TE TAI ŌHANGA
THE TREASURY

Our wellbeing throughout the COVID-19 pandemic

Background paper to Te Tai Waiora: Wellbeing in Aotearoa New Zealand 2022

November 2022

Te Kāwanatanga o Aotearoa
New Zealand Government

BACKGROUND PAPER TO TE TAI WAIORA: WELLBEING IN AOTEAROA NEW ZEALAND	Our wellbeing throughout the COVID-19 pandemic
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Executive Summary

This paper is part of a series of detailed background papers designed to support the Treasury's first Wellbeing Report *Te Tai Waiora: Wellbeing in Aotearoa New Zealand 2022*.

This paper uses the 2021 Living Standards Framework to review evidence about changes in New Zealanders' wellbeing from the arrival of COVID-19 in early 2020 through to the first quarter of 2022. This paper provides a high-level overview of the empirical evidence across a wide set of wellbeing indicators. Readers are encouraged to review more detailed reports published by other agencies, which we cite throughout.

It is important to note that the pandemic has not played out in a vacuum. The indicators examined in this paper will have been influenced by a range of factors (such as the Russian invasion of Ukraine). For this reason, we generally refrain from seeking to attribute shifts in wellbeing indicators to either the virus or New Zealand's response. The paper also does not include discussion of counter-factual scenarios or policy prescriptions.

Instead, this paper explores recent data to describe:

- observed trends in New Zealanders' wellbeing over the period from COVID-19's arrival in New Zealand in early 2020 through to the first quarter of 2022
- emerging observable evidence or potential leading indicators of longer-term impacts on New Zealanders' wellbeing.

In aggregate, many wellbeing metrics have been more robust than might have been expected, and wellbeing has generally held up better than in many other countries. For example, an early Treasury review of potential wellbeing impacts, He Kāhui Waiora, identified risks around widespread job losses, income reduction and impacts on firms' balance sheets. These risks have mostly not eventuated. The economy regained pre-COVID activity levels rapidly and unemployment reached historical lows in late 2021, including for young New Zealanders who were most at risk from a weaker labour market. Measures of subjective wellbeing also held up (despite declining slightly as the pandemic prolonged), and New Zealanders suffered fewer road deaths and fewer workplace injuries in 2020.

There have, however, been some negative impacts on wellbeing in other areas. While New Zealand managed to keep case numbers low until our population was vaccinated against the virus, we have seen disruption to our health system, including to hospital services and access to general practitioners (GPs) and screening services. While lesser than in many other countries, our education system has also experienced significant disruption. While there is not yet much evidence that this disruption has had a significant impact on education achievement, there are risks of impacts emerging, particularly given higher levels of disruption over 2022.

We have also seen some impacts that were not widely anticipated during the early stages of the pandemic (noting that these are not all directly attributable to the pandemic itself). House price growth accelerated during a period of low interest rates and higher-than-expected employment. Significant inflation pressure has also emerged.

We also highlight some themes around how the pandemic has affected the distribution of wellbeing. The OECD (2022a) has found that, across member states, the economic and social consequences of COVID-19 have fallen particularly hard on young people. Evidence suggests that this has also occurred to some extent in New Zealand. Through the analysed period, younger people were impacted by disruptions to our education system and were also more likely to experience higher levels of psychological distress. Young people are also more likely to be renters and so did not share in increasing housing wealth from rising house prices but instead faced increased rents and reduced access to affordable housing. More generally, inflationary pressures and increasing housing costs are more likely to affect low-income households. These recent developments add to the concerns recently raised by the Treasury (2022b) paper on longer-term trends in wellbeing for young people and for potential future impacts on human capability in New Zealand.

Māori and Pacific peoples, two population groups with younger age profiles, have also experienced some particularly negative impacts over the analysed period, including worsening rates of childhood immunisation, and cervical and breast cancer screening coverage. Again, these trends risk compounding pre-pandemic disparities in access to health services and health outcomes and were coupled with reported experiences of discrimination across the pandemic period. On the positive side, employment and income levels have held up for all groups, and we have seen overall declining levels of child poverty (material hardship) in recent years.

We have also seen evidence of potential impacts on other aspects of the wealth of Aotearoa New Zealand. Trust, as a metric for social cohesion, increased during the first part of 2020 but those gains eroded as the pandemic continued. In relation to financial and physical capital, we observed that a strong balance sheet prior to the pandemic provided the Government with options to support firms and households. Although the impact was less than initially forecast, the pandemic did affect the government's finances. On the other hand, business balance sheets remained resilient, reflecting in part, the rapid overall economic recovery.

There is still considerable uncertainty about the longer-term wellbeing effects of COVID-19 and other recent trends. It remains to be seen how these trends will evolve as the pandemic continues to play out in New Zealand and as we grapple with new challenges, like the rising cost of living.

Contents

Introduction

This paper uses the 2021 Living Standards Framework to review evidence about wellbeing throughout the COVID-19 period from its arrival to New Zealand in early 2020 through to the first quarter of 2022.

This paper is one in a series of background papers the Treasury is producing to support the first Wellbeing Report *Te Tai Waiora: Wellbeing in Aotearoa New Zealand 2022*.

The Wellbeing Report is a new stewardship document that the Treasury must produce every four years under the Public Finance (Wellbeing) Amendment Act 2020 (the Act). In the Wellbeing Report, the Treasury is required to use indicators to describe:

- the state of wellbeing in New Zealand
- how the state of wellbeing in New Zealand has changed over time, and
- the sustainability of, and any risk to, the state of wellbeing in New Zealand.

Purpose and scope of this paper

This paper is part of the Treasury's response to the first two requirements in the Act. It complements the review of key trends in wellbeing indicators undertaken in the *Trends in Wellbeing in Aotearoa New Zealand 2000-2020* report (referred to in the rest of this report as the trends in wellbeing paper),[1] which was published in April 2022 as a background paper to the Wellbeing Report (Treasury, 2022b).

This is not the first paper that the Treasury has published on New Zealanders' wellbeing in relation to COVID-19. In July 2020, early in the pandemic, the Treasury published *He Kāhui Waiora*,[2] providing a rapid evidence review of the potential wellbeing impacts of COVID-19 in New Zealand (Treasury, 2020b). Now, more than two years since the first case of COVID-19 in New Zealand, it is timely to review the evidence on how wellbeing has evolved.

It is important to note that the pandemic has not played out in a vacuum. The indicators examined in this paper will have been influenced by a range of factors (such as the Russian invasion of Ukraine). For this reason, we generally refrain from seeking to attribute shifts in wellbeing indicators to either the virus or New Zealand's response. We also refrain from discussion of counter-factual scenarios or policy prescriptions.

Instead, this paper looks at recent data to describe:

- observed shifts in New Zealanders' wellbeing from COVID-19's arrival in New Zealand in early 2020 through to the first quarter of 2022 (we refer to this period as 'the analysed period' throughout the report)
- emerging observable evidence or potential leading indicators of long-term impacts on New Zealanders' wellbeing.

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1 Background Paper for the 2022 Wellbeing Report: Trends in Wellbeing in Aotearoa New Zealand: 2000-2020 - April 2022 (treasury.govt.nz).

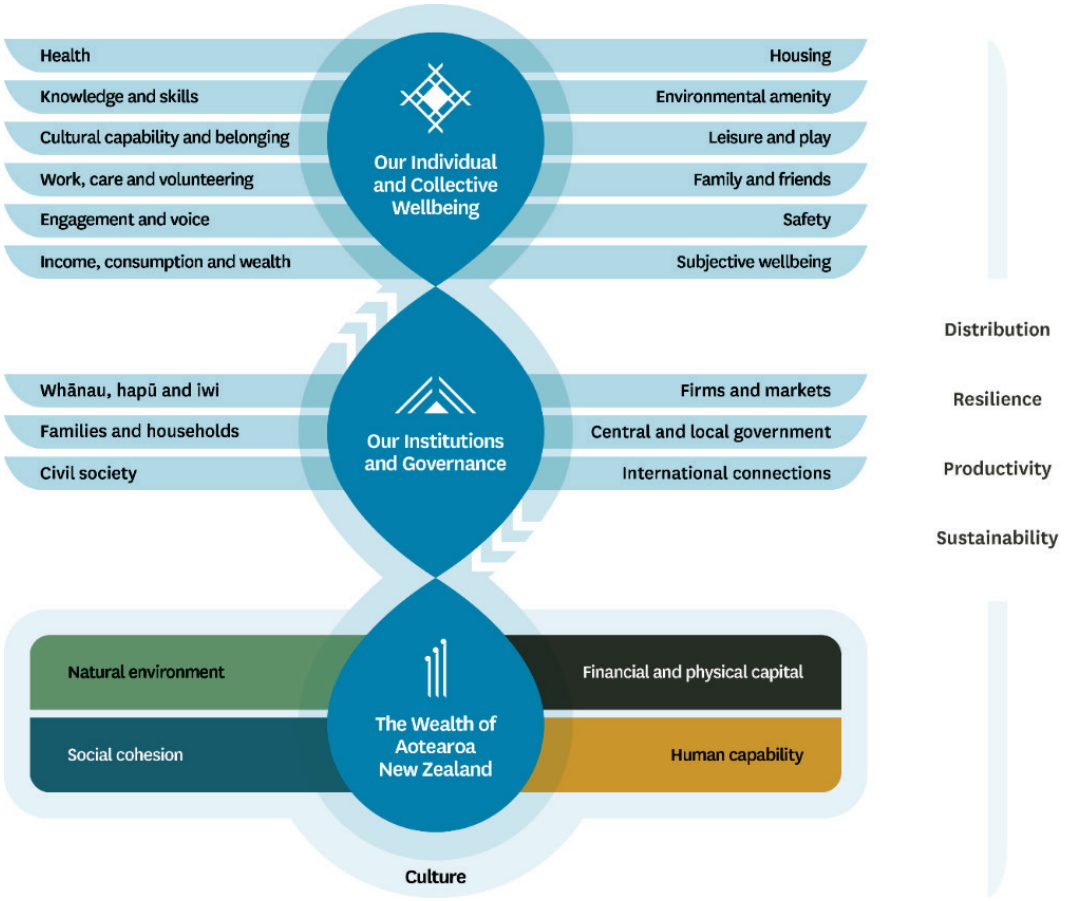
2 Discussion Paper: He Kāhui Waiora: Living Standards Framework and He Ara Waiora - COVID-19: Impacts on Wellbeing (DP 20/02) - July 2020 (treasury.govt.nz).

The analytical timeframe for this report (early 2020 through to the first quarter of 2022) should be understood as a 'soft' boundary, as in places we reference data from beyond this period where it provides important insights. It should also be noted that, in some cases, data is only available up to 2020 or 2021.

Paper structure

The Treasury's 2021 Living Standards Framework (LSF) is the main framework used to structure the analysis in this paper (see Figure 1).[3]

Figure 1 – The 2021 Living Standards Framework



This report explores trends in the wellbeing domains within the 'Our Individual and Collective Wellbeing' layer of the framework. We focus on those LSF domains where changes in wellbeing throughout the analysed period are most visible in the data available.

This report also uses the LSF's four aspects of wealth under the 'Wealth of Aotearoa New Zealand' domain of the framework. Our national wealth contributes to the current wellbeing of the country and sustaining them is important for our long-term wellbeing, particularly for future generations.

The 2021 version of the LSF includes a new level covering 'Our Institutions and Governance'. We do not specifically look at each of the institutional spheres in this paper. However, we do look at some wellbeing trends related to institutions, such as families and households, firms and markets and central government, through the domains and the four aspects of wealth.

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3 The Living Standards Framework (LSF) 2021 (treasury.govt.nz).

Data

This report draws on the LSF Dashboard but is not restricted to indicators in the Dashboard.[4] Many of the data sources in the LSF Dashboard have collection lags and are more appropriate for understanding longer-term trends in wellbeing. As these indicators typically do not yet reflect the shifts seen throughout our analysed period, we use more timely indicators and data where appropriate.

We err on the side of saying something rather than nothing. While we always endeavour to use the best quality data available, eg, from official sources or academic journals, in some cases we have also used novel and alternative sources of data to gain insight into the latest observable impacts, which may not yet be reflected in official statistics.

In some instances, our data sources have limitations (including small sample sizes), while in other instances, the pandemic has impacted survey collection periods and methods. As such, some of the trends observed in this report should be interpreted with caution. Caution is also advised when drawing conclusions and making comparisons. For a view of wellbeing trends throughout the COVID-19 period based on only the highest-quality data, Stats NZ's COVID-19 data portal is an excellent source.[5] This report draws from this portal where relevant.

In some instances, this paper collates data from the New Zealand General Social Survey (2018 and 2021) and the wellbeing supplements to the Household Labour Force Survey (June 2020, September 2020, December 2020 and March 2021) to review how certain indicators have changed vis-à-vis pre-pandemic levels (noting that this data will only capture impacts prior to the start of the second nationwide lockdown on 17 August 2021). Stats NZ advises mindfulness when interpreting this data as differences in collection method, sampled population, reporting periods and restrictions on face-to-face interviewing, among other things, may all impact comparability.[6, 7] We have indicated in each relevant Figure where data is from the General Social Survey or from supplements to the Household Labour Force Survey.

When readily available from the data source, we have added error bars to our graphs to reflect what is known as sampling error. Generally speaking, the larger the sample, the smaller the sampling error and the more closely the sample can be expected to resemble the total population. Error bars are important when considering trends over time (as this report does). Where margins of error overlap, we cannot be sure an observed change, upwards or downwards, is real.

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4 Living Standards Framework Dashboard (treasury.govt.nz).

5 COVID-19 data portal (stats.govt.nz).

6 The General Social Survey was due to go into the field on 1 April 2020 but could not because of the COVID-19 lockdown. Because of the urgent need to monitor wellbeing over the pandemic, a short wellbeing supplement was added to the Household Labour Force Survey – this ran for four quarters between June 2020 and March 2021. For more information see: see: Wellbeing statistics: A year in review (June 2020 to March 2021 quarter) | Stats NZ, and Understanding the impact of COVID-19 on Stats NZ's data and statistics | Stats NZ.

7 Data collection for the General Social Survey 2021 was disrupted by the second nationwide lockdown, which began in August 2021 during the Delta variant outbreak. This meant the sample size for the General Social Survey 2021 was significantly smaller than for previous collections. For more information see: General Social Survey (GSS) - Stats NZ DataInfo+.

As highlighted above, this report seeks to understand recent trends in wellbeing. COVID-19 has played an important role in many of these trends but not all developments in wellbeing can be attributed to it. Therefore, we do not attempt to make causal links.

Finally, as the wellbeing impacts of the pandemic will continue to play out over years to come, we expect that domestic and international agencies, research institutions, non-government organisations (NGOs), and think tanks will continue working to measure, understand and explain the impacts of the virus on our livelihoods and wellbeing.

Our Individual and Collective Wellbeing

The 'Our Individual and Collective Wellbeing' level of the LSF includes 12 domains that reflect what research and public engagement have shown are important for the wellbeing of both individuals and collectives, such as families, whānau and communities, of place, identity and interest (the Treasury, 2021).

This section reviews indicators and other data sources for six of the 12 domains to identify shifts in New Zealanders' wellbeing from early 2020 through to the first quarter of 2022. The domains we have looked at are *Health; Work, care and volunteering*; *Income, consumption and wealth*; *Housing*; *Safety;* and *Subjective wellbeing*.

We have intentionally focused on a subset of domains where changes in wellbeing throughout the analysed period are most visible in the data available, acknowledging that other domains may be more slow-moving and that it may be more difficult to spot emerging trends over the pandemic period, eg, *Environmental amenity*. There is some overlap between the LSF domains and the aspects of wealth. Therefore, some of the material covered in the Wealth of Aotearoa New Zealand section are relevant to domains not included in this section, for example, the *Human capability* section is relevant to the *Knowledge and skills* domain.

Overview

In many ways, our individual and collective wellbeing held up throughout the pandemic. However, data reveals a significant diversity of experience across domains and demographic groups.

We find that while New Zealand's public health response to COVID-19 enabled us to keep case numbers low, our health system still experienced a range of negative impacts. These include disruptions to hospital services, primary care (including access to GPs and childhood immunisation), and screening services. In line with pre-pandemic trends, younger New Zealanders have also experienced higher levels of psychological distress and loneliness than other age groups.

New Zealand's labour market was robust and recovered rapidly after the first lockdown, with unemployment rates reaching historical lows in late 2021 and early 2022. While we see low unemployment rates across all ethnicities, pre-pandemic disparities remain with, for example, Māori and Pacific peoples who continue to report higher levels of unemployment than other ethnic groups.

Household income was resilient throughout the pandemic. However, a decline in aggregate consumption can be seen during the lockdown periods and inflationary pressures experienced since 2021 may reinforce pre-pandemic income disparities. The rise in house prices over 2020 and 2021 increased the wealth of homeowners but is also likely to have deepened wealth inequalities between homeowners and renters – who are more likely to be young people.

Applications in the Public Housing register continued a long-term upward trend and there were steep increases in the number of households receiving Emergency Housing Special Needs Grants during lockdown periods.

New Zealanders did not report being more worried about crime in 2021 than they were in 2018 and, while data shows an overall increase in reported victimisations between mid-2018 and mid-2022, this may be related to an increase in the rate of people reporting crime, rather than an increase in actual crime. There were also fewer road deaths and workplace injuries in 2020.

Overall, measures of average subjective wellbeing remained resilient, although a slight decline can be observed as the pandemic has continued.

We acknowledge that additional data sources may be available for the domains reviewed in this section. Readers interested in in-depth discussion are encouraged to review our sources, including more-detailed reports published by other agencies, which we cite throughout.

Health

Key messages

- New Zealand had relatively low COVID-19 deaths over the analysed period, as we managed to keep case numbers low while our population was vaccinated against the virus.
- New Zealanders experienced disruption to health services, such as hospital procedures, primary care, and screening.
- The OECD reports that in most OECD countries with available data, more people adopted unhealthy, rather than healthy, behaviours during the first year of the pandemic. However, evidence for New Zealanders is mixed.
- In line with pre-pandemic trends, younger New Zealanders continued to experience increasing levels of psychological distress and loneliness. This story is complex and part of a longer-term trend; and should also be considered alongside indicators reviewed in the *Subjective wellbeing* section of this report.
- Negative health impacts have been disproportionately felt by certain groups, including younger people, disabled people, Māori, Pacific peoples and people living in areas with socio-economic deprivation.

The Living Standards Framework defines the health domain as people being in good mental and physical health and exhibiting health-related behaviours and lifestyles that reduce morbidity and mortality, such as eating well and keeping healthy.

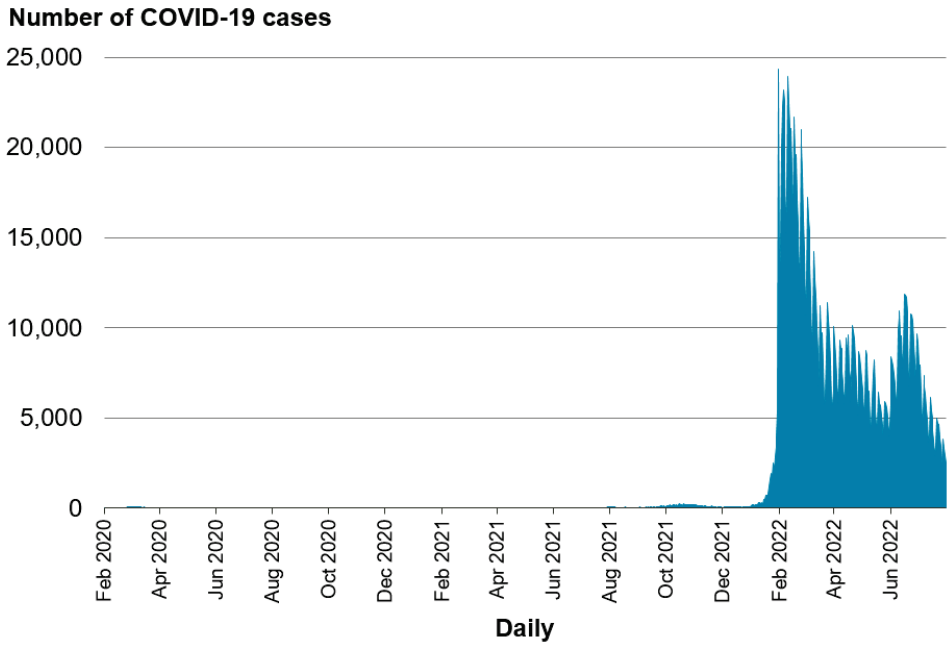
New Zealand has suffered far fewer COVID-19 deaths than most other countries…

While public health restrictions enabled New Zealand to control earlier waves of the virus until a high proportion of New Zealanders were vaccinated, the Omicron outbreak in early 2022 saw a rapid spike in daily confirmed cases (see Figure 2). As at 26 May 2022,[8] New Zealand had a total of 1,124,908 confirmed cases, 10,647 people hospitalised and 492 deaths where COVID-19 was officially coded as the underlying cause.

These figures reflect a much lower rate of mortality than seen in other countries. According to Ritchie et al., (2022), on 26 May 2022, New Zealand's cumulative confirmed COVID-19 deaths per million people was 165, compared to 323 deaths per million in Australia, 2,960 in the United Kingdom, 2,986 in the United States, and a global average of 798. As in other countries, most hospitalisations and deaths have fallen on older people.

8 Data for 26 May 2022 was the latest available at time of writing.

Figure 2 – Daily confirmed and probable cases of COVID-19 in New Zealand



Source: Ministry of Health (provided directly)

Importantly, the health impacts of COVID-19 have been dampened by our COVID-19 vaccination roll out, which was largely complete before the spread of the Omicron variant. At 26 May 2022, 96.3% of New Zealanders over the age of 12 were at least partially vaccinated against COVID-19, with 95.2% fully vaccinated and 72.8% of eligible people boosted.[9]

However, despite our relatively low death rate, COVID-19 has clearly presented a major challenge to New Zealanders' physical and mental health, as well as to the functioning of our health system.

…but have experienced other health impacts from disruptions to health services…

COVID-19 has caused significant disruption to hospital services in New Zealand. The Ministry of Health estimates that there were 14,883 planned care inpatient surgical deferrals for COVID-19-related reasons, including patient or staff sickness or isolation, between 15 August 2021 and 21 August 2022.[10] Across all hospital services it is estimated that 124,102 events have been deferred during the same period – this includes a wider range of services, including outpatient appointments and assessments.

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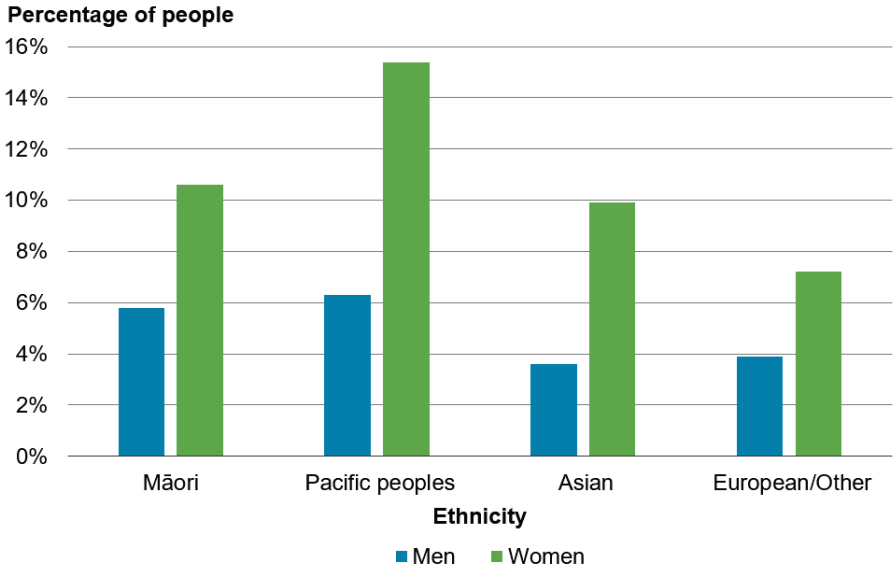
9 There have subsequently been changes to the Health Service User (HSU) population denominator used by the Ministry of Health to produce COVID-19 vaccination uptake statistics. These changes came into effect on 8 August 2022. However, these changes do not affect the statistics published at the time of reference in the above statement.

10 Planned care services, traditionally known as 'electives', encompass medical and surgical care for people who don't need to be treated right away.

There have also been disruptions to primary care access. In response to patient experience surveys undertaken by the Health Quality and Safety Commission (HQSC), one in three (34.4%) respondents reported that the Levels 3 and 4 lockdowns in 2020 kept them from going to their GPs in the way they usually would have.[11] These respondents were more likely to be under 65 years of age, disabled and to live in areas of greatest socio-economic deprivation. More than 40% of people surveyed who identified as being disabled could not see their GPs as they normally would (HQSC, 2021). New Zealand Health Survey data in Figure 3 below also indicates that reported unmet need varied across ethnicities and between men and women.

Figure 3 – Unmet need for GP services due to COVID-19 by ethnic group, 2020/21

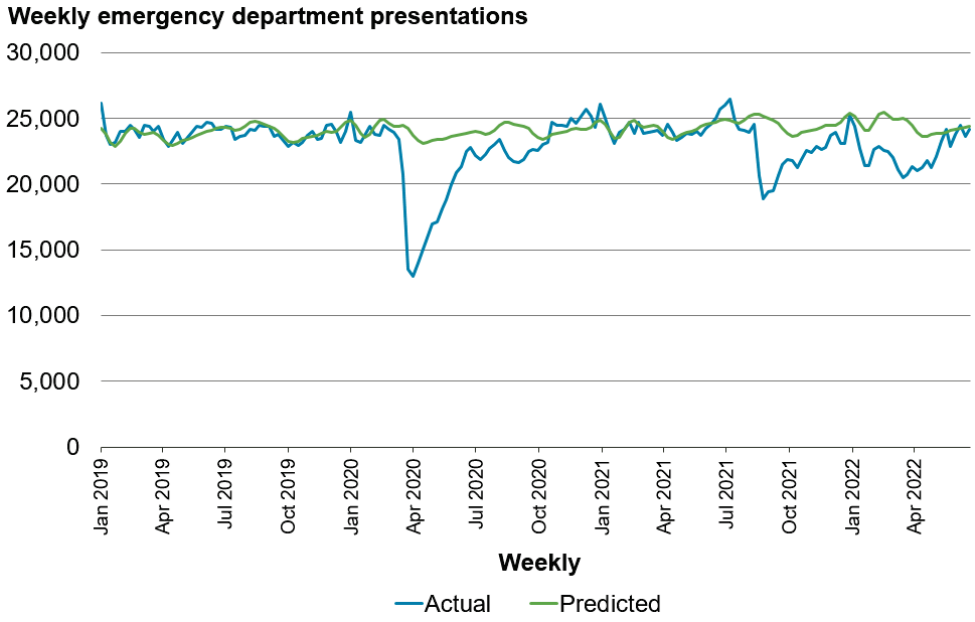


Source: Ministry of Health (New Zealand Health Survey)

Public health restrictions have had a mixed impact on emergency department presentations. As shown in Figure 4 below, HQSC reports that "*presentations to Aotearoa New Zealand* [emergency departments] *dropped dramatically at the start of Level 4 in March to April 2020 and began a steady return to expected numbers as we went down Alert Levels. Emergency department presentations stayed below forecast numbers until October 2020. Increased demand then followed in summer but presentations were back to forecast levels from about February 2021*" (HQSC, 2021).

[11] For more information about the history of the COVID-19 Alert System History of the COVID-19 Alert System | Unite against COVID-19 (covid19.govt.nz).

Figure 4 – Weekly actual and forecast emergency department presentations, January 2019 to June 2022

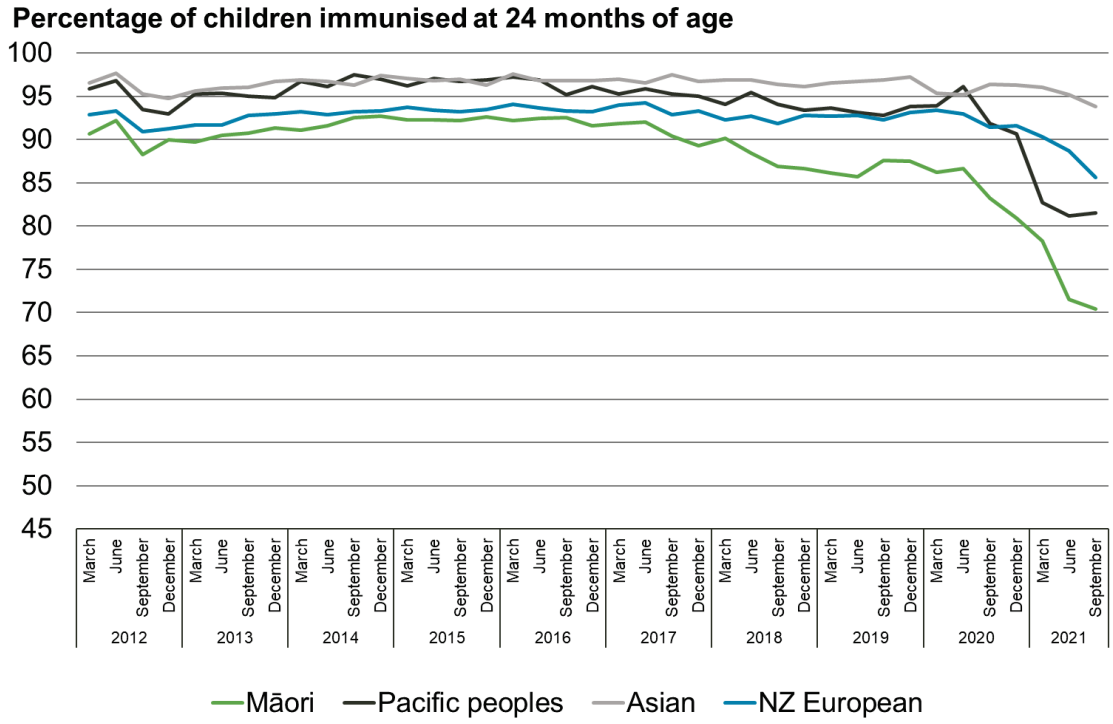


Source: Health Quality & Safety Commission (provided directly)

HQSC (2021) goes on to note that in October 2020 there was an increase in the number of patients presenting at emergency departments in conditions that were life-threatening or imminently so. HQSC hypothesises that this may be partially explained by the fact that "… *people have faced more barriers to primary care, leading to more severe acute events and the resulting strain on ED* (emergency department) *capacity"*.

There have also been impacts on the performance of our wider public health system. For example, while the percentage of two-year-old babies receiving the full schedule of immunisations has been declining since 2017, this negative trend accelerated following the 2020 lockdowns, dropping well below 90% for the first time in 10 years (see Figure 5). Concerningly, ethnic disparities have also widened, with immunisation coverage for Māori two-year-olds falling by 15% since mid-2020.

Figure 5 – Immunisation coverage at 24 months of age, by selected ethnicities, March 2012 to September 2021



Source: Health Quality & Safety Commission (provided directly)

As in many other countries, New Zealand's screening services were also paused or reduced during periods of heightened public health restrictions. While bowel screening was able to resume from June 2020, our breast and cervical screening programmes require in-person attendance and contact with a clinician, and disruptions have led to reduced coverage under both programmes.

Total breast screening coverage fell from 72% in June 2019 to 66% in June 2020 and has remained at a similar level through to June 2022.[12] This drop was sharper for Pacific women who dropped from 71.7% coverage to 63.3%, and coverage for wāhine Māori remained lowest amongst ethnic groups at 59.2%.

Total cervical screening coverage, which had already been declining since 2016, fell further from 71% in June 2019 to 68% in June 2020 and, after an uptick in 2021, fell back to 67.2% in June 2022.[13] Again, over this period Pacific women experienced the biggest drop from 65.8% coverage to 55.7%, and again coverage remained lowest for Māori women at 54.9%.

The Ministry of Health notes that, following the resumption of screening programmes, "*… a proportion of invitees* [have] *remained unable or unwilling to attend screening services due to fear of infection and anxiety about putting strain on the health system*" and that *"the ongoing impacts of COVID-19… create a challenging environment for efforts to return to pre-pandemic coverage levels"*. However, the Ministry advises that work is under way with screening providers to recover screening rates, prioritising Māori and Pacific peoples.

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12 BreastScreen Aotearoa DHB Coverage Report (minhealthnz.shinyapps.io).

13 National Cervical Screening Programme Coverage Report (minhealthnz.shinyapps.io).

… mixed changes to 'healthy behaviours'…

The OECD reports that in most OECD countries with data, more people adopted unhealthy, rather than healthy behaviours, from the start of the pandemic to October/November 2020 (OECD 2021). As outlined below, the evidence for New Zealanders is mixed.

In June 2022, Sport New Zealand published a report that compared survey data on participation in sports and physical activities between 2019 and 2021 (see Table 1).

For young people, the headline findings were that, after a period of stability between 2017 and 2019, in 2021 fewer young people (aged 5 to 17) participated in sports and physical activities each week, while average time spent participating increased.[14] Some groups also saw poorer participation outcomes, including young people from high deprivation areas and young Pacific peoples.

Table 1 – Change in young people's sport and physical activity, 2019 and 2021

	2019	2021	Difference (%)
Weekly participation	94%	91%	-3.2%
Average number of hours being active	10.9	11.5	+5.5%
Average number of sports and activities	5.2	5.0	-3.5%*
Meeting the physical activity guidelines	58%	59%	+1.7%*

Source: Sport New Zealand (2022)
** Result not statistically significant*

For adults (aged 18 and over), the headline findings were that, after a period of stability between 2018 and 2019, adults spent more time participating in sport and physical activities each week in 2021 and more adults reported meeting the Ministry of Health's physical activity guidelines (see Table 2). The average number of sports and activities undertaken each week also increased. However, there was variation across groups, including poorer outcomes for Pacific peoples, who showed no improvement across participation indicators.

Table 2 – Change in adults' sport and physical activity, 2019 and 2021

	2019	2021	Difference (%)
Weekly participation	72%	73%	0.6%*
Average number of hours being active	5.2	5.4	+3.8%
Average number of sports and activities	2.2	2.3	+3.8%
Meeting the physical activity guidelines	59%	61%	+4.5%

Source: Sport New Zealand (2022)
** Result not statistically significant*

[14] For details on the Ministry of Health's physical activity guidelines, see: How much activity is recommended? (health.govt.nz).

These findings largely reflect what is seen in the 2020/21 New Zealand Health Survey, which also found a small (albeit not statistically significant) increase in the percentage of adults (aged 15 years and over) who reported being physically active in the last week (from 51.8% in 2019/20 to 53% in 2020/21).[15] While results from Sport New Zealand highlight variation by sub-group, the New Zealand Health Survey found consistent increases across most demographic groups, and no group showed a statistically significant decrease.

The New Zealand Health Survey also found a statistically significant increase in the percentage of adults who reported being obese, from 31.2% in 2019/20 to 34.3% in 2020/21.[16] Within this data, statistically significant increases were evident for women, people aged 25 to 34 and 45 to 54, Pacific peoples and European/other peoples. This spike in reported obesity follows a decade of flat or gradually increasing rates and aligns with Ipsos survey data from late 2020, which shows that on average in 19 OECD countries, 31% of respondents had gained weight since the start of the pandemic, compared to only 18% who had lost weight (OECD 2021).

There is mixed evidence on New Zealanders' alcohol consumption throughout the analysed period. The Health Promotion Agency (HPA) commissioned a three-wave online survey that asked New Zealanders about how COVID-19 affected a range of behaviours, including alcohol consumption. The three waves of this survey collected data about people's reported behaviour during and after the first lockdown in 2020, as well as during a further period of lockdown in 2021.

