soundness of the financial system, while recognising that in most instances prudential policy is better suited to leaning against risks to financial stability. Monetary policy and prudential policy are coordinated to ensure that changes in one policy are taken into account when setting the other.

Implementation of strategy

The MPC applies the following process when formulating a policy decision:

1. Firstly, it considers the outlook for the economy and its policy objectives. It then discusses risks to achieving its policy objectives.
2. Next, it deliberates about which stance of monetary policy is most consistent with its monetary policy strategy given the current economic outlook, risks, and trade-offs.
3. Finally, the MPC decides how it will achieve the desired stance of monetary policy, including whether or not to adjust its policy settings at the current meeting and how it will communicate the policy outlook.
Monetary Policy Statement
August 2020

Scenarios and data finalised on 5 August 2020.
Policy assessment and summary record of meeting finalised on 12 August 2020.

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Chapter 1
Policy assessment

Tēnā koutou katoa, welcome all.

The Monetary Policy Committee agreed to expand the Large Scale Asset Purchase (LSAP) programme up to $100 billion so as to further lower retail interest rates in order to achieve its remit. The eligible assets remain the same and the Official Cash Rate (OCR) is being held at 0.25 percent in accordance with the guidance issued on 16 March.

Reflecting a possible need for further monetary stimulus, the Committee also agreed that a package of additional monetary instruments must remain in active preparation. The deployment of such tools will depend on the outlook for inflation and employment. The package of further instruments includes a negative OCR supported by funding retail banks directly at near-OCR (a Funding for Lending Programme). Purchases of foreign assets also remain an option.

Over recent months New Zealand had contained the spread of COVID-19 locally, allowing a relaxation of social restrictions and a recovery in economic activity. Recent indicators highlight that the faster return to social norms and a higher proportion of employees working from home has seen output and employment recover sooner than projected in our May Monetary Policy Statement. Recent spending also reflected pent up demand resulting from the lockdown period.

However, the severe global economic disruption caused by the pandemic is persisting. Any significant change in the global and domestic economic outlook remains dependent on the containment of the virus, which is highly uncertain as evidenced today by the return to social restrictions in New Zealand. Such uncertainty is stifling household and business spending appetites, as highlighted in confidence surveys. Given the ongoing health uncertainty, there remains a downside risk to our baseline economic scenario.

International border restrictions will continue to significantly curtail migration and tourism, and lead to the activity outlook being uneven across industries and regions. Commodity prices for New Zealand’s exports remain robust, but this has been partly offset by a rise in the New Zealand dollar exchange rate moderating the return to local export producers.
Ongoing support for domestic economic activity is being provided through significant government spending on business assistance and household income support. This will be supported by a rising level of government investment. However, there will be a transition of policies in the near-term, with the announced end of the Wage Subsidy likely to coincide with a decline in employment.

Monetary policy will continue to provide important economic support in the period ahead. Its effectiveness is evidenced by retail banks’ lower funding costs and lending rates, which are benefiting businesses and households. It remains in the long-term interest of banks to fully pass on the benefits of lower funding costs to their customers.

The Monetary Policy Committee will provide additional stimulus as necessary to meet its remit.

Meitaki, thanks.

Adrian Orr
Governor
Summary record of meeting

The Monetary Policy Committee (MPC) discussed the outlook for inflation and employment, and whether current monetary conditions will achieve its policy remit. The ongoing economic effects of the COVID-19 pandemic were central to the discussion. Members agreed that significant uncertainty existed as to virus containment, and that this was dampening economic confidence globally.

The Committee noted that New Zealand had contained the local spread of the virus, thereby enabling the relaxation of social restrictions. Members agreed that recent domestic economic activity and employment had been stronger than expected in the May Monetary Policy Statement. They noted that this was largely due to the earlier than assumed relaxation of social restrictions, a higher proportion of people working from home, and the pent up demand that arose due to the lockdown period.

The Committee noted that the recovery in economic activity had been uneven across industries and regions, with ongoing international border restrictions severely curtailing migration and services’ export earnings – such as tourism and foreign student education. The Committee noted that domestic economic activity remains below the level it was at prior to the COVID-19 outbreak, and that a sustainable recovery in investment and employment depends on both the degree to which the virus is contained effectively and on a reduction in uncertainty in the general economic environment. Members noted that fiscal policy continues to provide the primary support to the economy, as is appropriate given the pace and scale of the economic shock.

Members agreed that global uncertainty is significantly dampening consumer and business confidence to spend, invest, and employ over the near term. As a result the Committee agreed that the outlook for global economic activity remains weak. It also noted that a rise in the New Zealand dollar exchange rate has moderated local exporters’ incomes.

Members discussed the balance of risks to the baseline economic scenario prepared for the August Statement. Members agreed that, given the primary economic risks are health-related, as evidenced by recent events, the economic risks remain to the downside. The Committee noted a risk that persistent low inflation and employment become embedded in people’s expectations, creating the need for more monetary stimulus than otherwise.

The Committee discussed the current effectiveness of monetary policy. The Committee agreed that monetary policy remains effective and has a strong support role for the economy through improving cash-flow, increasing the incentive to invest, and keeping the exchange rate lower than otherwise. Members agreed that these transmission channels are important for the Committee to achieve its remit and would be important for enabling any necessary resource reallocation during a recovery.

Members noted that retail interest rates have declined consistent with the lower funding costs brought about by the recent monetary easing. The Committee also agreed that it remains in the best long-term interests of banks to continue to pass on the lower wholesale interest rates to their customers, and to maintain the supply of credit.

The Committee then discussed the appropriateness of current monetary settings for achieving its remit. The Committee agreed that, given the weak economic outlook, low inflation and employment, further monetary stimulus is needed to achieve its remit objectives.

The Committee discussed the monetary policy strategy having regard to the soundness and efficiency of the financial system, and to avoiding unnecessary instability in output, interest rates and the exchange rate.
Members weighed the risks associated with potential actions in pursuit of achieving the operational objectives of the remit against the risks and consequences of insufficient monetary stimulus. On balance, the Committee agreed that a deep and protracted economic downturn with high unemployment would pose a more serious risk to financial stability.

Members discussed the implications of alternative monetary policy tools for financial stability. The discussion covered the tools that are being considered, noted the lessons and experiences from other central banks, and considered the calibration of a package of monetary instruments. The Committee agreed that a lower or negative OCR, a Funding for Lending Programme, purchasing of foreign assets, and interest rate swaps all provided policy optionality.

The Committee noted staff advice that the design features of each tool could be selected to maximise effectiveness and reduce risks to financial stability. The Committee expressed a preference for considering a package of a negative OCR and a ‘Funding for Lending Programme’ in addition to the current Large Scale Asset Purchase (LSAP) programme. The Committee instructed staff to prepare advice on the design of a package for deployment if deemed necessary, taking account of the operational readiness of the financial system.

The Committee agreed that the most immediately available suitable tool is an expansion to the Large Scale Asset Purchase (LSAP) programme. The Committee discussed expanding the LSAP programme with the aim of adding more stimulus by lowering retail interest rates and the exchange rate.

Members noted the increase in New Zealand’s sovereign debt issuance, which means that the market for bonds is now larger than previously. The Committee noted updated staff advice that central bank purchases could absorb a larger proportion of the total market than previously thought without affecting market functioning. Members noted and endorsed staff advice that a larger LSAP programme would mean purchases could be front-loaded in order to put more downward pressure on New Zealand wholesale interest rates.

