

The monetary policy remit and two percent inflation

A speech delivered to 2024 Economics Forum
at The University of Waikato on 16 February 2024.
By Adrian Orr, Governor



I would especially like to thank Matthew Brunton of the Reserve Bank of New Zealand for significant input to this speech.

Introduction

Tēnā koutou, tēnā koutou, tēnā koutou katoa.

Thank you for inviting me today – it's great to be back again at this forum. This is my third speech here in as many years.

The focus of my talk today is on recent changes to the Monetary Policy Committee's (MPC) objectives and how that fits within the flexible inflation targeting approach used by Te Pūtea Matua – the Reserve Bank of New Zealand (RBNZ) over the past three decades.

I will also discuss some of the key priorities for the year ahead for the Reserve Bank as a full-service central bank, with a mandate spanning monetary policy, financial stability, cash operations, and financial markets infrastructure.

But first, as background to my comments on the Remit, I'll touch on the different drivers of headline inflation and how they evolved over the COVID-19 pandemic.

Core, tradable, and non-tradable inflation

Monetary policy is tasked with ensuring 2 percent annual headline inflation over the medium term. A key challenge for policymakers is distinguishing between the 'transitory' and 'persistent' or 'core' components of inflation.

As the name suggests, 'transitory' inflation represents price movements that are expected to be temporary. Transitory inflation is generally caused by unexpected price shocks that tend to dissipate naturally over the medium term.

Core inflation represents pricing pressures that are likely to persist once temporary shocks have unwound. Core inflation is driven by things like capacity constraints – the balance between supply and demand – as well as labour market dynamics and wage inflation. They reflect general, rather than relative, price movement in the economy.

Expectations of future inflation are also a key driver of core inflation. For example, if inflation is widely expected to be high in the future, businesses and workers will incorporate that into their pricing decisions and wage demands respectively. This can create inflation pressures that persist until inflation expectations are re-anchored at the inflation target.

Monetary policy leans against these more persistent inflationary pressures to ensure that headline inflation is expected to return to target over the medium term.

Measures of core inflation estimate this persistent inflation component by stripping out the transitory elements from headline inflation (Table 1). However, some estimates of core inflation are slow to evolve to new data and are prone to revision.

Headline inflation can also be broken into ‘tradable’ and ‘non-tradable’ inflation (Table 1). Non-tradable inflation reflects changes in the price of goods and services produced within the domestic economy. It is influenced by transitory shocks, but sustained movements in non-tradable inflation are a useful signal of the underlying drivers of core inflation pressure in the economy.

Tradable inflation is driven by movements in prices for internationally traded goods and services, including many products we import, and movements in the exchange rate. Long-run trends in tradable inflation reflect structural drivers in international markets, such as globalisation, and impact on core inflation. However, movements in tradable inflation are also strongly influenced by temporary shocks to global prices for food, energy, and other internationally traded goods.

To summarise, measures of core inflation help us identify *how much* of headline inflation is persistent, while non-tradable and tradable inflation help identify *where* inflationary pressures are emerging from. Non-tradable inflation can also provide signals to the strength of the domestic drivers of core inflation.

Of course, the Monetary Policy Committee (MPC) also draws on a range of other measures, such as wage growth and inflation expectations, to understand the likely trajectory of core inflation in the New Zealand economy.

Table 1: Different breakdowns of headline CPI inflation

Type of inflation	Description
Headline CPI inflation	A change in the general level of prices. This is driven by transitory and core inflation pressures. Headline inflation can also be broken down into tradable and non-tradable components.
Core inflation	Estimated measures of inflation that is persistent and broad based, rather than short-lived.
Transitory inflation	Inflation that is caused by price changes that are one-off or expected to reverse in the near term.
Tradable inflation	Tradable inflation covers prices for goods and services that are imported or are in competition with foreign goods, either in domestic or overseas markets. Movements demonstrate how international price movements and exchange rates are affecting consumer prices.
Non-tradable inflation	Non-tradable inflation covers goods and services that face less foreign competition. It shows how domestic demand and supply conditions are affecting consumer prices.

The changing nature of inflation: 2020 – 2023

The onset of COVID-19 created unprecedented uncertainty for policymakers globally. In 2020, policymakers, central banks, and private sector forecasters around the world anticipated deep economic downturns and low, if not negative, inflation.

Facing the prospect of deep recessions internationally, monetary and fiscal policymakers provided historic levels of support to households and businesses. With COVID-19 spreading rapidly, the devastating consequences it brought, and only the hope of a vaccine, the prudent choice was to risk providing too much stimulus, rather than too little, to maintain economic and social cohesion in the short-term.¹

In New Zealand, by early 2021, thanks to the containment of COVID-19 and monetary and fiscal support, economic activity was much stronger than expected. With increasing demand, international and domestic supply chain issues, and strict border restrictions in place, capacity pressures began to emerge in product and labour markets.