HPA's survey found that all ethnic groupings had growth in 'more than usual' alcohol consumption and a drop in 'less than usual' alcohol consumption in wave 3 compared to wave 1 (see Figure 6). Beyond these aggregate findings, there was large variation across ethnic groupings, including a higher proportion of Pacific peoples drinking 'less than usual' across all three waves of the survey.

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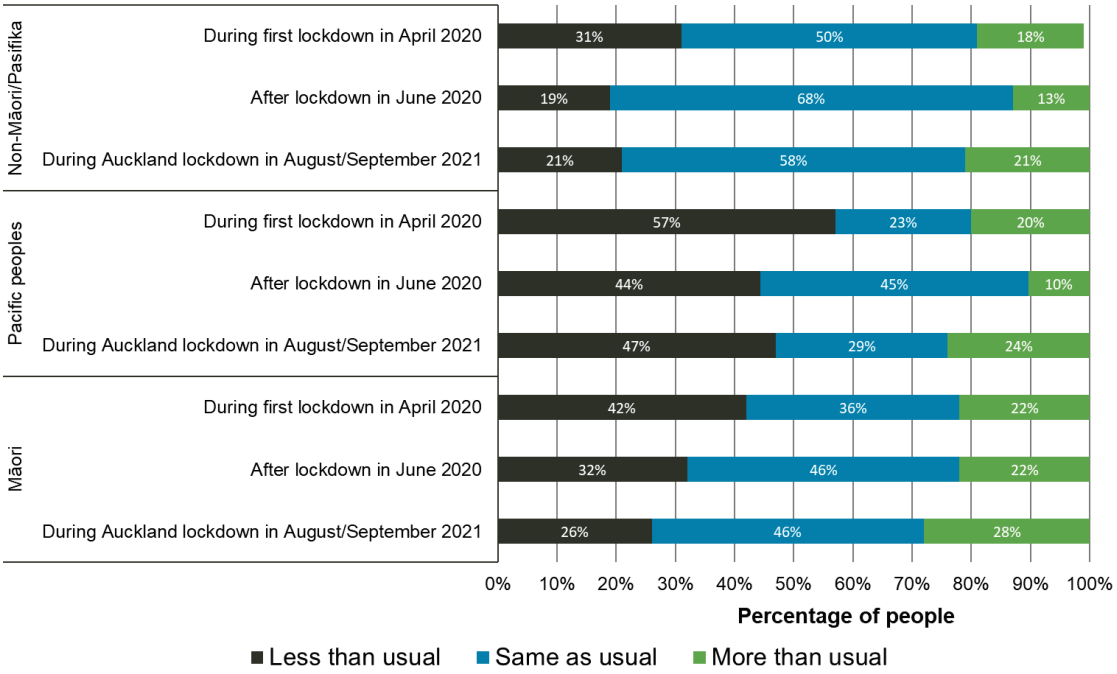
15 Where 'physically active' is defined as doing at least 2.5 hours of physical activity in the past week, spread out over the week.

16 Where obesity is defined as having a body mass index of 30+.

Figure 6 – Alcohol consumption across Alert Level settings[17]



Source: Health Promotion Agency (Impact of COVID-19 surveys)

These findings should be considered alongside the results of the 2020/21 New Zealand Health Survey, which found a statistically significant *decrease* in the percentage of adults who reported that they had consumed alcohol in the past year, from 81.6% in 2019/20 to 78.5% in 2020/21. This survey also found a small (although not statistically significant) decrease in the percentage of adults who reported participating in hazardous drinking or in heavy episodic drinking at least once per month.[18]

The New Zealand Health Survey also reported that the percentage of adults (aged 15 and over) who smoke at least monthly had continued to fall, from 13.7% in 2019/20 to 10.9% in 2020/21. However, this survey also found a small (although not statistically significant) increase in the percentage of daily smokers who reported smoking at least 21 cigarettes per day. This aligns with findings from Ipsos that showed that individuals in eight OECD countries were more likely to report having given up smoking than having started smoking since the pandemic began and other international evidence that suggests that for those who already smoked and did not quit, the pandemic led to an increase in tobacco consumption (OECD 2021).

There was also a large increase in the use of electronic cigarettes in the first year of the pandemic. The New Zealand Health Survey reported that the percentage of adults using electronic cigarettes at least once a day increased from 3.5% in 2019/20 to 6.2% in 2020/21. Large (and statistically significant) increases were evident across a range

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17 This data is taken from a survey that ran over the following three waves:

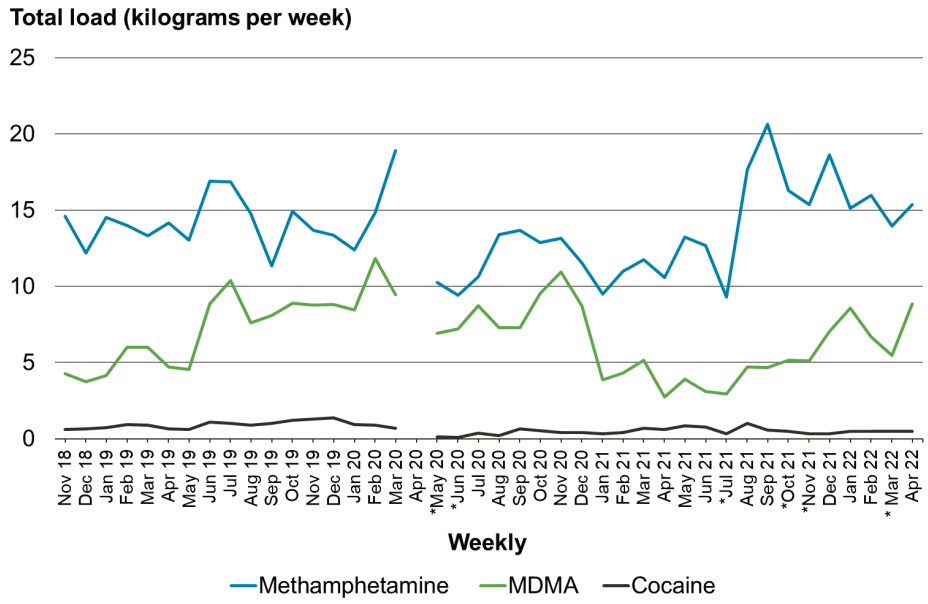
- 7 to 13 April 2020 lockdown (Alert Level 4)
- 10 to 19 June 2020 post lockdown (Alert Level 1)
- 10 to 17 September 2021 (Auckland at Alert Level 4 and the rest of New Zealand at Alert Level 2).

18 Where hazardous drinking is measured using the 10-question Alcohol Use Disorders Identification Test (AUDIT), and heavy episodic drinking is defined as consumption of six or more drinks on one occasion at least monthly.

of demographic groups and in particular for people aged 18 to 24 (5% to 15.3% using electronic cigarettes at least once a day) and for Māori men (5.5% to 15.2%).

Data from the National Drugs in Wastewater Testing Programme also allows us to examine New Zealanders' use of illicit substances throughout the pandemic. This data covers the use of methamphetamine, cocaine and MDMA, as well as fentanyl and heroin when detected but does not include cannabis or synthetic cannabinoids.

Figure 7 – Estimated weekly drug use from National Drugs in Wastewater Testing Programme, November 2018 to April 2022[19]



Source: New Zealand Police (provided directly)

Police note that it is unlikely that the spike seen in March 2020 in Figure 7 was linked to the lockdown, as wastewater sampling took place before there was any indication a lockdown was going to occur. Following this lockdown, levels dropped off before quickly increasing to near baseline levels by August 2020. Police note that it is likely that methamphetamine supply chains, both international and domestic, were disrupted for a short time following the introduction of COVID-19 restrictions in 2020.

Methamphetamine consumption also increased in August-September 2021, coinciding with the second nationwide Alert Levels 3 and 4 lockdown, and consumption has remained at an elevated baseline through to April 2022. Police note that it is likely that increasing global supply has resulted in increased availability and consumption in New Zealand.

…and continued increases in psychological distress.

As discussed in our report on trends in wellbeing, reported psychological distress has risen markedly faster for younger New Zealanders for a number of years. There also appears to have been an upwards spike in psychological distress reported by 15 to 24-year-olds in 2020/21 (see Figure 8). It is notable that this data ends before the beginning of the second nationwide lockdown in August 2021.

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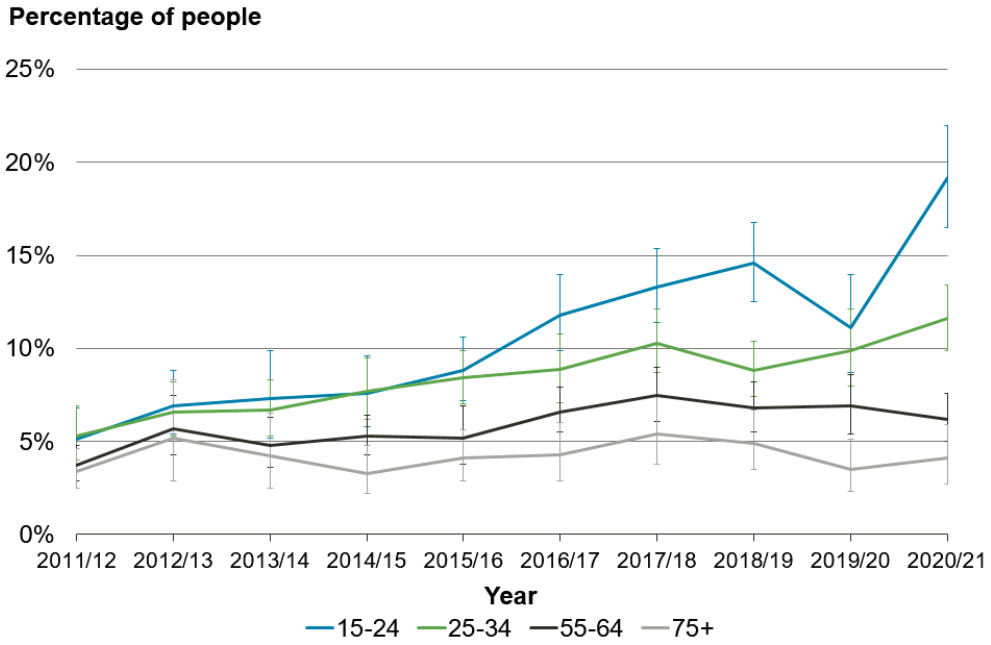
[19] On occasion, sites are unable to sample. When large sites, such as those located in Auckland are not sampled, a proportion of the national total load is missing, which results in artificially low dips on the graph. These months have been marked on the graph above with an *.

Figure 8 – Percentage of people experiencing high or very high levels of psychological distress in the last four weeks, by selected age groups (LSF Dashboard indicator)



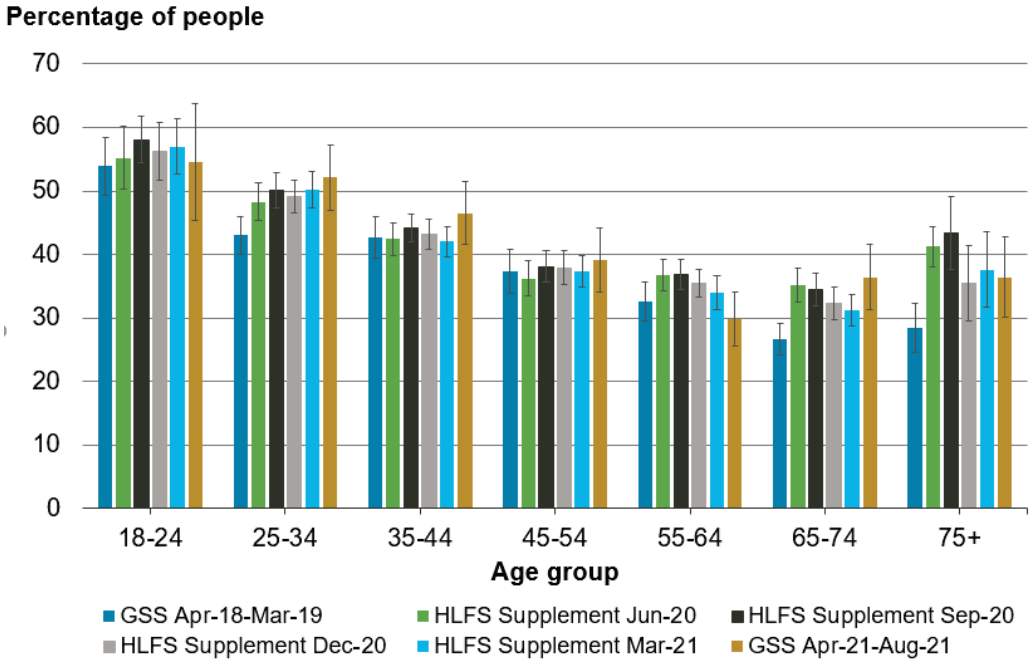
Source: Ministry of Health (New Zealand Health Survey)

This aligns with an OECD report (2021), which found that young people (15 to 24-year-olds) had experienced significant mental health impacts throughout COVID-19. This report found that in Belgium, France and the United States, based on data from March 2021, the share of young people reporting symptoms of anxiety and depression was more than twice as high than the most recent data available from before the pandemic (OECD, 2021d). This report also noted that self-reported mental health issues were more prevalent among young people compared to other age groups across many OECD countries. The same data from Belgium, France and the United States shows that prevalence of symptoms of anxiety and depression was around 30% to 80% higher among young people than the general population.

Australia also saw a spike in psychological distress amongst people aged 18 to 24 early in the pandemic but by April 2021 their rates of psychologic distress had fallen to significantly below the April 2020 peak, although they remained above pre-pandemic levels (Australian Institute of Health and Welfare, 2021).

As shown in Figure 9, Stats NZ data shows that throughout COVID-19, loneliness was also far more prevalent among younger New Zealanders, a finding that is consistent with both pre-pandemic data on loneliness in New Zealand and data from other OECD countries.

Figure 9 – Proportion of people who felt lonely at least a little of the time in the last four weeks, by age group, June 2020 to March 2021 quarters

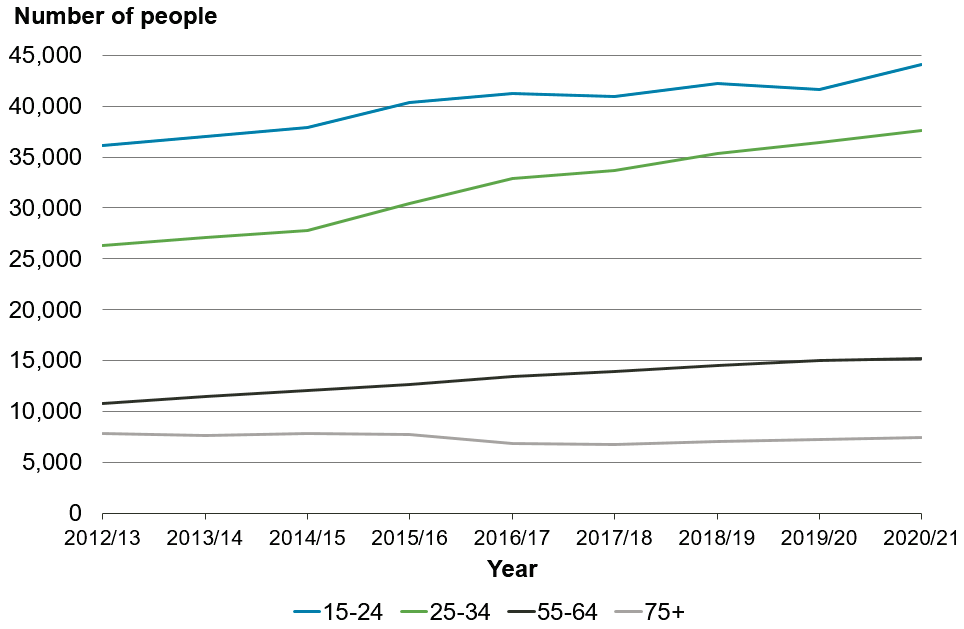


Source: Stats NZ (GSS and HLFS supplement data)[20]

A similar trend may also have occurred amongst young New Zealanders facing the greatest mental health challenges. In 2020/21 there was an increase in the number of New Zealanders aged 15 to 24 who accessed specialist mental health and addiction services, although it is difficult to disaggregate the impacts of COVID-19 from the ongoing longer-term upward trend in this data (see Figure 10). It should also be noted that service access is not necessarily a reliable indicator for prevalence or levels of need.

[20] See *Data* section of this paper for caveats about comparing data from the New Zealand General Social Survey (2018 and 2021) and the wellbeing supplements to the Household Labour Force Survey (June 2020, September 2020, December 2020, and March 2021). Differences in collection method, sampled population, reporting periods, and restrictions on face-to-face interviewing, among other things, may all impact comparability.

Figure 10 – Number of people accessing specialist mental health and addiction services, by select age groups



Source: Ministry of Health database

Work, care and volunteering

Key messages

- After an initial surge to 5.3% in late 2020, by the December 2021 quarter unemployment had dropped to the lowest levels since records began in 1986, at 3.2%.
- Employment levels reached record highs in September 2021 at 68.8%.
- There was aggregate employment growth in most industries between March 2020 and March 2022. Although reductions in the number of filled jobs were observed in the industries of Accommodation and Food Services; Transport, Postal and Warehouse; and Arts and Recreation Services.
- While unemployment levels fell for all ethnicities, genders and age groups throughout the analysed period, pre-pandemic disparities remain. Younger New Zealanders, Māori, and Pacific peoples continue to experience higher unemployment rates than other demographic groups.
- When asked about the likelihood of losing their job or business in the next 12 months, most New Zealanders were optimistic and reported either no chance or low chance, even during lockdown periods.

The Living Standards Framework defines the work, care and volunteering domain as how people are directly or indirectly producing goods and services for the benefit of others, with or without compensation. As data on care and volunteering throughout the COVID-19 period is limited, this section focuses on paid employment.

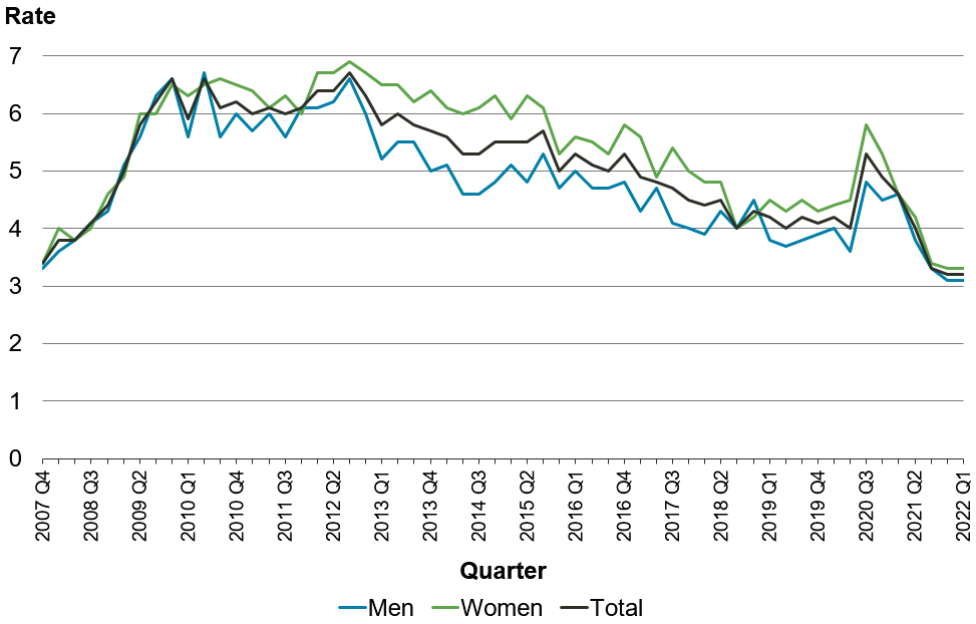
Being unemployed tends to reduce life satisfaction substantially for those in the labour force. While paid work contributes to wellbeing via the generation of income and enabling of consumption, being employed, and the quality of work, also contributes to one's sense of meaning, purpose and connection (the Treasury, 2021).

The overall labour market remained robust over the pandemic period…

In our July 2020 rapid evidence review of the potential wellbeing impacts of COVID-19 (He Kāhui Waiora), we noted that the Treasury forecast unemployment to peak at nearly 10% in the September quarter of 2020 and that this presented risks to human capital in decaying skills, loss of hope and discrimination against those who have been out of a job for a long time.

However, this risk has not manifested. As shown in Figure 11, the total unemployment rate peaked at 5.3% in September 2020 and by the December 2021 quarter had dropped to the lowest levels (for both men and women) since Household Labour Force Survey records began in 1986, at 3.2% total unemployment. The total unemployment rate remained unchanged at 3.2% in the March 2022 quarter.

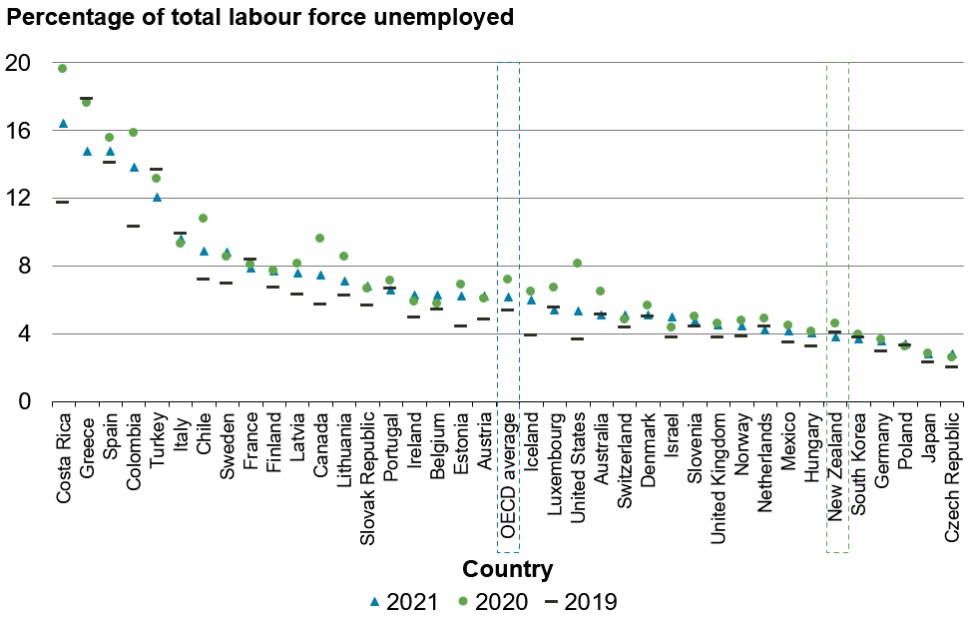
Figure 11 – Unemployment rate, by gender, seasonally adjusted, December 2007 to March 2022 quarters (LSF Dashboard indicator)



Source: Stats NZ (Labour market statistics)

New Zealand's unemployment rates between 2019 and 2021 remained below most other OECD countries.

Figure 12 – Unemployment rate across OECD countries (LSF Dashboard indicator)

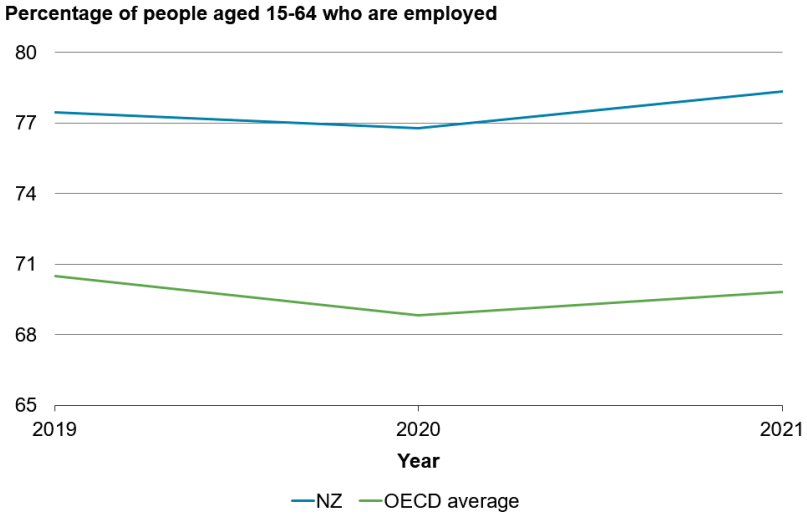


Source: OECD database

As highlighted in our paper on trends in wellbeing, New Zealand has consistently had employment rates above the OECD average. Employment remained robust over 2020 and 2021 (see Figure 13). Stats NZ data indicates that in the September 2021 quarter, New Zealand's employment rate reached record highs of 68.8%.[21]

[21] Note that OECD employment rates are among people aged 15-64, while Stats NZ data is for people aged 15 years and over – including the 65+ age group.

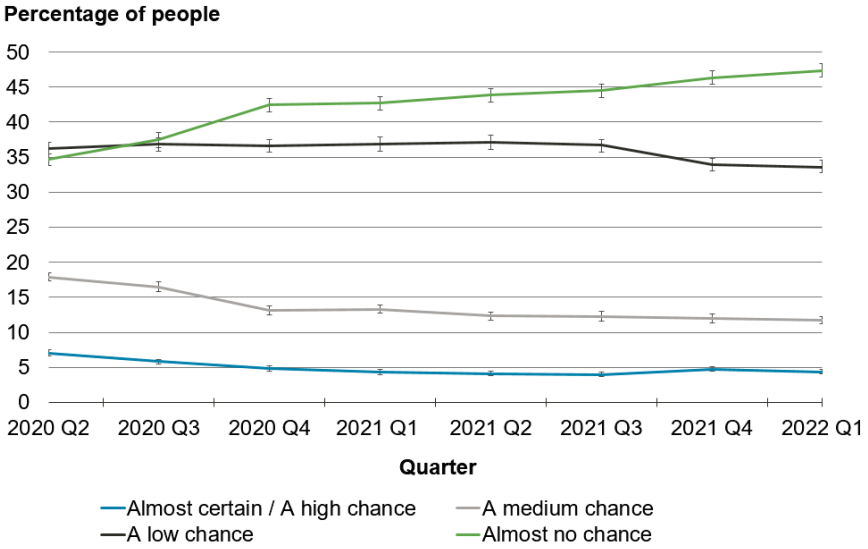
Figure 13 – Employment rate New Zealand and OECD average, 2019 to 2021 (LSF Dashboard indicator)



Source: OECD database

The resilience of the labour market and the tightness observed since late 2021 were also reflected in people's perception of their job security. As shown in Figure 14, when asked about the likelihood of losing their job or business in the next 12 months, most New Zealanders were optimistic and saw either no chance or a low chance, even during the periods of lockdown.

Figure 14 – Job Security, proportion of employed people by perceived chance of losing job or business in next 12 months, June 2020 to March 2022 quarters.



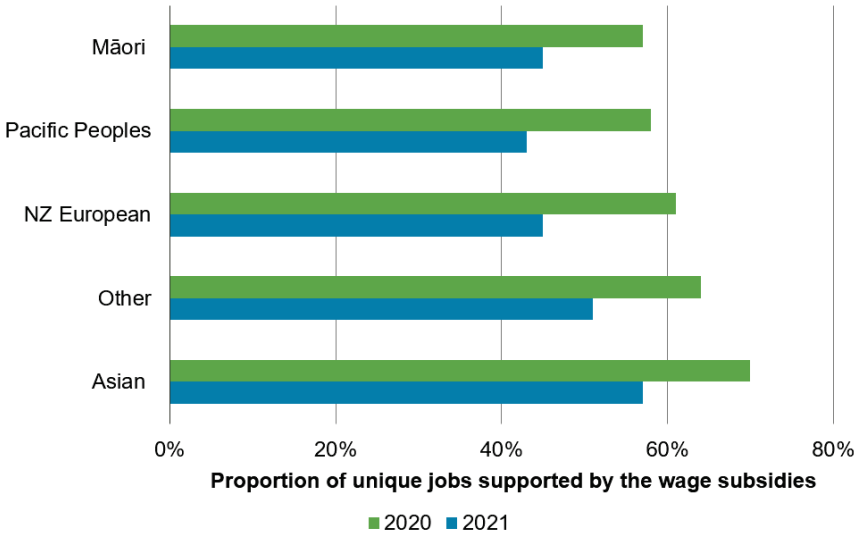
Source: Stats NZ (COVID-19 data portal)

Box 1 – The Wage Subsidy Scheme

The OECD (2021) has stated that the pandemic's differential impact on unemployment across countries reflects differences in policy responses (ie, the use of job retention schemes). The Wage Subsidy Scheme was set up in New Zealand to support people to remain connected to their jobs during COVID-19.[22]

Data from the Ministry of Social Development (MSD), covering up to January 2022, shows that some demographic groups were more likely to be employed in jobs supported by the Wage Subsidy scheme (see Figure 15). For example, Asian employees represented 37% of unique jobs[23] supported by the scheme in the Accommodation and Food Services Industry in 2021 – the industry with the highest proportion of jobs supported. Additionally, 64% of all Asian employee jobs supported were in Auckland, the region with the highest proportion of all employee jobs supported.

Figure 15 – Proportion of unique jobs supported by at least one of the wage subsidies, by employee ethnic group



Source: Ministry of Social Development (2022), the Treasury

In general, a greater proportion of jobs held by males were supported by the Wage Subsidy scheme than jobs held by females, and again this is explained by the representation of males and females in different industries (see Figure 16). Males represented the majority of employees in a number of industries that had a high proportion of jobs supported, such as Construction and Wholesale Trade. Females were over-represented in both the Accommodation and Food Services industry, which had a very high proportion of jobs supported, as well as in a number of industries with a very low proportion of jobs supported, such as health care, social services, and education and training.

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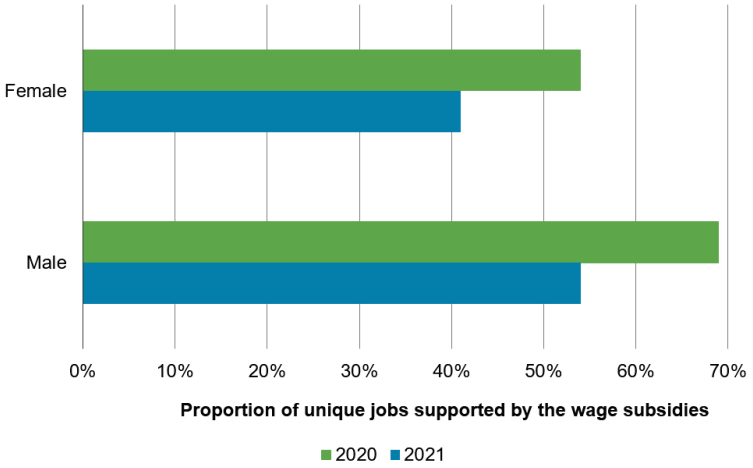
22 For more information see: Who received the-2021 COVID-19 wage subsidies? (msd.govt.nz). This Wage Subsidy report uses data on the 2021 wage subsidies up to 7 January 2022 and compares these with published data on the 2020 wage subsidies (with data up to 11 September 2020). All wage subsidies were closed to new applications by these dates and the vast majority of applications had been completed.

23 MSD's analysis focuses on employees and their jobs. MSD uses the concept 'unique jobs', defined as unique combinations of an employer and an employee. Employees can work for more than one employer. For example, a person with two part-time jobs both supported by a given round of the Wage Subsidy, has both of these jobs counted in the total count. Sole traders are excluded in the proportions.

Figure 16 – Proportion of unique jobs supported by at least one of the wage subsidies, by employee gender



Source: Ministry of Social Development (2022), the Treasury

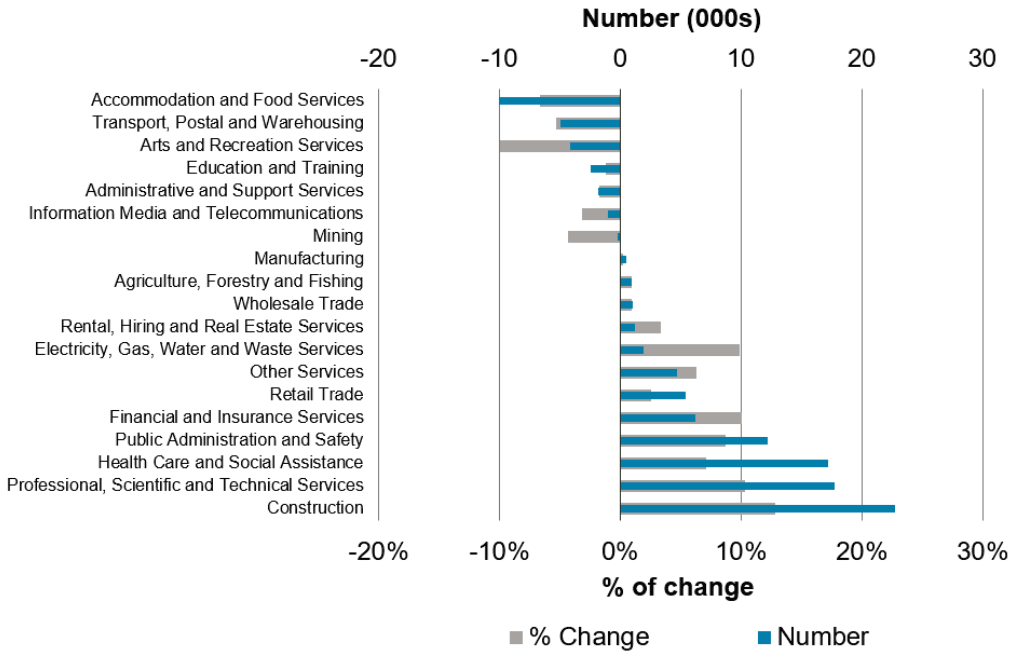
Although the pandemic disrupted business activity and jobs in different ways, meaning that impacts varied by industry and region, New Zealand's labour market was resilient overall. By the start of 2022, the Wage Subsidy Scheme was closed to new applications and, as noted above, unemployment rates remained at record lows through to March 2022.

…and pre-pandemic disparities remained but were not exacerbated.

The OECD found that across its member countries, job losses during the COVID-19 period disproportionately affected some demographic sub-groups; women, younger people, lower-income and less-educated individuals, ethnic minorities, and LGBTQ+ communities were over-represented in the industries most exposed to containment measures (eg, leisure and hospitality, tourism, retail) (OECD, 2021).

In New Zealand, domestic data shows aggregate employment growth in most industries between March 2020 and March 2022, despite the effect of lockdowns and other public health restrictions. Figure 17 shows that the biggest reductions in the number of filled jobs were observed in the industries of Accommodation and Food Services; Transport, Postal and Warehouse; and Arts and Recreation Services. These reductions were offset by gains in other sectors, as overall employment levels increased.

