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He Kāhui Waiora: Living Standards Framework and He Ara Waiora. COVID-19: Impacts on Wellbeing

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He Kāhui Waiora: Living Standards Framework and He Ara Waiora

COVID-19: Impacts on Wellbeing

Diana Cook, Phil Evans, Hana Ihaka-McLeod, Kara Nepe-Apatu, Jez Tavita and Tim Hughes

New Zealand Treasury Discussion Paper 20/02

July 2020

DISCLAIMER

This paper is part of a series of discussion papers on wellbeing in the Treasury's Living Standards Framework. The discussion papers are not the Treasury's position on measuring intergenerational wellbeing and its sustainability in New Zealand.

Our intention is to encourage discussion on these topics. There are marked differences in perspective between the papers that reflect differences in the subject matter as well as differences in the state of knowledge. The Treasury very much welcomes comments on these papers to help inform our ongoing development of the Living Standards Framework.

Note: This paper includes data available up to 30 June 2020.

NEW ZEALAND TREASURY DISCUSSION PAPER 20/02

He Kāhui Waiora: Living Standards Framework and He Ara Waiora COVID-19: Impacts on Wellbeing

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AUTHORS

Diana Cook

Deputy Chief Economic Advisor

The Treasury

Phil Evans Principal Advisor The Treasury

Hana Ihaka-McLeod Principal Advisor The Treasury

Kara Nepe-Apatu Principal Advisor The Treasury

Jez Tavita Analyst The Treasury

Tim Hughes Principal Advisor The Treasury

URL

Treasury website at July 2020:

https://treasury.govt.nz/publications/dp/dp-20-02

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Te Puni Kōkiri

NEW ZEALAND TREASURY

New Zealand Treasury

PO Box 3724 Wellington 6008 NEW ZEALAND

Email information@treasury.govt.nz

Telephone 64-4-472 2733

Website www.treasury.govt.nz

Mihi

Ko te Tai Whakarunga,

Ko te Tai Whakararo,

Ko te Tai o Ngā Pūkenga Rangatira,

Ara rā, ko te Tai Tokerau,

Ko te Tai Tonga,

Ko te Tai Hauāuru,

Ko te Tai Rāwhiti e.

Tēnei anō ko Te Tai Ōhanga e mihi maioha atu nei!

Kia piki te kaha, piki te ora, piki te wairua.

Tēnā koutou! Tēnā tātou!

Executive summary

The COVID-19 pandemic is having major impacts on our lives in ways that go far beyond health, extending across all dimensions of wellbeing and all population groups.

This paper presents the results of a 'rapid evidence review' of the potential impacts of COVID-19, and the associated economic recession, on the wellbeing of New Zealanders. The analysis identifies potential wellbeing impacts based on experiences of previous pandemics and recessions, as well as emerging data on and insights into the COVID-19 impacts.

Two frames of analysis – Living Standards Framework and He Ara Wajora

We looked at wellbeing evidence through two frames – the Living Standards Framework (LSF) and He Ara Waiora – to gain further insights from exploring wellbeing from different cultural perspectives and knowledge systems.

He Ara Waiora is centred on a te ao Māori view of wellbeing. It was initially developed for the Tax Working Group by expert Māori thought leaders, Ngā Pūkenga, who continue to work with the Treasury, Te Puni Kōkiri and Te Arawhiti to further develop and apply He Ara Waiora to our policy work. While the principles of He Ara Waiora are derived from mātauranga Māori, many of its elements are relevant to the wellbeing of all New Zealanders.

Key observations and findings from Living Standards Framework analysis

While New Zealand has been relatively successful in minimising the direct health impacts of the disease itself, the full socio-economic consequences of the unfolding recession have yet to be felt:

- The LSF analysis highlights the significant impacts of falling incomes and lost jobs on wellbeing.
- There are risks of flow-on impacts from the recession to other dimensions of wellbeing.
 In particular, the impacts of lost jobs and incomes may compound the impacts on mental health of the disease itself and the pressures from social distancing.
- The crisis may also have disproportionate impacts on existing vulnerable groups, which reinforce existing inequalities.
- However, new groups of people will also be affected, particularly a number of people experiencing economic hardship for the first time as unemployment rises.
- While we do not yet have comprehensive data on the impacts across different population groups, Asian people and young people have been relatively more likely to be covered by the Wage Subsidy. These groups may be vulnerable to unemployment as government support is scaled back given their higher representation in tourism-related sectors.

There is significant uncertainty about the scale of these impacts, and who will be most affected, particularly in the longer-term. Previous experience suggests that a severe recession is likely to have a number of long-term impacts on wellbeing. In particular, COVID-19 and the associated recession may have lasting impacts on the LSF's capital stocks – the assets which underpin wellbeing now and into the future.

The greatest long-term risks are to human capital, through impacts on mental health, education attainment and skills erosion, and to social capital if the impacts of the crisis are perceived to be unfair or not well-managed. Financial capital will be drawn down, perhaps close to exhaustion, for businesses, households and government.

Key observations and findings from He Ara Waiora analysis

He Ara Waiora provides another lens to help us understand the unique ways this crisis has affected Māori, and the ways in which iwi and Māori organisations have responded to the crisis. They moved quickly to shield and support vulnerable whānau in their communities, and particularly their kaumātua, whose health and wellbeing are a priority for whānau, hapū and iwi. The historical memory of previous pandemics, and their role in the experience of colonisation, remains strong.

Some Māori businesses and iwi portfolios have been hit hard, particularly through the downturn in tourism and the drop in lobster exports early in the pandemic. However, many strengths remain. Many iwi and asset-owning whānau operate their businesses with a view to sustainability and broader social outcomes. With assets largely concentrated in primary industries, Māori land-owning enterprises may be well placed to help lead an export-driven recovery.

He Ara Waiora also offers principles, derived from mātauranga Māori, to guide the process of policy development to support intergenerational wellbeing for Māori and all New Zealanders. These principles emphasise: co-ordination and alignment; partnership; collective and strengths-based actions; protecting and building mana; and stewardship.

The recovery ahead

COVID-19 will inevitably change many things about our society and economy. Some commentators have speculated that it provides an opportunity to rethink economic structures. In hui with the Treasury, a number of iwi and Māori leaders have recognised the potential for a reset of social and economic conditions to enable them to achieve their wellbeing aspirations. He Ara Waiora emphasises protecting the wellbeing of Te Taiao (the natural world or environment) through the economic recovery and redressing entrenched inequalities to restore mana to communities and to people.

There remains considerable uncertainty on how the crisis will play out in the coming weeks, months and years. The Treasury will continue to use the LSF and He Ara Waiora to help us understand the emerging wellbeing evidence and advise the Government on the economic response and recovery.