By the middle of 2021 headline inflation – at 3.3 percent – breached the upper range of our 1 to 3 percent inflation target. This inflation surge was common across countries and there was much debate globally about the extent to which it reflected transitory or persistent inflation pressures.

In Team Transitory, the prevailing view was that supply chain bottlenecks would quickly heal, labour supply would bounce back as vaccines were rolled out, and demand pressures would ease. Team Persistent highlighted strong domestic economies and tight labour markets, with increasingly robust domestic demand, increasing wages, and falling unemployment all pointing to increasing core inflation pressures.

In New Zealand, real-time estimates of core inflation appeared to remain relatively subdued in mid-2021, with our models indicating that it was around 2.2 or 2.3 percent at the time (Figure 1).² However, with the benefit of more data, these estimates now measure core inflation at 3 percent in the second quarter of 2021, the upper limit of our target. Inflation in mid-2021 was more persistent than it was first estimated to be with the data available at the time.

Notwithstanding uncertainty on the degree to which inflation was persistent or transitory, the MPC signalled the need to tighten monetary policy in the July *Monetary Policy Review*, with the tightening cycle commencing in October 2021, well ahead of many other countries (Figure 2). This monetary tightening would have occurred earlier had the Auckland region not been put back into a travel lockdown due to a new variant (Delta) of the COVID-19 virus.

Uncertainty remained high throughout the rest of 2021. The vaccine rollout began in New Zealand, but the emergence of new COVID-19 variants cast doubt on when the country would reopen to the rest of the world. The Delta outbreak in August that year saw restrictions put in place, with Auckland in lockdown for several months.

Over 2022, to the chagrin of Team Transitory, global supply chains remained fractured and new COVID-19 variants washed through the population. Demand from people who had retained their jobs and saved over the pandemic stayed strong. In February of that year, Russia invaded Ukraine,

¹ See the Reserve Bank's review and assessment of the formulation and implementation of monetary policy: [In Retrospect: Monetary Policy in New Zealand 2017-22](#). The review was peer reviewed by [Lawrence Shembri](#) and [Warrick McKibbin](#).

² These model outputs are based on the Reserve Bank's sectoral factor model and factor model respectively.

sending an inflationary shudder through global food and energy markets. Even though some of the direct inflationary effects of these events were temporary, they collectively contributed to an environment of high generalised inflation.

On the back of high headline inflation, inflation expectations began to increase. In New Zealand, 1-year ahead inflation expectations were 3.7 percent by late 2021, increasing to just over 5 percent by the end of 2022 (Figure 3).

People started to think that the consumer price inflation they could see in front of them would persist into the future, and those expectations fed into pricing decisions and wage demands. To some extent, inflation expectations became self-fulfilling as elements of transitory inflation 'leaked' into core inflation and got baked into pricing decisions.³

From early 2022, New Zealand slowly reopened to the world. Domestic spending remained strong on the back of record low unemployment and ongoing fiscal support. However, a net outflow of labour, as Kiwis could travel abroad, added to wage pressures. In early 2023, extreme weather events damaged homes and infrastructure and reduced the supply capacity of some industries.