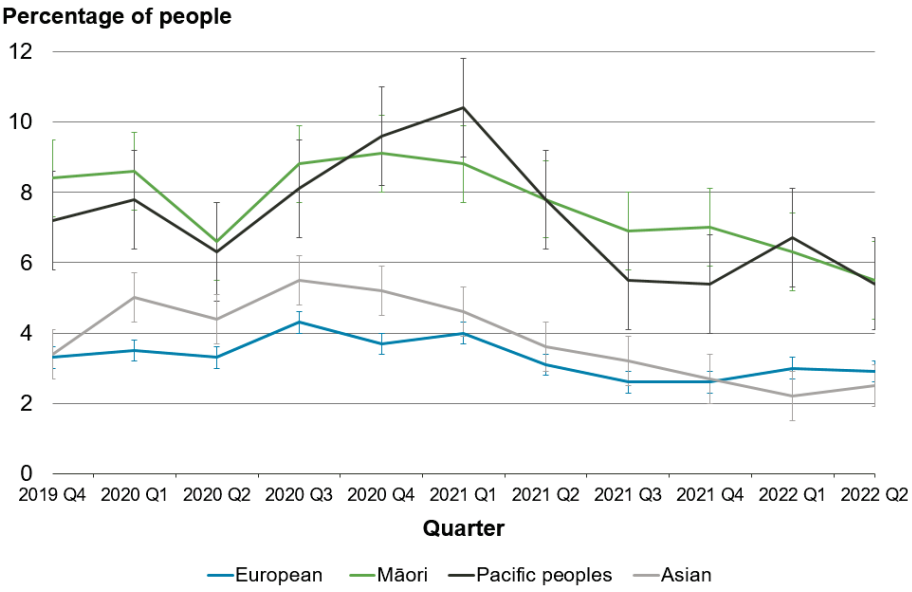
Figure 17 – Employment growth, change in number and percentage of filled jobs by industry, March 2020 to March 2022



Source: Stats NZ (Labour market statistics), the Treasury

Periods of sharp and short increases in unemployment during the pandemic period seem to have affected Pacific peoples, Māori and Asian peoples more than other ethnicities.[24] However, between the December quarter of 2019 and the June quarter of 2022 pre-pandemic gaps between major ethnic groups did not widen and unemployment levels were low across all ethnic groups (see Figure 18).

Figure 18 – Unemployment by ethnicity, 2019 Q4 to 2022 Q2 (LSF Dashboard indicator)

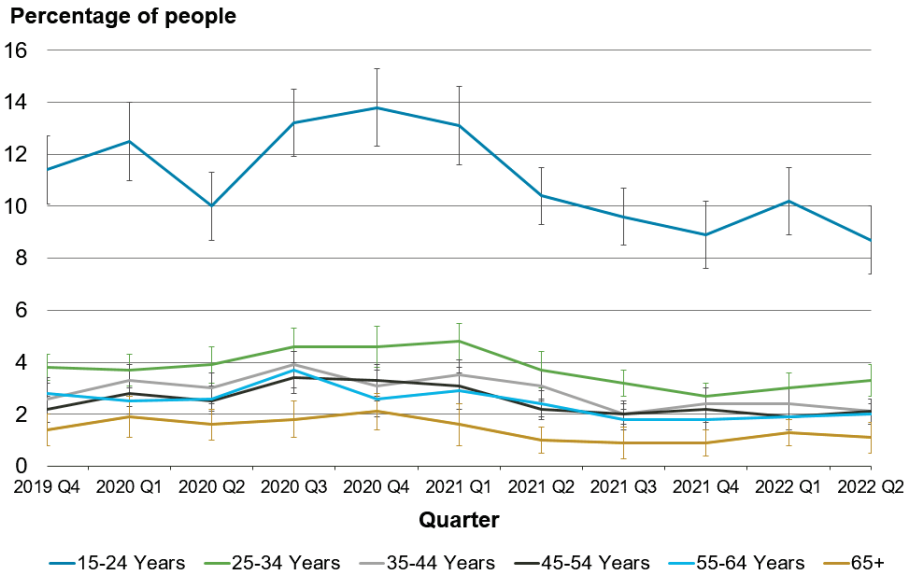


Source: Stats NZ (Labour market statistics)

[24] For more information on Stats NZ's statistical standard for ethnicity see: Ariā - Standards (stats.govt.nz).

A similar story emerges for New Zealand's youth. After peaking in the second half of 2020, by the December 2021 quarter the unemployment rate for youth aged 15 to 24 was the lowest it had been since the 2008 Global Financial Crisis. However, as shown in Figure 19, younger New Zealanders have continued to experience higher unemployment levels than other age groups.

Figure 19 – Unemployment by age group, 2019 Q4 to 2022 Q2 (LSF Dashboard indicator)

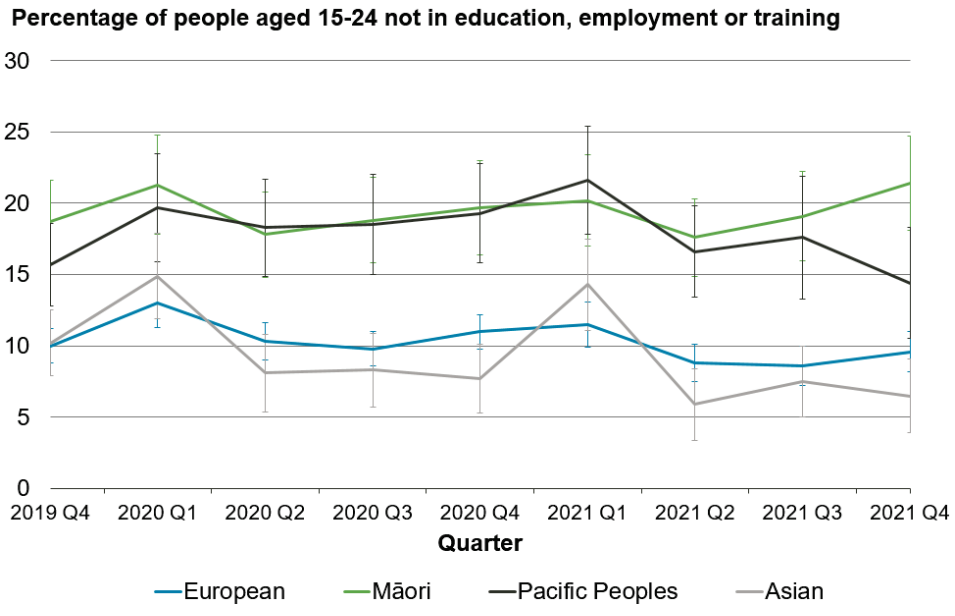


Source: Stats NZ (Labour market statistics)

Young people's participation in education and employment stayed at similar levels…

As shown in Figure 20, no statistically significant change can be seen since the start of the pandemic in the rate of young people not in employment, education or training (NEET). NEET rates for the fourth quarter of 2021 were at levels comparable to the same quarter in 2019 and remained highest among Māori and Pacific peoples.

Figure 20 – NEET rates by ethnicity, Q4 2019 to Q4 2021 (LSF Dashboard indicator)



Source: Stats NZ (Labour market statistics)

As discussed in our report on trends in wellbeing, the gender gap in the rates of people not in employment, education or training (NEET) has narrowed over time, as female rates have fallen and male rates have risen. Figure 21 shows that this trend appears to have continued throughout the pandemic. NEET rates for young men and women were similar throughout 2020 and 2021.

Figure 21 – NEET rates by gender, Q1 2019 to Q1 2022 (LSF Dashboard indicator)

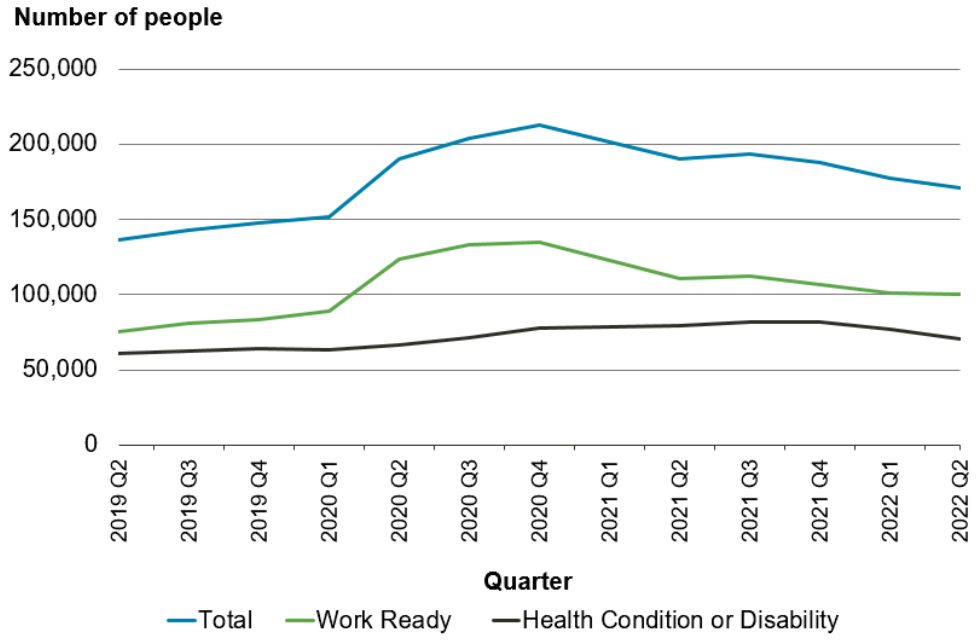
Source: Stats NZ (Labour market statistics)

…and an initial surge in under-utilisation of workers ebbed from early 2021.

Despite the tight job market, by the first quarter of 2022 the number of people receiving the Jobseeker Support benefit, which is split into Work Ready support and Health Condition and Disability support, was above pre-pandemic levels (see Figure 22).[25] The pandemic had disproportionate impacts on certain industries, such as tourism and hospitality, where a considerable proportion of employees are paid by the hour. With less activity in these industries, workers were required for fewer hours and therefore their incomes fell. The total number of people receiving Jobseeker Support Work Ready payments decreased from the first quarter of 2021 through to June 2022, reflecting the overall economic recovery.

[25] Research by Stats NZ (2022a) suggests that levels of unemployment and Jobseeker (Work Ready) should not be assumed to indicate a single pool of 'unemployed Jobseeker (Work Ready) recipients', even when at a similar level or moving in the same direction, as many unemployed people are not Jobseeker recipients and many Jobseeker recipients are not unemployed. See more at: Investigating the relationship between unemployment and benefit receipt | Stats NZ.

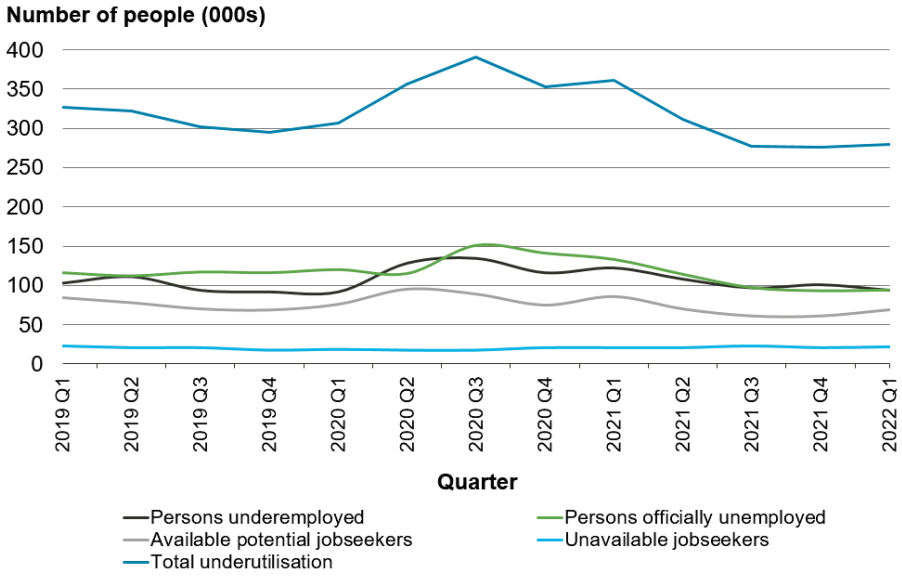
Figure 22 – Number of people receiving Jobseeker Support benefit, June 2019 quarter to June 2022 quarter



Source: Ministry of Social Development (Benefit Fact Sheets)

Additionally, by the September quarter of 2021, underutilisation, as a broader measure of spare capacity in the labour market, had fallen below pre-pandemic levels. At different points throughout 2020 and 2021 (eg, the second quarter of 2020 and the first quarter of 2021) there were increases in underutilisation alongside reductions in the number of people officially unemployed (see Figure 23). This can be partly explained by increases in the number of people seeking to work more hours (underemployed), particularly in those sectors disproportionately affected by the pandemic.

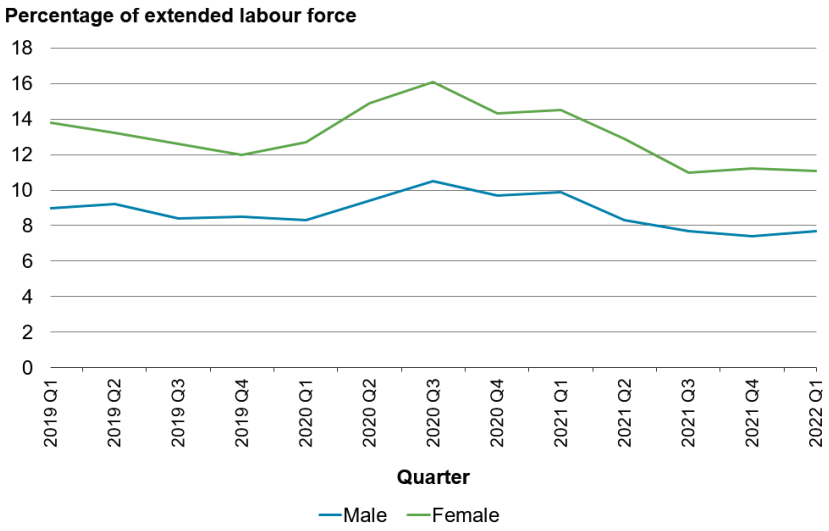
Figure 23 – Underutilisation decomposition, seasonally adjusted, Q1 2019 to Q1 2022



Source: Stats NZ (Infoshare)

It is worth noting that despite the fall in aggregate levels, underutilisation rates were higher for females than for males throughout the analysed period. As seen in Figure 24, this is a continuation of a pre-pandemic trend.

Figure 24 – Underutilisation rate by gender, seasonally adjusted, Q1 2019 to Q1 2022[26]



Source: Stats NZ (Infoshare)

[26] Extended labour force measures the total labour force (those employed and unemployed) plus the potential labour force. For more information see: Introducing underutilisation in New Zealand (stats.govt.nz).

Income, consumption and wealth

Key messages

- In aggregate, New Zealanders' income, consumption and wealth remained resilient over the pandemic period. Many key measures of household incomes increased in 2020/21 compared with the previous financial year.
- While a decline in aggregate consumption can be seen during the lockdown periods, data shows rapid recoveries in expenditure and no significant shifts in spending patterns between goods and services.
- Despite the aggregate-level recoveries, consumer spending in several regions of the country remained below pre-pandemic levels from the August - September 2021 lockdown period through to March 2022, particularly in Otago, Auckland and Wellington.
- Even by March 2022, consumer spend in industries related to tourism and hospitality, in particular Transport and Travel Agencies, and Accommodation remained around 50% below 2019 levels.
- Child poverty statistics showed a downwards trend in the rates of children living in material hardship between 2019 and 2021, although Māori and Pacific children continue to experience much higher levels of material hardship.
- Inflationary pressures experienced since 2021 have affected real wages and may reinforce pre-pandemic income disparities. Emerging analyses suggest inflation is particularly harmful for low-income households.
- Data from the Reserve Bank suggest that, in aggregate, household balance sheets seem to have strengthened throughout the analysed period. The increase in house prices during 2020 and 2021 contributed to a significant accumulation of wealth for homeowners. Households accumulated a significant savings buffer as saving rates grew, particularly during lockdown periods of reduced consumption activity.
- However, the increase in house prices may have increased wealth disparities between homeowners and renters.

The Living Standards Framework defines the income, consumption and wealth domain as people using income or in-kind transfers to meet today's needs and save for future needs, as well as being protected from future shocks by adequate wealth, private insurance and public insurance (the social safety net).

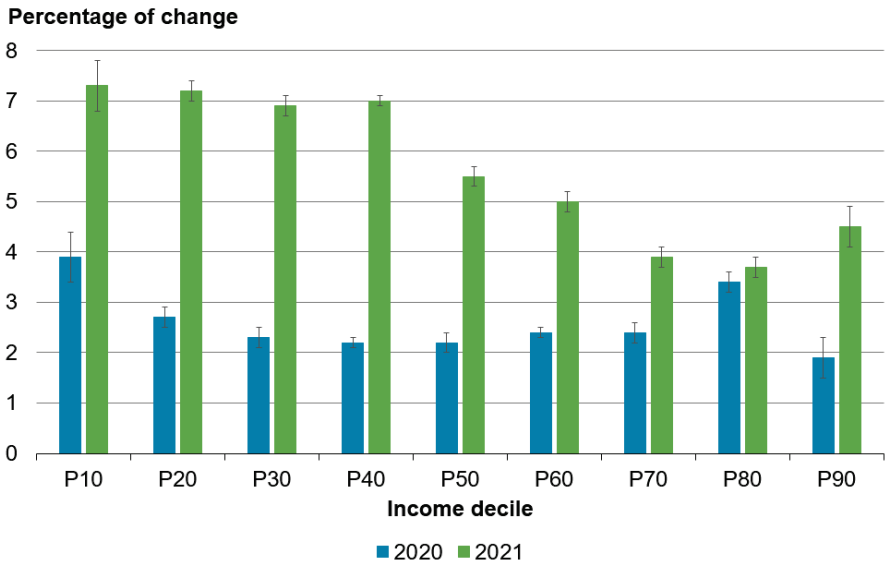
In He Kāhui Waiora, we discussed how a pandemic-related economic downturn could affect people's employment, earning prospects and wealth. In particular, we were concerned that disruptions to firms' activities would lead to significant falls in income, higher levels of financial insecurity and losses in household wealth via falling asset values. However, as described below, New Zealanders' material wellbeing has proved resilient.

Income levels were generally robust over the pandemic period...

In the year to June 2021, households' incomes were supported by a strong labour market, increases to benefit payments, and economic support measures enacted in response to COVID-19 (eg, the Wage Subsidy).

Stats NZ's Household Economic Survey showed that many key measures of household incomes increased in 2020/21 compared with the previous financial year.[27] Average annual household income (gross) increased 4.5%, from $105,701 in the year to June 2020 to $110,451 in the year to June 2021. As shown in Figure 25, incomes increased across all deciles, with the largest percentage increases in the first four deciles – although, in dollar terms, the largest annual increase was in the highest income decile.

Figure 25 – Annual change in household equivalised disposable income before housing costs, by income decile, year ended June 2020 and 2021



Source: Stats NZ (Household Economic Survey (HES))[28]

As shown in Figure 26, throughout the pandemic, nominal net household disposable income continued a long-term upward trend and reached $53.8 billion in the March 2022 quarter. While lower consumption expenditure during the lockdown periods resulted in higher household savings, by the March 2022 quarter the ratio of savings to disposable income was similar to pre-COVID-19 levels.

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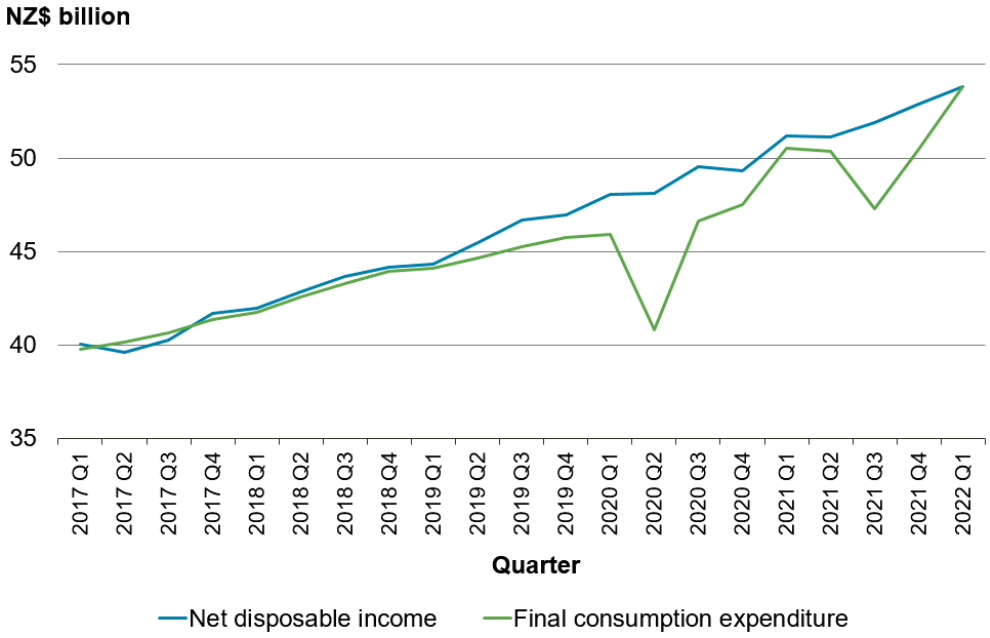
27 COVID-19 impacted the collection period for the Household Economic Survey 2020/21. For more information see: Household Economic Survey (Income) 2021 - Stats NZ DataInfo+.

28 Data for the Household Economic Survey is collected from 1 July to 30 June the following year. At the interview, the respondent is asked about their income in the previous 12 months. For example, an interview in November 2020 would collect the household's income and wellbeing in the 12 months from November 2019. This means that households interviewed for the HES 2020/21 survey in 2020 will include some 2019 income, while those interviewed in 2021 will include some 2020 income.

Figure 26 – Household final consumption expenditure and net disposable income, seasonally adjusted, nominal prices, March 2017 to March 2022 quarters



Source: Stats NZ (National accounts)

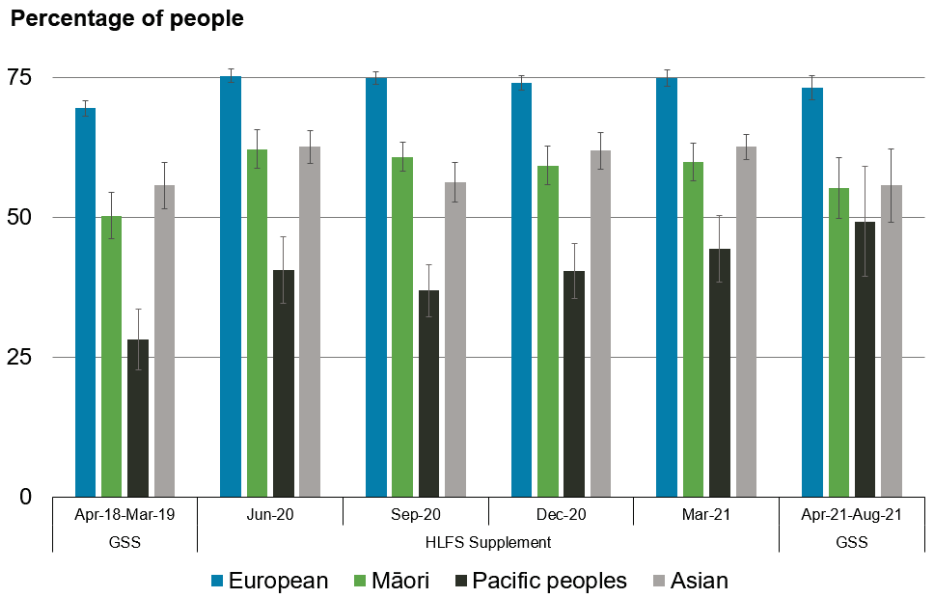
…and we do not see significant evidence of widening earnings inequality.

The Gini co-efficient[29] for equivalised disposable income after housing costs decreased to 37.0 in the year to June 2021, down from 38.1 in the previous year, with the Gini co-efficient for income before housing costs staying relatively stable. However, these aggregate numbers may be masking some trends (see Box 2), while pre-pandemic disparities remain (see Figure 27 and Figure 28).

Compared to pre-COVID-19 levels, the proportion of people who reported to have enough or more than enough money for everyday needs (income adequacy) remained relatively stable during the first year of the pandemic. Pre-pandemic disparities seem to remain. European New Zealanders reported higher levels of income adequacy than other ethnic groups. However, Figure 27 shows an increase in the proportion of Pacific peoples reporting to have enough or more than enough income – from around 25% in 2018 to almost 50% in April-August 2021.

[29] The Gini co-efficient is a summary measure of income (or wealth) dispersion in the population. Typically, Gini co-efficients are scaled from 0% to 100% (or 0 to 1), with a value of 0 indicating perfect equality and a value of 100 indicating that one household or individual has all the income.

Figure 27 – Income adequacy. Percentage of people who reported enough / more than enough money for everyday needs, 2018 to 2021 (LSF Dashboard indicator)



Source: Stats NZ (General Social Survey (GSS) and Household Labour Force Survey (HLFS) supplement data)[30]

Box 2 – Emerging research reveals a complex distributional story

Studies on the earnings of New Zealanders during the COVID-19 pandemic have revealed a more nuanced story.

For example, work by Dasgupta and Plum (2022) did not find significant distribution differences in earnings emerging during the first year of the pandemic. During the 2008 Global Financial Crisis, loss in earnings experienced by higher-skilled individuals were significantly less severe than low-skilled groups in New Zealand. However, the authors did not find evidence of these wage progression differences as an effect of the first COVID-19 lockdown.

In contrast, another study, by Pacheco, Plum and Tran (2022), found that the pandemic had amplified existing disparities between European New Zealanders and some groups of Pacific peoples. These disparities were primarily observable in wage scarring (long-term effects on wages) and lower wage progression.[31] Particularly disproportionate impacts were found for Pacific peoples aged under 30, Pacific peoples living in Auckland and Pacific women. For example, according to this research, during 2021, Pacific women aged under 30 living in Auckland had 22.8% lower wages when entering employment than New Zealand European woman aged under 30 and living in Auckland.

According to Pacheco, Plum and Tran's study, the industries hit hardest by the pandemic, in terms of wage growth, were positively correlated with those where Pacific peoples are more prevalent in the workforce. These industries were manufacturing and construction

30 See the *Data* section of this paper for caveats about comparing data from the New Zealand General Social Survey (2018 and 2021) and the wellbeing supplements to the Household Labour Force Survey (June 2020, September 2020, December 2020 and March 2021).

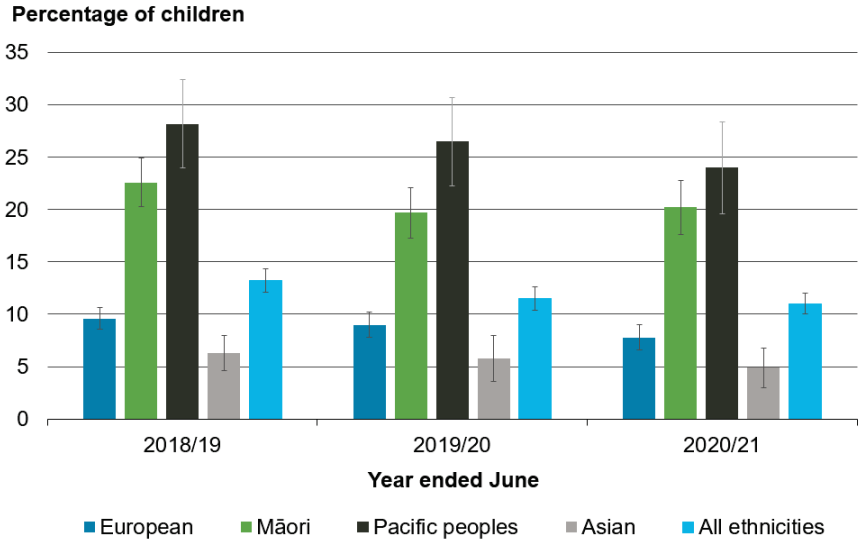
31 Pacheco, Plum and Tran (2022) calculate wage progression based on annual percentage change in wages and salaries for those who were employed in the previous 12 months.

for Pacific men and manufacturing and social assistance and healthcare for Pacific women. Additionally, young Pacific peoples living in Auckland suffered greater impacts than European New Zealanders, likely driven by the longer periods of lockdown in the city and the fact that younger workers are predominantly employed in sectors such as retail or hospitality, which were more vulnerable to COVID-19-related disruptions to activity.

This type of research helps to unpack what rests behind aggregate measures. Future studies will be needed to show whether the gaps between demographic groups identified during 2020 and 2021 returned to pre-pandemic levels in 2022 or after, supported by the resilience of the labour market and the economy overall.

Figure 28 shows some reduction in the rates of children living in material hardship over the last three years.[32,33] However, Māori children are more than twice as likely as European children to be living in material hardship, and Pacific children are around three times more likely than European children to be living in material hardship.

Figure 28 – Percentage of children living in households in material hardship by ethnicity, year ending June 2018/19 to 2020/21 (LSF Dashboard indicator)



Source: Stats NZ (Child poverty statistics)

Consumption generally bounced back after lockdowns…

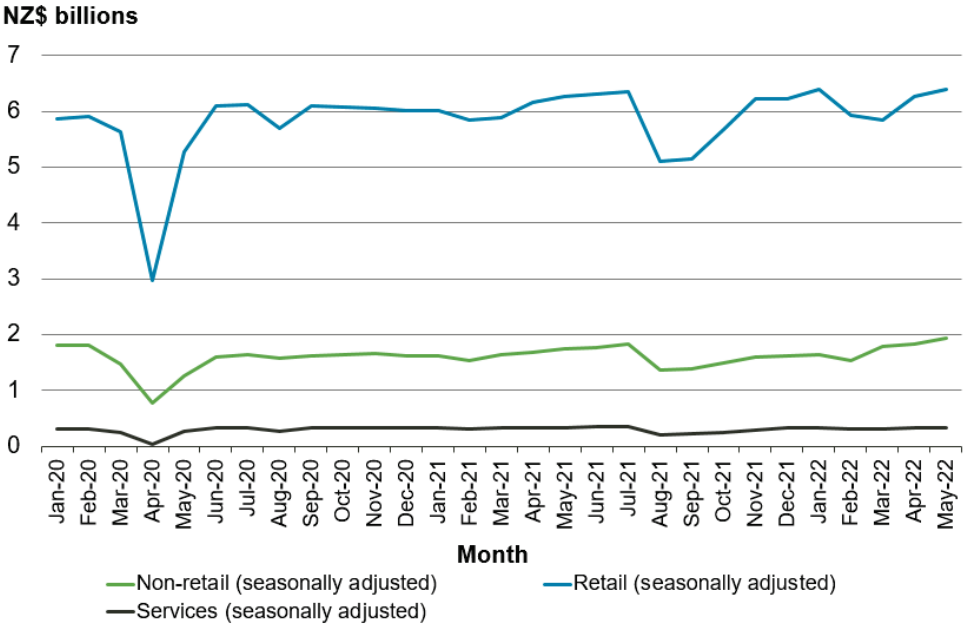
COVID-19 lockdowns and other public health restrictions reduced aggregate consumption. During the analysed period, in-person retail and household services, alongside schools and other public services, were closed or interrupted. In countries such as Australia, the United States, Canada, and the United Kingdom spending patterns shifted considerably in 2020 and 2021 as households moved away from services (eg, restaurant visits) to goods consumption (eg, groceries) (Bishop, Boulter & Rosewall, 2022). In New Zealand, while a decline in aggregate consumption can be

32 Material hardship is one of four primary measures of child poverty and hardship. For more information see: Child Poverty measures, targets and indicators (childyouthwellbeing.govt.nz).

33 It should be noted that material hardship data often lags real-word impacts. For commentary on expectations regarding material hardship, see the Child Poverty Report 2022 (budget.govt.nz).

seen during lockdown periods (eg, April 2020, September 2021), monthly card transaction spend data shows rapid recoveries and no significant persistent spending pattern shifts between goods and services (see Figure 29).[34]

Figure 29 – Monthly card transaction spend by industry, seasonally adjusted



Source: Stats NZ (COVID-19 data portal)

…but did vary across regions and industries…

Consumer spend declined sharply during the first Lockdown,[35] but recovered to 2019 levels rapidly once restrictions eased. Another significant decline in aggregate spending was observed between August and September 2021, when the country moved back to Alert Level 4.[36] Following this second drop, consumer spend in several regions of the country remained below pre-pandemic levels (see Figure 30). By March 2022, four-weekly consumer spend in Otago was -18.3% compared to 2019, while Auckland spend was -9.6% and Wellington spend was -7.6%.[37]

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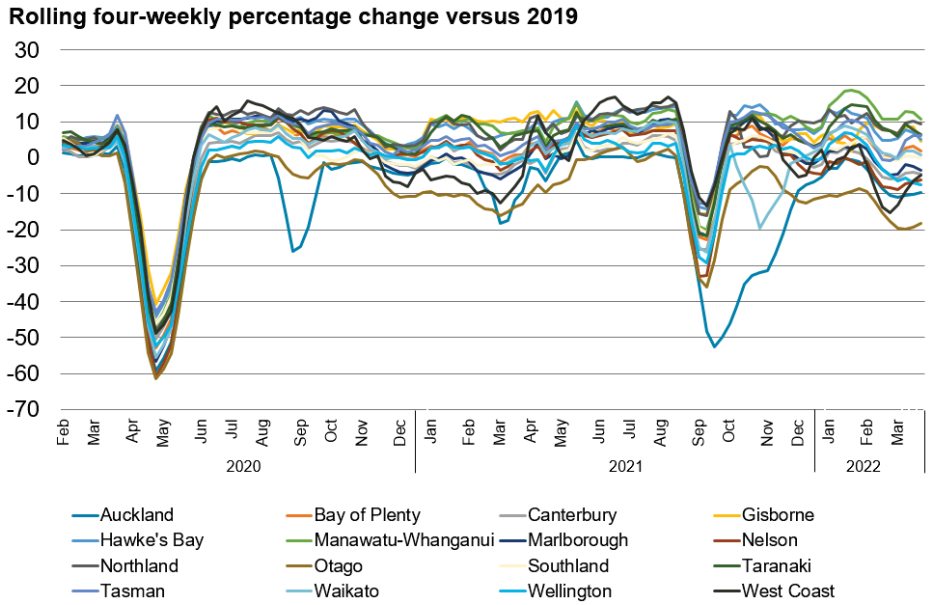
34 These values are not adjusted for price changes.

35 New Zealand was in Alert Level 4 from 25 March 2020 until 27 April 2020 and in Alert Level 3 from 27 April 2020 to 11 May 2020.

36 Auckland would remain at the higher Alert Level longer than the rest of the country until New Zealand moved to the COVID-19 Protection Framework on 2 December 2021. For more information see: History of the COVID-19 Protection Framework (traffic lights) | Unite against COVID-19 (covid19.govt.nz).

37 The consumer spend data in Figures 30 and 31 comes from Paymark's network and therefore excludes payments made via alternative networks and cash transactions. According to the Ministry of Business, Innovation and Employment and Marketview, Paymark's network covers more than 70% of the EFTPOS transactions around the country and provides a good snapshot of spending patterns in New Zealand. Nonetheless, this 70% is not evenly distributed and some regions in New Zealand may be more or less represented in the data. For more information see: MBIE - COVID19 Response (shinyapps.io).