Ko te whakarāpopototanga matua

He tino kaha rawa te pānga mai o te Urutā Korona ki a tātou, i tua atu i te hauora, ā, ka horapa kau noa ki ngā āhuatanga katoa o te oranga, ki ngā rōpū taupori katoa hoki.

Ka whakaatu tēnei puka i ngā hua o te 'arotake taunaki tere' mō ngā pānga o te Urutā Korona ka puta pea ki te oranga o ngā tāngata o Aotearoa Niu Tīreni, me te timunga taiōhanga ka puta mai hoki. I ahu mai i ngā wheako o ngā urutā me ngā timunga o mua, te tātaritanga e tautohu ana i ngā pānga oranga ka puta pea. Waihoki ka tautohua ngā raraunga me ngā māramatanga e puta mai ana e pā ana ki ngā pānga o te Urutā Korona-19.

E rua ngā anga tātari - ko Te Anga Paerewa Oranga, ko He Ara Waiora

I titiro mātou ki te taunaki oranga mā ngā anga e rua – ko Te Anga Paerewa Oranga, arā, ko te Living Standards Framework (LSF), ko He Ara Waiora hoki – kia whai māramatanga anō i te tūhura i te titiro i te oranga i ngā tirohanga ahurea rerekē, i ngā pūnaha mōhiotanga hoki. Ko te pūtahitanga o He Ara Waiora ko te tirohanga o te ao Māori ki te oranga. I te tīmatanga i whakawhanakehia tēnei mā te Tax Working Group e ngā pūkenga whakaaro Māori, arā, ko Ngā Pūkenga, e mahi tonu ana ki te taha o Te Tai Ōhanga, o Te Puni Kōkiri hoki, o Te Arawhiti hoki ki te whakawhanake tonu, ki te whakamahi tonu i He Ara Waiora ki ā tātou mahi kaupapa here. Ahakoa i ahu mai ngā mātāpono o He Ara Waiora i te mātauranga Māori, he maha ōna āhuatanga ka hāngai ki te oranga o ngā tāngata katoa o Aotearoa Niu Tireni hoki.

He tirohanga, he kitenga matua i te tātaritanga o Te Anga Paerewa Oranga

Ahakoa kua āhua angitu a Aotearoa Niu Tireni kia iti noa ngā pānga kaha o taua māuiui tonu, arā ngā whakaputanga ōhanga porihanga o te timunga taiōhanga kāore anō kia rangona rawatia:

- Ka puta i te tātaritanga LSF ngā pānga taumaha ki te oranga o te heke haere o te moni whiwhi me te kore haere o ngā tūranga mahi.
- He tūraru te puta mai o ētahi pānga i te timunga taiōhanga ki ētahi atu anō āhuatanga o te oranga. Ina koa, ka whakataumahatia atu pea te pānga ki te hauora hinengaro e ngā pānga o te kore haere o ngā tūranga mahi me ngā pēhinga o te tū tīrara.
- Ka pāhikahika pea ngā pānga o te mōrearea ki ngā rōpū paraheahea o tēnei wā, ka whakakaha ai i ngā taurite-kore o tēnei wā.
- Heoi anō, ka pāngia ngā rōpū tangata hou hoki, ina koa ētahi tāngata kua noho pōhara ā-ohaoha mō te wā tuatahi, i te piki haere o te koremahi.
- Ahakoa kāore anō kia tae mai ki a mātou he raraunga whānui mō ngā pānga tuari, e tinga ana ka kapia ngā tāngata Āhia, ngā rangatahi hoki ki te Pūtea Tāpiri Utu Kaimahi. Ka paraheahea pea ēnei rōpū kia noho koremahi i te iti haere o ngā Pūtea Tāpiri Utu Kaimahi, nā te tokomaha atu o aua rōpū i ngā rāngai tāpoi.

He tino kino te rangirua mō te taumaha o ēnei pānga, ko wai mā ka kaha rawa atu te pāngia, ina koa i te wā roa. Nō te āhua i kitea i mua, e tinga ana ka puta ētahi pānga oranga wā roa i tētahi timunga taiōhanga e pēnei ana te taumaha mā te heke o ngā rawa kei te pūtake o te oranga.

Ko ngā tūraru mō te rawa tangata, ngā mea kino rawa wā-roa, mā ngā pānga ki te hauora hinengaro, ki te whai mātauranga hoki, me te memeha haere o ngā pūkenga, tae ana ki te rawa pāpori ki te whakaarotia kāore i te tika, he ngoikore rānei te whakamāmā i ngā pānga o te mōrearea. Ka tīkina atu te rawa pūtea mā ngā pakihi, ngā kāinga, me te Kāwanatanga, kia tata pau pea.

Ko ngā tirohanga me ngā kitenga matua nō te tātaritanga o He Ara Waiora

Ka rato He Ara Waiora i tētahi arotahi anō hei āwhina i a tātou ki te whai mārama ki te pānga motuhake o tēnei mōrearea ki a ngāi Māori, ā, ki ngā mahi a ngā iwi, a ngā rōpū Māori hoki kua uruparetia e rātou te mōrearea. He kakama tā rātou tiaki, tautoko hoki i ngā whānau paraheahea i roto i ō rātou hapori, ā, ina koa ō rātou kaumātua, i te whakaarotau o tō rātou hauora, oranga hoki ki te whānau, te hapū, me te iwi. E kaha ana te pupuri tonu ki te maumahara ki ngā urutā o mua, me tō rātou wheako o te tāmitanga.

Kua tino taumaha te pānga atu ki ētahi pakihi Māori, huinga haumitanga ā-iwi hoki, inarā, mā te heke i te tāpoi me te pānga ki ngā hokohoko i te tīmatanga o te urutā. Otirā, ka tū tonu te maha o ngā rīrā. E whakahaere ana te maha o ngā iwi me ngā whānau whai rawa i ngā pakihi me te aro atu ki te toitūtanga me ngā hua pāpori whānui. Nā te mea kei ngā ahumahi matua te nuinga o ngā rawa, he tino āhei pea ngā kamupene pupuri whenua Māori ki te āwhina i te ārahi i te whakaora i te ōhanga ka ahu mai i te hokohoko.

Ka tāpae He Ara Waiora i ētahi mātāpono hoki, nō te mātauranga Māori, hei arataki i te tukanga mō te whakawhanake i te kaupapa here e tautokona ai te oranga o ngā whakatipuranga mō te Māori me ngā tāngata katoa o Aotearoa Niu Tīreni. Ka whakatairanga ēnei mātāpono i te: whakaritetanga me te hāngaitanga; te mahi tahi; ngā mahi ka puta i te rīrā; te tiaki me te hāpai i te mana; te kaitiakitanga hoki.