The Committee agreed that an increased LSAP limit of up to $100 billion by June 2022 would enable the Bank to implement purchases to lower wholesale interest rates. Members agreed that the Bank should retain the flexibility to adjust the pace and composition of bond purchases as market conditions dictate.

The Committee also agreed that any future move to a lower or negative OCR, if complemented by a Funding for Lending Programme, could provide an effective way to deliver monetary stimulus in addition to the expanded LSAP if needed.

On Wednesday 12 August, the Committee reached a consensus to:

- expand the LSAP programme to purchase up to a maximum of $100b by June 2022;
- direct the Bank to actively prepare a package of additional monetary policy tools, to be deployed if and when the outlook for inflation and employment requires additional stimulus, taking into account operational readiness; and
- hold the OCR at 25 basis points in accordance with the guidance issued on 16 March.

**Attendees**

- **Reserve Bank members of MPC**: Adrian Orr, Geoff Bascand, Christian Hawkesby, Yuong Ha
- **External MPC members**: Bob Buckle, Peter Harris, Caroline Saunders
- **Treasury Observer**: Caralee McLiesh
- **MPC Secretary**: Gael Price
Chapter 2
Key policy judgements

• The COVID-19 pandemic and restrictions to contain it led to a sharp contraction in economic activity in the June quarter 2020. However, the moves towards Alert Level 1 restrictions meant economic activity rebounded in May and June.

• Domestic economic activity is being suppressed by ongoing border restrictions, lower incomes for households and firms, the uncertain economic outlook, and lower demand from our trading-partner economies. The outlook remains highly dependent on the spread of COVID-19.

• The global economic disruption caused by the pandemic is persisting. However, relatively strong prices for New Zealand’s commodity exports have helped to support export incomes, partially offset by a stronger exchange rate.

• Considerable spare capacity has emerged in the labour market. Job losses are likely to continue as economic activity remains subdued and some government support schemes end. Inflation has declined and inflationary pressures are expected to weaken further.

• Fiscal stimulus is providing significant support to the economy. In particular, a large portion of firms and workers are being supported by the Wage Subsidy.

• Accommodative monetary policy is reducing interest rates. This is supporting cash flows for households and businesses, and is keeping the exchange rate lower than it would otherwise be.

The COVID-19 pandemic is hampering economic activity
The COVID-19 pandemic and restrictions to contain it led to a sharp contraction in economic activity in the June quarter 2020. However, the move to Alert Level 1 meant business activity rebounded in May (figure 2.1). Business activity also proved more resilient to the higher Alert Level restrictions than initially expected.
On 12 August, Auckland moved back to Alert Level 3 and the rest of New Zealand moved to Alert Level 2. While in place, tighter restrictions will reduce economic activity (see May Statement). It is currently unclear how long tighter restrictions will need to remain in place.

Border restrictions continue to heavily curtail international tourism and migration. The immediate impacts of this are being felt in tourism-related sectors. More broadly, domestic economic activity is being suppressed due to lower household and firm incomes, the uncertain economic outlook, and lower demand from our trading-partner economies.

The duration of border restrictions is unknown, and will depend significantly on the progression of the pandemic and vaccine development, which are both highly uncertain. Border restrictions are likely to be in place for some time. Reflecting this and the weak global economic outlook, lower economic activity is expected to persist for at least the next year.

**Global developments will influence the outlook for New Zealand**

The COVID-19 pandemic is disrupting economic activity globally, reducing demand for New Zealand’s exports and challenging global supply chains. Some countries have cautiously eased restrictions, allowing economic activity to resume. For example, China has seen its outbreak remain largely contained, despite lifting some of its restrictions. The easing of restrictions and reports of progress in vaccine development have contributed to a rebound in global equity prices and an improvement in financial conditions.

But the pandemic has worsened in many regions, and some of our key trading-partners have had to again tighten restrictions in response to outbreaks. The Australian outbreak has dampened expectations of an early resumption of trans-Tasman travel. Recent flare-ups in several countries highlight the challenge of containing the virus while accommodating economic activity.

Globally, fiscal policy has played a key role in limiting the initial economic impacts of COVID-19. Payments to encourage employers to retain staff have been a key feature of many countries’ fiscal responses. However, fiscal stimulus in our trading-partner economies is expected to roll off in the coming months as household and business support schemes end. There is a risk that we will see an additional decline in economic activity and demand in our trading-partner economies as this happens. Central banks have increased monetary stimulus through both conventional and alternative measures, and have signalled their readiness to deploy further stimulus if necessary.
The New Zealand dollar exchange rate has appreciated

The New Zealand dollar trade-weighted index (TWI) has appreciated by about 6 percent since the May Statement, to around its early-2020 levels (figure 2.2).

The recent appreciation of the TWI reflects a combination of factors. Risk sentiment has improved in global financial markets and New Zealand has so far avoided a widespread community outbreak of COVID-19.

The higher TWI also reflects that prices for New Zealand’s key export commodities have held up, despite the global economic downturn. After declining through the first half of 2020, dairy prices have rebounded to around their pre-COVID-19 levels. The outlook for commodity prices remains weak relative to pre-COVID-19 levels, given global demand is likely to be low for some time.

Businesses are adapting to the new economic environment

Faced with lower demand domestically and abroad, New Zealand businesses are cutting costs (see chapter 4). Businesses are adapting to changing consumer preferences and becoming more resilient to future public health restrictions.

Firms have been supported by a range of government measures, including subsidies, tax changes, and financing support schemes. The Government has paid $13 billion to firms through the Wage Subsidy. Lower borrowing costs than otherwise are also helping to support firms’ cash flows. The number of firms receiving the Wage Subsidy will decline further in the next few months as the scheme ends. As this happens, there is likely to be increased pressure on firms to reduce costs.

The New Zealand dollar TWI

Source: RBNZ.

Figure 2.2
New Zealand dollar TWI
With considerable uncertainty about future demand and the prospect of significant structural changes in the economy, we are already seeing firms pare back their investment plans (figure 2.3). Banks and firms are reporting significantly lower credit demand for investment purposes (see chapter 4). The availability of bank credit has also declined. This is particularly the case for the commercial property sector, which is more likely to be affected by the shift towards working from home, and sectors exposed to the loss of tourist spending. Business investment is likely to remain subdued until firms see a sustainable recovery in demand and greater certainty.

Firms have also been cutting back on labour costs by negotiating lower pay, reducing hours, and laying off workers. To date, job losses appear to be most concentrated in the services sector. Pay reductions have also been significant in the manufacturing and construction sectors.

**Domestic household spending recovered**

Lower labour earnings and business profits have reduced household incomes. However, total domestic consumption rebounded after New Zealand moved to Alert Level 1, with measures of electronic card spending at around their pre-COVID-19 levels in early August (figure 2.4).

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**Figure 2.3**

**Investment intentions**

Source: ANZ.

Note: ANZ Business Outlook investment intentions measures the net percentage of firms that report an increase or decrease in intended investment.

**Figure 2.4**

**Domestic electronic card spending**

(annual change)

Source: Ministry of Business, Innovation and Employment (MBIE).
Some of this rebound reflects households catching up on spending that they didn’t do during lockdown. But other factors have supported households’ underlying spending power. Lower interest rates and debt-servicing relief have limited the decline in households’ discretionary incomes, and resilient house prices have helped to maintain their wealth and borrowing capacity. The Government has also increased welfare payments to households.