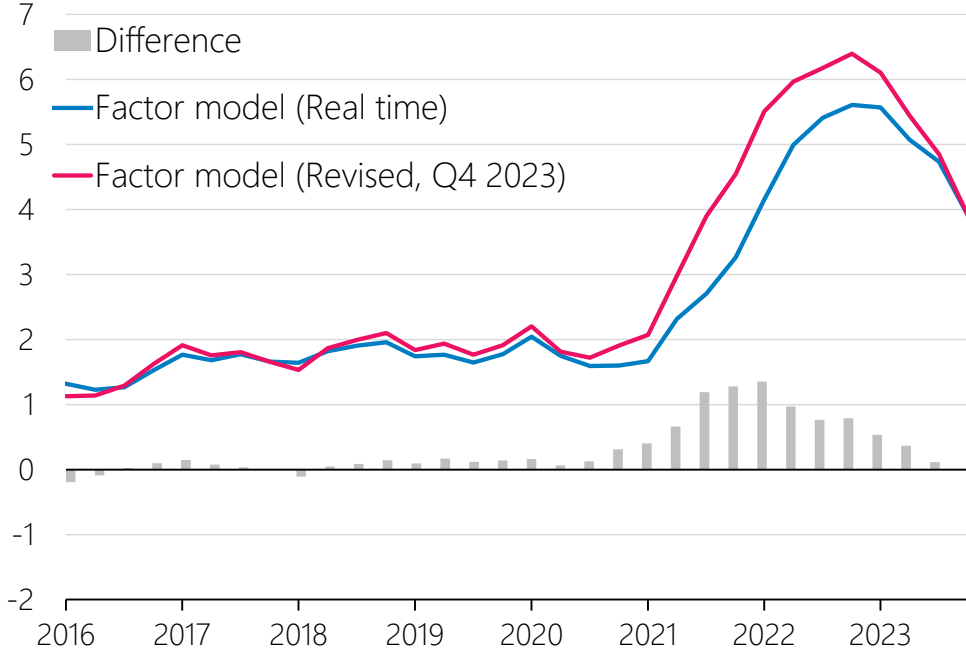
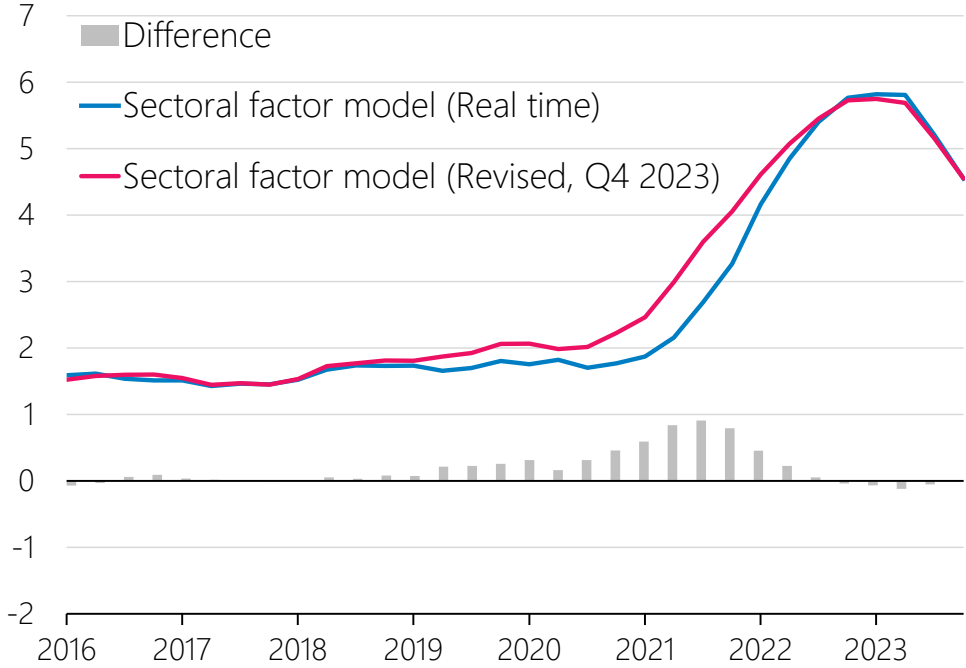
The MPC continued tightening monetary conditions to reduce inflation by slowing demand and making room for supply to catch up. The OCR reached 5.50 percent in May 2023. Inflation persisted, with measures of core inflation increasing to over 5 percent in 2023 despite the monetary tightening.

By the end of 2023, headline inflation had fallen to 4.7 percent, from a peak of 7.3 percent in 2022. Tradable inflation had fallen to 3 percent, a marked decline from its peak of 8.7 per cent in mid-2022. In contrast, non-tradable inflation has been far more persistent over 2023, falling less than 1 percentage point from its peak of 6.8 per cent in early 2023 (Figure 4).

All measures of core inflation have also fallen over 2023. While these declines in core inflation are moving us in the right direction, tackling the tail end of these persistent inflation pressures in the domestic economy remains key to achieving 2 percent inflation. Just how persistent these pressures might be depends on how factors, such as capacity pressures and inflation expectations, evolve going forward.