Ko te whakaoranga kei mua i te aroaro

Kāore e kore ka panoni te COVID-19 i ngā mea maha i roto i tō tātou pāpori, ōhanga hoki. E ai ki ētahi autaua, he mea angitu tēnei wā ki te huri i ngā whakaaro mō ngā anga ōhanga. I te hui ki te taha o Te Tai Ōhanga, i kite ētahi iwi me ētahi kaiārahi Māori ka taea te whakahou i ngā āhuatanga pāpori, i ngā āhuatanga ōhanga hoki kia āhei ai rātou te whakatutuki i ō rātou wawata mō te oranga. Ka āta aro atu He Ara Waiora ki te whakamarumaru i te oranga o Te Taiao (arā, ko te ao māori, te taiao rānei) mā te whakaoratanga ā-ōhanga me te whakatika i ngā taurite-kore kua whakaūngia hei whakatū anō i te mana ki te hapori, me ngā tāngata.

Arā he kaha tonu te rangirua mō te ahu pēhea o te mōrearea hei ngā wiki, ngā marama me ngā tau kei te haere mai. Ka whakamahi tonu Te Tai Ōhanga i te LSF, me He Ara Waiora hei āwhina i a tātou kia mārama ake ki te taunakitanga oranga e puta mai ana, hei aratohu hoki i te Kāwanatanga e pā ana ki te urupare mō te ōhanga me te whakaoranga.

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He Kāhui Waiora: Living Standards Framework and He Ara Waiora COVID-19: Impacts on Wellbeing

Purpose of paper

A pandemic affects everyone in ways that go far beyond health. It is hard to think of a single person, population group, firm, organisation or dimension of wellbeing that has not been or will not be affected by the COVID-19 pandemic, the public health response or the socio-economic consequences. The economic downturn will have pervasive impacts on wellbeing for many New Zealanders and those impacts will fall unevenly.

The Treasury is taking a wellbeing approach in its COVID-19 advice...

Like every government agency, the Treasury is focused on supporting the Government to manage the crisis. In doing so, we remain committed to taking a wellbeing approach to our advice.

This paper documents a 'rapid evidence review' of the potential wellbeing impacts of COVID-19. The Treasury undertook the review to inform its advice to the Government on the COVID-19 response and recovery. Box 1 summarises the New Zealand Government's approach to managing COVID-19 as context for the wellbeing analysis in the following sections.

We explored the wellbeing evidence through two analytical frames: the Living Standards Framework (LSF) and He Ara Waiora – a framework centred on a te ao Māori view of wellbeing (McMeeking et al, 2019). The Treasury uses the LSF and He Ara Waiora to explore wellbeing from different cultural perspectives and knowledge systems. These frameworks help to build the Treasury's capability to ensure that wellbeing and te ao Māori are woven into policy development with integrity.

...including this analysis of the potential wellbeing impacts

The analysis in this paper includes the impacts of COVID-19 itself, as well as the economic, social and environmental impacts of the containment measures and the economic recession. We considered:

 The potential impacts: the ways in which COVID-19 might affect the different dimensions of wellbeing based on New Zealand and international evidence of previous pandemics and recessions. • The emerging impacts: the emerging data on the impacts of COVID-19. Many of the traditional data sources we use for wellbeing analysis, such as the General Social Survey, are not released frequently enough to shed light on COVID impacts. Therefore, we have pulled together data from a number of sources, including administrative data from government agencies and data from the range of surveys that have been launched to measure COVID-19 impacts. There are variations in the data available across the different dimensions of wellbeing and across different population groups. The quantitative data was supplemented by a series of virtual hui (meetings) with Māori and Pacific leaders from around the country.

As a 'rapid evidence review' this paper is not comprehensive of the many ways in which COVID-19 will impact on wellbeing and there is considerable uncertainty about how these impacts will unfold over time. This review will be one input into the Treasury's ongoing advice to the Government on the COVID-19 economic response and recovery.

Box 1: New Zealand's approach to managing COVID-19

In March 2020, Cabinet introduced preliminary measures to combat the global pandemic. These included a directive for every person entering New Zealand from anywhere in the world (excluding the Pacific) to self-isolate for 14 days, travel bans for China and Iran, bans on cruise ships coming to New Zealand, and strict new health measures at the border for people departing to the Pacific.

Closely after that, Cabinet decided to adopt an elimination strategy consisting of a four-level alert system. The elimination strategy does not mean eradicating the virus permanently, which would require a global effort. Rather, it means being confident of eliminating chains of transmission in communities for at least 28 days and effectively containing any future imported cases from overseas.

The Government made \$62.1 billion available to support the COVID-19 response and economic recovery, which consisted of:

- The \$12.1 billion Economic Response Package announced in March 2020, which included
 the Wage Subsidy Scheme, an income-support package for the most vulnerable and an
 initial boost for health services. It also included two schemes to provide direct financial
 support to businesses: the Business Finance Guarantee Scheme and the Small Business
 Cashflow Scheme.
- The \$50 billion COVID-19 Response and Recovery Fund as part of Budget 2020. As at 14 May 2020, the Government had committed \$29.8 billion of the fund, of which \$13.9 billion had been announced before Budget day as part of an ongoing response to COVID-19. That leaves \$20.2 billion of funding remaining.

For more information, see: https://treasury.govt.nz/publications/budgets/budget-2020.

Living Standards Framework

This section explores the potential and emerging impacts of COVID-19 through the lens of the LSF. It highlights that there are likely to be significant and inter-connected impacts on New Zealanders' wellbeing, particularly from the economic recession, which will have different impacts across and within population groups. The greatest long-term risks are perhaps to human capital through impacts on educational achievement and the erosion of skills.

This section explores the potential impacts of COVID-19 in the four dimensions of the Treasury's LSF, which are outlined in Figure 1. The four dimensions are the domains of current wellbeing, the four capitals, risk and resilience and distribution.¹

Figure 1: The Treasury's Living Standards Framework



This paper also includes an analysis of the impacts of COVID-19 on 'collective structures', which include families/whānau and households, iwi and civil society, central and local government, firms and markets, and international institutions.

3

For more information on the Living Standards Framework see: https://treasury.govt.nz/information-and-services/nz-economy/higher-living-standards.

We are considering adding collective structures to the LSF as part of a planned refresh of the framework in 2021, with the aim of better reflecting:

- Child wellbeing: recognising child wellbeing is dependent on families/whānau and other collectives.
- Culture: recognising the critical role of collectives, values and beliefs in the
 wellbeing of many New Zealanders, and that the strength of the collective is
 particularly acknowledged and valued in Māori and Pacific communities.

This is evolving work and we aim to publish more on collective structures as part of our wider work to refresh the LSF later this year.

Impacts on current wellbeing: the 12 domains

The analysis of previous pandemics and recessions suggests that there is likely to be a range of interconnected impacts across the LSF's 12 wellbeing domains (as shown in Figure 1). There were some positive consequences of social confinement, including reduced air pollution, more time spent with family, a greater sense of social cohesion and new ways of working remotely and flexibly. However, these positives must be set against the very large negative impacts, particularly those driven by the economic recession.