There have been more people spending within New Zealand than normal in the past few months, as far fewer New Zealanders have travelled abroad for winter and some tourists have stayed longer than normal. We estimate that there were around 120,000 more people in New Zealand in July as a result of COVID-19 disruptions (see figure 4.3). However, we will not see the normal inflow of people as we head into summer if border restrictions remain in place.

The outlook for consumption remains subdued, although slightly better than in the May Statement. Labour incomes will likely decline as job losses continue in the second half of 2020, and income uncertainty may cause some households to reduce their spending. Low interest rates will help to dampen the decline by improving households’ discretionary income and reducing house price declines.

**Fiscal stimulus is supporting the economy**

The Government is delivering significant fiscal stimulus, helping to support economic activity. In Budget 2020, the Government announced the $50 billion COVID-19 Response and Recovery Fund, in addition to the $12.1 billion it announced in March. About $48 billion of the combined package has been allocated to date. Fiscal stimulus is likely to be more significant and more front-loaded than we assumed in the May Statement.

A significant portion of the stimulus announced to date has been in the form of transfers, tax relief, and other payments to households and businesses. Other government initiatives will increase direct government spending, including the public health response to COVID-19 and additional spending on infrastructure projects. The exact timing, composition, and magnitude of government spending remains uncertain.

**Spare capacity has emerged in the labour market…**

As labour demand has fallen, significant spare capacity has emerged in the labour market. Advertised job vacancies only partially rebounded as restrictions were eased (figure 2.5). More firms are reporting that it is easier to find the labour they need, despite low immigration and border closures limiting labour supply.
The headline unemployment rate fell to 4 percent in the June 2020 quarter, but this understates the increase in spare capacity. The surveyed unemployment rate was closer to 6 percent by the end of the quarter. Other indicators, such as the underutilisation rate, also suggest there is more spare capacity in the labour market.

The Wage Subsidy appears to have moderated the fall in employment so far and more job losses will be likely when it comes to an end. We expect the unemployment rate to peak in the December quarter 2020, at around 8 percent in our baseline scenario. The uneven economic impact of ongoing border restrictions is likely to result in a mismatch between workers’ skills and jobs, causing persistently higher unemployment.

...and inflation has declined.

Annual CPI inflation was 1.5 percent in the June 2020 quarter, down from 2.5 percent in March. The fall was mainly driven by tradables inflation, which declined from 1.5 to -0.6 percent in annual terms, reflecting a decline in fuel prices. Tradables inflation was underpinned by strong food prices. Non-tradables inflation declined to 3.1 percent, reflecting broad weakness as well as some specific factors. These include free public transport during parts of the quarter and heavily discounted domestic accommodation.

Inflation expectations are below 2 percent across a range of horizons (figure 2.6), and survey-based measures of firms’ pricing intentions have declined. Domestic inflationary pressure is likely to be subdued while significant spare capacity remains. Tradables inflation is also likely to be low, as the weak outlook for global demand and the higher level of the TWI outweigh the impacts of disruptions to global supply. Further out, a recovery in economic activity, supported by monetary and fiscal stimulus, is expected to reduce spare capacity in the economy and lift inflation back towards 2 percent.

Should inflation expectations decline, there is a risk that low inflationary pressures become entrenched, and that inflation takes longer to return to 2 percent.

![Figure 2.6: Inflation expectations (annual)](source: RBNZ Survey of Expectations, Aon Hewitt. Note: Seven-year expectations are from the now-discontinued Aon-Hewitt Economists’ Survey. All other series are from the RBNZ Survey of Expectations. The grey band shows the Reserve Bank’s inflation target range. The 2 percent target midpoint was introduced in 2012.)
Monetary policy is lowering interest rates

Monetary policy is helping to support the economic outlook. The reduction in the OCR, the Large-Scale Asset Purchases (LSAP) programme, and our broader signalling of the monetary policy outlook have contributed to lower interest rates in the economy (see chapter 3). Government bond rates have increased by around 15bps since May, but are still around 95bps lower than they were at the start of the year.

Swap rates have also risen since May, but by less. Overall, we estimate that banks’ new funding costs have fallen by around 80bps in 2020.¹ Mortgage rates and deposit rates have declined since the May Statement, with mortgage rates now 75-110bps lower than in January (figure 2.7). Lower interest rates have also contributed to the New Zealand dollar exchange rate being lower than otherwise, supporting export earnings.

Accommodative monetary policy is supporting household spending by limiting house price declines and reducing households’ mortgage interest payments. It is also helping to underpin households’ and firms’ confidence in the economic outlook, encouraging them to continue to spend and invest. While the transmission of monetary policy to the broader economy remains effective, some transmission channels are likely to be diminished somewhat. Firms and households may be less inclined to spend and invest in response to lower financing costs while uncertainty remains high. And the temporary lack of international tourism will reduce the impacts of the lower-than-otherwise exchange rate.

Considerable stimulus remains necessary

Considerable monetary stimulus remains necessary to achieve our employment and inflation objectives. The precise degree of monetary stimulus needed is uncertain. In our updated baseline scenario, the stimulus needed is roughly the same as that in the May baseline scenario.

¹ This estimate represents the change in the cost of funding at a three-month-equivalent term, and accounts for changes in the costs of a range of sources of bank funding.
Baseline scenario

The outlook for New Zealand’s economy depends on a wide range of developments. A widespread community outbreak of COVID-19 in New Zealand and a persistent tightening of public health restrictions would materially worsen the economic outlook. The duration of border restrictions is also highly uncertain, and depends heavily on whether or when a vaccine becomes widely available as well as the future merits of the restrictions. ‘Travel bubbles’ that present a low risk of importing COVID-19 cases could improve New Zealand’s economic outlook.

Globally, there is uncertainty as to the extent of future outbreaks of COVID-19 and the economic costs of the measures taken to avoid or contain them. A further deterioration in the global economic outlook could reduce economic activity in New Zealand through a range of channels, including by reducing New Zealand’s export prices. Worse health and economic outcomes abroad could also encourage more New Zealanders living abroad to return to New Zealand, supporting economic growth.

We have produced a baseline scenario to illustrate one possible path for the economy (figures 2.8–2.10). Chapter 5 discusses the key assumptions underlying the scenario. Under the baseline scenario:

- New Zealand avoids a widespread outbreak of COVID-19 and is at Alert Level 1 or lower from early June 2020;
- stringent border restrictions remain in place until the end of 2021; and
- from the September quarter 2020, New Zealand’s economy gradually recovers, reaching pre-COVID-19 levels of activity by early 2022.

Demand from our trading-partner economies also recovers only gradually.

In this scenario, inflation and employment are expected to fall below target over the next year. Considerable monetary stimulus remains necessary to meet our employment and inflation targets over the medium term.

A range of monetary policy instruments can be used to generate further stimulus. Chapter 3 discusses some of the monetary policy instruments available to the MPC to deliver more stimulus. Fiscal policy could also provide further stimulus if needed to underpin domestic demand.
Figure 2.9
Unemployment rate
(s.a.)

Source: Stats NZ, RBNZ estimates.

Figure 2.10
Real GDP
(2019Q4=100, s.a.)

Source: Stats NZ, RBNZ estimates.
Chapter 3
Alternative monetary policy instruments

Summary of monetary policy actions

Since 1999, the Reserve Bank has conducted New Zealand’s monetary policy through adjustments to the OCR. However, the MPC has a range of instruments other than the OCR available. These instruments can be used individually, or in combination, to deliver the monetary stimulus necessary to meet the MPC’s objectives.