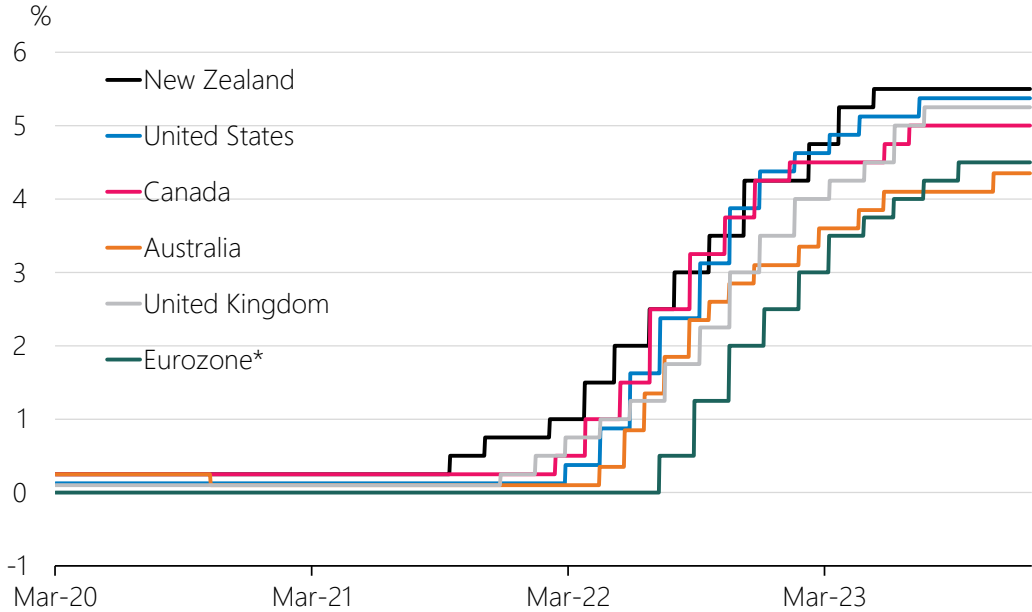
³ See [Bayarmagnai \(2023\)](#), 'Rational inattention to inflation among New Zealand households', RBNZ Analytical Note Series, AN2023/4 for research from Reserve Bank staff showing that New Zealand households pay more attention to inflation when it is high.

Figure 1: Core inflation in New Zealand (real time and updated estimates, annual %)



Source: Reserve Bank

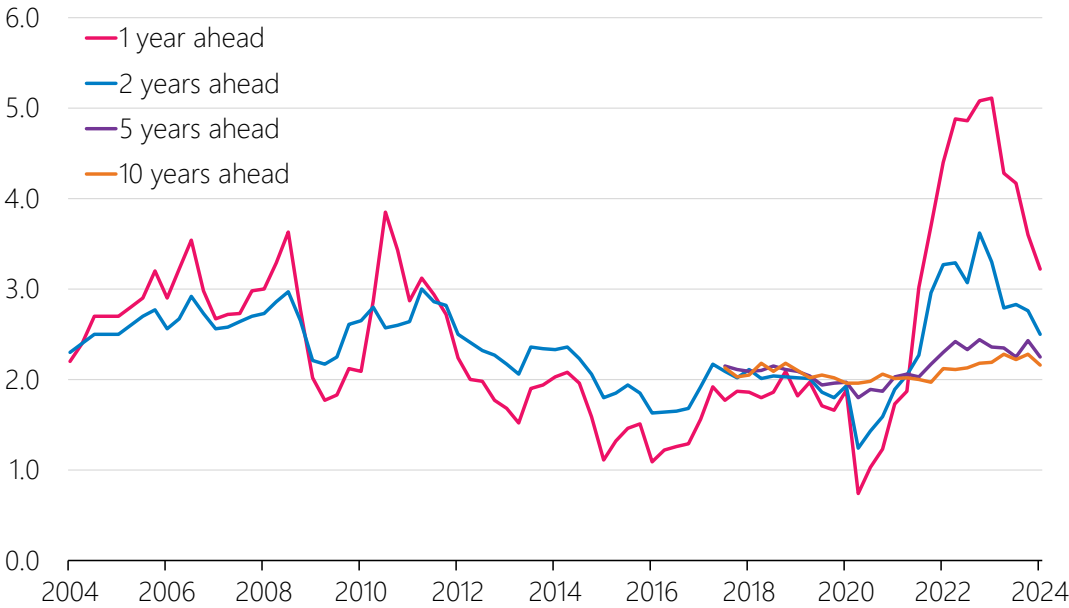
Figure 2: Central bank policy rates in a selection of advanced economies (2020-2023)