This section does not cover all of the wellbeing domains in Figure 1. It looks at the impacts on selected wellbeing domains where evidence of previous pandemics or recessions, or emerging data, suggests the impacts may be most significant. These are: income and consumption; jobs and earnings; health; safety and security; and subjective wellbeing. Knowledge and skills, social connections and environment are explored in the 'Impacts on long-term wellbeing: the capitals' section, under the relevant capital.

Incomes will be hit by the economic recession...

The most significant impacts of the crisis will come from the economic downturn. The Treasury's main economic forecasts in Budget 2020 show real GDP (gross domestic product) contracting by close to one-quarter in the June 2020 quarter. While economic activity will recover as restrictions are lifted, real GDP is still forecast to be around 10% lower by the end of 2020 than was expected at the end of 2019 (see Figure 2).²

Domestic economic activity has been stronger than anticipated in Budget 2020 and the extension of the Wage Subsidy Scheme has contributed to a larger increase in government spending than assumed in the Treasury's Budget forecasts. However, these positives have been broadly offset by a weaker global outlook (the Treasury, 2020). While there is substantial uncertainty about both the depth and the duration of the downturn and the strength of the recovery, it is likely that New Zealand will see a deeper economic contraction than we have seen in our recorded history.

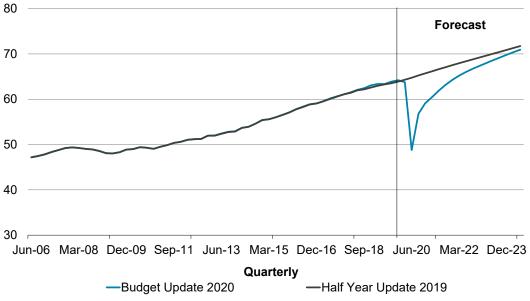
He Kāhui Waiora: Living Standards Framework and He Ara Waiora COVID-19: Impacts on Wellbeing

The Treasury's Budget forecasts include one month at Alert Level 4 and assume one month at Alert Level 3, followed by the remainder of the year to March 2021 at Alert Levels 1 or 2. Border restrictions are assumed to remain in place until the end of the March 2021 quarter. The main economic forecasts assume approximately \$35 billion of discretionary fiscal support, alongside significant monetary policy stimulus. For more information, see: https://treasury.govt.nz/publications/efu/budget-economic-and-fiscal-update-2020.

There is likely to be a cyclical impact on productivity as firms' output tends to fall more – or more quickly – than their capacity to adjust their cost structures. However, there is uncertainty as to whether the pandemic will lead to long-term declines in productivity or incomes. It will depend on the long-lasting impacts of the crisis on factors such as innovation, investment, human capital and uncertainty.

Figure 2: Treasury Budget 2020 forecasts: Real GDP

\$billions (2009/10 prices)



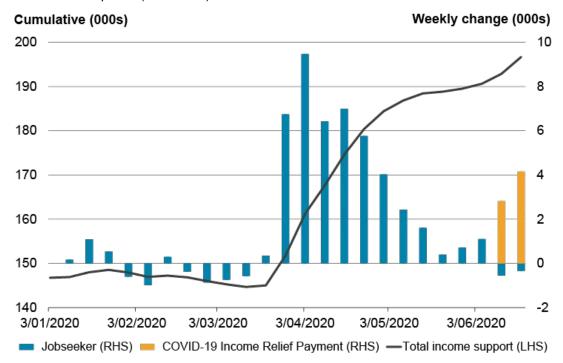
Sources: Stats NZ, the Treasury

... and impacts on jobs will be a key mechanism through which the recession will affect wellbeing

New Zealand and international evidence shows that unemployment has one of the strongest relationships to self-reported wellbeing (eg, Brown et al, 2010 and Diener et al, 2018).

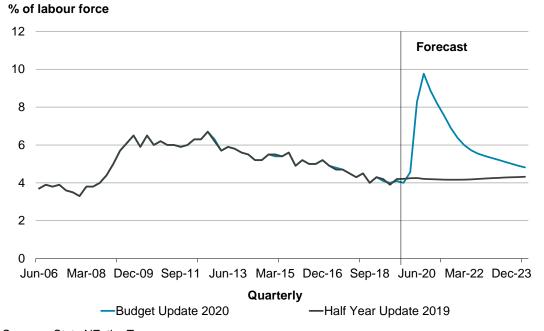
The number of Jobseeker Support recipients has increased (see Figure 3). The weekly increase in the number of recipients has been declining as we move down the Alert Levels and the number of people on Jobseeker Support has fallen over the first two weeks of the introduction of the COVID-19 Income Relief Payment (CIRP), caused by people transferring onto the CIRP. However, the total number of people receiving income support (Jobseeker and CIRP) has continued to increase.

Figure 3: Jobseeker and Income Support recipients Number of recipients (thousands)



Source: Ministry of Social Development

Figure 4: Unemployment rate



Sources: Stats NZ, the Treasury

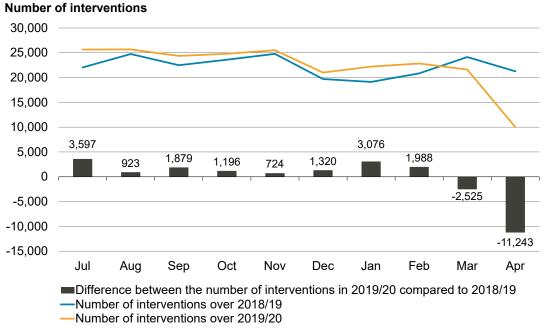
The health impacts extend beyond COVID-19...

New Zealand has experienced only a low number of COVID-19 deaths. As of 30 June, there have been 1,526 confirmed and probable cases of COVID-19, of which 1,484 people have recovered and 22 people have died (Ministry of Health, 2020a).3

...with some delays in treatment...

The lockdown had some direct health impacts. There is some risk of delayed diagnosis of severe conditions depending on the extent to which the lockdown discouraged people from accessing primary care. There was also disruption in planned hospital care and outpatient appointments (see Figure 5).4 These delays may lead to poorer health outcomes depending on how rapidly the health sector can clear the backlog now that we have returned to Alert Level 1.