In response to the COVID-19 pandemic, the MPC has taken a number of monetary policy actions to support the New Zealand economy. These have included providing additional monetary stimulus by lowering the OCR to 0.25 percent, providing forward guidance by signalling the OCR will be kept at this level for at least a year, and introducing the LSAP programme. These actions, and others taken by the Reserve Bank, have helped to support the smooth functioning of New Zealand’s financial markets. The MPC has reiterated its preparedness to provide additional monetary stimulus if required to support the New Zealand economy.

1. For further details on the balance sheet implications of the RBNZ’s actions, see Our Balance Sheet at Work.

- The MPC has taken a range of policy actions to support the New Zealand economy in response to the COVID-19 pandemic. Alongside a lower OCR and forward guidance, the MPC announced the LSAP programme in March 2020. The LSAP programme works primarily by reducing government bond yields, which are key benchmark interest rates that influence broader financial conditions in New Zealand.

- The MPC’s actions have lowered interest rates faced by households and businesses. Lower interest rates will help to lift aggregate demand in New Zealand and keep the exchange rate lower than otherwise. It will take time for these actions to fully transmit through the economy, and ultimately to inflation and employment.

- The MPC has a range of instruments available to provide further stimulus if necessary. These instruments include expanding the LSAP programme, a term lending programme, setting a negative OCR, and purchasing foreign assets.
Under the LSAP programme, the Reserve Bank purchases nominal New Zealand government bonds (NZGBs), Local Government Funding Agency (LGFA) Bonds, and New Zealand Government Inflation-Indexed Bonds (IIBs) from market participants. At the May Statement, the MPC significantly expanded the LSAP programme by raising the limit to $60 billion from the previous $33 billion limit.

The Reserve Bank has purchased around $23 billion of nominal NZGBs and IIBs so far, which is about 23 percent of the current outstanding supply. The Bank has also purchased just over $1 billion of LGFA bonds. LSAP bond purchases have been spread relatively evenly across the various available nominal bond maturities. Since mid-June, the weekly purchase rate has been stable at around $970 million (including $30 million for LGFA bonds).

In addition to the MPC’s monetary policy decisions, the Reserve Bank has introduced a number of facilities to support the functioning of financial markets in New Zealand. The Reserve Bank also continues to work alongside banks and government departments on programmes designed to support access to credit for households and businesses.

**Effects of monetary policy actions**

A key purpose of the MPC’s recent actions is to provide economic stimulus to the New Zealand economy by lowering interest rates faced by businesses and households. The low OCR, LSAP programme, and forward guidance have helped to lower interest rates, while also restoring confidence and liquidity in financial markets.

The transmission of these actions to the MPC’s ultimate inflation and employment objectives can take time. The initial transmission to retail interest rates has been effective so far, but it will take time to see how households and businesses respond to the stimulus. There is always uncertainty about how monetary policy actions will ultimately affect the economy, but that uncertainty is heightened in the current unprecedented environment.

The MPC’s decision to reduce the OCR has seen other short-term interest rates decline. The forward guidance, LSAP programme, and other actions taken by the Reserve Bank have helped lower longer-term interest rates (figure 3.1). Overall, NZGB yields are down around 95bps on average in the year to date. This shows more pass-through from the MPC’s policy actions beyond the 75bps reduction in the OCR. We estimate that NZGB yields are at least 50bps lower, and potentially more than 100bps lower, than they would have been without the LSAP programme.

**Figure 3.1**

*New Zealand government bond yield curve*

*Source: Bloomberg.*
LSAPs have also compressed the spread between yields on other highly rated bonds (such as LGFA and Kāinga Ora bonds) and yields on NZGBs, helping to improve conditions in the wider New Zealand debt market. Kāinga Ora bonds are not included in the LSAP programme, illustrating that the LSAP programme may be encouraging investors to move into other asset classes as the Reserve Bank purchases their NZGB and LGFA bond holdings. The spreads between corporate bond and NZGB yields have also narrowed significantly. This ‘portfolio rebalancing channel’ has likely supported the performance of New Zealand equities and other financial assets since March.

Swap rates are the wholesale benchmark rate that bank bonds and mortgages are most closely priced off. These rates have declined by around 100bps during the year. The LSAP programme has increased the volume of settlement cash held by banks in accounts with the Reserve Bank. This has in turn compressed the spread between bank bill rates and overnight index swap rates (OIS). The 90-day bank bill rate is the benchmark rate for swap agreements, so the reduction in this rate has contributed to lower swap rates.

Although both NZGB yields and swap rates have fallen significantly since the LSAP programme was introduced, they have marginally increased since May (figure 3.2). NZGB yields have faced upward pressure from the increased issuance of NZGBs, as well as further planned issuance, to finance the New Zealand Government’s spending in response to COVID-19. The total issuance of NZGBs has exceeded purchases under the LSAP programme since it began (figure 3.3).

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4 Bank bills are short-term debt instruments issued by banks. OIS rates indicate market participants’ expectations for the OCR over a given period, and are a risk-free benchmark rate.
While lower risk-free interest rates reduce government financing costs and put downward pressure on the exchange rate, for monetary policy to be fully effective the interest rates facing households and businesses should be lower as well. Monetary policy easing has contributed to lower domestic bank funding costs and mortgage interest rates (figure 3.4). Floating mortgage rates have declined by 75bps since the start of the year, in line with the reduction in the OCR, while longer-term mortgage rates have fallen by more – driven by the larger falls in longer-term funding costs. At least 50 percent of mortgages are due to be re-priced in the next 12 months.

Based on currently available information and ongoing discussions with banks and businesses, monetary policy is passing through to businesses but by less than to households. According to the Reserve Bank’s June 2020 Credit Conditions Survey, banks have experienced an increase in credit demand from firms for working capital, but a reduction in credit demand for capital expenditure purposes. Banks have reported tightening lending standards, particularly across sectors perceived as being more risky in the current environment. Detailed data on business lending rates is limited. The Reserve Bank has begun collecting information on actual new lending rates faced by firms, which will enable better monitoring of monetary policy transmission to businesses in the future.

In addition to lowering interest rates, the LSAP programme has helped to keep the New Zealand dollar exchange rate lower than it would have been otherwise. The impact of the LSAP programme on the exchange rate is hard to identify, given that many factors influence the exchange rate, but the depreciations on the announcements of our LSAP programme decisions suggest LSAPs have been effective via this channel. We estimate that the exchange rate is 4–10 percent lower than it would have been without the LSAP programme.

The New Zealand dollar exchange rate is heavily influenced by offshore developments, particularly relative interest rates, movements in commodity prices, and risk sentiment in global markets. The broad weakness of the US dollar, improvement in global risk sentiment, and relative strength in commodity prices have contributed to the recent appreciation of the New Zealand dollar on a trade-weighted basis.
Options for additional monetary stimulus

The MPC has additional options to add further monetary stimulus should the MPC decide it is necessary. The Reserve Bank is undertaking detailed assessments of several monetary policy instruments. The purpose of each of these instruments is to provide monetary stimulus to the economy, but the exact transmission mechanisms differ somewhat between instruments (figure 3.5).