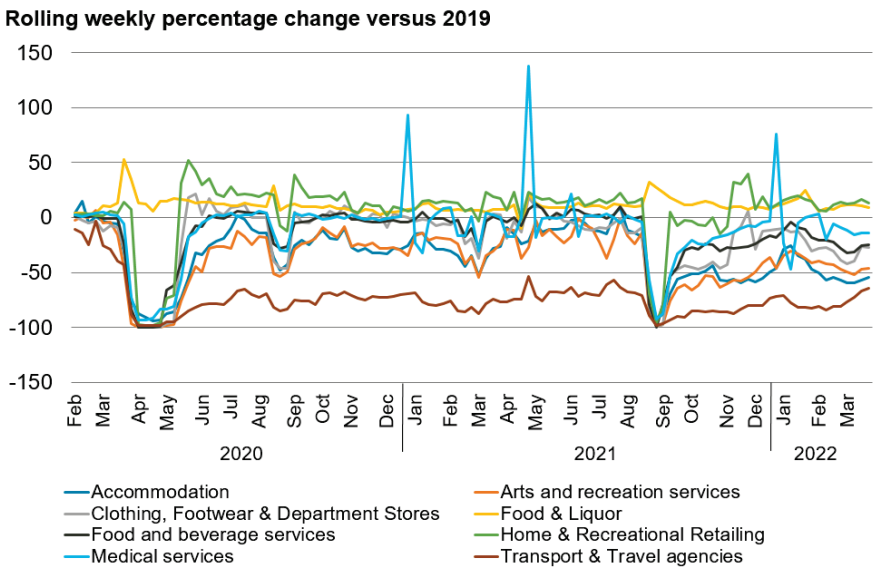
Figure 30 – Consumer spend change by region



Source: Ministry of Business, Innovation and Employment, Marketview

As shown in Figure 31, consumer spend also varied across New Zealand's industries. Throughout the analysed period, weekly consumer spending remained stable, and above 2019 levels, for products from the Food and Liquor industry. However, since the first lockdown, consumer spend in the Transport and Travel Agencies declined sharply and by March 2022 was still less than half 2019 levels. Weekly consumer spending on Accommodation[38] recovered quickly after the first lockdown but declined again when COVID-19 resurged in August/September 2021. Weekly spending on Accommodation remained around 50% below 2019 levels through to March 2022.

Figure 31 – Consumer spend change by selected industries



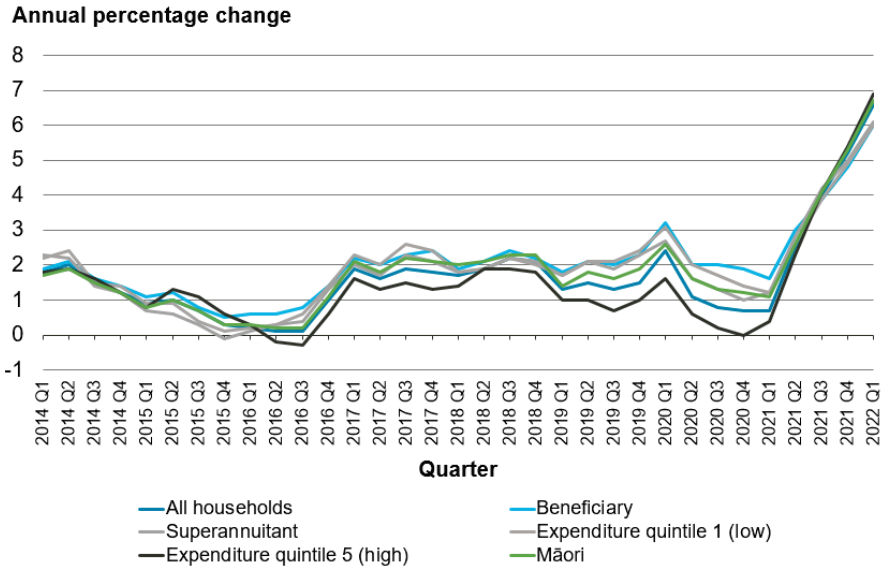
Source: Ministry of Business, Innovation and Employment, Marketview

38 Consumer spend in accommodation refers to short-term services for visitors, such as hotels, motels and serviced apartments.

…and emerging inflationary pressures are impacting purchasing power…

In addition to the effect of lockdowns on consumption, inflation since mid-2021 has affected real wages and households' purchasing power. Figure 32 shows that, between the March quarter 2021 and the same quarter in 2022, the consumer price index (CPI) had a steep increase of 6.9%.

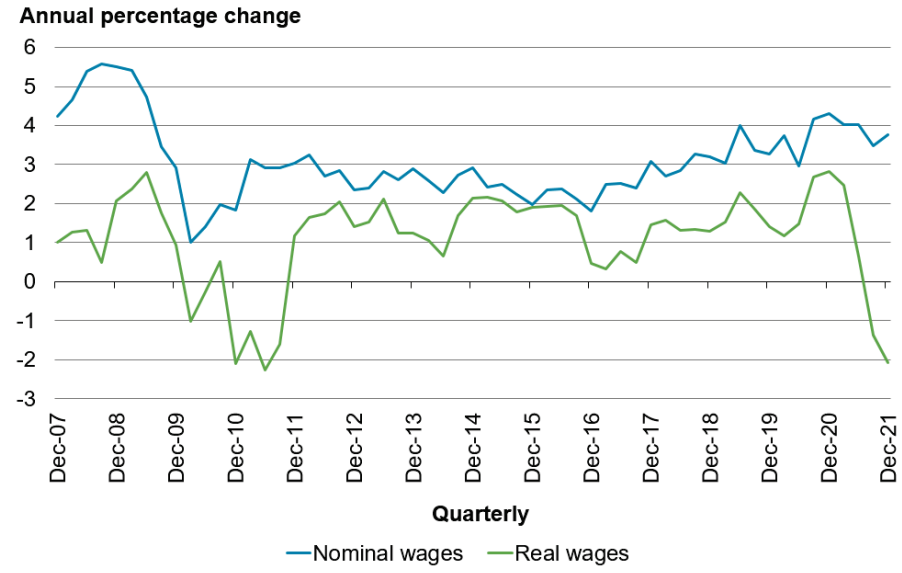
Figure 32 – Change in household living costs indexes, selected groups



Source: Stats NZ (Household living costs price indexes)

Real wages had been growing around 2% per annum in the years preceding the pandemic but a decline was observed since the September 2021 quarter as inflation surged.

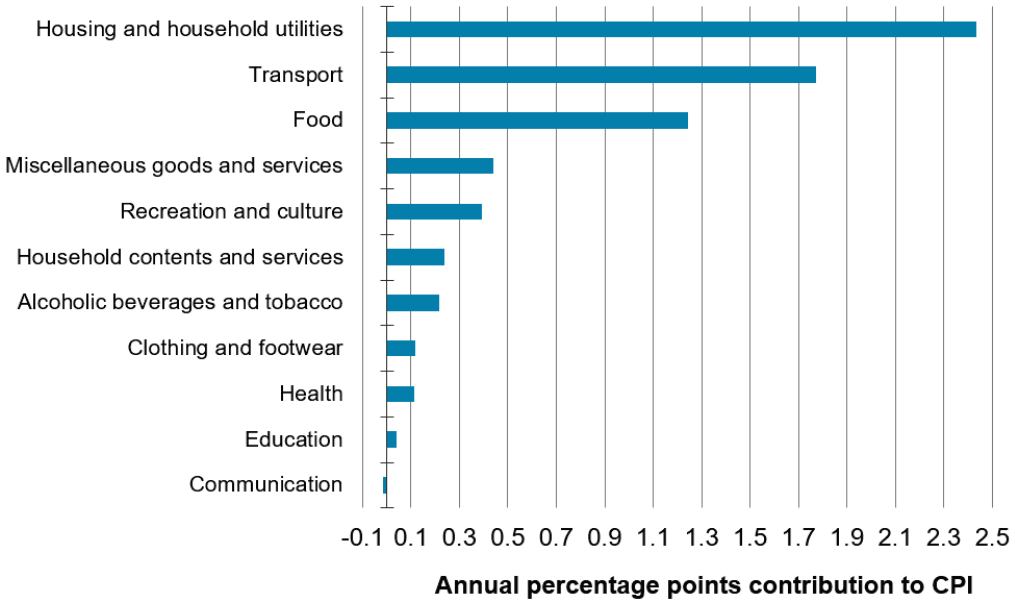
Figure 33 – Nominal and real wage growth, annual percentage change



Source: Stats NZ, the Treasury

Housing and household utilities, transport, and food had by far the biggest annual CPI changes in the March 2022 quarter (see Figure 34). Rents and rising construction cost, due to a combination of supply chain disruptions and demand pressures, particularly influenced the rise of the housing and household utilities group.

Figure 34 – Annual percentage points contribution to consumers price index, by group, March 2022 quarter



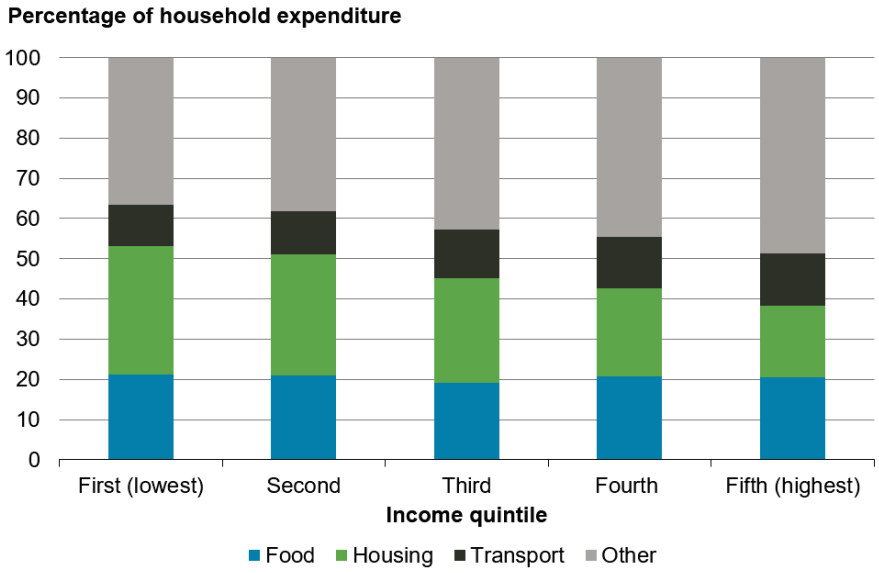
Source: Stats NZ (Consumers price index)

…and cost of living increases are particularly challenging for low-income households.

The impact of this inflation on real wages appears to be particularly harmful for low-income households. Looking at the period between December 2019 and December 2021, emerging Treasury analysis suggests the effect of inflation is greater for households in the lower-income deciles, when looking at expenditure on food and fuel as a proportion of 2019 equivalised disposable income.

In addition, Stats NZ data suggests that, by December 2021, the bottom two income quintiles spent more than 60% of their household income on housing (including rent), food and transport, while the top quintile spent just over 50% (see Figure 35). Inflation in these expenditure items will have a greater impact on low-income earners.

Figure 35 – Composition of household expenditure by income quintile, December 2021



Source: Stats NZ (Household living costs price indexes), the Treasury

As shown in our report on trends in wellbeing, Māori, Pacific peoples and younger New Zealanders are less likely to own a house (the Treasury, 2022b) and therefore are more likely to be impacted by the rise in rents across the country (see *Housing* section). Higher-income households are better able to absorb price rises by cutting back non-essential spending, while poorer households already spend most of their budgets on essential goods and services, making inflation harder to bear (ANZ, 2021).

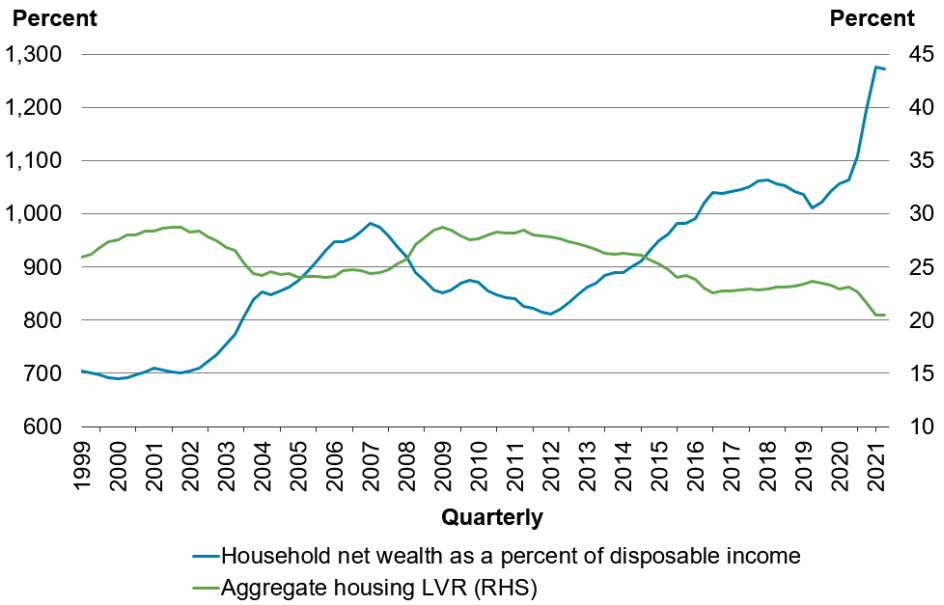
Household balance sheets seem robust over the pandemic period.

In aggregate, household balance sheets seem to have strengthened throughout the analysed period. The Reserve Bank (2022) has noted that the increase in house prices during 2020 and 2021 contributed to a significant accumulation of wealth for homeowners. Total household net wealth rose around 33% between March 2020 and April 2022, with housing equity representing, at the time, about 50% of total household net wealth (The Reserve Bank, 2022).

Between late 2012 and mid-2021, household net wealth, measured as a percentage of disposable income, grew, while housing leverage, measured through the average housing loan-to-value ratio (LVR) decreased.[39] As shown in Figure 36, this trend accelerated in 2020, partly explained by the large rise in property and financial asset valuations since April 2020. This cumulative effect created a substantial equity buffer during 2020 and 2021 (the Reserve Bank, 2021).

[39] The Reserve Bank uses aggregate housing loan-to-value ratio (LVR) to compare the total outstanding value of residential mortgage lending (including for investment properties) to the estimated total value of all residential properties.

Figure 36 – Average household net wealth and housing leverage, quarters

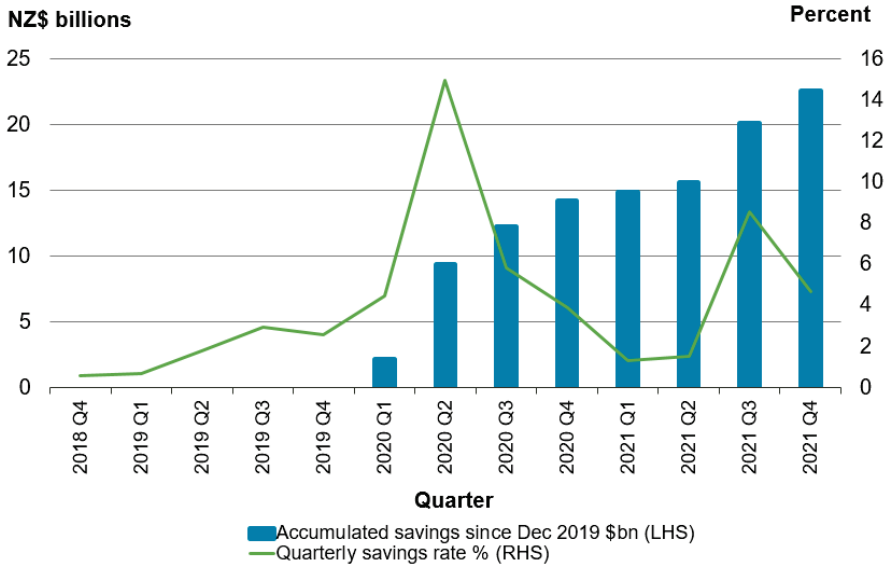


Source: Reserve Bank of New Zealand (*Financial Stability Report November 2021*), Stats NZ

The increase in house prices impacts how wealth is distributed in New Zealand. Research by Symes (2021) found that, with non-housing wealth constant, wealth inequality among homeowners decreases when housing wealth increases – all else equal; however, increasing house prices also cause an increase in wealth inequality between homeowners and non-owners.[40]

Figure 37 shows that households accumulated a significant savings buffer between February 2020 and December 2021. As previously noted, saving rates grew particularly during lockdown periods of reduced consumption activity (April to June 2020 and August to September 2021).

Figure 37 – Household savings rate and accumulated savings



Source: Reserve Bank of New Zealand (*Financial Stability Report May 2022*), Stats NZ

[40] For a more detailed discussion of house prices, wealth and inequality in New Zealand, see: The Wealth Ladder: House Prices and Wealth Inequality in New Zealand (AN 21/01) (treasury.govt.nz).

Housing

Key messages

- New Zealand's long-term rise in house prices accelerated throughout 2020 and 2021. While homeowners benefited from capital gains, renters experienced higher housing costs and higher difficulty to save for a house deposit.
- Applications for social housing on the Housing Register grew over 60% between March 2020 and March 2022. However, applications for public housing were already consistently increasing, and increases of similar or larger proportions were observed in the years before the pandemic. Pre-pandemic disparities also remain, with Māori accounting for around half of all primary applicants.
- There were steep increases in the number of households receiving Emergency Housing Special Needs Grants (EH SNGs) during lockdown periods (ie, March 2020 and August 2021). However, since early 2022, the number has been declining.

The Living Standards Framework defines the housing domain as people having a place to call home that is healthy, suitable, affordable and stable.

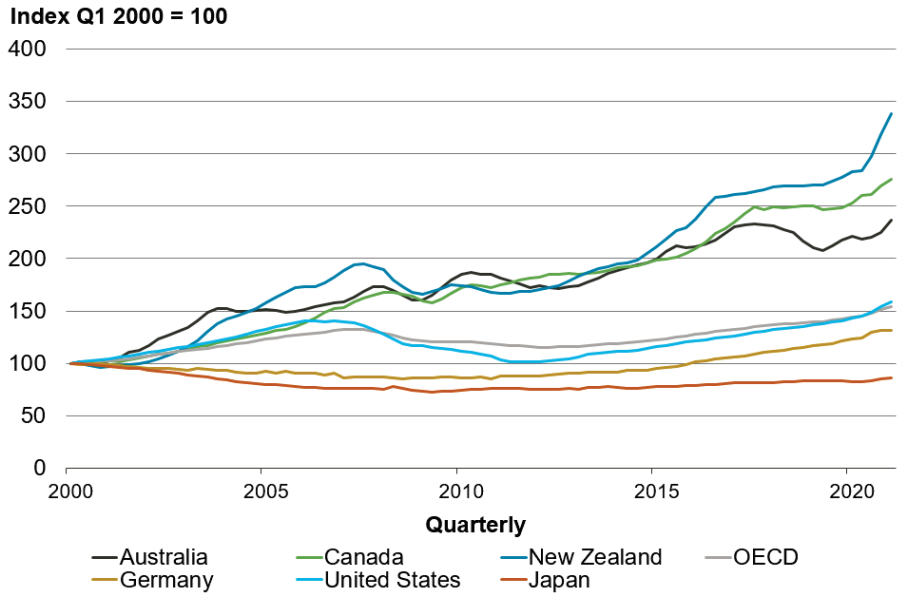
Housing plays an important role in people's wellbeing; not only in terms of wealth but also through the benefits that owning a house provides for other 'functionings' such as raising a family, participating in cultural practices and finding membership and identity in a local community (the Treasury, 2021).

Our report on trends in wellbeing showed that home ownership rates are higher for Pākehā and older New Zealanders. While this can be, in part, explained by lifecourse patterns, as older people simply have had more time to accumulate wealth, it is also the case that rising house prices have disproportionately benefited particular groups (see *Income, consumption and wealth* section). How this wealth is transferred to subsequent generations (eg, through inheritances or bequests) will have important implications for the future distribution of wealth and wellbeing.

House prices continue to rise over the pandemic period…

New Zealand experienced a long-term rise in house prices through to the end of 2021. OECD data shows that real house prices have increased at a greater rate than in other advanced economies, particularly since 2015 (OECD, 2022). As shown in Figure 38, this trend accelerated throughout 2020 and 2021, despite our closed borders and reduced immigration, reflecting low interest rates and monetary stimulus in response to COVID-19, a rapid economic recovery, favourable domestic economic conditions, and supply chain and labour constraints. After peaking in late 2021, house prices declined in the first half of 2022 (see Figure 39).

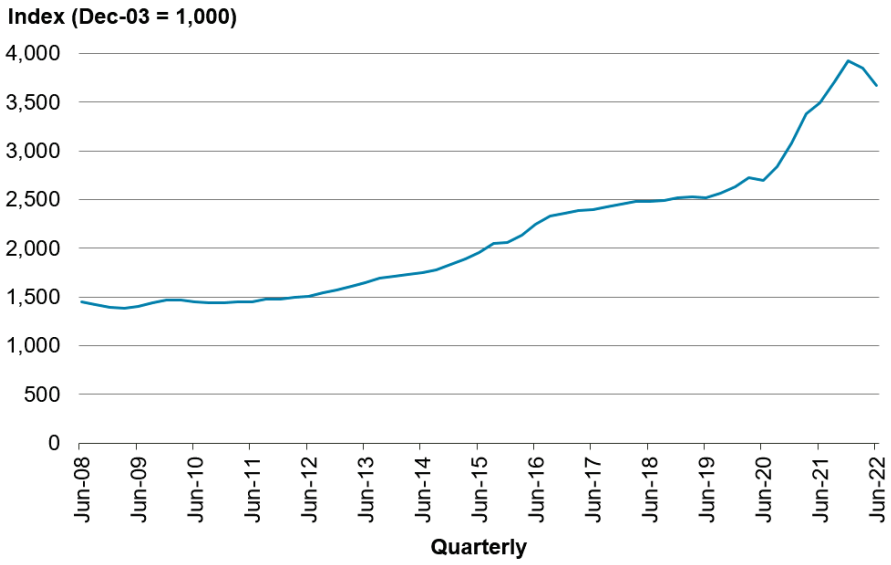
Figure 38 – Real house prices increase in selected OECD countries, quarters 2000 to 2020



Source: OECD (Economic Surveys: New Zealand 2022)

The Reserve Bank's May 2022 Financial Stability report showed that seasonally adjusted annual house prices grew around 30% during 2020 and 2021, followed by a drop of around 4.3% between November 2021 and May 2022. The Reserve Bank suggested that despite this fall, the level of house prices remained unsustainable when assessed against a range of fundamentals. Nevertheless, the report also noted that the share of housing loans on hardship programmes were low relative to its peak during 2020.

Figure 39 – House prices index

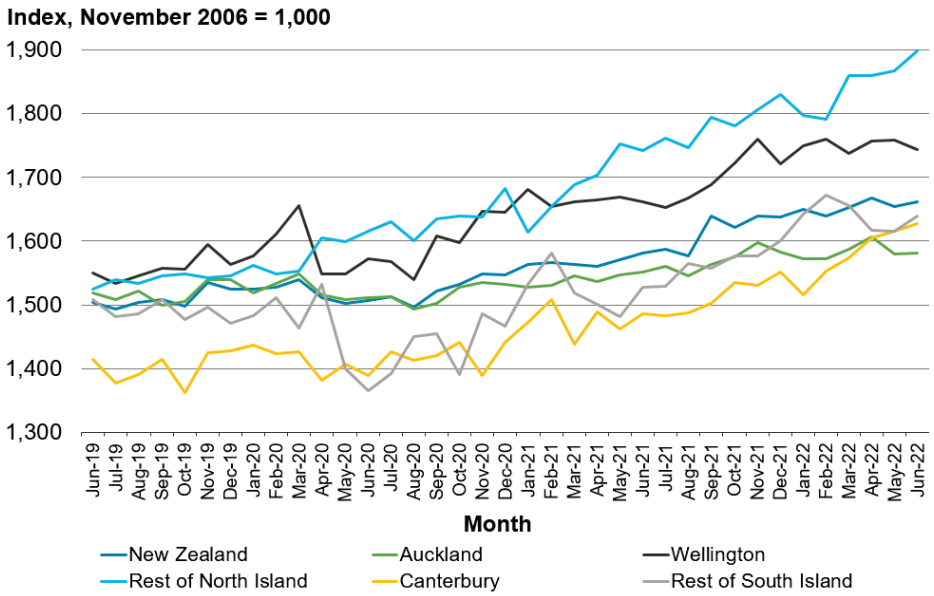


Source: CoreLogic, the Treasury

…leading to higher housing costs for renters.

While homeowners benefited from low interest rates and capital gains, renters experienced higher housing costs during 2020 and 2021. In Figure 40, Stats Rental Property Index data shows that rental prices dipped across the country during the period of the first lockdown. Compared to other regions, Wellington and the South Island (excluding Canterbury) experienced significant falls in rent prices, while a more stable upward trend was observed in Canterbury and the North Island (excluding Wellington and Auckland). Following the end of the first lockdown, there was a rapid return to the pre-pandemic upward trend and by late 2020 rental prices were above 2019 levels.

Figure 40 – Rental Property Prices Index, flow measure[41]

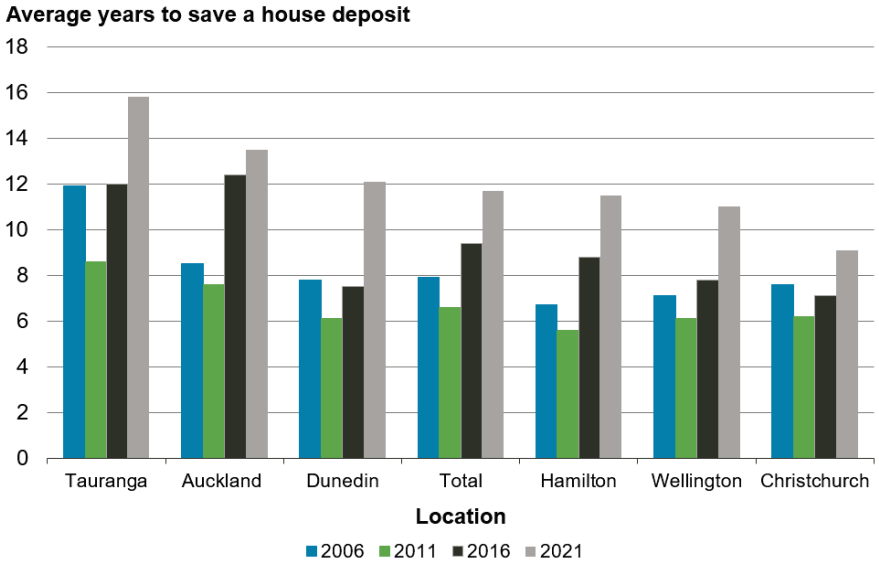


Source: Stats NZ (Rental Index Price)

As noted in our report on trends in wellbeing, renters have found it increasingly difficult to accumulate a sufficient deposit to transition into home ownership over the last few years. As seen in Figure 41, data from CoreLogic suggests that this trend was exacerbated by the house-price boom in 2020 and 2021.

[41] The flow measure of rents captures rental price changes only for dwellings that have a new tenancy started in the reference month. It tends to be more volatile than the stock measure, which shows rental price changes across the whole rental population, including renters currently in tenancies. For more information see: Rental price indexes: June 2022 | Stats NZ.

Figure 41 – House deposit affordability over time, by selected locations



Source: CoreLogic, the Treasury

Demand for public and emergency housing continued to grow…

Applications for public housing on the Housing Register grew over 60% between March 2020 and March 2022, from over 16,000 to almost 27,000 respectively (see Figure 42). When also accounting for applications in the Transfer Register, the growth of the Public Housing Register was over 65% in the same period.[42]

Most of the increase seen in the Housing Register occurred between March 2020 and March 2021. However, applications for public housing have been steadily increasing for a number of years and surges of similar or larger proportions were observed in the years before the pandemic. For example, applications grew more than 140% between December 2017 and December 2019. Pre-COVID-19 disparities between ethnic groups also remain with Māori and Pacific peoples disproportionately represented in the number of applications,[43] as well as single people over 25 and single parents.

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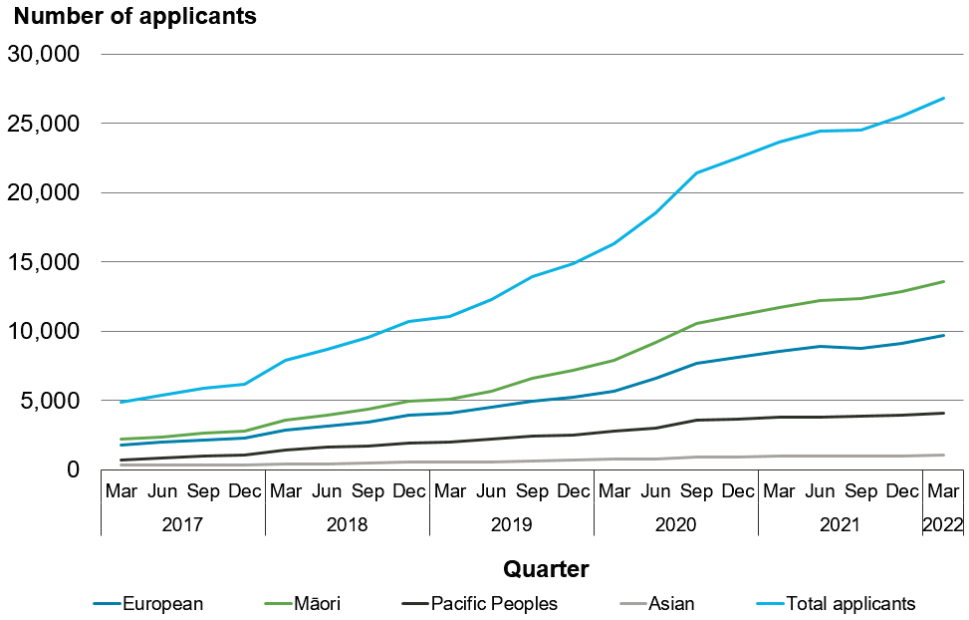
42 The Transfer Register contains applicants already in public housing who need to be rehoused for reasons such as there being too few or too many bedrooms in their current public house or for health reasons. The Public Housing Register combines application on the Housing Register and the Transfer Register. For more information see: Monthly Housing Reporting - Ministry of Social Development (msd.govt.nz).

43 From December 2021, the Ministry of Social Development has been using a reporting approach called 'total response'. Total response ethnicity means that when a person belongs to more than one ethnic group, they are counted in each applicable group. Ethnicity results may differ from previous reporting. For more information see: https://www.msd.govt.nz/about-msd-and-our-work/tools/how-we-report-ethnicity.html.

Figure 42 – Housing Register applications as at the end of the month, by ethnicity of main applicant, March 2017 to March 2022 quarters



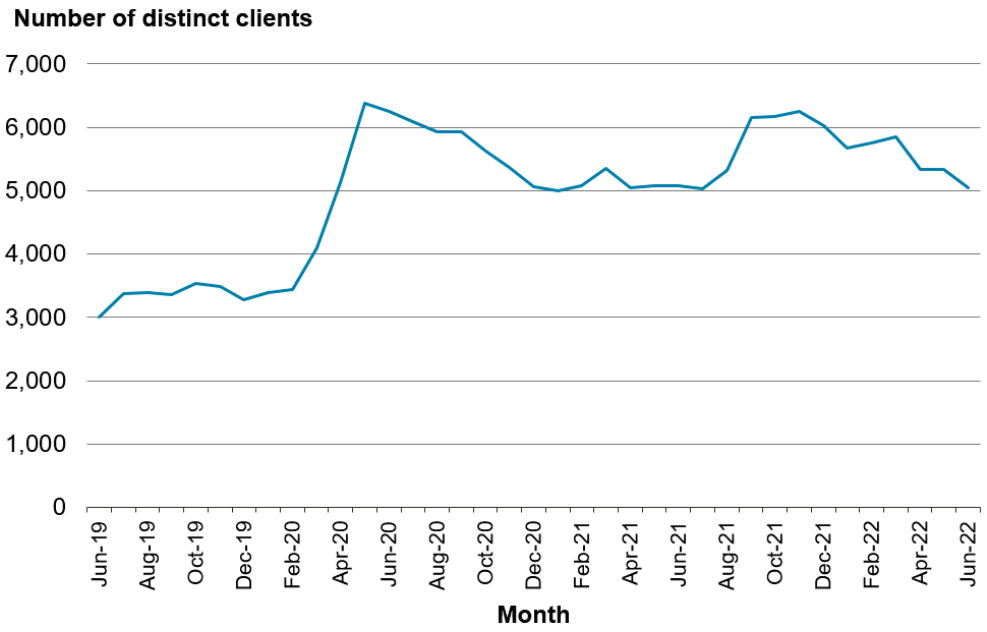
Source: Ministry of Social Development (Housing Register)

...but a COVID-19-related surge in emergency housing grants seems to be ebbing.

Data from the Government Housing Dashboard suggests there were steep increases in the number of households receiving Emergency Housing Special Needs Grants (EH SNGs) during lockdown periods (ie, March 2020 and August 2021). As shown in Figure 43, the number of households receiving EH SNGs reached over 6,000 in May 2020, compared to 3,389 in January 2020. While the trend stabilised at around 5,000 households between October 2020 and July 2021, following the lockdown in August 2021, the number of EH SNGs again reached over 6,000 in late 2021.

However, since 2022, a downward trend in the number of EH SNGs can be observed. Analysis by the Ministry of Housing and Urban Development considers that a range of factors may have contributed to this reduction, including the shift from the COVID-19 Alert Level Framework to the COVID-19 Protection Framework (traffic light system) and increasing transitional housing placements (particularly in Auckland and Wellington).

Figure 43 – Number of households in emergency housing at the month end, June 2019 to June 2022



Source: Ministry of Housing and Urban Development (Government Housing Dashboard)

Safety

Key messages

- Survey evidence indicates that New Zealanders were no more worried about crime in 2021 than they were in 2018.
- Data shows an overall increase in reported victimisations between mid-2018 and mid-2022, driven by large increases in reported victimisations relating to theft and related offences. Police attribute this increase to an increase in people reporting crime (rather than an increase in actual crime).
- There was a significant reduction in crime reported during lockdowns in March/April 2020 and August/September 2021.
- In recent years, most demographic groups have not experienced significant changes in rates of victimisation. However, where there have been significant reductions, these have generally been related to household offences and burglaries, and some of the largest decreases were for more vulnerable populations, including Māori, people living in more deprived neighbourhoods, and people with a high level of psychological distress.
- Data indicates that New Zealanders suffered fewer road deaths and fewer workplace injuries in 2020.

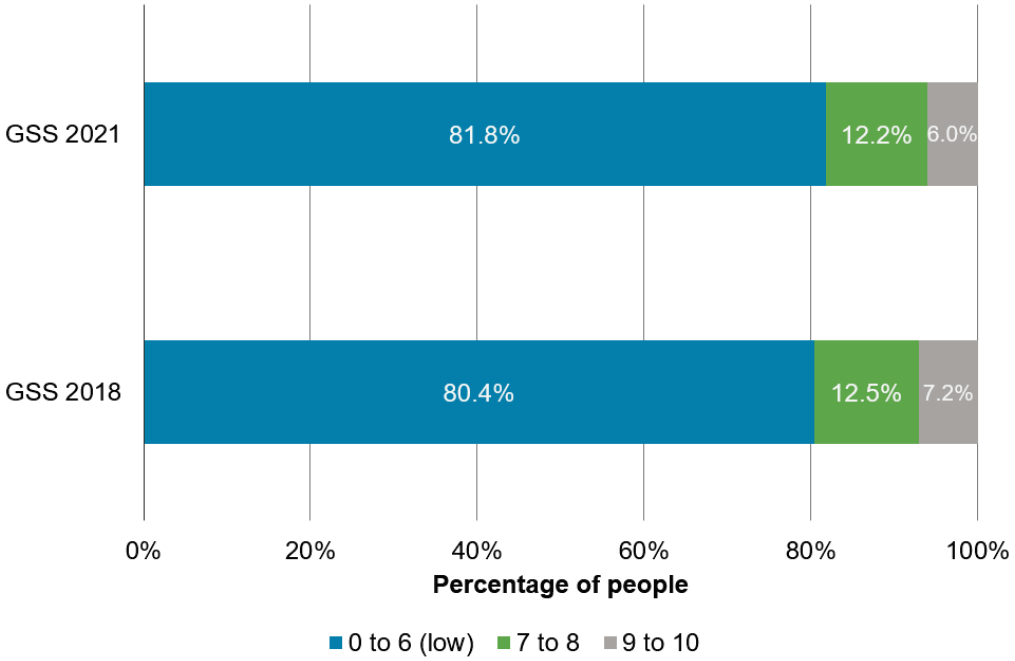
The Living Standards Framework defines the safety domain as people being safe from harm and the fear of harm and keeping oneself and others safe from harm. Safety relates to most other domains. For example, unsafe neighbourhoods can translate into loss of physical and mental health, lack of safety at home hinders the basis of family support, and lack of safety at school (or homes during the COVID-19 lockdown) can affect educational achievement.