Figure 5: Planned health care interventions Number of planned health care interventions (such as elective inpatient surgeries and minor procedures)



Source: Ministry of Health

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For updates since this paper was finalised see: https://covid19.govt.nz/updates-and-resources/data-andstatistics/covid-19-data/

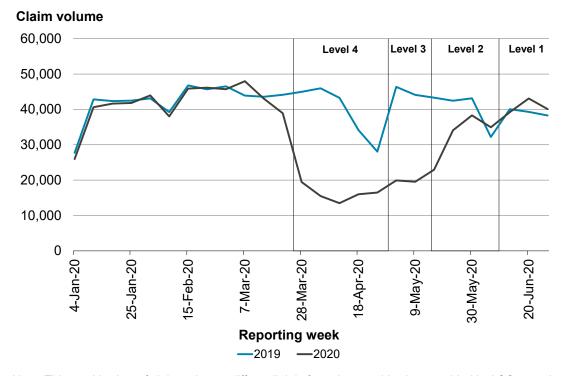
Ministry of Health data shows that to the week ending 21 June approximately 8,200 Planned Care inpatient surgeries, 10,900 Planned Care minor procedures, 500 other inpatient surgeries, 55,100 First Specialist Assessments and Follow-ups, 12,200 diagnostic scans (CT, MRI, ultrasounds), 3,300 endoscopy procedures and 26,700 other outpatient appointments were deferred due to COVID-19.

...and, on the flip-side, a temporary fall in accidents...

On the flip-side, there is some evidence of healthier behaviours during COVID-19, although it is self-reported and mixed (see Box 2). In addition, the Accident Compensation Corporation's (ACC's) new injury claim numbers suggest a fall in accidents during the lockdown, although accidents tracked back up to normal levels as we moved down the alert levels (see Figure 6).

Some accident types, such as traffic accidents, tend to fall in recessions (eg, Ruhm, 2015). However, abstracting from these cyclical impacts, lower levels of GDP may translate into lower life expectancy over time. One study suggests a 10% fall in GDP could lead to a fall in life expectancy of 1.4 years (Gibson, 2020).

Figure 6: ACC injury claims Weekly registration volumes in 2019 and 2020



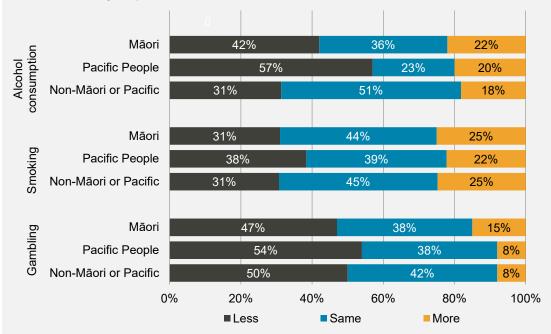
Note: This weekly view of claim volumes differs slightly from the monthly view provided in ACC reporting. The weekly information enables more frequent reviews of trends, but is extracted on a slightly different basis from official monthly claim volumes.

Source: ACC

Box 2: Did people behave in healthier ways during the lockdown?

There were some signs of healthier behaviour during the lockdown. Generally, a higher proportion of people said they were drinking, smoking or gambling less during the lockdown period than previously (see Figure 7).

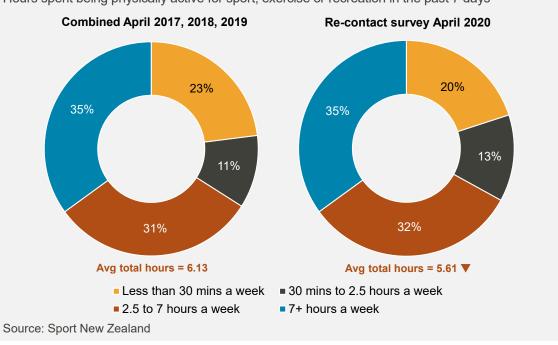
Figure 7: Levels of drinking, smoking and gambling during the lockdown Percent of survey respondents who said less, same or more



Source: Health Promotion Agency (2020)

There was also a self-reported increase in weekly participation in any physical activity for the purpose of sport, exercise or recreation during the lockdown; ie, more adults did some activity during lockdown (generally walking). However, the total time spent being physically active for the purpose of sport, exercise or recreation actually declined significantly (see Figure 8), particularly among males, younger people and adults from high deprivation areas.

Figure 8: Time being spent active Hours spent being physically active for sport, exercise or recreation in the past 7 days

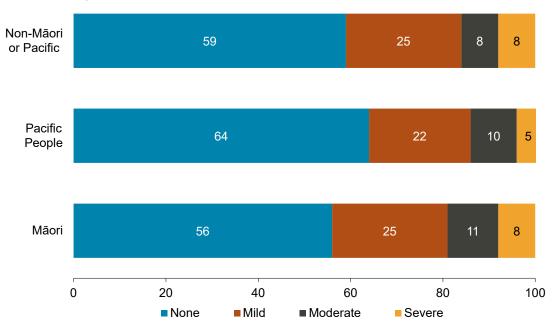


...but with mental health challenges potentially the most significant health risk

Evidence from previous pandemics and recessions suggests that the combined impact of the containment measures and the recession will worsen mental health, which may flow though to higher levels of alcohol abuse, chronic diseases, and violence. There are particular concerns for Māori and Pacific people, who have been experiencing increases in the rate of psychological distress since 2011. Children are also among those most at risk of psychological trauma and behavioural difficulties, which may have long-term impacts on their wellbeing (Ministry of Social Development, 2020a).

Emerging evidence of the mental health impacts is mixed. The Ministry of Health's COVID-19 Wellbeing Survey suggests that anxiety and depression symptoms were stable during the lockdown period (Ministry of Health, 2020b). A Health Promotion Agency Survey (2020) found that 17% of respondents experienced moderate to severe psychological distress during the lockdown (see Figure 9). While we are not able to compare these survey results with pre-COVID-19 figures, mental health phone lines have been reporting increases in demand. There remains a risks that problems will emerge as the economic consequences of the crisis persist.

Figure 9: Rates of psychological distress Percent of respondents



Source: Health Promotion Agency (2020)

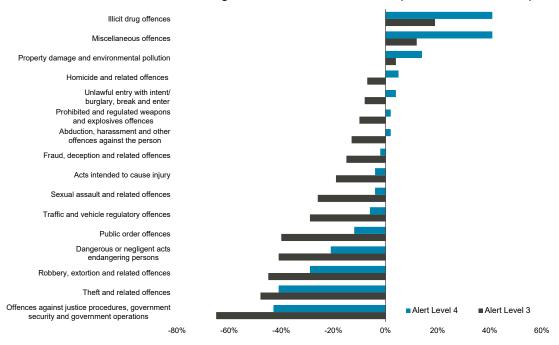
The biggest impact on safety and security is the risk of higher rates of domestic violence

Most criminal offences were down during the Alert Level 4 period compared with a baseline four-week period just prior to the lockdown. Almost all offences increased in Alert Level 3 compared to Alert Level 4, but the overall number of offences were still lower than in the pre-COVID-19 period (see Figure 10).

The experience of previous pandemics and recessions suggests a risk of increases in relational and family conflict due to higher stress levels (Ministry of Social Development, 2020a). However, this cannot yet be seen in the available data. Family-violence-related charges were 10% lower in Alert Level 4 than during the previous four weeks (Ministry of Justice, 2020a). Reports of Concern to Oranga Tamariki were down during the lockdown (see Figure 11).