Source: Haver Analytics

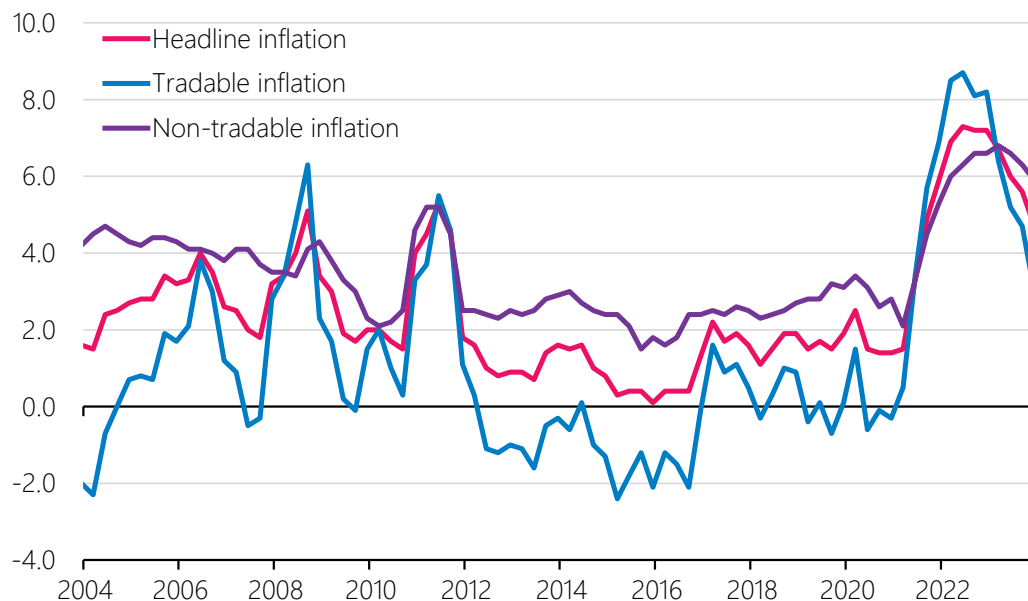
*The rate shown for the Eurozone is the rate for the ECB's main open-market refinancing operations

Figure 3: Inflation expectations (expressed in annual terms, %)



Source: Reserve Bank of New Zealand Survey of Expectations

Figure 4: Tradable and non-tradable inflation (annual, %).



Source: Statistics New Zealand

The evolution of inflation targeting in NZ

I want to reflect on the Reserve Bank's 2023 review of the monetary policy Remit and what this means for the policy implications of transitory and persistent inflation.⁴

A flexible approach to inflation targeting

Since the formal adoption of inflation targeting in 1990, there has always been some mechanism allowing monetary policy to focus on the more persistent elements of inflation and to discount the inflationary effects of transitory shocks and to avoid large swings in interest rates, the exchange rate, and output.⁵

In practice, this means taking care not to make economic booms and busts worse by jumping at shadows and reacting to the first-round effects of short-term price movements.

As has been abundantly clear over recent decades, the economy often faces temporary price shocks. These are generally caused by unforeseeable events that monetary policy has little or no influence over, such as natural disasters or weather events. The effects on inflation from these temporary shocks often dissipate quickly. For example, global energy and food prices can quickly rise and fall (Figure 5).

While inflation can be volatile month to month, monetary policy influences inflation with a lag. Our most recent estimates suggest it takes about 18 months to 2 years for the peak effects of monetary policy to flow through to inflation.⁶ By this time, any transitory inflationary pressures in play at the time of a monetary policy decision would have unwound.

⁴ The Reserve Bank is required to undertake a thorough review of the monetary policy objectives every five years. We recently completed such a review (the Remit Review) in June 2023. The Remit Review consultations and advice to the Minister can be found on our website: <https://www.rbnz.govt.nz/monetary-policy/about-monetary-policy/remit-review>

⁵ The mechanism for considering the effects of temporary shocks to inflation evolved over the inflation targeting period. The early Policy Target Agreements (PTAs) had a renegotiation clause that would be triggered if certain events occurred, such as a significant change in the terms of trade. The 1992 PTA included a clause that allowed the Governor to respond to temporary shocks in a way that ensured the effects on inflation would remain temporary, which avoided the need for frequent renegotiations of the PTA. From the 2002, the PTAs (and subsequently the MPC Remits) also included an explicit 'medium-term' focus for the inflation target.

⁶ See Chapter 4 of the [November 2023 Monetary Policy Statement](#).

Monetary policy also operates with an inherent degree of uncertainty. For example, the impact of monetary policy on inflation can change over time. Key economic data are also released with a lag and are prone to large revisions, as with the recent GDP release. When the economy's windscreen is dirty, it is harder to be sure where the next turn is.

These realities make achieving 2 percent inflation with precision *today* or on any specific date effectively impossible. Attempting to do so would create large swings in interest rates, output, and employment in response to temporary fluctuations in inflation. And even then, central banks would fail.

Instead, monetary policy should be set such that future inflation can be reasonably expected to reach 2 percent over the medium term. This allows for a more considered response to noisy data, with the focus on the balance between supply and demand and core inflation pressures.

A credible, forward-looking, and flexible approach to inflation targeting is the best contribution monetary policy can make to long-term economic prosperity, while avoiding excessive economic volatility.

While a medium-term focus does not prescribe a specific 'time-to-target', we always aim to get inflation back to the 2 percent midpoint in reasonable time to mitigate the risks from inflation expectations becoming unanchored.