Concerns about crime are stable…

While large datasets are available regarding criminal charges and convictions in New Zealand, changing Police practice means that trends in this data are unlikely to accurately reflect actual trends in the prevalence of crime.

Data from the General Social Survey (GSS) 2021, shown in Figure 44, suggests there was no substantial shift in New Zealanders' concern about crime between 2018 and 2021. This is supported by data from the New Zealand Crime and Victims Survey (2022), which found no significant changes in New Zealanders' overall feelings of safety between 2017/18 and 2020/21.

Figure 44 – Responses to the question 'what effect does worrying about crime have on your quality of life?' (where '0' is no effect and '10' is a large effect)



Source: Stats NZ (General Social Survey)

…despite increasing levels of reported crime, except for lockdown periods.

Police data on victimisations records how many times Police receive reports of crimes that have a victim.[44] This data shows an overall increase in victimisations between mid-2018 and mid-2022, driven by a large increase in reported victimisations relating to theft and related offences. Police attribute this increase to an increase in people reporting crime, rather than an increase in actual crime, driven in part by the introduction of the 105 non-emergency telephone line and new digital tools, which make reporting crimes easier.[45]

In regard to trends within the pandemic period, this data shows that victimisations recorded by the Police fell substantially in April 2020, coinciding with the Alert Level 4 lockdown that began in March 2020. A similar drop occurred during the August/September 2021 lockdown but by early 2022 reported victimisations had returned to a similar level as immediately before the pandemic (see Figure 45).

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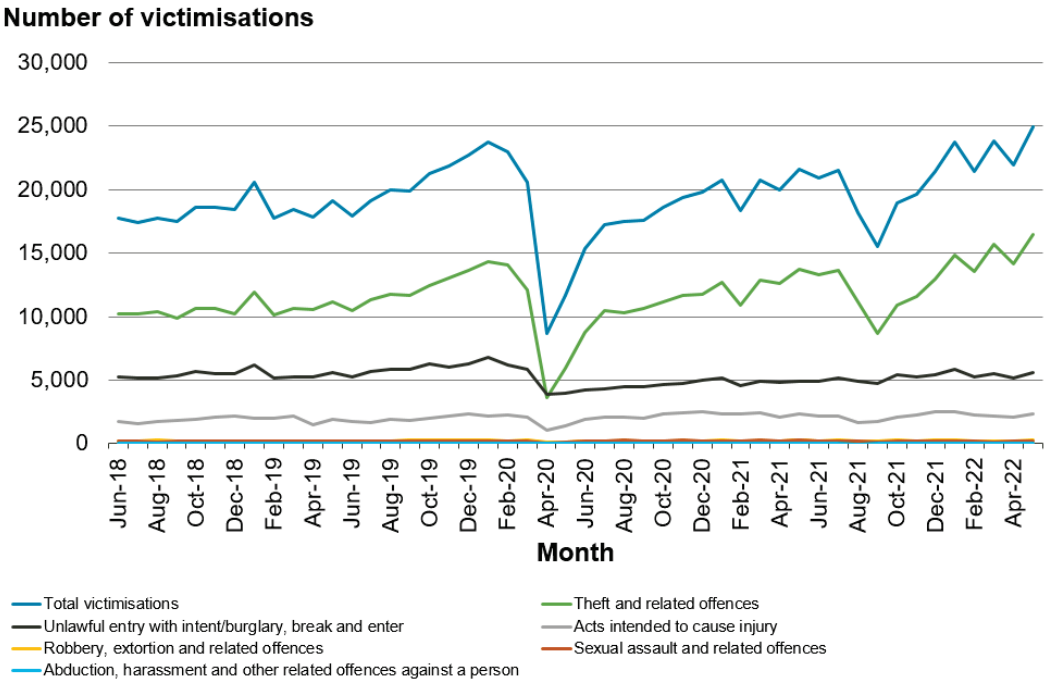
44 This data excludes homicides and offences that do not necessarily have a specific identifiable victim (eg, drug-use, public disorder offences).

45 Article: Crime victim rate hits record high, but cops say figures aren't all they seem (nzherald.co.nz).

Figure 45 – Victimisations by type of crime, June 2018 to April 2022



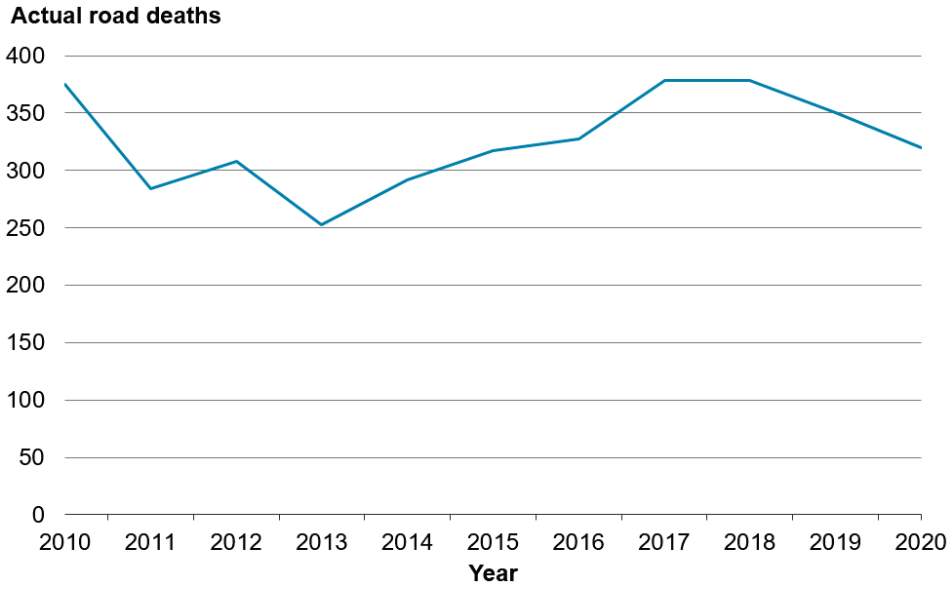
Source: New Zealand Police database

The Ministry of Justice has released a report (2022) that references data from the New Zealand Crime and Victims Survey to discuss the prevalence of victimisation across different demographic groups in recent years. This report notes that between cycle 1 of the survey (March 2017 to September 2018) and cycle 4 (November 2019 to November 2021), most demographic groups did not experience significant changes in rates of victimisation. However, where there were significant reductions in victimisation, these were generally related to household offences and burglaries, and some of the largest decreases were for more vulnerable populations, including Māori, people living in more deprived neighbourhoods, people not in a stable relationship, people living alone or in a one parent-with-child(ren) household, and people with a high level of psychological distress.

There was a decrease in road deaths and work-related fatalities over 2020 due to lockdowns.

Looking beyond crime to wider aspects of safety, data in Figure 46 shows fewer road deaths in 2020 compared to preceding years. This may be considered unsurprising, given the significant reduction in both heavy and light road traffic during periods of heightened COVID-19 restrictions (Waka Kotahi (New Zealand Transport Agency), 2021). Provisional data (not included in Figure 46) indicates that road deaths remained at a similarly low level in 2021.

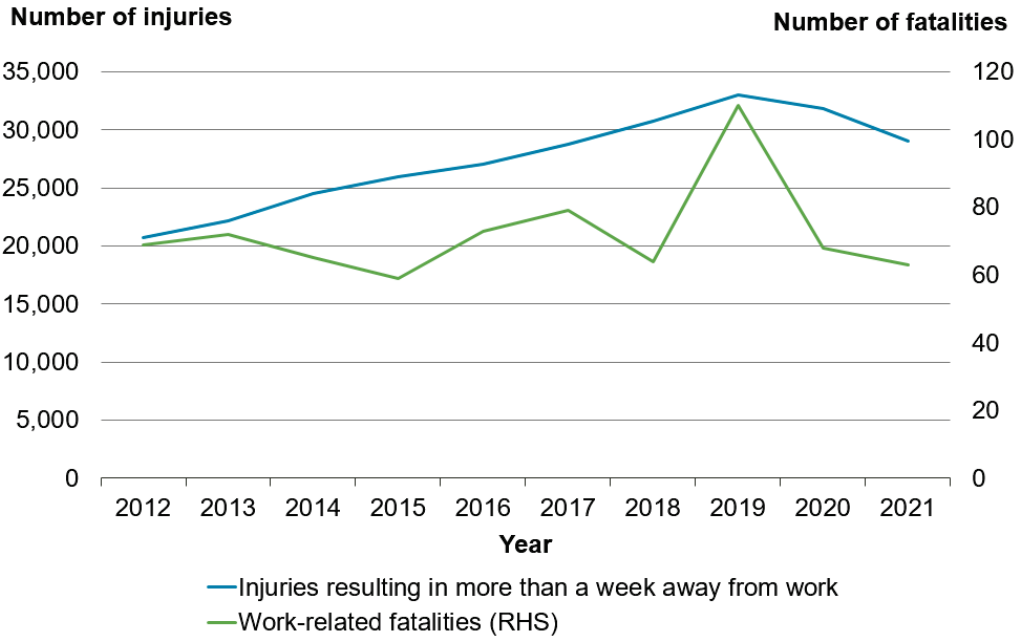
Figure 46 – Road deaths, 2010 to 2020



Source: Ministry of Transport statistics

As shown in Figure 47, during 2020 and 2021 New Zealand also saw fewer workplace injuries resulting in more than a week away from work, disrupting a longer-term upward trend. Work-related deaths were also lower than the previous year, however, 2019 data includes deaths related to the Whakaari volcanic explosion.

Figure 47 – Work-related fatalities and injuries resulting in more than a week away from work, 2012 to 2021



Source: Worksafe Data Centre, ACC

Subjective wellbeing

Key messages

- Overall, measures of New Zealanders' subjective wellbeing remained resilient during 2020 and 2021, although a slight decline can be observed as the pandemic has stretched out.
- Aggregate measures may mask a more complex story. Emerging research suggests that the pandemic and periods of heightened public health restrictions may have affected life satisfaction differently for different demographic groups.
- Consistent with longer-term trends, older New Zealanders (65+) reported higher levels of life satisfaction than other age groups over the pandemic period.
- In general, during 2020 and 2021, New Zealanders reported a higher frequency of positive emotions than negative emotions. However, domestic and international data suggest that young people were more likely to experience negative feelings than older age groups.
- Data available suggests that children's subjective wellbeing metrics held up well over the pandemic. However, there may be differences between age groups. Sport New Zealand data shows that between June 2020 and April 2021 children aged 12 to 17 rated their happiness considerably lower than children aged 5 to 11, and a fall in reported happiness was evident between September 2020 and April 2021.
- Novel data suggests that although the percentage of New Zealanders reporting high levels of concern about the virus decreased in 2022, there were differences between age groups. Between January and March 2022, younger respondents (aged 18 to 24) were less concerned than older respondents, and people aged 35 to 44 years reported the highest levels of concern.

The Living Standards Framework (LSF) defines the subjective wellbeing domain as people being satisfied with one's life overall, having a sense of meaning and purpose, and positive and negative affect, which encompasses the positive and negative emotions experienced by people (see Box 3). This section focuses on two of the three aspects of subjective wellbeing in the LSF: life satisfaction and positive and negative affect.

The COVID-19 pandemic and associated public health measures disrupted the way people work, study, travel and connect with others. Subjective wellbeing was not only impacted by public health measures but also by fear and perceived risk from COVID-19 itself.

Box 3 – Subjective Wellbeing in the Living Standards Framework

Many of the wellbeing domains in the Living Standards Framework (LSF) include both objective and subjective measures. For example, the health domain includes measures of life expectancy (an objective measure) and self-reported health (a subjective measure). The subjective wellbeing domain refers to three broader types of subjective wellbeing around how people are feeling about their lives or in the moment. Some economists consider that all the other domains are important only to the extent that they contribute to these three subjective measures: life satisfaction, meaning and purpose, and both positive and negative affect (the Treasury, 2021). In the LSF, the subjective wellbeing domain captures all three of these aspects:

- *Life satisfaction:* it is a long-term evaluative assessment. Usually measured as a self-evaluation of the overall state of someone's life.
- *Meaning and purpose:* it is linked to the philosophical concept of *eudaimonia.* Measured by the self-assessed feeling that someone's life is worthwhile.
- *Positive and negative affect:* it is a 'point in time' measure that looks at the extent to which people experience positive or negative emotions.

The economic and health impacts of the pandemic and government responses also shaped subjective wellbeing outcomes. For example, the OECD (2021) noted that life satisfaction remained fairly resilient on average during the first year of the pandemic. However, cross-country comparisons are difficult as outcomes are heavily dependent on the timing of data collection in relation to the progression of the pandemic in different countries. The OECD suggests that countries with above average excess death rates experienced a significant decline in life satisfaction, and countries with greater stay-at-home measures experienced a significant deterioration in negative affect balance (ie, a higher share of the population reporting more negative feelings than positive feelings).

The *World Happiness Report 2022* found that average life evaluations, reflecting the net effects of offsetting negative and positive influences, have remained remarkably resilient across countries during COVID-19. However, the *World Happiness Report 2022* also found that the pandemic has not affected everyone equally. Some of the results suggest that: for the young, life satisfaction has fallen, while for those over age 60, it has risen – with little total change; individual-level data for emotions and life evaluations revealed that COVID-19 has worsened the wellbeing costs of unemployment and ill health; worry and stress have also risen, by 8% in 2020, before falling to 4% above pre-pandemic levels in 2021.

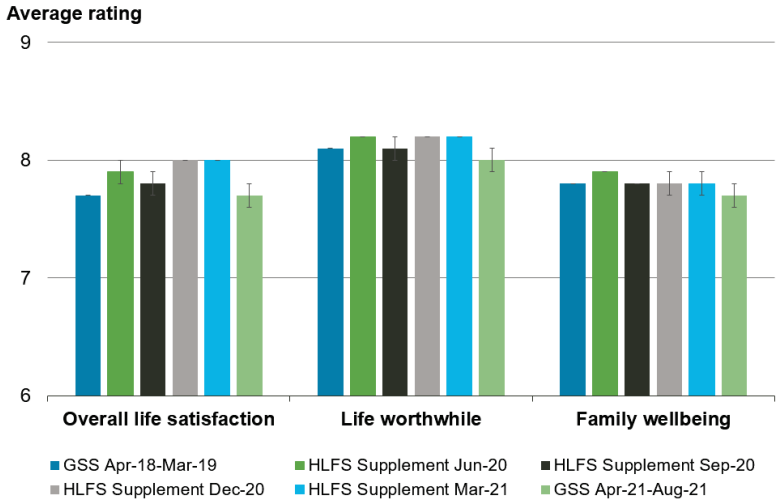
Life satisfaction has generally been robust over the pandemic period…

Stats NZ data shows that overall New Zealanders remained resilient to the effects of the pandemic and measures of subjective wellbeing (ie, self-ratings of life satisfaction, the worthwhileness of life, and family wellbeing) were relatively stable. As shown in Figure 48, aggregate life satisfaction ratings increased slightly in 2020 compared to pre-pandemic data but declined slightly by mid-2021 as the pandemic stretched out – particularly for metrics of overall life satisfaction and life worthwhileness.

Interestingly, mean overall life satisfaction and life worthwhile ratings for the Auckland region remained stable across all quarters covered by the Household Labour Force Survey (HLFS) supplements (June 2020 to March 2021), although the region

experienced longer periods with public health restrictions than the rest of the country. However, the additional lockdowns experienced in Auckland since August 2021 are not covered by the HLFS supplements periods and may have affected these metrics.

Figure 48 – Average rating on a 0-10 scale for overall life satisfaction, life worthwhile, and family wellbeing, 2018 to 2021 (LSF Dashboard indicator)

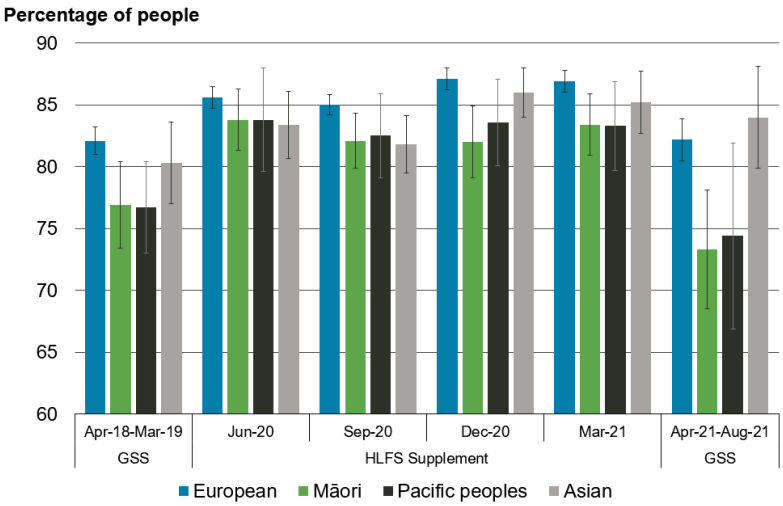


Source: Stats NZ (GSS and HLFS supplement data)[46]

Life satisfaction ratings by ethnicity also remained relatively stable between 2020 and mid-2021 (see Figure 49). However, a statistically significant drop in the proportion of Māori who reported high life satisfaction can be observed in the most recent round of the GSS (April-August 2021) compared to March 2021. While a large drop can also be observed for Pacific peoples, it is not statistically significant and should be interpreted with caution.

[46] See *Data* section of this paper for caveats about comparing data from the New Zealand General Social Survey (2018 and 2021) and the wellbeing supplements to the Household Labour Force Survey (June 2020, September 2020, December 2020, and March 2021). Differences in collection method, sampled population, reporting periods, and restrictions on face-to-face interviewing, among other things, may all impact comparability.

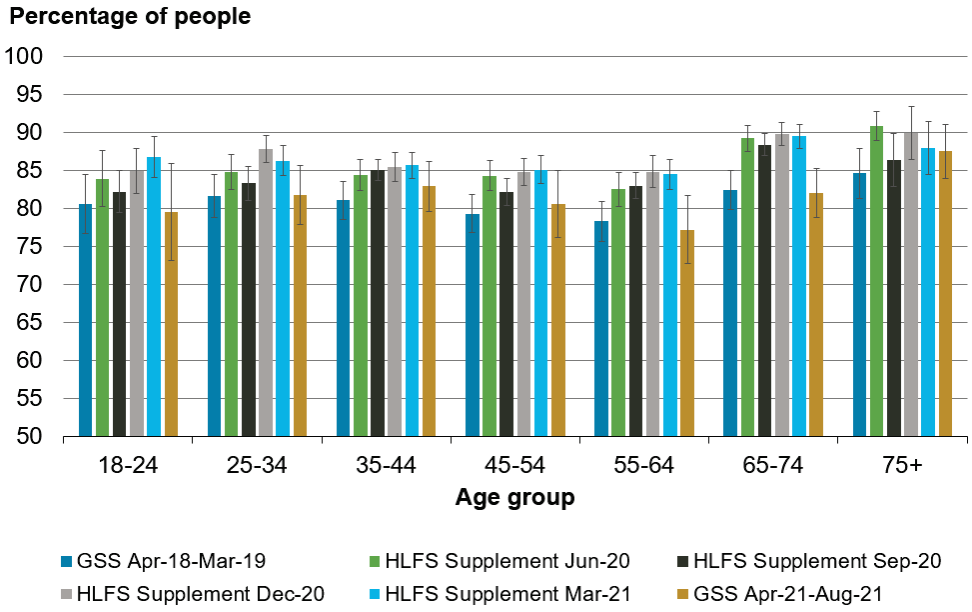
Figure 49 – Percentage of people who rated their life satisfaction highly, by ethnic group (LSF Dashboard indicator)



Source: Stats NZ (GSS and HLFS supplement data)[47]

Consistent with longer-term trends described in our report on trends in wellbeing, Figure 50 shows that older age groups (65+) were more likely to rate their life satisfaction highly than younger New Zealanders during the analysed period.

Figure 50 – Percentage of people who rated their life satisfaction highly, by age group (LSF Dashboard indicator)

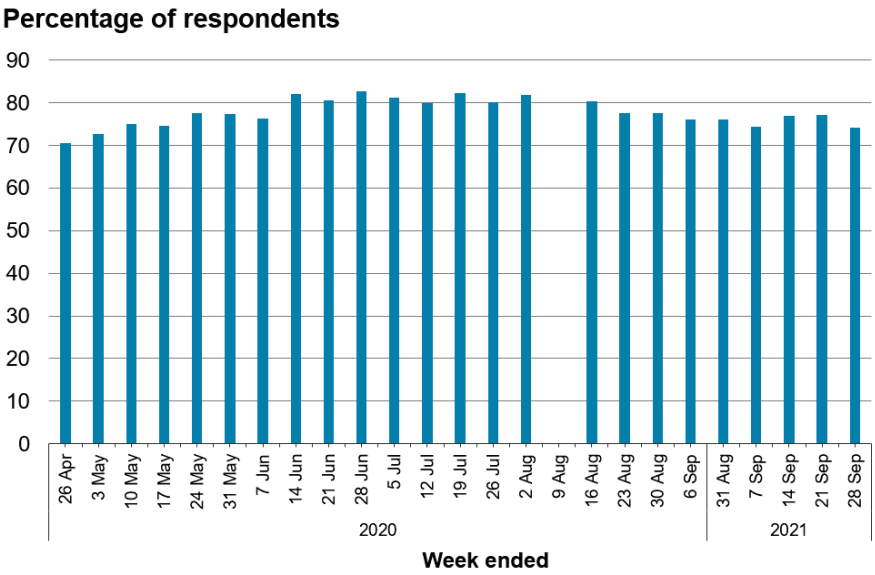


Source: Stats NZ (GSS and HLFS supplement data)[47]

[47] See *Data* section of this paper for caveats about comparing data from the New Zealand General Social Survey (2018 and 2021) and the wellbeing supplements to the Household Labour Force Survey (June 2020, September 2020, December 2020, and March 2021).

Data from the Ministry of Health's COVID-19 Health and Wellbeing Survey also shows resilience in life satisfaction metrics.[48] In the final round of the survey, undertaken between August and September 2021, no major changes to life satisfaction levels were observed, compared to 2020 data (see Figure 51).

Figure 51 – People either 'somewhat or completely satisfied with life these days', week ended, April 2020 to September 2021



Source: Ministry of Health (COVID-19 Health and Wellbeing Survey)

…but there is some evidence of declining life satisfaction as the pandemic stretched out.

However, recent research suggests a more nuanced story. Grimes (2022) found that while aggregate life satisfaction and other wellbeing metrics increased during the first year of the pandemic, periods of more restrictive lockdown were associated with drops in life satisfaction and increased loneliness. Grimes also noted that these effects were not homogenous. For example, while lockdowns resulted in greater reductions of life satisfaction on groups of sole parents compared to couple households, the study observed positive impacts on life satisfaction for people who were unemployed or seeking more hours of work (partly explained by peer effects relating to the stigma of unemployment).

Recent research by the Social Wellbeing Agency (2022) also detected a statistically significant direct effect of lockdowns on subjective wellbeing metrics, with lockdowns associated with -0.14 point lower reported life satisfaction and -0.10 point lower family wellbeing (both on 0 to 10 scales).

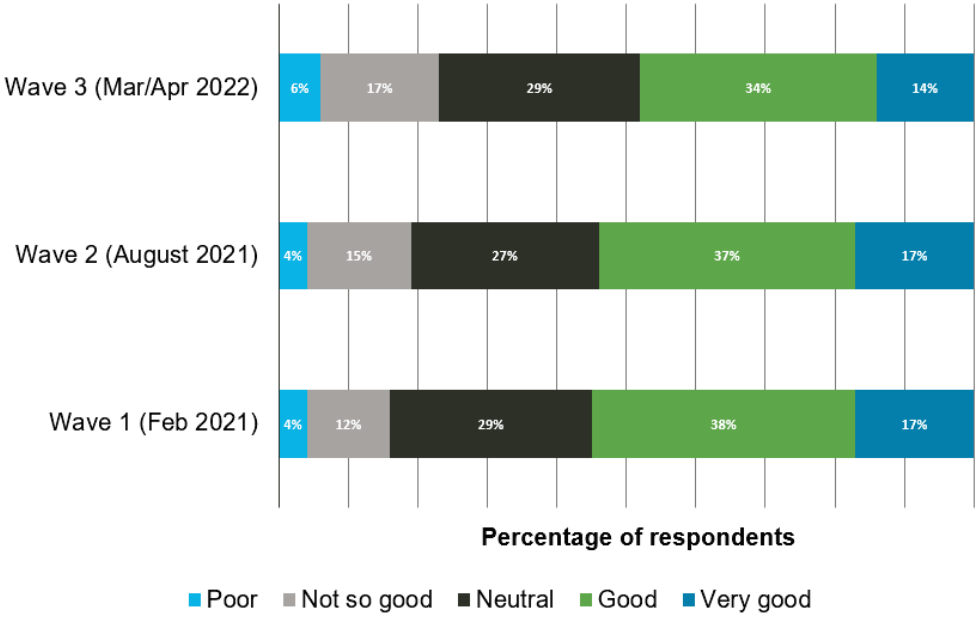
Some of these complexities are also reflected in novel data. Since early 2021, the Ministry of Business, Innovation and Employment and GravitasOPG have been running a longitudinal COVID-19 Consumer Impacts study. The results of the first three waves of the study (out of a planned five) show that positive perceptions of life satisfaction

[48] The first round of the COVID-19 Health and Wellbeing Survey was in field between 30 March and 27 September 2020. It was resumed on 19 August 2021 and although New Zealand moved to Alert Level 4 two days later, it captured some of the COVID-19 impacts between August and September 2021.

have declined slightly as the pandemic was prolonged.[49] In February 2021, 55% of respondents described their life satisfaction as good or very good, compared to 48% in the March-April 2022 wave.

As shown in Figure 52 there was a significant increase in the proportion of respondents who described their life satisfaction as poor or not so good, from 16% in February 2020 to 23% in March-April 2022. Respondents who were looking for work or experienced a decline in working hours were over-represented among those who describe their life satisfaction negatively in March-April 2022.

Figure 52 – Overall life satisfaction, COVID-19 Consumer Impacts Study[50]



Source: Ministry of Business, Innovation and Employment, GravitasOPG

Expectations of positive life satisfaction also changed between the three waves of the COVID-19 Consumer Impacts study. As shown in Figure 53, while in the first wave of the survey (February 2021) a majority of respondents (77%) believed that their life satisfaction would improve over the next six months, this optimism decreased with each wave of the survey and by the third wave of the survey (March/April 2022), only 53% of respondents believed that their life satisfaction would improve over the next six months.

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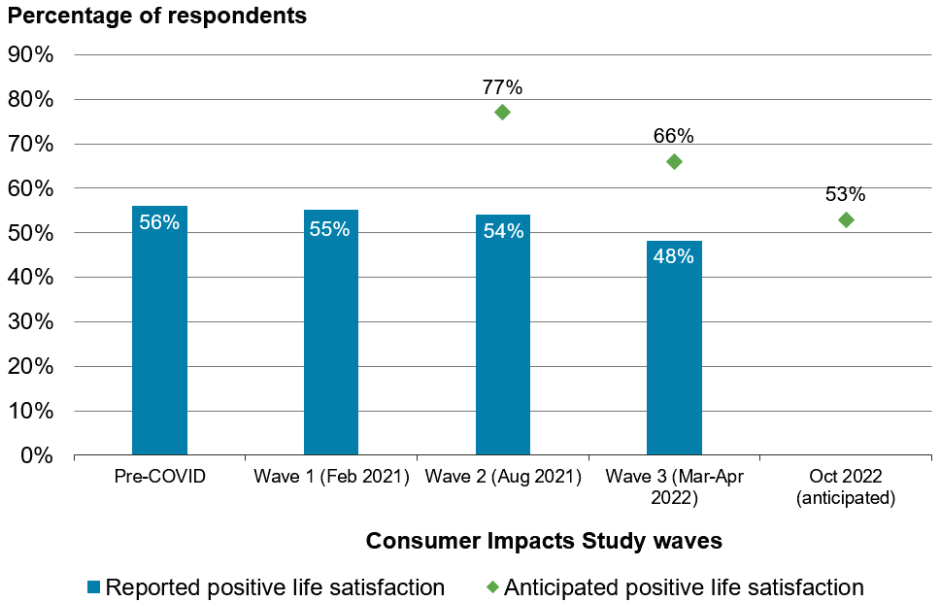
49 The Consumer Impacts study follows a group of over 1,000 adult New Zealanders over a two-year period to track changes in consumer concerns, attitudes, behaviours and experiences. All results presented in the study have been significance-tested by the original authors to compare results from the three waves and identify sub-groups that are statistically more or less likely than the total sample to give a particular response. For more information see: COVID-19 consumer impacts study reports | Ministry of Business, Innovation & Employment (mbie.govt.nz).

50 To ensure that the results for each wave capture actual changes in attitudes and behaviours over time, rather than changes in sample composition, data for previous waves are re-calculated by the authors of the report to include only respondents (n=679) who also participated in the wave 3. Figures 53 and 54 show the results presented in wave 3 of the report. For more information see: Consumer Impacts in a COVID Environment (mbie.govt.nz).

Figure 53 – Anticipated and reported positive life satisfaction, COVID-19 Consumer Impacts Study waves



Source: Ministry of Business, Innovation and Employment, GravitasOPG, the Treasury

The 'positive and negative affect' measure suggests our public mood was also relatively stable so far over the pandemic period.

As noted in Box 3 above, affect is a measure of subjective wellbeing and considers the prevalence of positive and negative emotions.

According to the *World Happiness Report 2022*, international negative affect as a whole was around 8% above its pre-pandemic level in 2020, falling to 3% above baseline in 2021. This heightened negative affect was mainly fuelled by worry and sadness, but not by anger.

Nonetheless, the *World Happiness Report 2022* ranked New Zealand as the 10th happiest country in the world, with a score of 7.20 for the period 2019 to 2021, in comparison to Finland (7.821), Denmark (7.636) and Iceland (7.575) which were the top three countries. New Zealand sits between Israel (7.364) ranked 9th and Austria (7.163) ranked 11th. Compared to pre-pandemic reports, New Zealand experienced a slight decline in happiness, ranking 8th between 2017 and 2019, with a score of 7.30.

Looking at domestic metrics, the Gross National Happiness (GNH) index[51] suggests that New Zealand's public mood remained relatively stable between January 2020 and May 2022. However, as seen in Figure 54, short drops in public sentiment can be observed around March and April 2020 and February and March 2022, possibly explained by the first lockdown and the Omicron outbreak respectively. The 'noise' in Figure 54 may reflect how subjective wellbeing metrics throughout the pandemic period were influenced by regular day-to-day changes.

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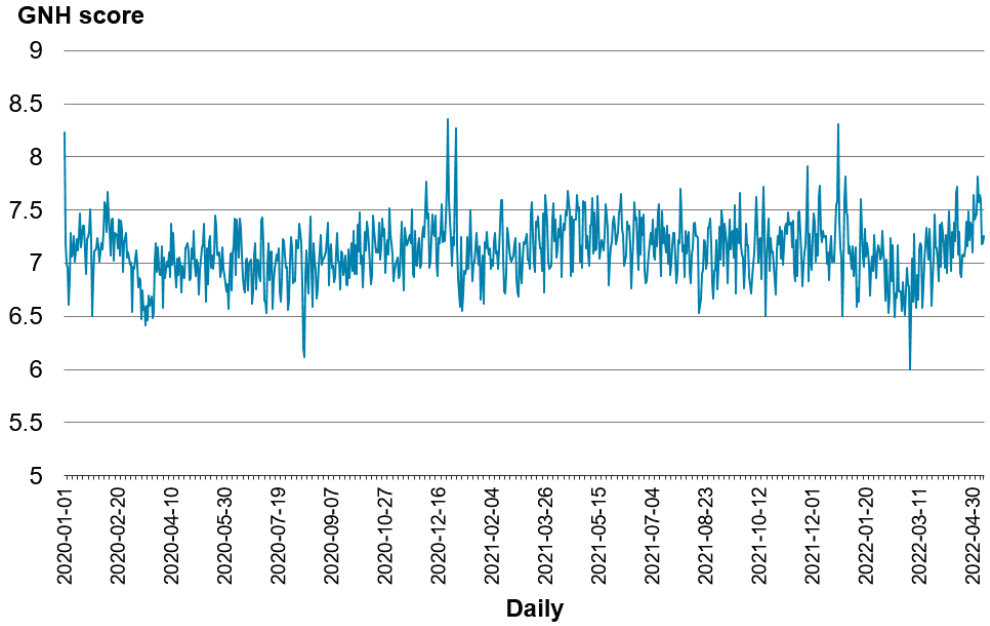
[51] The Gross National Happiness (GNH) index was developed by academics at the University of Johannesburg and Auckland University of Technology to measure real-time sentiment of a given country. The index is constructed by extracting Twitter data and classifying the 'sentiments' of the tweets as either negative, neutral or positive, using a score from 0 to 10. The sentiment scores are then combined in a sentiment balance algorithm to derive the GNH.

Figure 54 – Daily GNH Index for New Zealand, between 1 January 2020 and 30 April 2022



Source: Gross National Happiness Index (Stats NZ COVID-19 data portal)

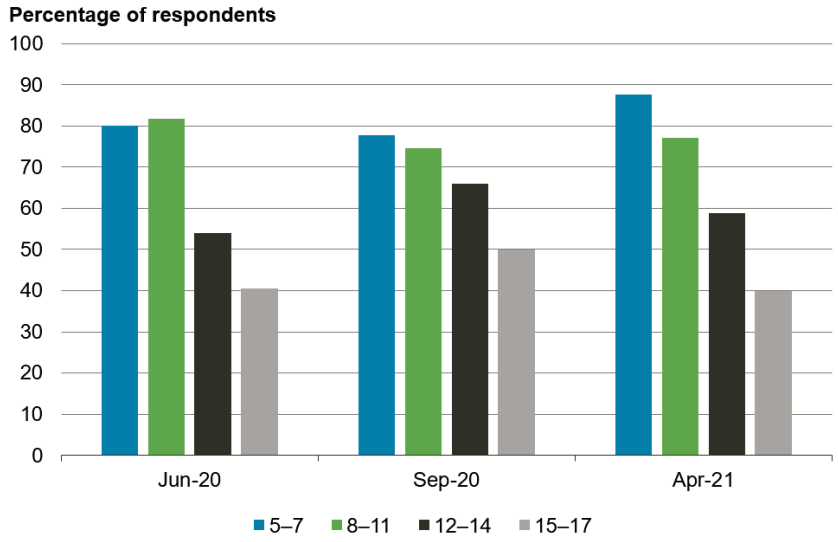
Metrics available suggest that subjective wellbeing of children also held up during the pandemic, however, there may be differences between age groups (see Box 4). In May 2020, Growing Up in New Zealand conducted a survey with around 2,500 children and found that 88% of the children felt supported by their family in lockdown and nearly 80% had a 'good time' with their family.[52]

[52] For more information see: A snapshot of Life in Lockdown: Children's Health, Wellbeing, and Education (msd.govt.nz)

Box 4 – Children's happiness (affect)

Survey data from Sport New Zealand showed considerable differences in how children in different age groups rated their happiness between June 2020 and April 2021. As shown in Figure 55, on the positive side the percentage of children aged 5 to 7 and 8 to 11 who rated their happiness very highly oscillated around 80% during the first year of the pandemic. However, happiness rates for children 12 to 17 were considerably lower than younger children and a fall was evident between September 2020 and April 2021. Only around 40% of children aged 15 to 17 rated their happiness very highly in June 2020 and April 2021 surveys.