This section discusses the transmission of expanding the LSAP programme, reducing the OCR below zero, a term lending programme, and purchases of foreign assets. These are not the only instruments that could be used to provide additional stimulus. For instance, the MPC could also alter its forward guidance or transact in interest rate swaps.

Expanding LSAP programme

As outlined above, the LSAP programme has been effective at lowering interest rates in the economy and contributing to a lower exchange rate than otherwise. However, the impact of LSAPs on NZGB yields has been partially offset by the increased issuance of NZGBs.

Expanding the LSAP programme would help to flatten the NZGB curve further, while also increasing liquidity and putting downward pressure on the exchange rate. This would likely transmit through to lower interest rates for households and businesses. Because the NZGB curve is already relatively flat around the current level of the OCR, a lower OCR would likely increase the effectiveness of LSAPs by lowering short-term interest rates and allowing LSAPs to flatten the yield curve at a lower level.

Figure 3.5
Transmission channels for monetary policy instruments

Each tool

Figure 3.5 shows the transmission channels for monetary policy instruments. The figure illustrates how changes in interest rates and other financial asset yields can affect domestic real economy indicators such as GDP, AGG DEMAND, EMPLOYMENT, INFLATION, INCOME, and saving/borrowing. The figure also highlights the role of other financial tools like forward guidance and interest rate swaps in influencing these transmission channels.
Negative OCR

The MPC could also provide more stimulus by reducing the OCR, potentially to below zero. A negative OCR influences activity in the economy through channels similar to those for a positive OCR. It would lower short-term benchmark rates, flowing through to lower lending and borrowing rates for households and firms, and putting downward pressure on the exchange rate.

The international experience with negative policy rates shows that deposit rates for households tend not to fall below zero. Therefore, once deposit rates are close to zero, lowering the OCR further may lose effectiveness as cuts would not significantly lower bank funding costs. Bank lending rates may also remain above zero with a negative OCR, as they are priced at a spread above benchmark interest rates and bank funding costs.

The exact design of a negative OCR policy can help to ensure that it is effective. In addition, the policy may be more effective if combined with other monetary instruments.

Term lending (funding for lending) programme

Another option the MPC could use to provide additional stimulus would be a term lending programme. The Reserve Bank launched several facilities during the initial COVID-19 outbreak to provide liquidity to financial markets in exchange for collateral, to support market functioning and the Government’s Business Finance Guarantee Scheme. The MPC could launch a broader, expanded term lending programme. This would provide additional monetary stimulus by offering low-cost, secured, long-term funding to banks.

A term lending programme would lower bank funding costs, both directly and indirectly, by reducing banks’ demand for, and hence the price of, other sources of funding. This would in turn help to lower the cost of loans for households and businesses. Internationally, term lending programmes have also sought to directly encourage the supply of credit via including incentives for banks utilising the programme to expand their lending, providing additional stimulus to the economy.

A term lending programme may be increasingly useful for supporting the pass-through of monetary stimulus if the OCR were reduced. The programme could help to ensure that bank lending rates remained responsive to declines in the policy rate even as retail deposit rates approached zero.

Purchases of foreign assets

As an alternative way of providing additional stimulus, the MPC could choose to initiate large-scale purchases of foreign assets (such as foreign government bonds) in addition to the current programme of purchasing domestic bonds.

Purchasing foreign assets would create a flow of demand for foreign currency in exchange for New Zealand dollars, putting downward pressure on the exchange rate. The Reserve Bank creates New Zealand dollars to fund the purchase of foreign assets, as with the purchase of domestic assets under the LSAP programme. This increases the stock of New Zealand dollars and puts additional downward pressure on the exchange rate, in addition to the direct effect of selling New Zealand dollars.
Higher New Zealand dollar liquidity would also put downward pressure on domestic interest rates.

A lower exchange rate than otherwise and lower interest rates would transmit through the economy to higher economic activity, inflation, and employment.

Choice of monetary policy instruments

The MPC is guided by five key principles when deciding on the appropriate combination of monetary policy instruments (table 3.1). The MPC considers the interactions between instruments, including any sequencing considerations. The most appropriate combination will depend on the exact economic and financial conditions facing the economy at any point in time.

Table 3.1: Principles for using monetary policy

<table>
<thead>
<tr>
<th>MPC Remit Principles</th>
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</tr>
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<tbody>
<tr>
<td>Effectiveness</td>
<td>Instruments would be designed to provide a strong influence over inflation and employment, to ensure that the monetary policy objectives are achieved.</td>
</tr>
<tr>
<td>Efficiency</td>
<td>The Committee would take into account the distortionary impact of the instruments on the efficient allocation of resources within the economy, including between various groups and sectors of the economy.</td>
</tr>
<tr>
<td>Financial system soundness</td>
<td>The Committee would take into account the impact of the instruments on financial system risks, to avoid the costs of financial crises.</td>
</tr>
</tbody>
</table>

Operational principles

| Public balance sheet risk | The Committee would take into account the financial risks that the instruments would create for the Reserve Bank and Crown balance sheets, to protect public funds and central bank independence. |
| Operational readiness    | Use of the instruments would take into account the operational readiness of each tool, to ensure the transmission channels function as expected. This includes the readiness of the Reserve Bank to implement each tool and the readiness of financial markets and the New Zealand public to respond appropriately to the instruments. |

5 See Principles for monetary policy
Chapter 4
Impacts of COVID-19 on the New Zealand economy

The move down Alert Levels in the June quarter saw containment measures ease, allowing more businesses to resume operations.

Consumer spending rebounded as the restrictions were eased. This partially reflected pent-up demand from during the lockdown and significant fiscal support through the Wage Subsidy. The outlook for household incomes and consumer spending is uncertain. Economic activity will likely slow down, particularly when support from the Wage Subsidy ends.

The New Zealand economy is likely to see lasting impacts from the economic downturn. Some sectors continue to be hindered by the border restrictions. Uncertainty remains high and the global economy remains weak. Investment intentions have declined.

Inflation has eased. Inflation expectations and firms’ pricing intentions have declined. Considerable slack is emerging in the labour market, and unemployment is likely to rise.

Economic activity rebounded as restrictions were eased
On 8 June 2020, New Zealand moved from Alert Level 2 to Alert Level 1. This change resulted in the resumption of public gatherings and the removal of social distancing requirements.

The restrictions imposed in Alert Levels 2-4 in the first half of 2020 controlled the spread of COVID-19 in New Zealand, but also significantly reduced economic activity. Non-essential manufacturing, construction, and face-to-face trade all stopped during Alert Level 4, while some of this activity was allowed to resume at Alert Level 3. At Alert Level 2, some social distancing requirements continued, meaning fewer shoppers in stores and reduced productivity in some sectors.

The recent tightening of restrictions will reduce economic activity, although it remains unclear how long they will be needed. New Zealand’s border remains closed to tourists and migrants.
Activity resumed sharply as the Alert Levels were eased between April and June 2020, but has remained below the previous year (see figure 2.1). Some industries have faced weak demand directly due to the ongoing border restrictions (figure 4.1). Other sectors were less directly affected under Alert Level 1. However, reduced spending by households and firms will likely suppress business activity in a broad range of sectors. These impacts are likely to become more pronounced as government policies supporting incomes – namely the Wage Subsidy – end.