Family harm may have been less visible during high Alert Levels due to limited opportunities to report, and fewer 'societal eyes'. The average number of charges for family-violence-related offences increased in Alert Level 3 to the same amount seen in a normal week (Ministry of Justice, 2020b). There has also begun to be a return to normal levels in Reports of Concern, with some weeks also exceeding last year's figures (see Figure 11).

Figure 10: Charges occurred for offences against justice
Percent difference in number of charges in Alert Level 4 and 3 compared to the baseline period

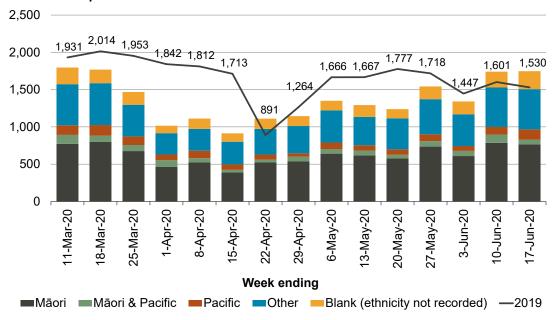


Note: Alert Level 4 occurred from Thursday 26 March to Monday 27 April 2020. This was followed by Alert Level 3 from Tuesday 28 April to Wednesday 13 May 2020. The four-week baseline period used by the Ministry of Justice for this analysis was Monday 24 February to Sunday 22 March 2020.

Source: Ministry of Justice (2020a and 2020b)

Figure 11: Oranga Tamariki Reports of Concern

Number of Reports of Concern



Note: In 2019 there was an increase in Reports of Concern as children returned to school following the Term 1 holidays. Data is not official and has been specifically extracted to assist monitoring of the impact of COVID-19. These weekly numbers are subject to change over time – official data is published on the Oranga Tamariki website each quarter. This data is as at June 25. Dates provided in the graphs indicate the week up to the given date. Comparisons to last year apply to the closest equivalent week. More detail on the data can be found at: https://www.orangatamariki.govt.nz/how-we-get-involved/covid-19/data-snapshot/

Source: Oranga Tamariki

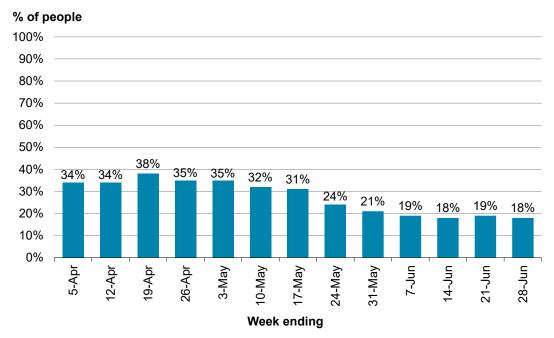
Subjective wellbeing appears to have held up well for most people during the lockdown

The Ministry of Health's COVID-19 Health and Wellbeing Survey suggests that people are mostly healthy, progressively less worried about COVID-19-related issues, getting along well with other household members, and able to support their children's wellbeing across the Alert Levels (Ministry of Health, 2020b). A key exception is loneliness, with around a third of people saying they felt lonely at least a little of the time during the lockdown, although this fell as we moved down the alert levels (see Figure 12).

In addition, certain groups are likely to have had experiences that buck the overall trend (see Armitage and Nellums, 2020 and Orgilés et al, 2020). For example, while loneliness was not a significant issue for the majority of disabled people, many did highlight concerns over mental health issues being exacerbated, heightened anxiety and increased fatique (Office for Disability Issues, 2020).

Figure 12: Levels of loneliness under the lockdown

The proportion of respondents who felt lonely or isolated at least "a little of the time" in the past seven days



Source: Ministry of Health (2020b)

Impacts on long-term wellbeing: the capitals

The LSF includes the four capital stocks (see Figure 1), which are the assets that support our wellbeing now and into the future – both at the individual and country level. Previous experience suggests that a recession of this severity is likely to have a number of long-term impacts, through a deterioration in the capital stocks. This section explores some of the potential impacts on each of the capital stocks (human, social, physical and financial, and natural).

There is a high level of uncertainty on the long-term impacts. They will depend on how long the pandemic lasts, not only in New Zealand but also overseas, and on the extent to which individuals, firms and society can adapt to the changes it brings.

There are risks to human capital from education disruption...

This section focuses on the education and labour market impacts on human capital as the health impacts were covered in the section on current wellbeing.

There are potential risks to student outcomes, particularly widening disparities, from the closures of early childhood education centres and schools during the lockdown.⁵ Schools were able at least partially to offset the impacts of the lockdown through online learning. Children and students have generally responded positively and many

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A number of studies highlight the positive impacts of high-quality early learning services on the development of cognitive and non-cognitive competencies of children from lower socio-economic backgrounds (eg, Kautz et al 2014, Siraj et al, 2017 and Melhuish, 2012). A number of studies find impacts from non-attendance at school on attainment levels and inequalities, including students falling behind during the long summer break (eg, Ministry of Education, 2020, Sims, 2020, Kim and Quinn, 2013, and Alexander et al, 2007).

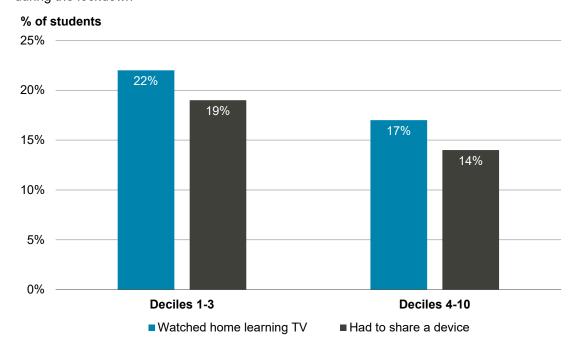
teachers have adapted and innovated. Many Māori communities have also responded with innovation. For example, Ngāti Whātua Ōrākei bought and distributed devices before and during the lockdown to support online learning in their hapū and iwi. The He Ara Waiora section provides other examples of how hapū and iwi have responded to the crisis.

Distance learning may have amplified existing inequities, including disproportionate levels of engagement, particularly for those without access to the internet or digital devices. While the Ministry of Education provided additional devices, an Education Review Office (ERO) survey found that students in low-decile schools were more likely to have had to share devices than those in upper-decile schools (see Figure 13).

Secondary school students reported more obstacles to learning from home than primary students. ERO's survey found that three-quarters of National Certificate of Educational Achievement (NCEA) students (years 11-13) felt they were not able to cope as well as usual with the workload and expectations while learning from home, and that the support they required was not readily available (ERO, 2020).