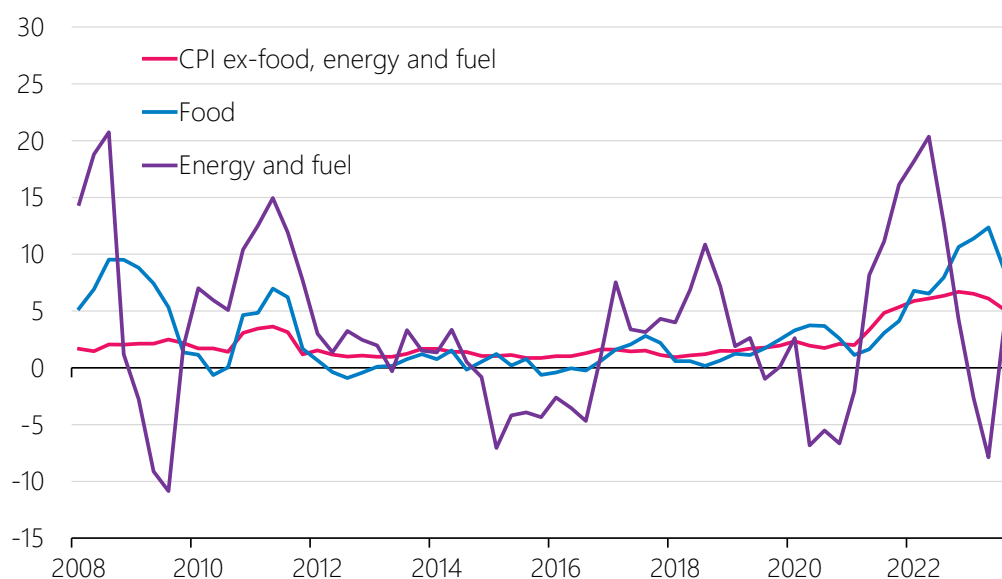
For example, over the COVID-19 period, the MPC has set monetary policy to ensure that inflation is forecast to return to the 2 percent midpoint no later than the end of our three-year forecast period.

Of course, as the economy is hit by new shocks, we update the projected path of the OCR to ensure that, absent of any further shocks, inflation still returns to the 2 percent midpoint over the medium term.

It follows that there is no single 'optimal' time horizon for inflation to return to target. Instead, it depends on the changing nature of the shocks impacting on the economy.

It also depends on the state of the economy when those shocks hit. For example, the MPC may choose to look through a transitory shock to inflation if it is unlikely to lead to higher inflation over the medium term. But if the shock hits when inflation is already high, it is more likely to 'leak' into more persistent core inflation via higher inflation expectations. In this case, the MPC may choose to respond to the second-round effects of the transitory shock.

Figure 5: Annual inflation in food prices, energy prices and the CPI excluding food and energy



Source: Stats NZ, Reserve Bank estimates

Note: 'CPI ex-food, energy and fuel' is the Statistics New Zealand series: CPI excluding food group, household energy subgroup, and vehicle fuels. 'Food' is the CPI Food subgroup. 'Energy and fuel' is from a constructed index that uses the following CPI basket components: Household energy subgroup; petrol class; and other vehicle fuels and lubricants class.

Greater clarity on the primacy of our inflation target

In our advice provided to the Government as part of the Remit Review, the Reserve Bank recommended amending the Remit to clarify the primacy of *achieving* the inflation target over *supporting* Maximum Sustainable Employment (MSE). This would support the public understanding of what the MPC is targeting and their priorities.

This primacy of the inflation target helps to anchor inflation expectations. Well-anchored inflation expectations are particularly important to an economy facing frequent or significant shocks that impact on inflation. If households and businesses expect inflation to return to the 2 percent midpoint, price and wage increases are more likely to be set around 2 percent, helping ensure that transitory shocks do not lead to second-round effects and more persistent inflation.

Our mandated Remit Review did not explore whether the objective to support MSE should be removed. This is a legislative matter for Parliament to determine, not the Reserve Bank. However, the recent change to remove supporting MSE as a primary objective aligns with the general push towards a simpler and clearer Remit that emphasises the primacy of the inflation target.⁷

While the removal of the MSE objective does provide some benefits in clarifying the MPC's priorities, it does not mean significant change to the MPC's task. The labour market is a key driver of inflation for any economy. The supply of labour and worker skill sets are critical to determining the productive capacity of the economy – how fast the economy can grow without generating inflation.

⁷ The [December 2023 Remit](#) now includes a 'secondary' requirement for the MPC to seek to avoid unnecessary instability in employment.