Border restrictions continue to limit demand in some sectors

Border restrictions continue to significantly restrain activity in some sectors as foreign arrival numbers have been limited to close to zero (figure 4.2). The tourism sector is most affected, which is significant given international tourism spending typically accounts for approximately 20 percent of export values. The absence of international visitors is reducing activity for restaurants, hotels, and retailers. In addition, revenue has fallen for many education providers as international students cannot enter the country. The restricted flow of long-term migrants into New Zealand will also reduce economic growth and the domestic labour supply.
The border restrictions are also limiting departures. There is typically an outflow of people from New Zealand during the winter months as international tourists return home and New Zealanders go on holiday abroad. Consequently, there is currently an unusually high number of people in the country (figure 4.3). We estimate that there were approximately 120,000 more people in New Zealand in July as a result of COVID-19. This means there are more people spending and working locally, supporting economic activity.

In summer, when there tends to be fewer New Zealanders abroad and more overseas tourists in New Zealand, the impact of border restrictions would reduce the number of people in New Zealand. This will act as a drag on spending within the economy.

Export commodity prices resilient

The COVID-19 pandemic and containment measures have significantly reduced global growth. This would normally reduce global demand for commodities. For example, prices for dairy products more than halved during the global financial crisis (figure 4.4). However, New Zealand commodity export prices have been resilient as demand from China has held up. Relatively strong export prices have contributed to the TWI being stronger than otherwise, partly offsetting their impacts on exporters’ earnings (see figure 2.2). The outlook remains highly uncertain, and slower global growth continues to be a significant downside risk to demand for our exports.

![Figure 4.3](Cumulative border crossings since late 2019)

*Source: New Zealand Customs Service, RBNZ estimates.*

![Figure 4.4](Export commodity prices (foreign currency terms))

*Source: ANZ, Global Dairy Trade.*
**Job losses continue**

Consistent with the slowing economy, the labour market has weakened. The number of people receiving the Jobseeker benefit and the COVID-19 Income Relief Payment (CIRP) has grown since late March (figure 4.5).

The Wage Subsidy has temporarily supported more than 71 percent of New Zealand businesses and 1.7 million workers, helping employers to retain staff. As a result, the impacts on employment to date have been small despite the unprecedented reduction in economic activity.

The support from the initial Wage Subsidy is declining as more firms end their 12-week periods covered by the subsidy. The application period for the 8-week extension closes on 1 September. As the support from the Wage Subsidy diminishes, we expect that many firms will reassess their cost structures and staffing requirements, leading to further job losses. Firms are reporting that they have reduced employment or are planning to reduce it in the near future (figure 4.6).
Weakness in labour demand is also reflected in falling job vacancies (figure 4.7). Firms in all sectors had fewer vacancy advertisements posted during the higher Alert Level restrictions. The number of job advertisements partially recovered as New Zealand moved to lower Alert Levels. However, the number of advertised jobs did not return to pre-COVID-19 levels, indicating increased slack in the domestic labour market. This is consistent with firms reporting that it isn’t as difficult to find labour.

*Household incomes are lower and spending will likely be suppressed*

Household spending rebounded strongly as restrictions were eased from April to June (see figure 4.1). Some drivers of the rebound in spending are likely temporary, including the impacts of demand pent up through the lockdown and the temporarily higher number of people in New Zealand. Significant government support and other initiatives like mortgage payment deferrals have also supported household discretionary income.
Despite the significant government support, annual household earnings growth has fallen to around zero (figure 4.8). This is driven mostly by employees working fewer hours or for lower pay and is less due to job losses.

The uncertainty and pressure that the COVID-19 pandemic is putting on businesses have resulted in reduced job security for households (figure 4.9). This is particularly the case for younger people, who are likely to be less skilled and experienced. Younger people are also more likely to be lower wage earners with less savings, which makes it more difficult for them to maintain their previous levels of consumption if their incomes fall.

Faced with a more uncertain job market and lower job security, households will likely increase their levels of savings as a precaution, and therefore spend less. Lower consumer spending will put more pressure on business revenue and could result in further job losses.

Household spending is also likely to be lower if house prices fall. This is because households tend to spend less when their wealth is eroded by falling house prices. To date, house prices have been resilient (figure 4.10).
In part this reflects that lower mortgage interest rates are underpinning housing demand. Lower mortgage rates are also supporting the cash flows of households with mortgages (figure 4.11). Nevertheless, there is considerable uncertainty as to the sustainability of current house prices, particularly as unemployment increases and immigration remains low.

**Businesses are cautious to invest and employ**

Firms are facing significant uncertainty about the economic outlook, and this is making it difficult for them to plan. During times of uncertainty, firms look to cut costs and delay or cancel planned investment projects. Firms are reporting that they intend to invest less (see figure 2.3). Consistent with this, credit demand for capital expenditure has fallen significantly (figure 4.12). Investment is likely to be low until firms start to see a sustained increase in demand.
Tighter credit conditions will also contribute to lower investment. Banks have reduced the availability of credit, particularly to businesses. This is largely a response to the higher perceived risk of lending in the current economic environment, although some banks also report having reduced their tolerance for risk. The reduction in credit availability has been most significant for firms in industries most affected by the COVID-19 disruptions, such as tourism. Regulatory and policy actions in response to COVID-19 disruptions have helped to support credit availability.6

**Inflation is easing as demand falls**

Headline annual inflation eased from 2.5 percent in the March quarter 2020 to 1.5 percent in the June quarter 2020, reflecting a fall in both tradables and non-tradables inflation.

Lower demand is likely to reduce inflationary pressures in the near term. As spare capacity in the labour market rises, wage inflation is likely to fall, reducing cost pressures on firms and further reducing domestic inflationary pressure. Surveys of businesses already show firms have significantly reduced their pricing intentions (figure 4.13).

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6 See appendix one of the *May Financial Stability Report* for an earlier summary of such actions.
Chapter 5
Baseline scenario

This chapter summarises our baseline economic scenario, which the MPC has considered in making its policy assessment. The baseline scenario was finalised on 5 August.

The economy recovered better than expected from the impacts of the higher Alert Levels. However, with global COVID-19 cases continuing to rise, border restrictions will be in place for some time. The exchange rate has also appreciated, weighing on export incomes. The outlook for economic activity is weak. Job losses suppress household spending and business investment is expected to be lower.

The Government has announced a large fiscal package to support the New Zealand economy. A continuation of significant monetary stimulus also remains necessary to ensure that inflation and employment return to target in the medium term.

Economic impacts of COVID-19 initially less severe but still significant and persistent

- New Zealand’s health strategy has so far prevented a widespread community outbreak of COVID-19 domestically, but the economic slowdown has been unprecedented. In the scenario, economic activity remains below pre-COVID-19 levels until 2022 (figure 5.1).

Figure 5.1
GDP
(2019Q4=100, s.a.)

Source: Stats NZ, RBNZ estimates.
• New Zealand moved to Alert Level 1 faster than we expected. Estimates of the economic impacts of the higher Alert Levels during the first half of 2020 are also less negative, as more people worked from home than originally assumed. Domestic consumption recovered quickly, partly reflecting demand pent up during the lockdown.

• Even under Alert Level 1, industries directly affected by the border restrictions, such as tourism and education, would continue to see reduced demand. In addition, industries sensitive to declines in domestic spending, such as construction and retail trade, would also be affected.

• Overall, annual GDP is assumed to drop by 5.8 percent in 2020, a smaller decline than in the May Statement.

Fiscal policy is more stimulatory

• The economic outlook is supported by fiscal stimulus, which is assumed to be larger and sooner than originally assumed (figure 5.2).