Figure 55 – Percentage of young people who rated their happiness very highly, by age group



Source: Sport New Zealand[53] (Stats NZ COVID-19 data portal)

Private sector firms have also collected and published data on New Zealanders' positive and negative affect throughout the pandemic period. Perceptive (an Australasian research and analytics firm) ran a 'COVID-19 Insights Tracker' from the beginning of the pandemic and regularly engaged with New Zealanders and business owners to understand the potential impacts of the virus.

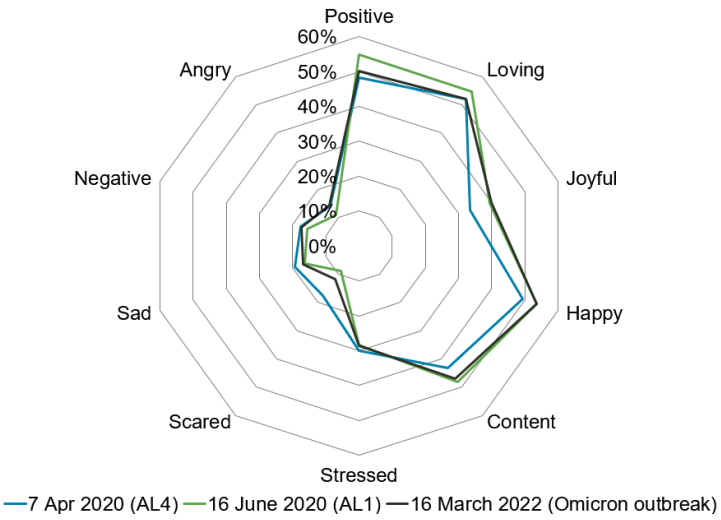
Throughout the pandemic, Peceptive's data showed that New Zealanders were generally more likely to report positive feelings than negative feelings. When asked "how did you feel over the last week?", feelings such as "positive", "loving", "happy", or "content" were more frequently mentioned than feelings such as "negative", "sad", or "stressed". As shown in Figure 56, despite small variations, this pattern was observed during the first lockdown in April 2020, when the country was in Alert Level 1

[53] Data for the surveys was collected during the following Alert Levels: June 2020 – Level 1; September 2020 – mainly Level 2; April 2021 – Level 1. Respondents, including parents responding on behalf of children, were asked: "On a scale from 1 to 10, where 1 is very unhappy and 10 is very happy, in general how happy are you?" Respondents were previous Sport New Zealand's Active NZ Survey respondents who had given permission to be re-contacted. As a result, there could be bias associated with the respondents and thus the findings of this survey. Datasets were weighted to the 2013 census.

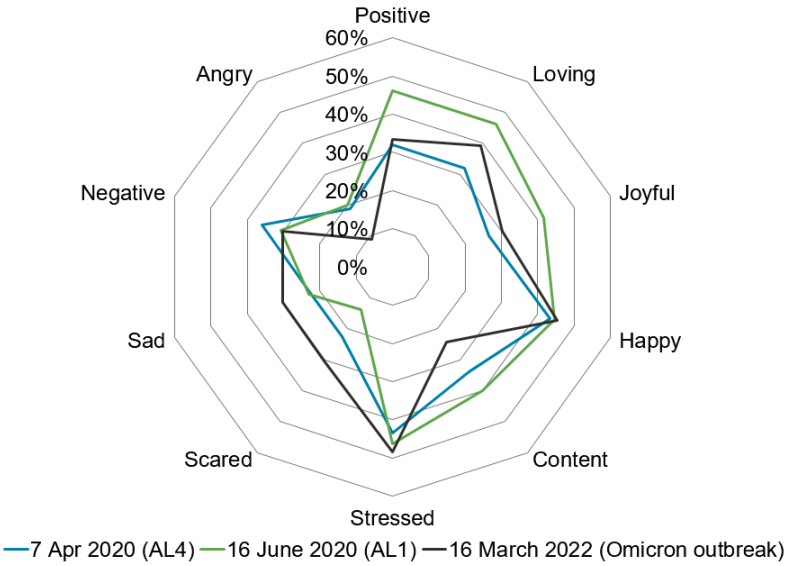
in June 2020, and in March 2022 during the Omicron outbreak. However, within these aggregate results, New Zealanders aged 18 to 24 were more likely to report feelings such as “negative”, “sad”, and “scared” than older age groups.

Figure 56 – Feelings reported by New Zealanders over the last week, during the course of the Pandemic, by selected age groups[54]

Total Sample (18 to 75+ year olds)

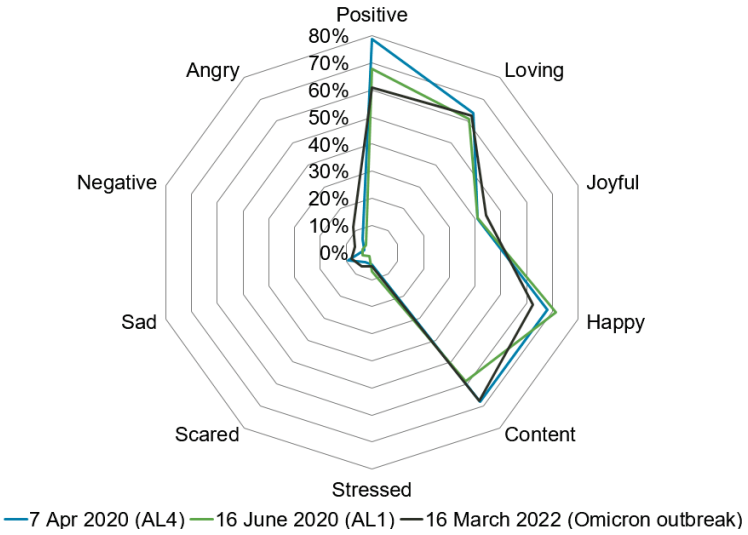


Sample for 18 to 24-year-olds



[54] In the ‘spider charts’ in Figure 56, the further towards the edge of the chart, the higher the frequency that respondents reported a given feeling.

Sample for those aged 75+

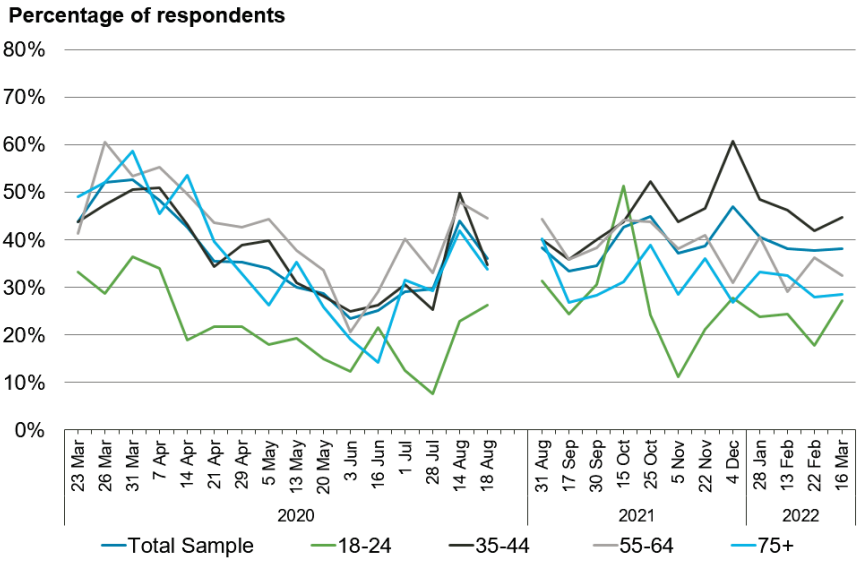


Source: Perceptive (COVID-19 Insights Tracker), the Treasury

Perceptive's data also shows that the proportion of people reporting a high level of concern about the COVID-19 situation peaked at 53% by 31 March 2020 and decreased throughout the second quarter of 2020. High concern about the pandemic situation then increased at specific points between August 2020 and the end to 2021, possibly reflecting the impact of lockdowns and the discovery of new variants of the virus (see Figure 57).

Between February and March 2022, around 38% of respondents reported a high level of concern about the COVID-19 situation. Younger New Zealanders (aged 18 to 24) were less concerned than older age groups throughout the analysed period. People aged 35 to 44 years reported higher levels of concern than the total sample from mid-2021 through to March 2022.

Figure 57 – Proportion of people reporting high concern about the COVID-19 situation, selected age groups



Source: Perceptive (COVID-19 Insights Tracker), the Treasury

The Wealth of Aotearoa New Zealand

The ‘Wealth of Aotearoa New Zealand’ is a level of the Living Standards Framework designed to support the monitoring and analysis of our overall wealth as a country and, in particular, whether that wealth is being sustained for future generations.

In this section we look at data and indicators for the four aspects of our wealth to identify emerging evidence of potential long-term changes in wellbeing during the COVID-19 pandemic. We use available data to try to understand how our stocks of national wealth have changed since 2020, as sustaining them is important for our long-term wellbeing.

Overview

While there is considerable uncertainty about how the pandemic will continue to play out, there are risks of potential longer-term impacts of our wellbeing through the erosion of some aspects of our national wealth.

In terms of our natural environment, provisional data indicates that New Zealand’s emissions fell during periods of public health restrictions, with a return to ‘business-as-usual’ expected as our economy recovers. This aligns with expectations for global emissions.

We looked at data on trust and reported experiences of discrimination as metrics for social cohesion. As observed in other OECD countries, trust levels in New Zealand increased during the first year of the pandemic. However, those gains have eroded as the pandemic has continued. Consistent with longer-term trends, women, younger people, Māori, Pacific peoples and Asian peoples were more likely to report experiences of discrimination during the pandemic than other sub-groups

New Zealand’s education system appears to have proven resilient throughout the analysed period. However, pre-existing risks to our human capability may have grown; in recent years New Zealand has experienced a steady decline in school attendance and it remains to be seen how COVID-19-related disruptions, still present in early 2022, will flow through to education outcomes.

In relation to financial and physical capital, we note that a strong balance sheet prior to the pandemic provided the Government with options to support firms and households. Although the impact of COVID-19 on government’s balance sheet was smaller than initially forecast, the pandemic did significantly affect the government’s finances. Business balance sheets remained resilient, reflecting in part the rapid overall economic recovery.

We acknowledge that further data sources may be available for the aspects of our wealth reviewed in this section. Readers interested in in-depth discussion are encouraged to review our sources, including more detailed reports published by other agencies, which we cite throughout.

Natural environment

Key messages

- This section focuses on New Zealand's greenhouse gas emissions, as this is the aspect of our natural environment where data is available for the COVID-19 period.
- Provisional data suggests that emissions in New Zealand rebounded following a drop during the March to April 2020 lockdown. Given there is no observable evidence of structural shifts in the economy at this point, a similar return to 'business-as-usual' is likely to have occurred following the August to September 2021 lockdown.
- This aligns with expectations for global emissions, which fell by an estimated 5.8% in 2020 but are expected to return to 'business-as-usual' as economies recover.

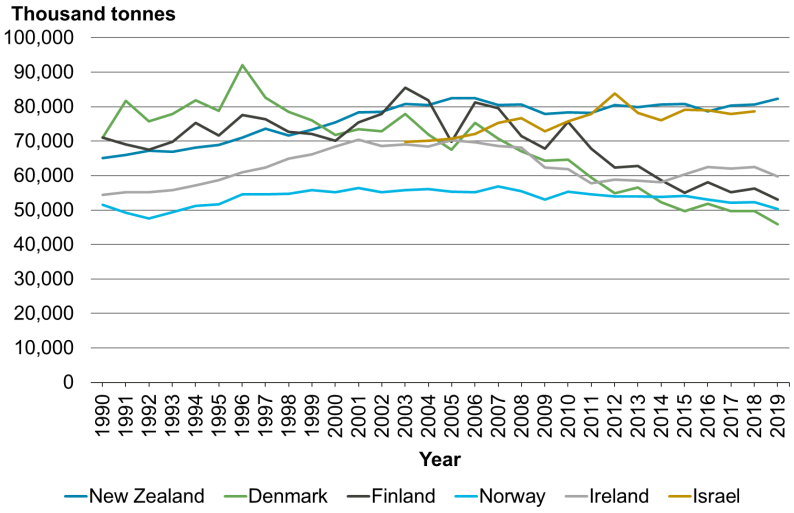
The Living Standards Framework defines the natural environment aspect of wealth as all aspects of the natural environment needed to support life and human activity, valued for spiritual, cultural and economic reasons.

This section focuses on data and trends in New Zealand's greenhouse gas emissions, as data on other aspects of our natural environment, such as biodiversity, air quality and water quality, is not yet readily available for the COVID-19 period. For a more detailed review of empirical evidence on New Zealand's natural environment and its contribution to New Zealanders' wellbeing, see *Wellbeing and Natural Capital: Understanding the sustainability and risks*, prepared by New Zealand Institute of Economic Research (NZIER) and *New Zealand's wellbeing: is it sustainable and what are the risks?,* which sit alongside this report as background papers[55] to *Te Tai Waiora: Wellbeing in Aotearoa New Zealand 2022*.

Emissions returned to normal levels after lockdowns across OECD countries.

As shown in Figure 58, New Zealand's gross emissions had remained relatively flat in the years leading up to the pandemic, even as other advanced economies started to see decreases.

Figure 58 – Thousand tonnes of gross greenhouse gas emissions (CO_2) equivalent) for New Zealand and select small advanced economy comparators, 1990 to 2019



Source: OECD database

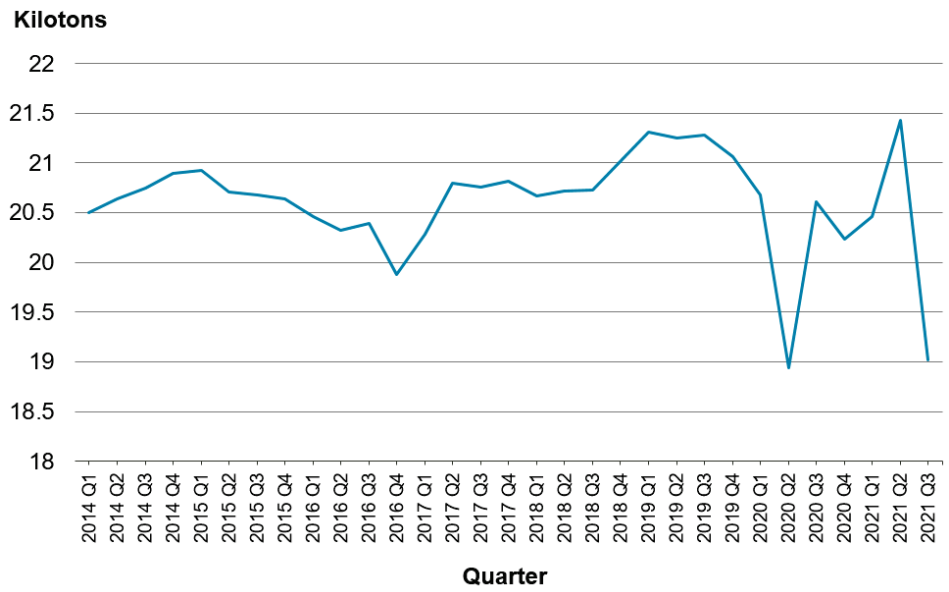
55 These papers and other background Treasury papers to *Te Tai Waiora*: *Wellbeing in Aotearoa New Zealand* can be found on the Treasury website.

On a per capita basis New Zealand's emissions have decreased nearly 15% from our 2003 peak of 20 tonnes CO2 equivalent per capita to around 17.2 tonnes per capita in 2019. The select small advanced economy comparators above have experienced similar per capita decreases.

In regard to the pandemic period, the International Energy Agency (2021) estimated that in 2020 *"global energy-related CO_2 emissions fell by 5.8% according to the latest statistical data, the largest annual percentage decline since World War II".* However, in a November 2021 report, the OECD noted that *"evidence from past crises suggests that a strong rebound in emissions is likely as economic activity picks up. Indeed, monthly energy-related CO_2 emissions estimates for 2020 suggest a gradual return to business as usual, with global emissions in December 2020, 2.1% higher than in the previous year"*.

Provisional data suggests that New Zealand's emissions pattern is consistent with the International Energy Agency prediction. An initial drop in emissions was followed by a rebound after the March to April 2020 lockdown (see Figure 59). Given there is no observable evidence of structural shifts in the economy at this point, a similar return to 'business-as-usual' is likely to have occurred following the August to September 2021 lockdown.

Figure 59 – New Zealand's total emissions (kilotons) for all industries and households, seasonally adjusted – provisional, 2014 to 2021 quarters



Source: Stats NZ (COVID-19 data portal)

Social cohesion

Key messages

- Trust played an important role in responding to COVID-19, and New Zealand reported higher levels of trust than the OECD average during the pandemic period.
- By June 2020, New Zealanders' average trust ratings of other people, Parliament, the health system, and Police had increased compared to 2018. However, a slight decline can be observed in more recent data, particularly regarding Parliament and the health system.
- While the proportion of Māori who trust the public sector declined sharply between 2020 and 2022, Pacific peoples' trust in the Public Service increased in the same period, reaching levels similar to European New Zealanders.
- Domestic data does not show differences between regions in their levels of trust in the Public Service – with the exception of Canterbury. However, OECD data suggests New Zealand has a significant difference between regions in levels of trust in the civil service.
- Consistent with longer-term trends, women, younger people, Māori, Pacific peoples and Asian peoples were more likely to report experiences of discrimination during the pandemic than other sub-groups. Compared to pre-pandemic levels, there was a significant increase in the proportion of women and people aged 65 to 74 who reported experiences of discrimination.

Social cohesion is defined in the Living Standards Framework 2021 as the willingness of diverse individuals and groups to trust and cooperate with each other in the interests of all, supported by shared intercultural norms and values (the Treasury, 2021).

Social cohesion covers one's ability to express identity, discrimination, sense of belonging, and trust held in others. This section focuses on trust and discrimination. This is due to data availability but, more importantly, because trust is the headline social cohesion measure and played a role in the pandemic response, while there are risks that fears about the potential impact of the virus could trigger or exacerbate experiences of discrimination.[56]

Trust played an important role in responding to the pandemic…

Trust and cooperation amongst people, and between people and governments, were important contributors to the containment of the pandemic. The success of many health measures applied domestically and internationally depended on governments trusting their citizens and vice versa. The *World Happiness Report 2021 and 2022* show that, in general, societies with higher institutional trust and greater income equality were more successful in fighting COVID-19, noting that high social trust tends to be correlated with lower income inequality.

The *World Happiness Report 2021* estimated that countries where the return of a lost wallet is seen as very likely had almost 50 fewer COVID-19 deaths per 100,000 people than countries where such a return is seen as very unlikely – about as large an effect as provided by trust in institutions.

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[56] For a more comprehensive review of social cohesion in New Zealand, see '*Social cohesion: A background paper for the 2022 Wellbeing Report'* on the Treasury website.

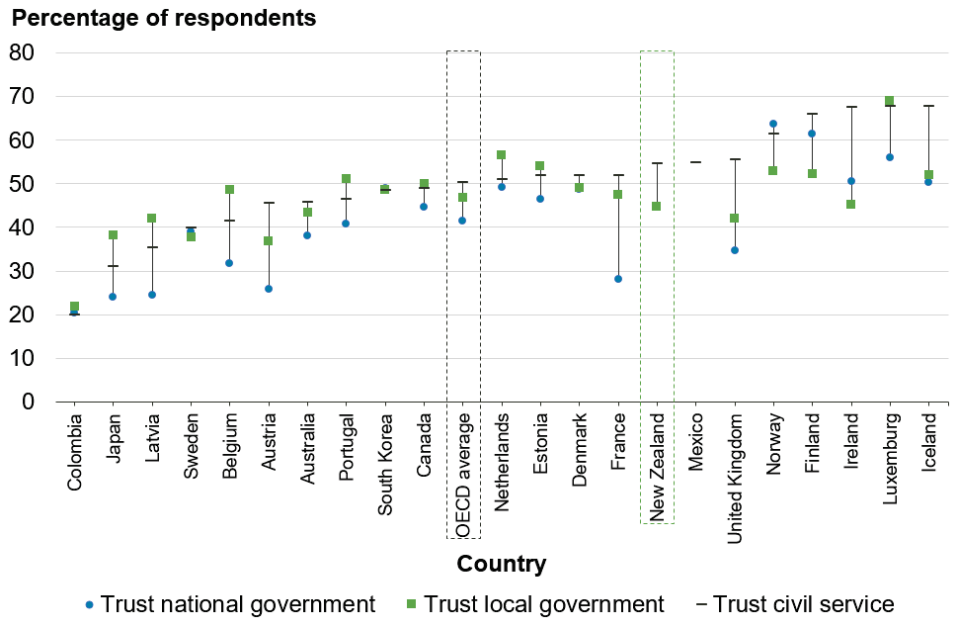
Additionally, the *World Happiness Report 2021* compared trust-related variables with other relevant factors identified, such as exposure to infections from other countries, income inequality, whether the country is an island and whether the head of government was female.[57] Their results suggest that trust in government has a stronger effect on the number of deaths from the virus than being an island or having a female as a head of government.

Other studies have also highlighted the importance of trust during the pandemic. The OECD (2021) noted that trust, in people and in institutions, has been an important resilience factor, with higher trust contributing to COVID-19 containment. Another study by Makridis & Wu (2021) in the United States, found that greater trust and relationships within a community could endow individuals with a greater concern for others, leading to more hygienic practices and social distancing.

…and New Zealand trust levels were above the OECD average during the pandemic.

In 2021, the OECD ran its first Survey on the Drivers of Trust in Public Institutions (Trust Survey) in 22 of its member countries. Although the Trust Survey does not provide a pre-pandemic picture, it is a useful tool to compare New Zealand's confidence in public institutions relative to international peers during the COVID-19 period. As shown in Figure 60, New Zealand (54.6%) is above the OECD average (50.2%) in the proportion of people who trust their civil servants, while we are slightly below the OECD average in terms of trust in local government. Figure 60 also shows trust in national government across OECD countries, but this data was not available for New Zealand.

Figure 60 – Share of respondents who indicate trust in various government institutions in the OECD (responses 6-10 on a scale of 0 to 10), 2021



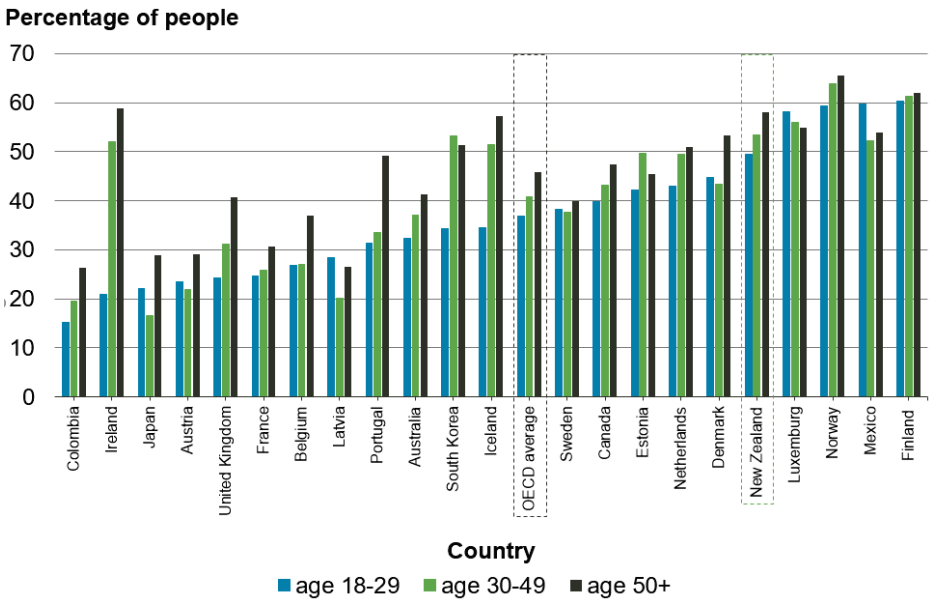
Source: OECD (2022a)

[57] The *World Happiness Report 2021* estimated that having a female leader was associated with death rates lower by 19 per 100,000 population. According to the report, this can be related to factor such as countries that ranked highly on a range of social features were found more likely to have chosen a female leader, and that several of the female leaders by the time of the study had favoured policy making with overall wellbeing as the objective.

The OECD's Trust Survey also compared trust in the national government by age group in 2021 and found that, across the surveyed countries, younger people tended to trust the national government less than older people. This difference may be partly explained by the fact that the economic and social consequences of COVID-19 have fallen particularly hard on young people (OECD, 2022a).

Although still above the OECD average, different levels of trust in the civil service between young and older groups were observed in New Zealand (see Figure 61). Comparability with other countries is limited, however, as they report on trust in the national government rather than the civil service.

Figure 61 – Share of respondents who indicate trust in their national government (responses 6-10 on a scale of 0 to 10) by age group, 2021[58]



Source: OECD (2022a)

Trust levels seem to have increased in the first half of 2020 but those gains have since eroded…

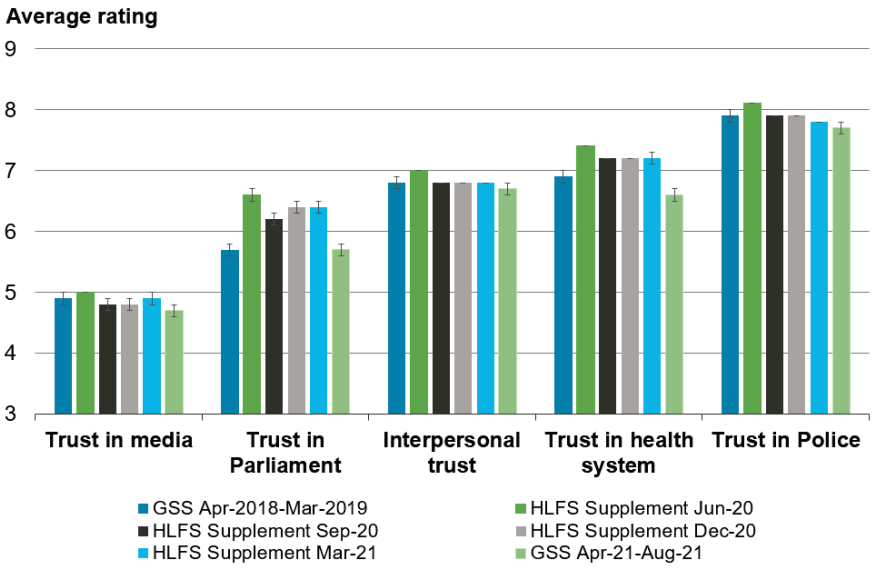
In a separate report, the OECD (2021) noted that trust metrics peaked across member countries in 2020. However, some of those early gains in trust eroded as the pandemic continued. By early 2021, nearly one in three people felt left out of their societies in European OECD countries (up from one in five in mid-2020). This feeling was particularly acute among those already vulnerable, including people who were unemployed or who had lower education (all of whom were already more likely to feel left out of their societies in 2016), as well as younger people up to age 24. By the February to May 2021 period, the majority of adults in 12 OECD countries felt that their country was "more divided now than before the coronavirus outbreak" (OECD, 2021).

Consistent with the OECD findings, Stats NZ data shows that, by June 2020, New Zealanders' average trust ratings of different bodies and institutions, such as one another, the Parliament, the health system, and Police had increased compared

[58] Mexico and New Zealand present trust in civil service, as respondents were not asked about trust in the national government. The OECD notes that trust in civil service on average tends to be higher than trust in national government and this may limit comparability.

to 2018 and remained stable throughout 2020 (see Figure 62). Nonetheless, an overall fall in trust can be observed as the pandemic stretched out. In particular, 2021 General Social Survey (GSS) data shows a reduction in trust levels in Parliament and the health system compared to the 2020 peak.

Figure 62 – Average trust ratings in New Zealand on a scale from 0 to 10



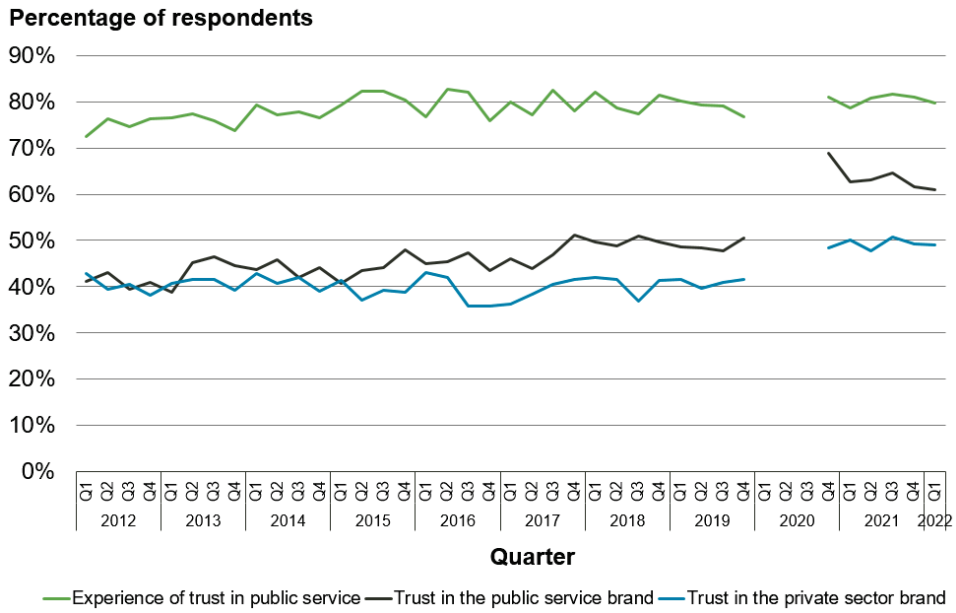
Source: Stats NZ (GSS and HLFS supplement data)[59]

According to the Kiwis Count Survey, conducted by the Public Service Commission, trust in the Public Service and private sector has increased in New Zealand since 2012 (see Figure 63). In line with the OECD's observation of international trends and with Stats NZ data, New Zealanders' trust in government peaked in 2020, which could be related to the central role of the Public Service in response to COVID-19. In 2021 and early 2022, the levels of trust in the Public Service 'normalised' as the pandemic evolved and there was a reduction in trust levels compared to December 2020.

Trust in the Public Service (measured as an overall impression, based on what respondents know or have heard from family, friends or the media) peaked at 69% in December 2020, and despite a slight fall to 61% by March 2022, it remained well above pre-COVID levels (51% in December 2019). Additionally, by the March quarter of 2022, 80% of respondents reported that they trust the Public Service based on their personal experience – when asked to reflect on a service or organisation they have recently used or engaged with.

[59] See *Data* section of this paper for caveats about comparing data from the New Zealand General Social Survey (2018 and 2021) and the wellbeing supplements to the Household Labour Force Survey (June 2020, September 2020, December 2020, and March 2021).

Figure 63 – Trust in the Public Service based on experience and perception of trust in the Public Service and private sectors, by quarter[60]



Source: Public Service Commission (Kiwis Count Survey)[61]

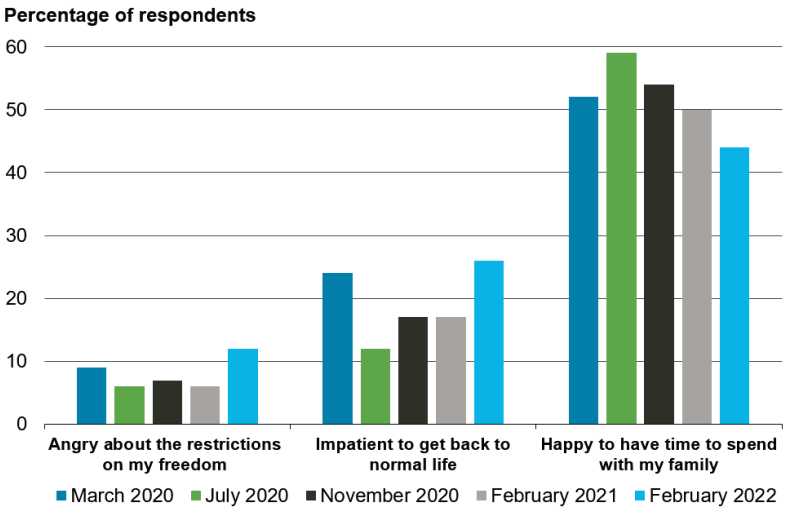
As the pandemic has played out, people's willingness to cooperate with the public health measures has reduced and impatience to return to normal life has increased across many countries. The World Health Organisation (2020) named this phenomenon 'pandemic fatigue', defined as demotivation to follow recommended protective behaviours, emerging gradually over time and affected by a number of emotions, experiences and perceptions.

The Ipsos survey *Mind and Mood of New Zealanders* tracked public reaction and attitudes towards the state of the virus and perception of management between February 2020 and February 2022. As shown in Figure 64, the February 2022 run of the survey found that more than a quarter of the population was feeling impatient to get back to normal life and more than 10% of people were feeling angry about restrictions on individual freedom. This represents a significant increase compared to late 2020 and early 2021, and higher levels than reported in March 2020. There was also a sustained decrease, since July 2020, in the proportion of people reporting feeling happy to have time to spend with their family. This may reflect fatigue in relation to lockdown measures.

60 The Public Service Commission uses the term 'brand' to refer to the Public Service and private sectors as a whole.

61 There is a gap in the survey results for 2020 due to issues including the COVID-19 lockdown. For information on the changes in the survey over time, see Kiwis Count survey methodology and archive - Te Kawa Mataaho Public Service Commission.

Figure 64 – How New Zealanders described their mood when asked "which best describes how are you feeling today?"

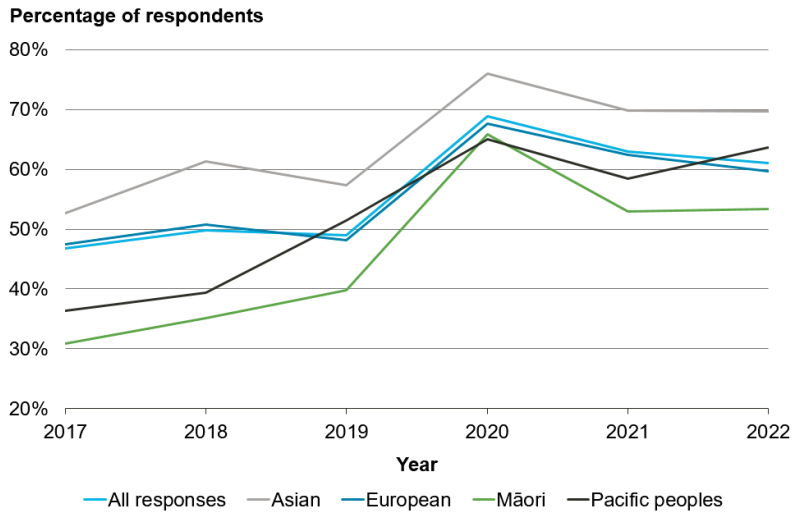


Source: Ipsos (Mind and Mood of New Zealanders Survey)

…and some differences in trust across groups were observed.