Likewise, wage growth driven by excess demand in the economy – as opposed to wage growth driven by productivity gains – creates additional cost pressures for businesses and, in turn, upward pressure on consumer prices.

In some instances, shocks can push employment and inflation in opposite directions, creating trade-offs for monetary policy decision-makers. However, the MPC had, by and large, not faced any trade-offs between the inflation and MSE objectives over the period when MSE was included in the Remit.

Two percent still makes sense.

The Reserve Bank also believes that the current inflation target of 1 to 3 percent with a 2 percent mid-point remains appropriate for New Zealand.

There are costs and benefits associated with increasing and lowering the target. Some of these have been well traversed by researchers over the past several decades. The distortionary effects of inflation on the tax system, interactions with asset markets (including the housing market), and the relative price distortions from inflation support a lower inflation target.

Meanwhile, a higher inflation target can ‘grease the wheels’ of the labour market by allowing real wages to fall in some sectors, leading to smaller increases to unemployment, in the face of shocks to the economy.

There are also some more contemporary issues to consider. A higher inflation target would reduce the risk of monetary policy becoming constrained by the effective lower bound, near zero, where interest rates cannot be meaningfully reduced further to support the economy. At the same time, inflation expectations may become more responsive to general inflation when it is high and volatile.

Table 2: Benefits and costs of a higher and lower inflation target

Costs of higher inflation target	Benefits of higher inflation target
<ul style="list-style-type: none"> • A higher inflation target reduces people’s purchasing power if prices rise faster than their incomes. • Creates distortions from inflation caused by interactions with the nominal tax system.⁸ For example, inflation may shift people into higher tax brackets. • Reducing the value of some investments, particularly more liquid assets, if the returns prove insufficient to compensate for inflation. • Households and businesses can become more responsive to general inflation when it is high 	<ul style="list-style-type: none"> • Reduces the likelihood that the economy experiences a deflationary spiral, where households expect ongoing declines in prices and therefore reduce spending today. • Better mitigates the risk of encountering the ELB. That is, a higher inflation rate can allow conventional monetary policy to better support economic activity in the face of large deflationary shocks. • Allows the value of real wages to decline in some sectors over time when a negative shock hits the economy, without nominal wages changing. This means unemployment rises by

⁸ Carey (1989), ‘Inflation and the tax system’, RBNZ Bulletin, 52(1) provides a summary of the tax interactions with inflation in the New Zealand context. Hargreaves (2008), ‘The tax system and housing demand in New Zealand’, RBNZ Discussion Papers series, DP2008/06 discusses the specific effects of these distortions on the New Zealand housing market.

Costs of higher inflation target	Benefits of higher inflation target
<p>and volatile.⁹ Therefore, it may be difficult to maintain stable inflation dynamics when inflation is high.</p> <ul style="list-style-type: none"> • Distributional effects such as unanticipated inflation reducing the real value of debt, redistributing wealth from savers to borrowers. • Resource misallocation arising from price rigidities. When businesses update their prices infrequently, a positive inflation rate can lead to a distortion between the prices and costs of goods that can result in inefficiencies. • Can create higher administrative costs associated with businesses updating prices and households managing their money holdings. • Makes it more difficult for planning and investment decisions. 	<p>less in a recession, due to downward nominal wage rigidity.</p> <ul style="list-style-type: none"> • A positive inflation rate may help businesses adjust their relative prices in the face of a shock. Businesses can maintain their current prices while general inflation increases.

Source: Remit Review Second Consultation Paper & Monetary Policy Handbook

Note: The costs (benefits) of a higher inflation target equate to the benefits (costs) of a lower inflation target.

Estimates of the 'optimal' inflation target that best balances these factors vary. However, an inflation target with a focus on 2 percent appears to be within the range of 'optimal' inflation targets suggested in research.¹⁰ It is low enough to avoid many of the costs and distributional effects of high inflation. Compared with a lower target, it better mitigates the risk of encountering the effective lower bound.

In the long term, 2 percent inflation is more likely to mean continued growth and steady jobs, supporting the prosperity and wellbeing of everyone.

Many other central banks have considered that a target around or close to 2 percent continues to strike a good balance between the costs and benefits of positive inflation (Figure 6). We are in good company.

⁹ See [Bayarmagnai \(2023\)](#)

¹⁰ See the Remit Review's [Supporting New Zealand's economic stability](#), [Toitū te Ohanga: Advice to the Minister](#) and the [Monetary Policy Handbook](#) for more discussion on the costs and benefits of inflation. [Lockyer \(2022\)](#), 'The optimal level of the inflation target', RBNZ also provides for an evaluation of the costs and benefits of higher and lower inflation targets. Pages 30 and 31 summarises the argument for retaining an inflation target centred on 2 percent.