• In Budget 2020, the Government announced the COVID-19 Response and Recovery Fund, which totals $50 billion. This is in addition to the $12 billion announced in March, bringing the total envelope to $62 billion or 20 percent of nominal 2019 GDP.

• Of the total envelope, roughly two-thirds is assumed to support private incomes and spending via transfers, loans, and tax relief. The remaining one-third is assumed to be additional government consumption and investment. The biggest single component is the Wage Subsidy with $13 billion already paid out.

• Significant uncertainty remains over the exact allocation and timing of the remainder of the spending.

The weak global recovery, border closure, and strong exchange rate weigh on the outlook

• Annual trading-partner GDP growth is assumed to drop by 2.7 percent in 2020. The economic recovery of our key trading partners is linked to the successful containment of COVID-19. In many of our trading partners, such as Australia, China, Europe, and the US, some restrictions have been reinstated. The global economic outlook is highly uncertain.

Figure 5.2
Assumed timing of fiscal stimulus

Source: Treasury, RBNZ estimates.
Note: For stimulus relating to transfers, loans, and tax relief, timing is based on the estimated initial impacts on private spending, not when actual payments are made by the government.
• We assume that New Zealand’s borders will open fully from the beginning of 2022. Services exports are assumed to stay at very low levels until the end of 2021 (figure 5.3). If New Zealand eases border restrictions with some countries earlier than assumed, the gradual recovery in exports could begin sooner.

• Net immigration is assumed to stay at around zero until borders reopen. This reduces demand for housing and residential investment. House prices are assumed to fall by around 9 percent over 2020 and to recover more slowly from this trough. Growth in labour supply is also lower.

• The recovery in financial market sentiment and relatively strong prices for New Zealand’s commodity exports have contributed to the New Zealand dollar TWI appreciating since the May Statement (figure 5.4). The TWI is assumed to stay around 72 over the scenario period.

• The higher-than-expected exchange rate weighs on export incomes and aggregate demand. In addition, lower import prices reduce inflationary pressure in New Zealand.

Figure 5.3
Export volumes
(s.a.)

Source: Stats NZ, RBNZ estimates.
Note: Dotted lines show the baseline scenario from the May Statement.

Figure 5.4
New Zealand dollar TWI
(quarterly average)

Source: RBNZ estimates.
**Inflation to stay below the target band for longer**

- Annual CPI inflation dropped to 1.5 percent in the June 2020 quarter and most core inflation measures declined (figure 5.5). In part this reflects that COVID-19 disruptions resulted in sharp declines in some commodity prices, such as oil.

- Looking ahead, the higher TWI puts downward pressure on tradables inflation. Tradables inflation is assumed to remain close to or below zero for most of the scenario horizon.

- The significant decline in economic activity in the June 2020 quarter causes the output gap to decrease substantially. This spare capacity is gradually absorbed over the scenario period. Non-tradables inflation continues to fall into 2021, only recovering to pre-COVID-19 levels at the end of the scenario horizon.

- Overall, headline inflation is assumed to fall below the target band in 2021. It recovers to the 2 percent target mid-point towards the end of the scenario horizon, as non-tradables inflation picks up.

**Employment falls below its maximum sustainable level**

- The Wage Subsidy has supported labour income and employment in the June 2020 quarter. Despite this support, the employment rate fell by 0.6 percentage points to 66.9 percent in the quarter. Several labour market indicators suggest employment has fallen below its maximum sustainable level.

- As economic activity has dropped, many businesses have reduced staff hours and some have negotiated temporary wage cuts. This is dampening the impact on unemployment in the near term.

- The participation rate drops by around 1 percentage point to around 69.5 percent in the scenario. Some people who lose their job due to COVID-19 are likely to leave the labour force, for example to retrain or retire. In addition, the net inflow of relatively younger migrants is on hold due to border restrictions. As a result, labour force growth will be lower.

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7 The lockdown and border closure led to supply disruptions for some goods and services, e.g. air transport, so that some prices had to be imputed by Stats NZ. Effectively, the imputation decreased the weight of these prices to zero.
• With the Wage Subsidy ending and more firms adjusting to lower demand, the unemployment rate peaks in the December 2020 quarter at around 8 percent (figure 5.6).

• The unemployment rate declines from 2021 to 5.8 percent by the end of the scenario horizon. This is higher than in the May Statement, reflecting the longer border closure assumption and an assumption that the COVID-19 shock will have more persistent impacts on the labour market. It will take time for those who lose their jobs to retrain and find new jobs in different industries.

Considerable monetary stimulus remains necessary

• In the May Statement we published an unconstrained OCR to demonstrate the broad level of stimulus needed to achieve the Reserve Bank’s employment and inflation objectives.

• The level of monetary stimulus required in the baseline scenario is broadly unchanged relative to the May Statement (figure 5.7). The better near-term outlook and more stimulatory fiscal package are roughly offset by the negative economic impacts coming from the longer border closure assumption and higher New Zealand dollar TWI, resulting in a similar unconstrained OCR track.
### TABLE 5.1

**Key assumptions for the baseline scenario**

<table>
<thead>
<tr>
<th>Narrative</th>
<th>Key judgements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global growth falls in 2020</strong></td>
<td>Annual GDP growth of our key trading partners is -2.7% in 2020 and recovers gradually thereafter. Globally, large fiscal packages and significant monetary stimulus provide important support for the economic recovery. The New Zealand dollar TWI is assumed to stay around 72 given improved global risk sentiment and robust prices for New Zealand’s commodity exports.</td>
</tr>
<tr>
<td><strong>Global inflation is subdued</strong></td>
<td>Annual inflation of our key trading partners falls to 0.4% by the beginning of 2021 but recovers to 2% in the same year. Annual ex-oil import price inflation in foreign currency terms is higher in the near term but remains subdued over the medium term. Dubai oil prices gradually increase to around USD 45 per barrel. Whole milk powder prices are around USD 3000 per metric tonne over the scenario period.</td>
</tr>
<tr>
<td><strong>New Zealand GDP drops in 2020, but gradually recovers over the medium term</strong></td>
<td>Annual GDP drops by 5.8% in 2020 and recovers to its pre-COVID-19 level by the start of 2022. New Zealand avoids a widespread outbreak of COVID-19 and is at Alert Level 1 or lower from early June 2020. Border restrictions remain until the end of 2021. The $62 billion fiscal envelope for discretionary COVID-19 response spending is assumed to be spent. Roughly two-thirds is for transfers to households and businesses and one-third is for government consumption and investment. Exports of services contract significantly and remain at low levels until the end of 2021. With net immigration around zero until borders reopen, house prices fall by around 9% over 2020 and recover slowly thereafter. Residential investment is below pre-COVID-19 levels. Potential output temporarily falls in the June 2020 quarter as containment measures constrain capacity. Annual potential GDP growth settles around 1.2% after the initial rebound. Lower population growth and labour force participation restrains labour supply. Reduced investment limits capital growth.</td>
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<tr>
<td><strong>Employment falls below its maximum sustainable level</strong></td>
<td>Employment falls well below its maximum sustainable level in 2020 as labour demand falls sharply. Unemployment peaks at 8.1% in the December 2020 quarter as spare capacity emerges in a variety of sectors and industries. Unemployment gradually declines from 2021 to 5.8% by the end of the scenario horizon. Annual net immigration of working-age people falls to around zero while border restrictions are in place, then rises to around 23,000 per annum. The labour force participation rate falls to around 69.5% in 2022.</td>
</tr>
<tr>
<td><strong>Inflation falls below the target range and remains low</strong></td>
<td>With significant spare capacity and a higher New Zealand dollar TWI, headline inflation is expected to be below the 1-3% medium-term target range until late 2022. Headline inflation rises back to the target mid-point in 2023. Annual non-tradables inflation falls to 1% in 2021 as excess spare capacity emerges. Annual tradables inflation averages -0.4% over the scenario horizon due to the relatively strong New Zealand dollar TWI and generally soft import price inflation.</td>
</tr>
</tbody>
</table>
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Appendices

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## Appendix 1: Statistical tables

### TABLE 6.1

**Key baseline scenario variables**

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<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>GDP growth Quarterly</th>
<th>CPI inflation Quarterly</th>
<th>CPI inflation Annual</th>
<th>TWI</th>
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TABLE 6.2

*Long-run expectations are extracted from a range of surveys using a Nelson-Siegel model. Source: ANZ Bank, Aon Consulting, Consensus Economics, RBNZ estimates.