The experience of the Christchurch earthquakes suggests that the impacts of disruptions can be mitigated by targeted interventions to support the pupils at greatest risk of falling (further) behind (Beaglehole et al, 2016 and Connolly, 2013). However, there may also be educational impacts if the recession leads to increases in material hardship. Children who experience material hardship have worse cognitive, social, behavioural and health outcomes than those who do not, both during childhood and into adulthood (Ministry of Social Development, 2020a, OECD, 2016, Boston, 2014 and Duncan and Murnane, 2011).

Figure 13: Percent of students who had to share a device and who watched home learning TV during the lockdown



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⁶ For example, see: https://sites.google.com/ptengland.school.nz/four2020/corona

Tertiary education learners are also at risk of poorer outcomes due to the disruption caused by the lockdown, increased financial strain and in some cases provider closure. These risks are likely to affect learners from low socio-economic backgrounds disproportionately, as they are less likely than others to have financial support from their families. On the flipside, the tertiary education sector can also provide New Zealanders with opportunities to upskill, particularly those who have lost their jobs due to COVID-19.

...and the long-term impacts on people's employment and earning prospects

Labour market impacts also have the potential to erode human capital:

- Large increases in unemployment in recessions can result in long-term and persistent unemployment due to the decay of labour market skills (Coles and Masters, 2000), loss of hope among the unemployed (Frese and Mohr, 1987), and labour market discrimination against those who have been out of a job for a long time (Kroft et al, 2013). People with low labour market skills or experience are more susceptible, particularly the cohort of young people entering the labour market in a recession (for example, see Karonen and Niemelä, 2020 and Scarpetta et al, 2010). As Māori and Pacific people have much younger populations, they will also be disparately affected.
- Workers who have industry- or firm-specific skills could also suffer long-term impacts on jobs and earnings if COVID-19 causes changes in the structure of the economy that make their skills obsolete.⁷ Older workers tend to be particularly affected as they have more firm- and job-specific skills than younger workers, so have more to lose if those skills are no longer relevant.

Some of these impacts – on younger and older workers – can be offset by effective job-training and active labour market programmes (Card et al, 2018).

In the medium term migration numbers may fall, with a short-term loss of temporary international workers compounded by a lower inward migration of non-New Zealanders. This could be partially offset by fewer New Zealanders leaving and more expatriate New Zealanders returning. The net impact on human capital is ambiguous, depending on the returning New Zealanders' mix of skills and experience.

Our social capital has helped during the lockdown...

There are also potential impacts on social capital from the crisis. New Zealand has high levels of social capital compared with other OECD countries, including ratings in the top third of countries for trust in others, trust in the Police, and trust in government (OECD, 2020a). This trust is likely to have helped to support the effectiveness of public health measures during the epidemic (Freimuth et al, 2013). There is evidence from the New Zealand Attitudes and Values Survey of an increase in trust in government and sense of community immediately post the lockdown (see Figure 14).

The wages and earnings of displaced workers can still be significantly below expected levels up to 10 years after a job loss. For few examples of New Zealand research, see: Dixon and Maré, 2013; Dixon and Stillman, 2009; and Hyslop and Townsend, 2019. For examples of international research, see Davis and von Wachter, 2011 and Upward and Wright, 2015.

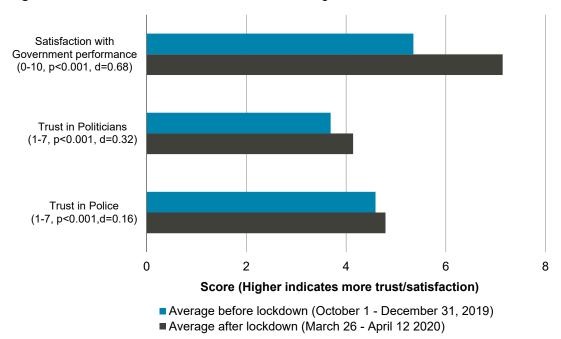


Figure 14: Trust in and attitudes towards nation and government in New Zealand

Note: The p score indicates that all three differences are statistically significant with a high level of confidence. The d score indicates the size of the difference (effect size), with d=0.2 indicating a small difference, d=0.8 indicating a large difference, and d=0.5 indicating a medium difference.

Source: New Zealand Attitudes and Values Survey (Sibley et al 2020)

...but levels of trust vary across population groups

Levels of trust in government are uneven in New Zealand, however, and are fragile among Māori and Pacific communities. Such communities may view contemporary issues and crises, including COVID-19, in the context of New Zealand's colonial history, and be less trusting than others of official responses. The Waitangi Tribunal has found that the legacy of colonisation continues to affect the lived experiences of Māori today, causing low levels of trust in the Crown (The Waitangi Tribunal, 2019).

The partnership between Māori and the Crown, based on the Treaty of Waitangi, is a key component of New Zealand's social capital. The health of this partnership is likely to affect overall levels of trust. As Treaty partners, iwi and Māori leaders have sought to participate in the Government's COVID-19 decision-making. The strengths of iwi and community organisations were highlighted in the immediate pandemic response and the ways in which communities, marae and hapū supported the wellbeing of their whānau. Examples include the provision of food and hygiene packs and vouchers, the establishment of 0800 numbers for support and information, and the provision of social services.

An important consideration will be how to manage the uneven impacts of the crisis for different population groups and generations. There is evidence that younger New Zealanders already have lower trust in each other than older New Zealanders (Institute for Governance and Policy Studies, 2018).

Physical capital may be under-utilised or 'stranded'...

Unlike war or a natural disaster, COVID-19 will leave physical capital relatively unscathed, although there may be some maintenance delay issues. However, firm closures may see underutilised physical capital and potentially 'stranded' or redundant assets in internationally exposed sectors, which may have long-term impacts on their activities. Firm-specific knowledge-based capital, such as customer loyalty, brand reputation, supply chain relationships and market position, could also be damaged. The level of underutilisation and length of time in which assets are stranded are uncertain, given that the trigger points for closure vary by business and some assets could be re-purposed.

Weaker economic activity throughout the recession may lead to reduced business investment, limiting increases in physical capital. However, a reduction in business investment in physical capital may be at least partly offset by increased government investment in infrastructure and capital to support the economic recovery.

... and financial capital will be drawn down, perhaps close to exhaustion, for businesses, households and government

The actual and expected drop in business revenue, and future profit streams, is likely to be the main factor driving firms' financial capital and ongoing viability.

Firms in the tourism, accommodation and hospitality sectors are particularly affected by income drops, and will face longer recoveries as border restrictions and social distancing measures affect sales and operating models. Compounding these difficulties, firms in these sectors often hold relatively low financial buffers. Some sectors are also more vulnerable to losses of income than others, as their debt-servicing costs, as measured by interest coverage ratios, are high relative to profit margins (see Figure 15).