Figure 6: Comparison of inflation targets (Inflation target, %)



Source: Central bank websites. Economies shown (from left to right): New Zealand, Sweden, Australia, Japan, Switzerland, Norway, United Kingdom, Canada, Eurozone, United States.

* The SNB equates price stability with a rise in the Swiss consumer price index (CPI) of less than 2% per annum. Deflation, i.e. a sustained decrease in the price level, also breaches the objective of price stability

The year ahead for the Reserve Bank

Reducing inflation to target is a top priority for the Reserve Bank. However, as a full-service central bank, we need to achieve all our objectives across our wide mandate – monetary policy, financial stability, cash operations, and financial markets infrastructure – to ensure long-term economic prosperity for New Zealanders.

I'd like to highlight just a few areas that are at the top of our list:

Monetary and fiscal policy coordination is critical for our small, open economy. It is vital that the Reserve Bank and the Treasury – Te Tai Ōhanga continue to work together to support New Zealand in the event of more large shocks in future.

We are also enhancing our capability to support financial markets during periods of dysfunction. We are undertaking a review of our liquidity facilities used to support markets at the height of the pandemic, which will help us refine the design and deployment of such operations in the future.

As the regulator of deposit-takers, a key piece of work underway is the implementation of the Deposit Takers Act (DTA). This is a multi-year project that will create a single, coherent regulatory regime for all deposit takers (both banks and non-bank deposit takers).

The key elements of the Depositor Compensation Scheme (DCS) are expected to be in place by late 2024. Under the DCS, depositors will be eligible for compensation of up to \$100,000 per depositor, per institution, from mid-2025. This will strengthen the New Zealand financial system's safety net.

We are also looking at the rules around how much mortgage debt borrowers can take on. Debt-to-Income (DTI) restrictions will complement other tools we use to support financial stability, such as LVR restrictions. Having multiple tools in place means we can better focus them on the specific risks they are designed to mitigate.

We will also be publishing results from our climate change stress test with New Zealand's five largest banks. As we have seen over the past year, extreme weather events pose a real threat that we face moving forward. Ensuring that our deposit-takers and insurers remain robust to these climate challenges, and those posed by the global transition to a low-emissions economy, is critical to financial stability in Aotearoa New Zealand.

We are also involved a cross-government, iwi, and private sector initiative to improve Māori access to capital where specific market failures exist.¹¹ Lower Māori home ownership means less collateral for small business financing. Collectively owned Māori land also poses challenges for financing business activity. Likewise, poor understanding of others' needs means financial service providers need better data and competencies to truly assist realising the value of New Zealand's economic opportunity. We have been working with the Māori Land Court to clarify the legal frameworks for lending on whenua Māori and have been working with banks to improve insights in the short term with the data banks currently have.

Our Future of Money programme is another a strategic priority, focused on bolstering the resilience of New Zealand's cash system in the context of a 'less cash, not cashless' future. And as we announced in December, community cash trials will also start this year. Rural communities lacking access to cash services will be invited to take part in trials of new ways to help individuals and retailers withdraw and deposit cash. We know that New Zealanders still often rely on cash and value the certainty and convenience it provides but access to cash in rural areas is especially difficult because of banks' limited physical presence.

Finally, we are continuing to develop our work on a Central Bank Digital Currency (CBDC). A digital New Zealand dollar would exist alongside cash but could help manage risks associated with declining cash use and support innovation, competition and efficiency in our economy. We expect to be consulting on our current thinking about a CBDC later this year.

These are just some of the wide range of things that the Reserve Bank is working on. I encourage you to read our Annual Report to see a summary of all that we do.

Concluding remarks

To conclude, I would like to reiterate that inflation remains a top priority for Te Pūtea Matua. The past few years have seen the emergence of persistent core inflation off the back of the COVID-19 pandemic. Tackling the persistent inflationary pressures and bringing levels of 'core' inflation in line with our target is an important part of bringing inflation back down to the 2 percent.

In this context, a flexible approach to inflation targeting, with a medium-term focus, remains appropriate. This provides the MPC with the ability to weigh different considerations (e.g. output volatility and inflation expectations) when responding to economic shocks.

¹¹ A [multi-agency steering group](#) has been overseeing this work which was co-sponsored by The Treasury Te Tai Ōhanga Secretary Dr Caralee McLiesh alongside the Reserve Bank.

The removal of the MSE objective does not mean any big changes to our monetary policy strategy, but it could support anchoring inflation expectations moving forward. And 2 percent continues to strike the right balance between the costs and benefits of inflation.

We also have a full agenda of work to achieve our broader mandate as a full-service central bank.

Nga mihi, thank you, and I look forward to the year ahead.