Levels of trust vary for different demographic groups. As measured in the Kiwis Count Survey, Māori and Pacific respondents have historically reported lower levels of trust in the Public Service compared to European and Asian ethnic groups. However, as shown in Figure 65, while the proportion of Māori who trust the Public Service declined sharply after the 2020 peak,[62] Pacific peoples' trust in the Public Service increased between 2021 and 2022, reaching similar levels to European New Zealanders.

Figure 65 – People who report trust in the Public Service by ethnicity (LSF Dashboard indicator)

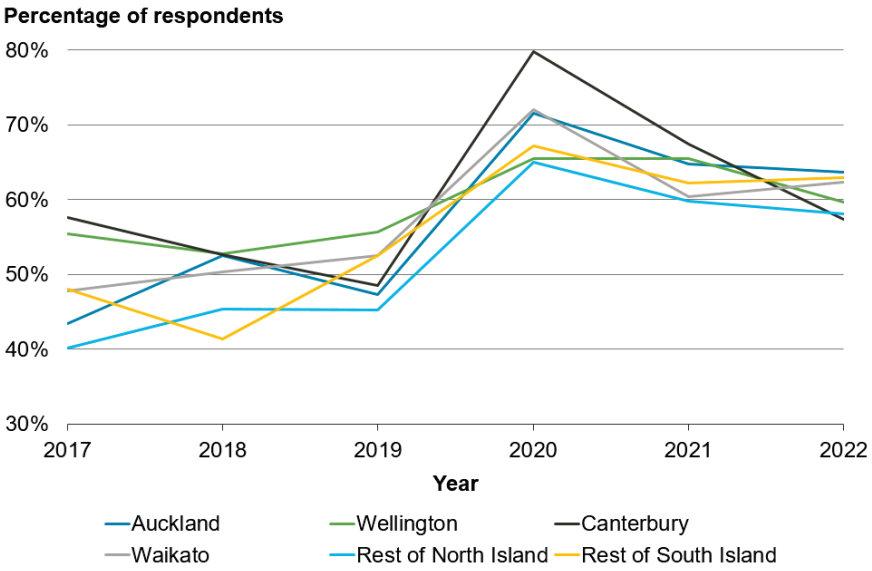


Source: Public Service Commission (Kiwis Count Survey)

62 The Public Service Commission aggregated these scores on an annual basis to reduce the volatility caused by small sample sizes for some dimensions. This means that the latest year's scores are provisional year-to-date estimates until the December quarter results are released.

Figure 66 shows that, with the exception of Canterbury, which had a higher peak and a more marked subsequent decline in the levels of trust in the Public Service, there is no observable differences between New Zealand regions in the Kiwis Count Survey since the start of the pandemic in early 2020.

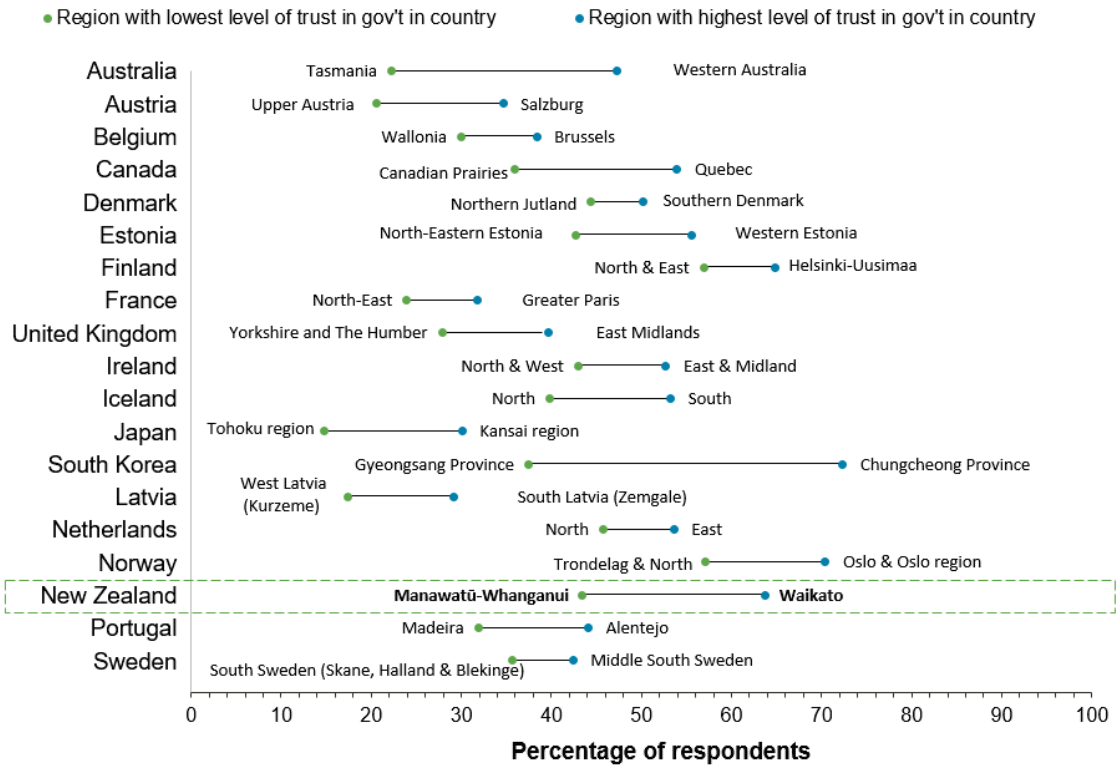
Figure 66 – People who report trust in the Public Service by region (LSF Dashboard indicator)



Source: Public Service Commission (Kiwis Count Survey)

However, the OECD's Trust Survey found that New Zealand has one the largest differences in trust in institutions between regions. The gap between the region with the lowest level of trust in the civil service (Manawatū/Whanganui) and the region with the highest level of trust (Waikato) was more than 20% (see Figure 67). Larger differences between regions were only observed in South Korea (34.9%) and Australia (25%), although comparability is limited as these countries' figures are based on trust in national government.

Figure 67 – Share of respondents who indicated trust in their national government (responses 6-10 on a scale of 0 to 10) in regions with highest and lowest level of trust by country, 2021, OECD countries[63]



Source: OECD (2022a)

According to the OECD (2022a), territorial disparities in trust could reflect dissatisfaction with regional access to public services, as well as socio-economic opportunities and wellbeing outcomes. These factors can also trigger feelings of being 'left behind' and disengagement with the political system, which can undermine democracy (OECD, 2022a).

The pandemic may have elevated some types of discrimination.

Research by Sibley, Overall, Osborne & Satherley (2021) analysed data from the New Zealand Attitudes and Values Study, collected from 29 September 2019 to 17 October 2020, to assess the effects of COVID-19 Alert Levels on discrimination and other key outcomes compared to a control group.[64] Their study suggests that the pandemic elevated general perceived gender-, ethnic-, and religious-based discrimination across Alert Levels.

As shown in Figure 68, the study notes that women reported more perceived gender-based discrimination relative to the control group during the Alert Levels 4, 3 and 2. By contrast, men reported more perceived ethnic-based discrimination, which may align with employment opportunities and other social interaction outside the home.

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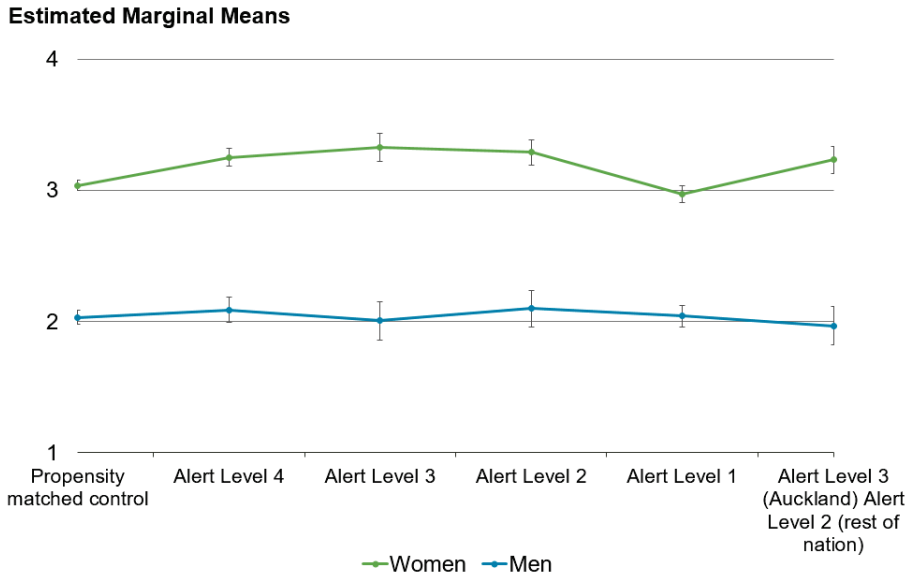
63 New Zealand data is presented for 'trust in civil service' as New Zealand respondents were not asked about trust in the national government. The OECD notes that trust in civil service on average tends to be higher than trust in national government.

64 The New Zealand Attitudes and Values Study is a nationwide longitudinal panel study based on a random sample of the electoral roll. In the study, Sibley, Overall, Osborne & Satherley, (2021) used a sample of over 12,000 people surveyed in 2019 (before the pandemic) as a propensity-matched control group.

Figure 68 – Gender differences in gender-based discrimination, September 2019 to October 2020[65]



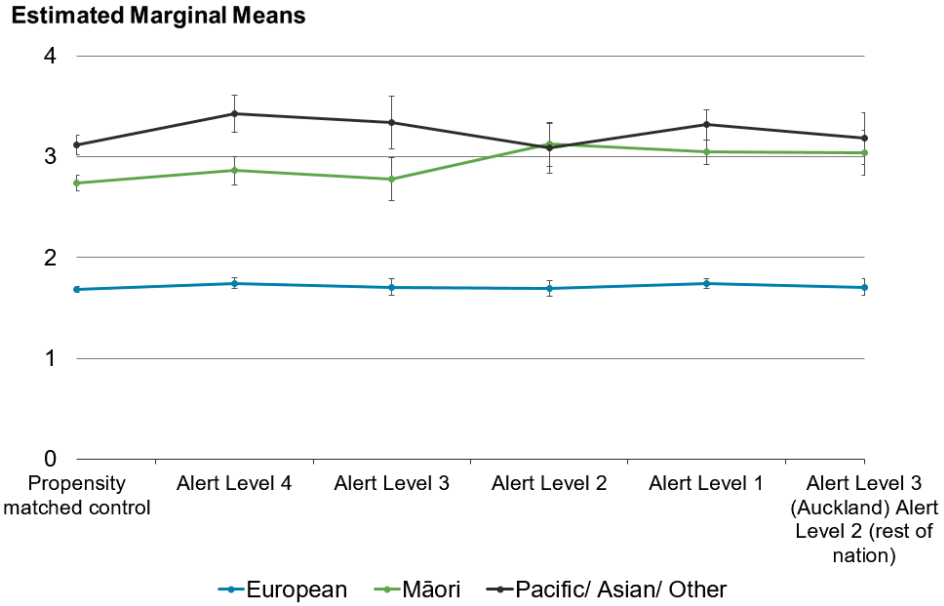
Source: Sibley, Overall, Osborne & Satherley, (2021)

Figure 69 shows that Māori, Pacific peoples, Asian peoples and other minority ethnic groups also reported more perceived ethnic-based discrimination across the Alert Levels, including during Alert Level 1 when COVID-19 was eliminated from the community. Relative to the control group, Pacific peoples, Asian peoples, and other non-Māori ethnic minorities[66] reported the highest ethnic-based discrimination during higher Alert Levels. Māori reported more ethnic-based discrimination at lower Alert Levels, when social interactions and employment had resumed (Sibley, Overall, Osborne & Satherley, 2021).

65 Estimated marginal means show the effect of a given factor on a statistical model, adjusted for any other variables in the model.

66 For this report, Pacific peoples, Asian peoples and those identifying with another ethnic group were collapsed into one broader category due to limited sample size when split across Alert Levels. The authors of the study note that these distinct ethnic groups may have been affected in unique ways by the Alert Level changes that were not necessarily detected in their model.

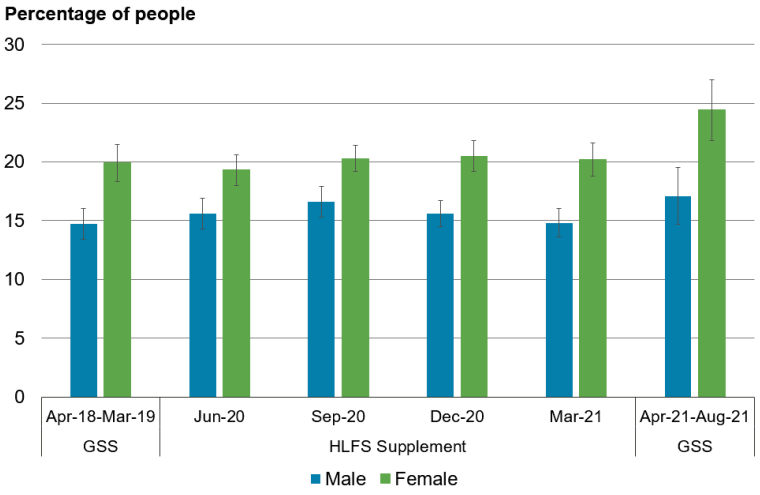
Figure 69 – Ethnic group differences in ethnic-based discrimination, September 2019 to October 2020



Source: Sibley, Overall, Osborne & Satherley, (2021), the Treasury

Data from Stats NZ in Figure 70 reveals a similar story. In line with pre-pandemic trends, a higher proportion of women reported experiences of discrimination than men between mid-2020 and mid-2021. Additionally, a statistically significant increase in the proportion of women who reported experiences of discrimination in the last 12 months can be seen by mid-2021, as the pandemic stretched out.

Figure 70 – Percentage of people who reported experiences of discrimination in the last 12 months, by gender (LSF Dashboard indicator)

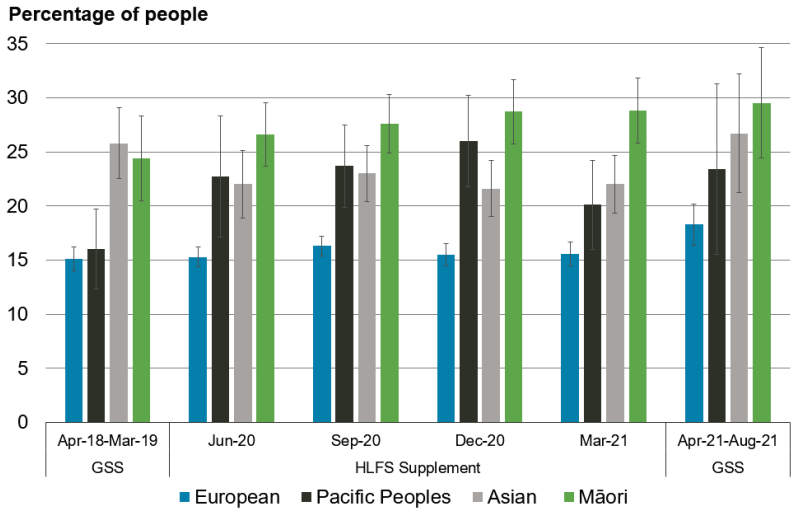


Source: Stats NZ (GSS and HLFS supplement data)[67]

67 See *Data* section of this paper for caveats about comparing data from the New Zealand General Social Survey (2018 and 2021) and the wellbeing supplements to the Household Labour Force Survey (June 2020, September 2020, December 2020, and March 2021).

Pre-pandemic disparities between ethnic groups also remained. As shown in Figure 71, throughout 2020 and the first half of 2021, Māori were more likely to report experiences of discrimination than other ethnic groups, although no statistically significant increase was observed from pre-pandemic levels.

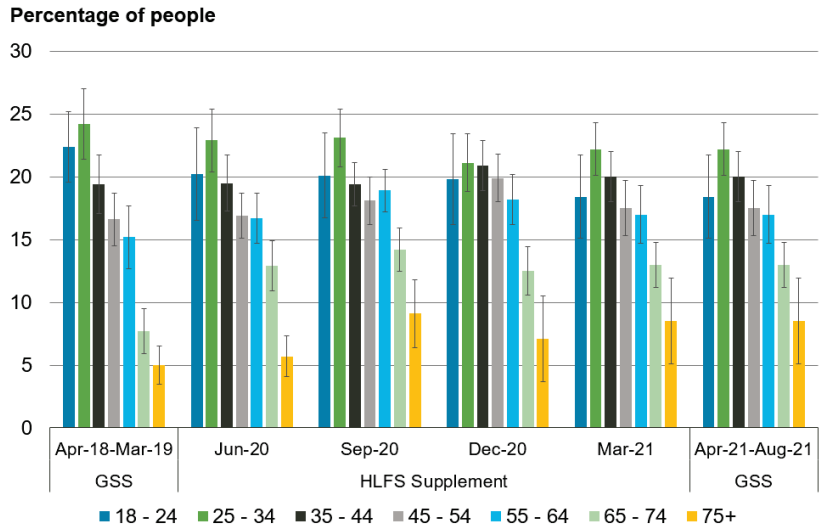
Figure 71 – Percentage of people who reported experiences of discrimination in the last 12 months, by ethnic group (LSF Dashboard indicator)



Source: Stats NZ (GSS and HLFS supplement data)[68]

Figure 72 shows that significant increase in the proportion of people aged 65 to 74 who reported experiences of discrimination can be observed compared to pre-pandemic data. As a continuation of pre-COVID-19 trends, overall, younger New Zealanders (aged 18 to 44) reported higher rates of discrimination experiences than other age groups.

Figure 72 – Percentage of people who reported experiences of discrimination in the last 12 months, by age group (LSF Dashboard indicator)



Source: Stats NZ (GSS and HLFS supplement data)[68]

[68] See *Data* section of this paper for caveats about comparing data from the New Zealand General Social Survey (2018 and 2021) and the wellbeing supplements to the Household Labour Force Survey (June 2020, September 2020, December 2020, and March 2021).

Human capability

Key messages

- This section focuses on the knowledge and skills component of human capability. While there is not yet evidence of pandemic-related disruptions impacting education achievement, there are risks of emerging impacts, particularly given that school attendance dropped off significantly in early 2022.
- There was no evidence of significant impacts on primary school achievement in 2020, although evidence is not yet available for 2021 and 2022.
- National Certificate of Educational Achievement (NCEA) results improved for secondary students in 2020, before declining slightly in 2021. This pattern was relatively uniform across year groups, deciles, genders and ethnicities and may be explained by measures taken to award bonus credits in 2020. These bonus credits were also available in 2021 but to a lesser extent.
- Following a decade of steady decline, New Zealand also saw a rebound in domestic enrolments in tertiary education in 2021. This rebound may have been driven in part by a spike in unemployment in late 2020 and a temporary government policy to cover the cost of training and apprenticeship programmes.

The Living Standards Framework defines human capability as people's knowledge, physical and mental health, including cultural capability. This section will focus on the knowledge and skills component of human capability, as this is where recent data is most available, noting that physical and mental health have been discussed in the *Health* section of this report.

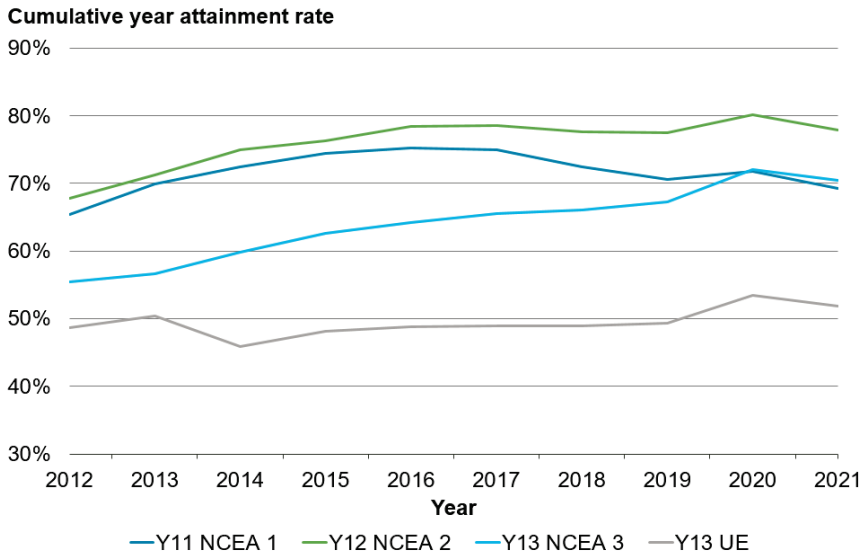
There has been significant concern across countries that disruptions to the acquisition of knowledge and skills throughout the pandemic will have long-run consequences for human capability (OECD, 2021 and Sibley, C.G., Overall, N.C., Osborne, D., & Satherley, N. (2022)). As noted in our report on trends in wellbeing, knowledge and skills are important when it comes to people's participation in the labour market and have been associated by researchers with other aspects of wellbeing, such as health and willingness to trust and cooperate with others (the Treasury, 2022b).

There is as yet little evidence of COVID-19 disruptions on educational achievement…

One of the key internationally comparable measures of student achievement in New Zealand, the OECD's Programme for International Student Assessment (PISA), which measures the reading, mathematics and science skills of 15-year-olds, has not been updated since 2018. Wider evidence on impacts to educational achievement during the analysed period is likewise limited.

There was a continued improvement in NCEA results across year-groups in 2020 (see Figure 73), with a subsequent decline in 2021 (although results generally remained above 2019 levels). This pattern was relatively uniform across year groups, deciles, genders and ethnicities, and Auckland students do not appear to have experienced any disproportionate impacts.

Figure 73 – Percentage of students achieving NCEA qualifications, by year group, 2012 to 2021[69]



Source: New Zealand Qualifications Authority (NZQA) statistics

However, these results should be interpreted in light of Learning Recognition Credits (LRCs), which were introduced in 2020 to counter COVID-19 disruptions by awarding bonus NCEA credits to students earning credits through assessment (NZQA, 2021). LRCs were also made available in 2021, with additional bonus credits made available to students in Auckland. While LRCs appear to have improved NCEA results (enabling more students to achieve NCEA and University Entrance in the face of COVID-19), it is unlikely that they have been able to negate disruption to the actual acquisition of knowledge and skills.

Initial evidence suggests that primary school students may not have experienced significant learning impacts in 2020. In June 2021, the Ministry of Education published a report that examined data collected by teachers on the learning progress of students in Years 4 to 10 throughout 2020 (Ministry of Education, 2021). This report found no moderate or large reductions in learning progress in reading or mathematics, although there was some reduction in writing progress (within the range of regular year-to-year variation). This report also did not find evidence of increases in inequity by school decile or ethnicity and did not find strong evidence of any additional impacts on students in Auckland. It remains to be seen whether further disruptions throughout 2021 and 2022 have impacted learning outcomes.

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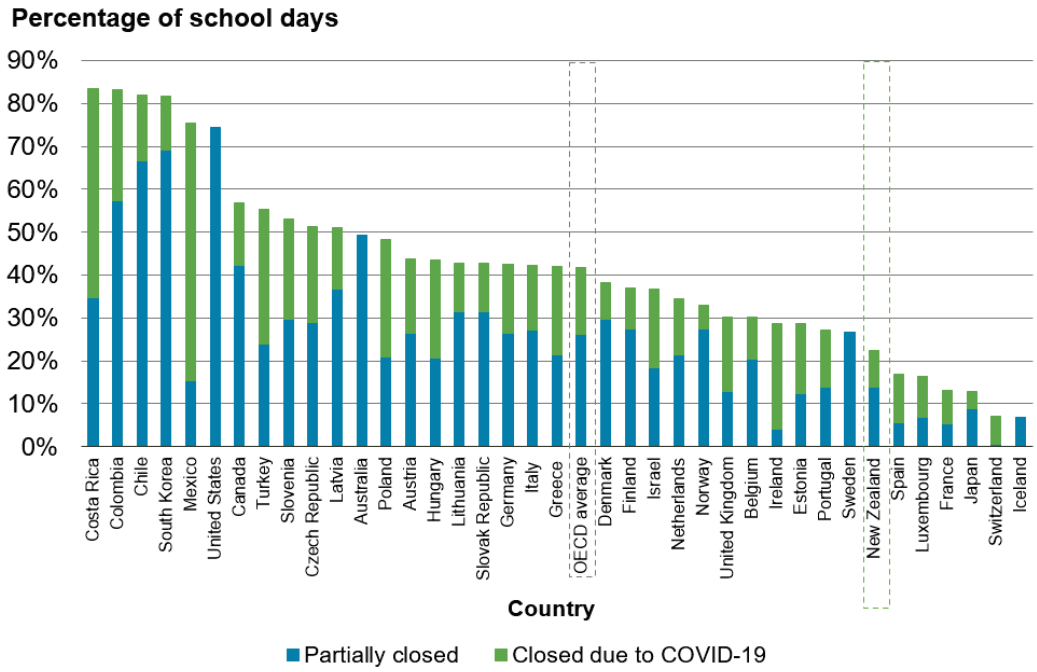
69 The cumulative attainment rate counts all students who had attained the qualification concerned by the end of the academic year being reported, including students who may have attained the qualification concerned in an earlier year. In general, the cumulative attainment rate will be higher than the current year attainment rate. For more information: Secondary-Statistics-Consolidated-Files-Summary.pdf (nzqa.govt.nz).

…but declining school attendance may be an early warning of future challenges.

While New Zealand has had very few school closures during COVID-19 relative to other OECD countries (see Figure 74), in absolute terms we have seen our schools partially or fully closed for more than 20% of days between 16 February 2020 and 31 October 2021.

Figure 74 – COVID-19 school disruptions, 16 Feb 2020 to 31 Oct 2021



Source: UNESCO data

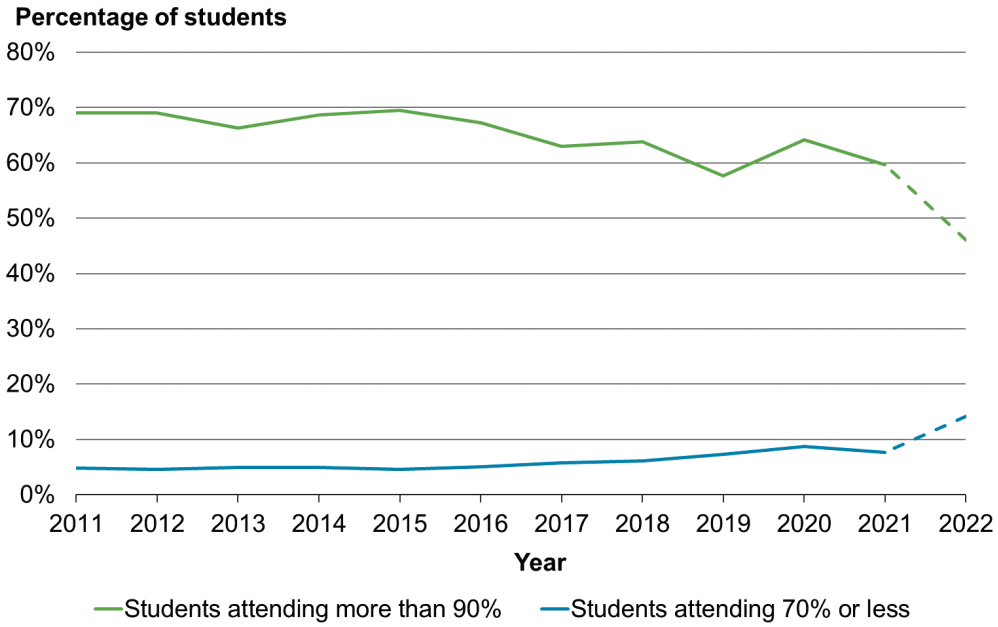
While 2018 data suggests that New Zealand is above the OECD average in the share of students with access to internet and a computer at home (OECD, 2021), in an effort to minimise disruptions from school closures, the Ministry of Education rolled out internet connectivity and devices to students from households that did not already have access to these tools. In May 2022 an evaluation of this roll out was published, looking at the roll out's progress from 15 March 2020 to 30 September 2020 (Ministry of Education, 2022).

This evaluation noted that the Ministry had successfully provided internet connections to 40,000 households and had provided 36,000 students with devices, including laptops, Chromebooks and iPads. However, the evaluation also noted that at the end of September 2020 there remained significant gaps, including for Years 1 to 8 students, where there was a shortfall of 72,000 devices and an estimated 5,000 households without internet connections. While this evaluation was unable to fully quantify the impacts of this roll out, it did note that recipients who received this digital connectivity support had similar patterns of attendance and achievement as comparable students who did not require support with digital connectivity and that neither group saw significant drops during 2020.

There have also been risks to the educational achievement of secondary students over 2021 and 2022 from increasing disruption to education over the last two years. School absence is associated with a consistent reduction in NCEA credits attained by New Zealand secondary students – regardless of whether that student is moving from

100% to 99% attendance or from 71% to 70% attendance (Ministry of Education, 2020). As shown in Figure 75, COVID-19 disruptions have exacerbated a steady longer-term trend of worsening student attendance in New Zealand.

Figure 75 – Percentage of students attending school regularly (over 90% of the time) and percentage of students who were chronically absent (attending 70% or fewer of school days), measured in half-days, data for term 2, 2011 to 2021 and term 1 2022



Source: Ministry of Education (Education Counts)

While the data for 2022 in Figure 75 shows a further reduction, this data is for term 1 only and may be limited in its comparability to data shown for previous years, which covers term 2 attendance only.[70] Attendance can vary significantly between terms. For example, in term 1, 2019, 72.8% of students attended more than 90% of half-days compared to an average of 64.1% of students attending more than 90% across all four terms in 2019.

Another complicating factor regarding attendance data for the pandemic period is that most schools recorded all of their students as 'studying off-site' during lockdown periods. The Ministry of Education reports that *"during these lockdowns, 86-89% of schools reported attendance rates over 98% across all of their students, compared to only 0.3-1.1% of schools over the same weeks last year'* and that *'attendance data during lockdown may not reflect student engagement over this period in the same way that physical attendance is normally an indicator of engagement"*.[71]

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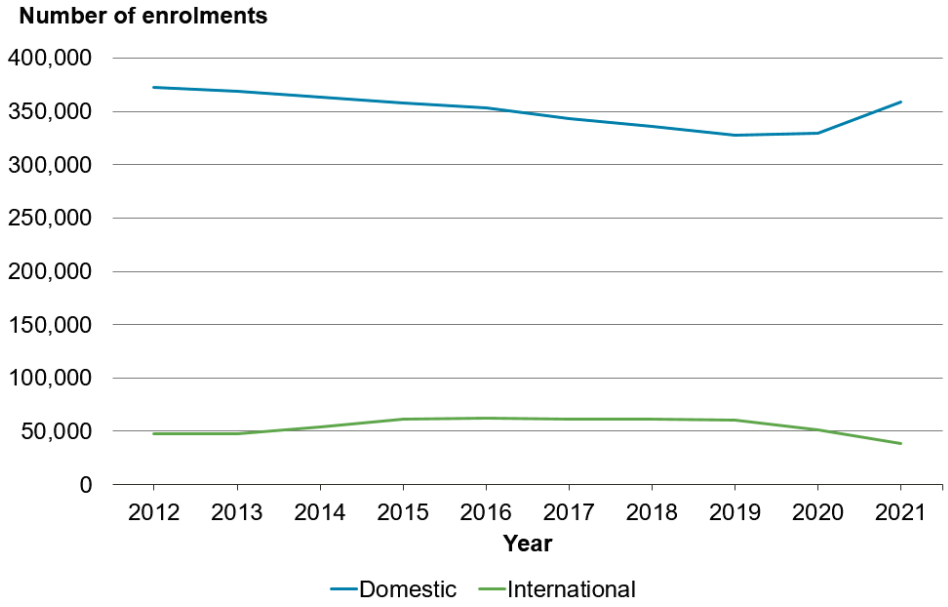
[70] Only term 2 attendance data was published from 2011 to 2018. Since 2019 data has been published for all terms, however, we have used term 2 data for 2019 to 2021 in Figure 75 to build a comparable series from 2011 to 2021 (noting this will have been impacted by the different levels of public health restrictions in place at different stages of the pandemic). At the time of writing, only term 1 data was available for 2022, we have included this datapoint in Figure 75 in order to capture the most recent trends.

[71] For more information on COVID-19 and school attendance, see How COVID-19 is affecting school attendance (educationcounts.govt.nz).

There has been a recent increase in domestic tertiary enrolments.

As shown in Figure 76, data for universities, te pūkenga and wānanga shows increases in domestic enrolments in 2021 (against a longer-term period of absolute decline during a period of high population growth), as well as the expected decrease in international enrolments due to border closures.

Figure 76 – Domestic and international enrolments in tertiary institutions, 2012 to 2021

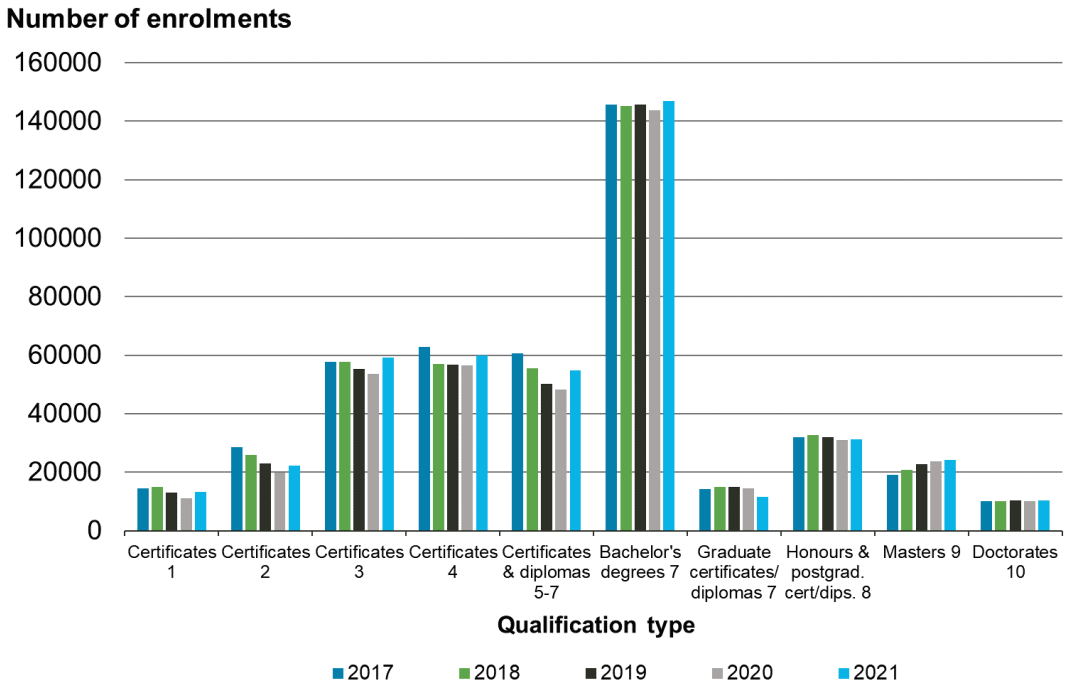


Source: Ministry of Education (Education Counts)

Breaking down this enrolment data, it appears that the rebound has largely been driven by increases in students studying for Levels 3 to 7 certificates and diplomas (see Figure 77). This aligns with overseas evidence that suggests that shorter-duration education programmes are more sensitive to economic cycles and the unemployment rate (Ministry of Education, 2009).[72] Notably, New Zealand's unemployment rate spiked in the second half of 2020 (see the *Work, care and volunteering* section of this report for more detail), when many people would have been considering their employment and study prospects for 2021. As an additional possible driver, the Ministry of Education (2021b) has noted that some of the fields that showed large enrolment increases were ones that qualify for the government's Targeted Training and Apprenticeship Fund (TTAF) policy, which has made a range of training and apprenticeship programmes at sub-degree level free for learners until December 2022.