Measures of inflation, inflation expectations, and asset prices

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<th>Measures of inflation, inflation expectations, and asset prices</th>
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<th>2019</th>
<th>2020</th>
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<td><strong>Asset prices (annual percent changes)</strong></td>
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<td>NZX 50 (quarterly average to date)</td>
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TABLE 6.3

**Measures of labour market conditions**
*(seasonally adjusted, changes expressed in annual percent terms)*

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<td>70.3</td>
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<td>Number unemployed (thousand people)</td>
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<td>109</td>
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<td>Number employed (million people)</td>
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<td>2.62</td>
<td>2.64</td>
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<td>Labour force (million people)</td>
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<td>2.74</td>
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<td>Extended labour force (million people)</td>
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<td>2.84</td>
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<td>Working-age population (million people)</td>
<td>3.88</td>
<td>3.89</td>
<td>3.90</td>
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**Quarterly Employment Survey**

|                                | 2019 | 2020 |
|                                | Dec  | Jun  | Mar  | Jun  |
| Filled jobs growth             | 1.3  | 1.0  | 1.1  | 0.9  | 1.9  | 0.8  |
| Average hourly earnings growth (private sector, ordinary time) | 3.7  | 4.8  | 3.9  | 3.0  | 3.3  | 2.5  |

**Other data sources**

|                                | 2019 | 2020 |
|                                | Dec  | Jun  | Mar  | Jun  |
| Labour cost index growth, private sector | 2.0  | 2.2  | 2.3  | 2.4  | 2.4  | 1.7  |
| Labour cost index growth, private sector, unadjusted | 3.6  | 3.8  | 3.8  | 3.7  | 3.6  | 2.8  |
| Estimated net migration (published, thousands, quarterly) | 9.4  | 9.9  |      |      |      |      |
| Change in All Vacancies Index  | 5.7  | -1.6 | -0.4 | -0.3 | -17.9 | -49.6 |

Note: The All Vacancies Index is produced by MBIE as part of the Jobs Online report, which shows changes in job vacancies advertised by businesses on three internet job boards. The unadjusted labour cost index (LCI) is an analytical index which 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 Statistics New Zealand (2016). Introducing underutilisation in the labour market. Estimated net migration (published) is the Stats NZ outcomes-based measure.
TABLE 6.4

Composition of real GDP growth
(annual average percent change, seasonally adjusted, March years, unless specified otherwise)

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<td>Private</td>
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<td>3.0</td>
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<td>Total</td>
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<td>3.3</td>
<td>3.1</td>
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<td>4.1</td>
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Gross fixed capital formation

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<td>Residential</td>
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<td>Total</td>
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<td>6.9</td>
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Final domestic expenditure

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<td>Stockbuilding*</td>
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<td>Total</td>
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Gross national expenditure

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<td>Exports of goods and services</td>
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<td>Imports of goods and services</td>
<td>1.3</td>
<td>8.1</td>
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<td>2.3</td>
<td>5.2</td>
<td>7.2</td>
<td>3.9</td>
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<td>4.0</td>
<td>2.8</td>
<td>1.5</td>
<td>-5.9</td>
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GDP (production)

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<td>2.6</td>
<td>3.6</td>
<td>3.6</td>
<td>3.7</td>
<td>3.2</td>
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<td>1.5</td>
<td>-6.1</td>
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<td>GDP (production, March qtr to March qtr)</td>
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<td>3.3</td>
<td>3.5</td>
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<td>3.0</td>
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*Percentage point contribution to the growth rate of GDP.
### TABLE 6.5

**Summary of baseline scenario**
*(annual percent change for March years unless specified otherwise)*

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<td>Labour costs</td>
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<td>Export prices (in New Zealand dollars)</td>
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<td>Import prices (in New Zealand dollars)</td>
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<td>OCR (year average)</td>
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<td>GDP (production, annual average % change)</td>
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<td>3.6</td>
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<td>3.7</td>
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<td>Total employment (seasonally adjusted)</td>
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<td>Unemployment rate (March qtr, seasonally adjusted)</td>
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<td>Government operating balance* (% of GDP, year to June)</td>
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<td>-1.2</td>
<td>0.2</td>
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<td>Current account balance (% of GDP)</td>
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<td>Trading-partner GDP (annual average % change)</td>
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<td>3.4</td>
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</tr>
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<td>Trading-partner CPI (TWI weighted)</td>
<td>2.3</td>
<td>2.3</td>
<td>1.0</td>
<td>1.2</td>
<td>1.9</td>
<td>1.9</td>
<td>1.4</td>
<td>2.4</td>
<td>0.4</td>
<td>2.0</td>
</tr>
</tbody>
</table>

*Government operating balance is a model-based estimate of OBEGAL divided by nominal GDP in the scenario. The estimate relies on fiscal projections from Budget 2020.
Appendix 2: Chart pack

Figure 6.1
Composition of CPI inflation (annual)

Figure 6.2
Output gap (share of potential)

Figure 6.3
Unemployment and underutilisation rates (s.a.)

Figure 6.4
OCR and neutral OCR indicator suite (quarterly average)

Source: Stats NZ, RBNZ estimates.

Source: RBNZ estimates.

Note: Shaded area indicates the range between the maximum and minimum values from a suite of neutral OCR indicators.
**Figure 6.5**
Composition of potential output growth
(annual)

Source: RBNZ estimates.

**Figure 6.6**
Headline inflation and core inflation
(annual)

Source: Stats NZ, RBNZ estimates.
Note: Core inflation measures exclude the GST increase in 2010.

**Figure 6.7**
Inflation expectations
(annual)

Source: RBNZ estimates.
Note: Inflation expectations are estimates from the RBNZ inflation expectations curve, based on surveys of businesses and professional forecasters.

**Figure 6.8**
Private sector wage growth
(annual)

Source: Stats NZ, RBNZ estimates.
Note: Real QES average hourly earnings is deflated with headline CPI inflation.
Figure 6.9
House price inflation (annual)

Source: REINZ.

Figure 6.10
Mortgage rates

Source: interest.co.nz, RBNZ estimates.

Note: The rates shown for each term are the average of the latest rates on offer from ANZ, ASB, BNZ, and Westpac.

Figure 6.11
New Zealand dollar exchange rates

Source: Reuters, RBNZ estimates.

Figure 6.12
Terms of trade, dairy and oil price indices

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