[72] The Ministry of Education predicts tertiary education demand in New Zealand using forecast youth unemployment and forecast youth population. For more information see: New Zealand tertiary education demand forecast 2022 (educationcounts.govt.nz).

Figure 77 – Number of tertiary enrolments by qualification type, 2017 to 2021



Source: Ministry of Education (Education Counts)

Financial and physical capital

Key messages

- A strong balance sheet prior to the pandemic provided the Government with options to support firms and households.
- Although the impact of COVID-19 on government's balance sheet was smaller than initially forecast, the pandemic did significantly impact the government's finances. The operating deficit (OBEGAL) reached $9.7 billion and Net Core Crown Debt reached 35.9% of nominal gross domestic product (GDP) in the 2022 financial year.
- New Zealand's annual current account deficit widened sharply from late 2020, reaching levels not seen since the Global Financial Crisis. The larger deficit was mainly driven by weaker exports, particularly of services affected by the border restrictions, such as tourism and education.
- New Zealand's Net International Investment Position (NIIP), improved markedly since the December quarter 2020. An improved NIIP offers some buffer to a period of larger current accounts deficits.
- Businesses' balance sheets remained resilient throughout the pandemic. No significant increase in the number of liquidations or bankruptcies was evident in 2020/21 or 2021/22 compared to pre-pandemic years.
- After peaking in 2020, non-performing loans and provisions decreased to pre-pandemic levels by late 2021. Similarly, after falling in 2020, credit demand grew in 2021 to above pre-pandemic levels, particularly for medium- and large-sized firms.

Financial and physical capital is an important part of the wealth of New Zealand. As a capital stock, the Living Standards Framework defines financial and physical capital as encompassing three subcategories:

- tangible, human-made assets, such as buildings, machinery and infrastructure, including physical taonga, such as marae
- knowledge-based property assets such as research and development, software and databases, and arts and literature
- financial assets minus liabilities, including currency, bank deposits, loans and equity.

This section focuses on balance sheets of the government, firms and, to a degree, the country. Households balance sheets are covered in the *Income, consumption and wealth* section of this report.

COVID-19 has hit the government's balance sheet hard…

COVID-19 demonstrated the importance of a strong government balance sheet that has buffers to absorb shocks. Prior to the pandemic, the government balance sheet had Net Core Crown debt at 19% of gross GDP. This provided the Government with options on how to respond to the economic impacts of the pandemic, including the ability to support households through policies such as the Wage Subsidy Scheme (the Treasury, 2022).

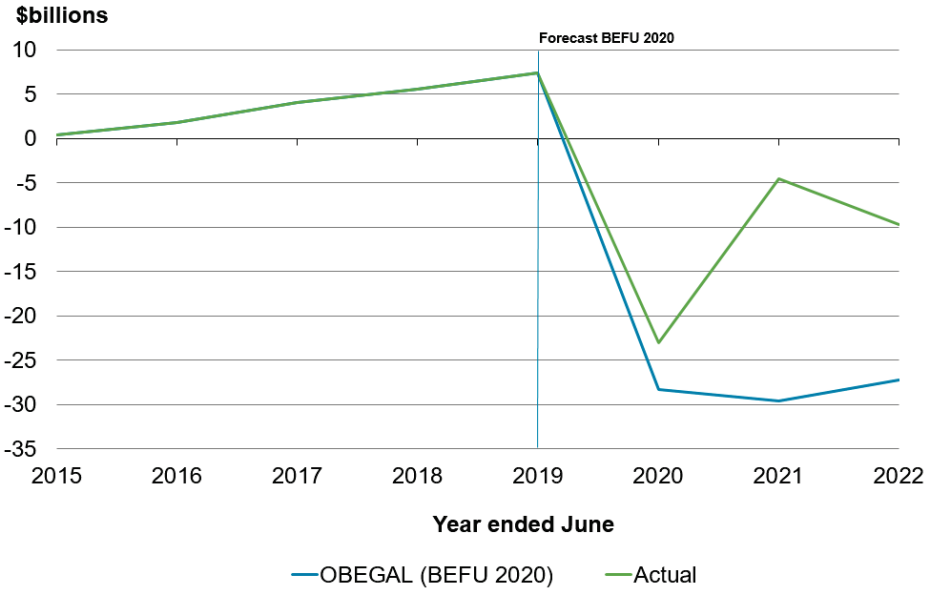
The resilience of the economy led to a smaller impact of COVID-19 on the government's balance sheet than initially forecast. After the initial shock in the second quarter of 2020, New Zealand's real GDP rebounded rapidly. By September 2020, real GDP was already above pre-COVID levels.

However, the economic disruption of COVID-19, coupled with the Government's fiscal response, still had a significant impact on the government's balance sheet and fiscal position. As observed in the Treasury's Investment Statement 2022, some of the most relevant effects of the pandemic on the government balance sheet were: a significant increase in debt, changes to the composition of debt (making government debt-servicing costs more sensitive to changes in interest rates), and new assets and liabilities (eg, the $1.6 billion of loans made to companies under the Small Business Cashflow Scheme and $2.9 billion of loans through the Business Finance Guarantee Scheme) (the Treasury, 2022).

At the onset of the pandemic, operating deficits (OBEGAL deficits)[73] were forecast as higher government spending was required to cushion the blow of the pandemic, and less tax revenue was anticipated due to the disruption of economic activities. Nonetheless, the economic impact of the pandemic on the government's fiscal position was not as profound as initially expected (see Figure 78).

In the *Budget Economic and Fiscal Update* (BEFU) 2022, we noted that the OBEGAL deficit for the financial year 2019/20 was under $25 billion, recovering in the 2020/21 financial year to less than $5 billion. Following the introduction of additional fiscal support measures in response to disruption caused by the Omicron variant in late 2021 and early 2022, the OBEGAL deficit reached $9.7 billion in the 2022 financial year.

Figure 78 – Operating Balance Before Gains and Losses (OBEGAL) after inter-segment eliminations, forecasts for Budget 2020 and actual compared

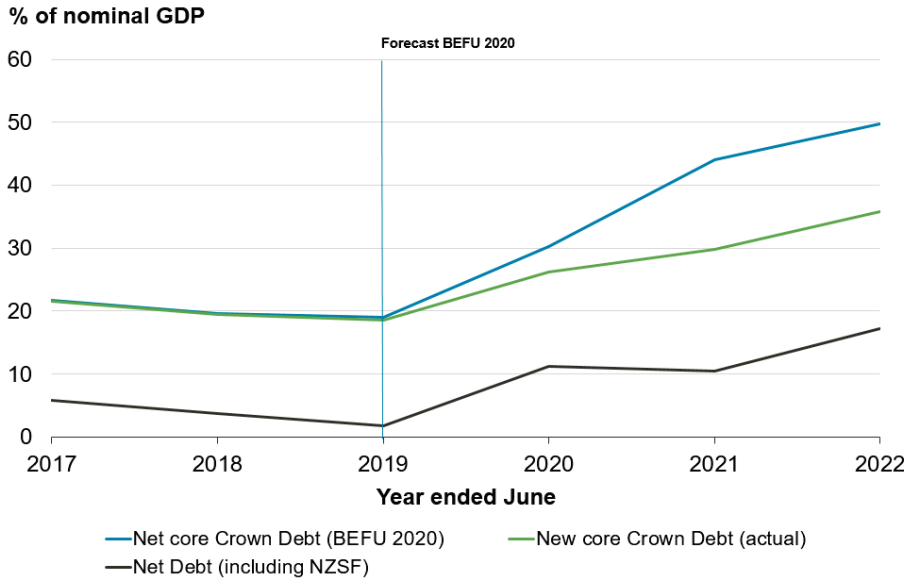


Source: The Treasury

[73] The operating balance before gains and losses (OBEGAL) is an indicator that looks at the difference between government revenue and expenses. See more at Fiscal Indicators and the Financial Statements: A Guide to How Fiscal Indicators are Compiled from the Financial Statements of the Government (treasury.govt.nz).

A similar story is evidenced by the Net Core Crown Debt indicator. While a significant increase in expenditure was required to cushion the blow of the pandemic, debt did not increase to the levels initially expected. As presented in Figure 79, Net Core Crown Debt was 35.9% of nominal GDP for the 2022 financial year, compared to 49.8% forecast in *Budget Economic and Fiscal Update 2020*.

Figure 79 – Net Core Crown Debt (and Net Debt 2022), forecast for Budget 2020 and actual compared[74] (LSF Dashboard indicator)



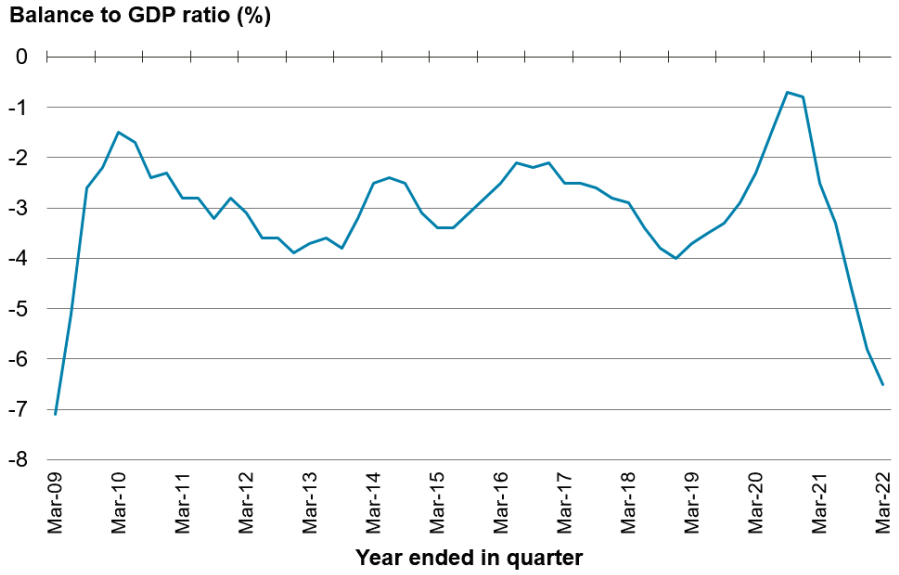
Source: The Treasury

…and also hit our current account deficit…

New Zealand's annual current account deficit has widened sharply since late 2020, from 0.8% of GDP in the year ended December 2020 to 6.5% of GDP in the year ended March 2022 – reaching levels not seen since 2009, after the Global Financial Crisis (see Figure 80). The larger deficit was mainly driven by weaker exports, particularly of services such as tourism and education, that were affected by the border restrictions – and which accounted for a significant part of pre-COVID-19 exports. During 2020 and 2021, external demand for New Zealand's commodity exports was buoyant, prices went up and the terms of trade reached record levels (OECD, 2022). However, export gains were also offset by higher value of imported goods, which reflected the strong domestic demand and higher international freight costs (BNZ, 2022).

74 In 2022, the Government broadened the Net Debt indicator used in the communication of its fiscal strategy. Previously, Net Core Crown Debt was used and this has now been broadened to include core Crown advances, Crown entity borrowings and the financial assets and borrowings of the New Zealand Super Fund. These changes bring New Zealand's net debt indicator closer to international norms, allowing for better comparison of fiscal sustainability against other countries (the Treasury, 2022a). For comparability with previous forecasts, this report refers to Net Core Crown Debt, although Net Debt is still captured in the figure.

Figure 80 – Annual current account balance to GDP ratio (%), year ended in quarter March 2009 to March 2022

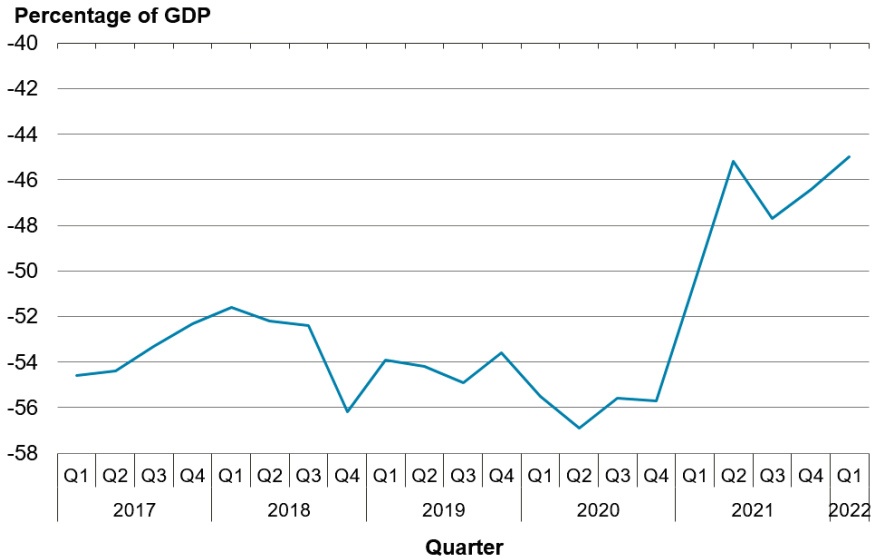


Source: Stats NZ (Balance of payments and international investment position)

…but our Net International Investment Position has improved.

Nonetheless, New Zealand's Net International Investment Position (NIIP), defined as the difference between assets and liabilities with the rest of the world, improved markedly following the December quarter 2020 (see Figure 81). By the March quarter of 2022, our NIIP reached the equivalent of -45% of GDP, compared to -50.4% of GDP in the December quarter of 2020 and far from the levels of over -80% of GDP reached in 2009. Analysis by BNZ (2022) suggests an improved NIIP offers some buffer to a period of larger current accounts deficits, which will act to enlarge the net liability position.

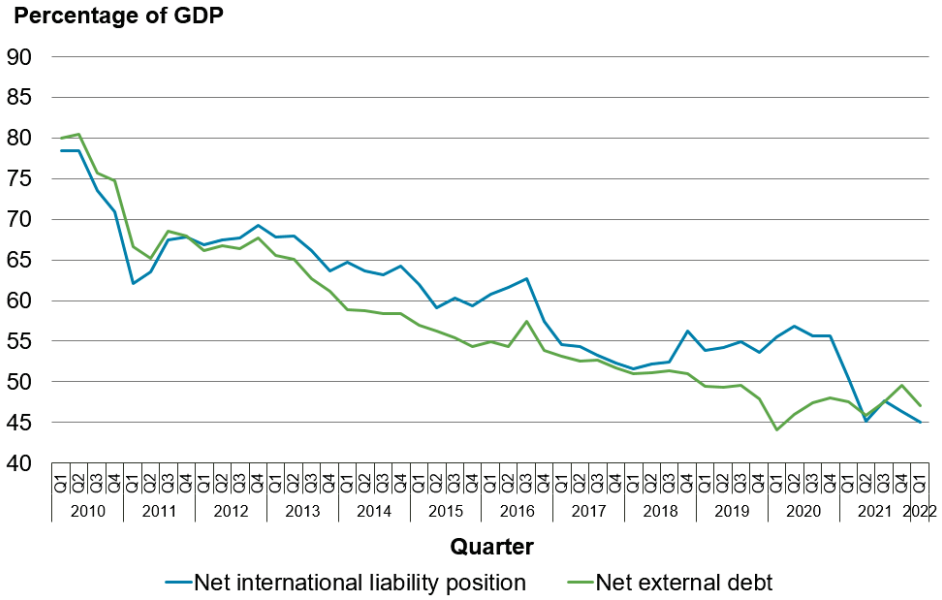
Figure 81 – Net International Investment Position to GDP, ratio (%), Q1 2017 to Q1 2022 (LSF Dashboard indicator)



Source: Stats NZ (Infoshare)

Although New Zealand's NIIP has improved over the past decade, the OECD (2022) notes that net international liabilities remain high by international comparison. However, as shown in Figure 82, the net international liability position contracted between the first quarter of 2021 and the first quarter of 2022 and it is now well below pre-COVID-19 levels (55% of GDP in March 2020 compared to 45% in March 2022). A slight increase in New Zealand's net external debt can be seen since the start of the pandemic.

Figure 82 – Net International Liability Position and net external debt to GDP ratio, Q1 2010 to Q1 2022

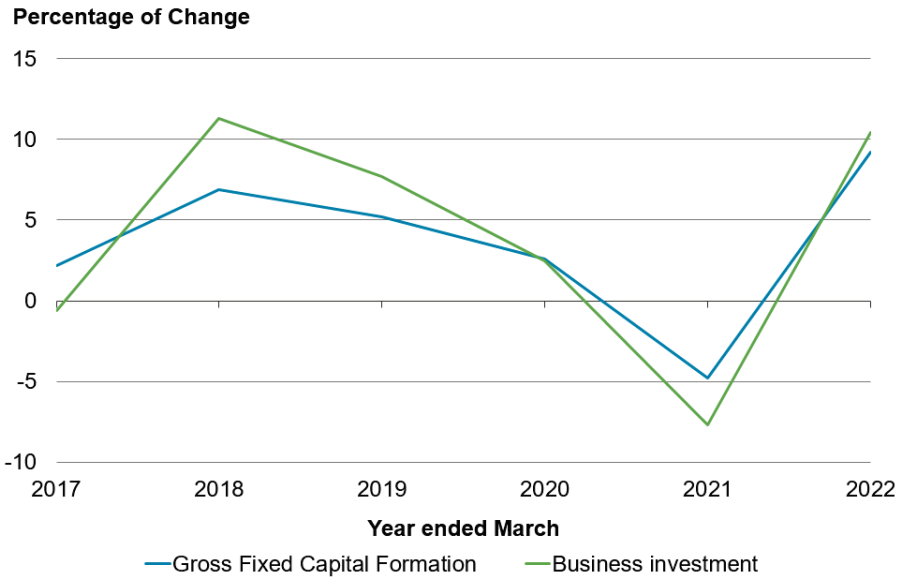


Source: Stats NZ (Balance of payments and international investment position)

Investment rebounded after an initial decline in the early days of the pandemic…

New Zealand's Gross Fixed Capital Formation (GFCF), defined as the production or acquisition of produced assets minus disposals, declined 4.8% in the year ended March 2021 (see Figure 83). This change was mainly driven by a fall in business investment of 7.7% over the same period. However, as the economy recovered, business investment rose sharply in 2021 and grew 10.4% by the year ended March 2022. This was reflected in a 9.2% total increase in GFCF in March 2022 compared to the year ended March 2021.

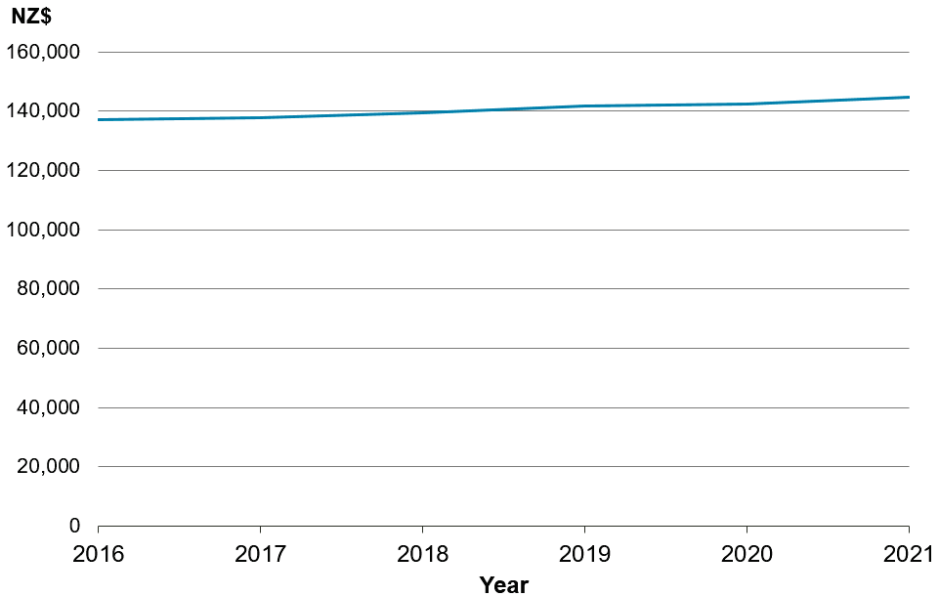
Figure 83 – Gross Fixed Capital Formation, annual percentage change in the annual creation or acquisition of produced assets (LSF Dashboard indicator)



Source: Stats NZ (Gross Domestic Product data)

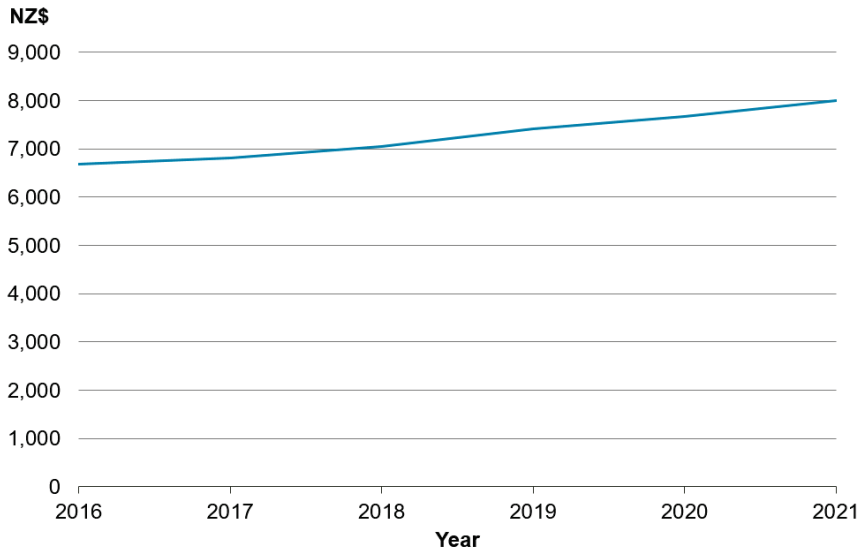
Total net fixed assets per capita and net intangible assets per capita have also been increasing in the last few years and appear to not have been affected notably by the pandemic (see Figures 84 and 85).

Figure 84 – Total net fixed assets per capita, 2009/10 prices (LSF Dashboard indicator)



Source: Stats NZ (System of National accounts)

Figure 85 – Net intangible assets per capita, 2009/10 prices (includes research and development (R&D), software, mineral exploration) (LSF Dashboard indicator)

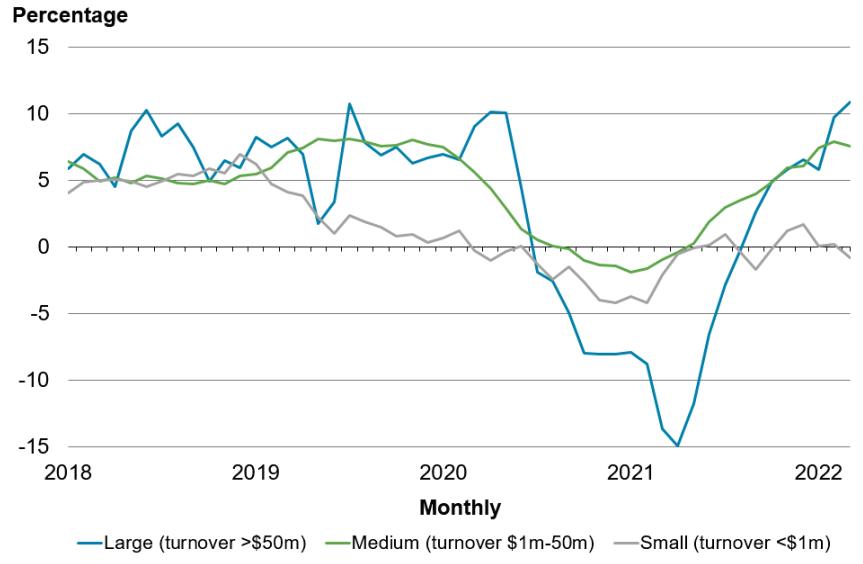


Source: Stats NZ (System of National accounts)

…as business confidence recovered…

According to the Reserve Bank of New Zealand (2022), the uncertainty caused by COVID-19 affected businesses' confidence and tamed their investment intentions in 2020. However, businesses' investment intentions recovered over 2021, as the economy showed signs of resilience and output capacity pressures emerged. After falling in 2020, particularly for larger firms, credit demand grew in 2021 (see Figure 86). The Reserve Bank (2022) also notes that merger and acquisition activity influenced higher borrowing by corporates, as businesses took advantage of the low interest rate environment.

Figure 86 – Annual growth in bank business lending by firm size (excluding agriculture and commercial real estate)



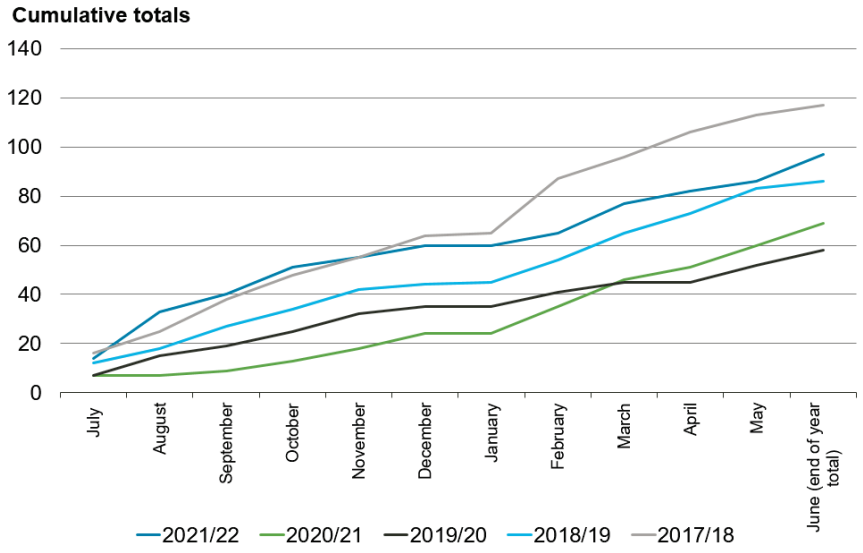
Source: Reserve Bank of New Zealand (Financial Stability Report May 2022)

…and business balance sheets proved resilient.

In He Kāhui Waiora, we noted how the pandemic-related disruptions could reduce business revenue, leave firms' assets under-utilised or 'stranded' and ultimately affect firm's ongoing viability. These initially expected impacts would have reduced New Zealand's financial capital, not only for businesses but also for households and the government through flow-on effects.

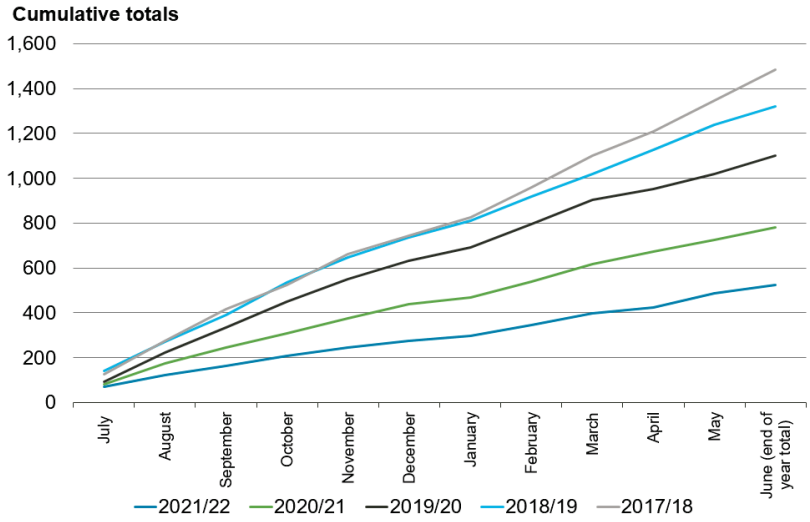
However, businesses' balance sheets have remained resilient over the past two years. As shown in Figures 87 and 88, no significant increase in the number of liquidations or bankruptcies was evident through to the end of the 2021/22 financial year compared to previous financial years.

Figure 87 – Insolvency Trustee Service Administered liquidations, cumulative total for each financial year, 2017/18 to 2021/2022



Source: New Zealand Insolvency and Trustee Service

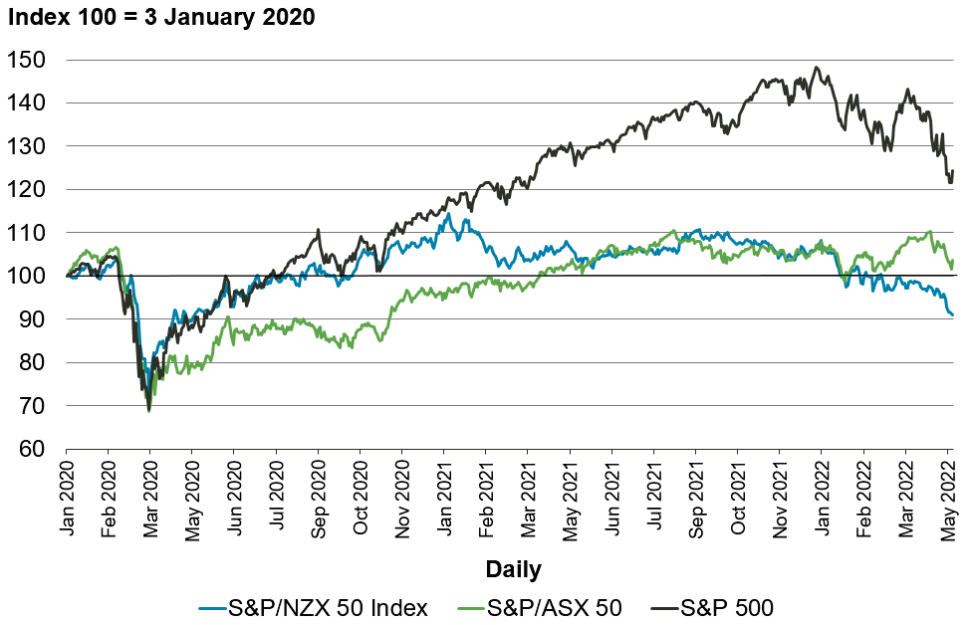
Figure 88 – New Zealand bankruptcy adjudications, cumulative total for each financial year, 2017/18 to 2021/2022



Source: New Zealand Insolvency and Trustee Service

New Zealand's rapid economic recovery was also reflected in the stock market. After a shock in March 2020, New Zealand's stock market (represented in Figure 89 by the S&P NZX50 index, which follows New Zealand's largest 50 stocks) recovered to pre-pandemic levels by November 2020, following a similar path to the S&P500. However, the performance of the New Zealand stock market was weaker in the second half of 2021 and the first quarter of 2022, reflecting, in part, fears about the Omicron outbreak in the country and, more recently, global conditions, such as the Russian invasion of Ukraine, supply chain disruptions and inflation.

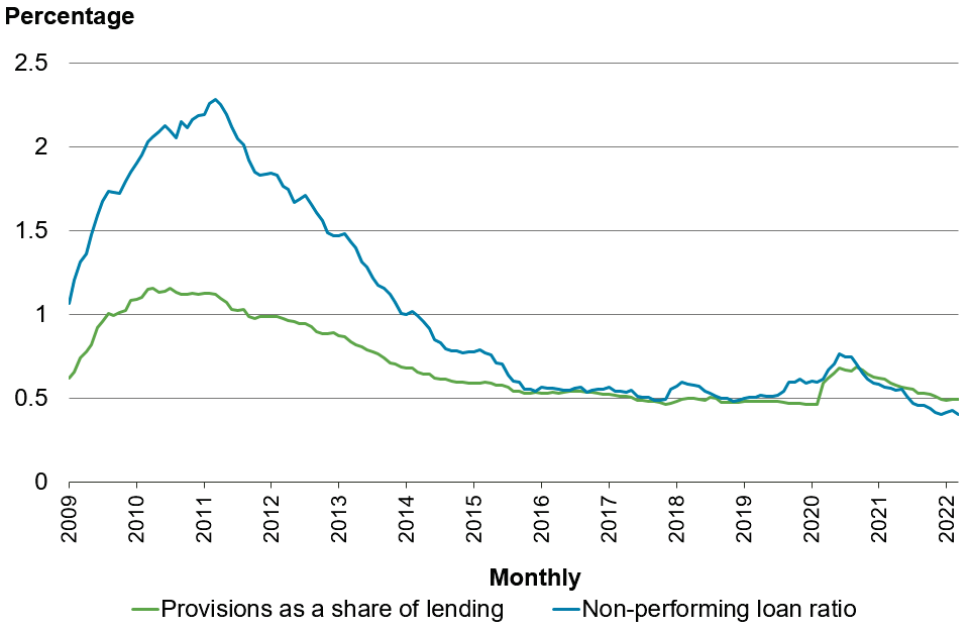
Figure 89 – Stock market performance



Source: Treasury analysis of S&P Dow Jones Indices

In the May 2022 Financial Stability Report, the Reserve Bank of New Zealand (2022) noted that recent robust domestic economic activity had ensured that banks' asset quality remains high. Overall, non-performing loans and arrears remain at low levels. After peaking in 2020, far from levels seen after the 2008 Global Financial Crisis, the proportion of non-performing loans and provisions decreased to pre-pandemic levels (see Figure 90). By the first quarter of 2022, levels of credit stress appeared low even in sectors that had been more adversely affected by lockdowns, the closed border and changing consumer behaviour. After increasing during 2020, commercial banks had continued to reduce loss provisioning, as asset quality remained high.

Figure 90 – Non-performing loans and provisions



Source: Reserve Bank of New Zealand *(Financial Stability Report May 2022)*

Conclusion

In this paper we used the Living Standards Framework to frame an exploration of data trends in wellbeing from the beginning of the pandemic through to the first quarter of 2022. As readers will appreciate, the empirical story is mixed and complex.

On the one hand, some of the data and wellbeing metrics revealed a robust and resilient New Zealand economy during the COVID-19 period, with record levels of employment, resilient household incomes and wealth, rising house prices and all-time high terms of trade. Measures of subjective wellbeing also proved resilient, despite declining slightly as the pandemic prolonged, and New Zealanders suffered fewer road deaths and fewer workplace injuries in 2020.

On the other hand, data reveals a set of negative trends. The pandemic caused disruption to the health system, including access to hospital services, GPs and screening services. Young people experienced higher levels of psychological distress. The rapid increase of house prices is likely to increase wealth disparities between homeowners and renters – particularly affecting young New Zealanders, while inflationary pressures are likely to disproportionately affect low-income households. The education system has also experienced significant disruption and, while there is not yet evidence of strong impacts on education achievement, risks remain that disruption experienced in early 2022 will exacerbate pre-pandemic challenges.

We acknowledge that there is still considerable uncertainty about the longer-term wellbeing effects of COVID-19. It also remains to be seen how these trends will evolve as the pandemic continues to play out in New Zealand. It will be important to monitor trends in the risk areas highlighted in this paper over time to identify potential implications for the sustainability and resilience of wellbeing in New Zealand.

As we noted in He Kāhui Waiora, COVID-19 is a multifaceted challenge, with a range of interconnected wellbeing impacts in the short and longer term. COVID-19 is likely to have contributed to many of the trends outlined in this paper but, as the pandemic did not occur in a vacuum, we cannot know the role it has played related to other factors. There is also uncertainty around the extent to which some of these trends will be transitory or pose longer-term risks to our wellbeing. This paper will not be the final word and we look forward to future studies that help us better understand emerging trends in wellbeing and the role that COVID-19 is playing in those trends.

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