Firms in some sectors, such as retail trade, food service and construction, went into the crisis with relatively better debt serviceability positions, but are still exposed to failure due to the severe drops in income they have experienced. Firms in these sectors also tend to be more leveraged, with few tangible assets with which to secure ongoing funding, putting them at risk of insolvency during a prolonged downturn (see Figure 15).

Equity as % of assets Interest coverage ratio 70% 12% 60% 10% 50% 8% 40% 6% 30% 4% 20% 2% 10% 0% Dairy Food and beverage Construction Retail trade Wholesale trade Other agriculture Manufacturing Forestry and logging nformation media and Fransporting and financial services) Accommodation telecommunications warehousing All industries ě

Figure 15: Firms balance sheet and debt servicing vulnerability by sector

Note: The figure shows the historical average from 2013 to 2018. Equity-to-assets ratio is calculated as shareholders' funds or owners' equity divided by total assets. Interest coverage ratio is calculated as the total income less total expenditure (excluding interest and donations) divided by interest and donations using aggregate industry values.

◆ Interest Coverage Ratio (RHS)

Source: Reserve Bank of New Zealand (2020)

■ Equity-to-Asset Ratio (LHS)

A number of New Zealand households will also experience wealth loss through declines in the value of financial and housing assets. The hit to financial capital may be particularly hard for people nearing or entering retirement as they face the choice of lower retirement incomes or delaying retirement. We may see households increase their savings to rebuild their net worth and protect themselves against future shocks, as they did following the Global Financial Crisis (GFC).

For the household sector as a whole, debt-servicing burdens are not very high by historical standards, reflecting low interest rates. A high proportion of recent entrants to the housing market have taken on debt at high debt-to-income ratios. However, Reserve Bank analysis suggests that the proportion of households with low equity buffers has declined substantially since 2013 and is below what it would have been in the absence of loan-to-value-ratio (LVR) lending restrictions (the counterfactual in Figure 16). A higher proportion of households are now able to absorb a greater decline in house prices without going into negative equity (Reserve Bank, 2020).

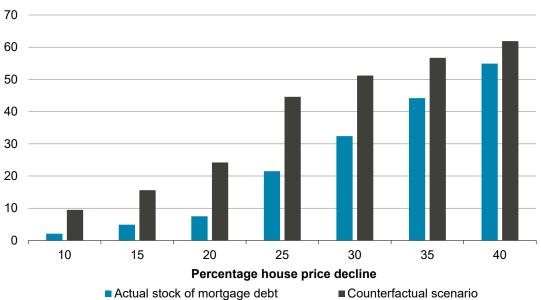
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The share of housing in household assets has increased significantly in the past two decades, and is now close to 50%.

Figure 16: Percent of housing debt at risk of negative equity, given declining house prices



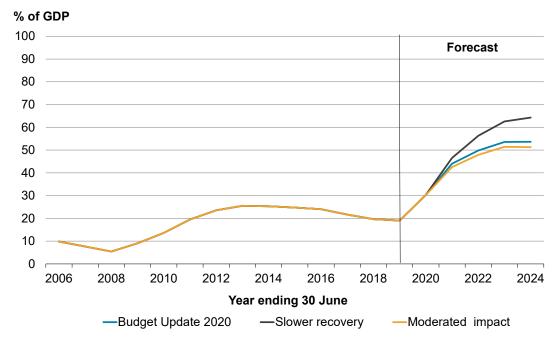


Note: The counterfactual scenario estimates the LVR distribution which would have been likely to occur in the absence of LVR restrictions since 2013. This data is indicative and uncertain. Furthermore, the actual LVR distribution of the current stock of housing debt is reported by banks using the value of houses at the time of their last credit event, eg, when a mortgage was last topped up, rather than the current house value.

Source: Reserve Bank of New Zealand (2020)

The Government will also see a significant deterioration in its financial capital, which will constrain its ability to respond to further shocks. Net public debt is forecast to more than double from current levels of around 20% of GDP under the Treasury's main economic forecast in the 2020 Budget (see Figure 17). Increasing public debt levels reflect both falls in tax revenue from the economic recession and the significant increases in expenditure to cushion the blow of the crisis and to support the recovery.

Figure 17: Public net debt



Note: This chart includes estimated Core Crown net debt under two economic scenarios included in Budget 2020. The slower recovery scenario assumes the economic shock from COVID-19 is more persistent than in the main forecast, including a more gradual recovery in tourism. The moderated impact scenario assumes more effective control over COVID-19 both domestically and abroad. For more information on these scenarios, see the 2020 Economic and Fiscal Update: https://treasury.govt.nz/sites/default/files/2020-05/befu20_1.pdf.

Sources: Stats NZ, the Treasury

The lockdown has had some positive impacts on natural capital...

The lockdown, and a period of reduced economic activity, has had some positive temporary impacts on the environment, via lower traffic and energy use. For example, traffic volumes reduced significantly during Alert Levels 4 and 3 and this was associated with improvements in air quality. However, traffic volumes have increased again as we move down the levels (see Figure 18). The scale of associated reductions in greenhouse gas emissions in New Zealand has yet to be confirmed, but the International Energy Agency forecasts a global average drop of 8% over 2020 (International Energy Agency, 2020).

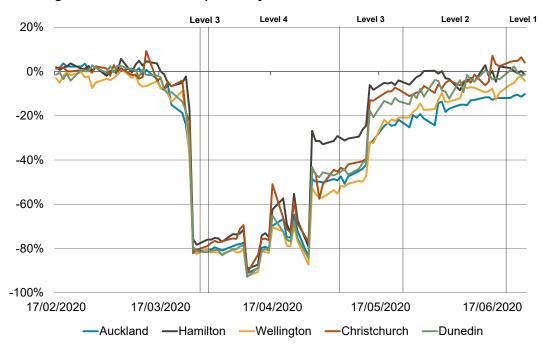
COVID-19 has exposed some vulnerable threatened species populations to predation due to delays in the Department of Conservation's predator control programmes. ¹⁰ The impacts of the delay are difficult are quantify. However, nationally significant populations of highly threatened great spotted kiwi, rock wren, kea, takahē, snails and bats were exposed to a higher risk of stoat predation for at least two months longer than they otherwise would have been.

Overall, concentrations of road traffic pollution in Auckland, Wellington and Christchurch were between 25% and 35% of normal in Alert Level 4 and 47% and 63% of normal in Alert Level 3. See: https://niwa.co.nz/news/seven-weeks-of-clearing-the-air-provides-huge-benefits.

Four aerial 1080 operations, which protect bats, mohua, kiwi and whio on 107,000 hectares of public conservation land, were delayed or in one case cancelled. The worst-affected regions were Southland, Westland and Kahurangi National Park.

Figure 18: Changes in traffic volumes

% change in traffic volumes from previous year



Source: NZ Transport Agency

...but there remain questions about whether they will be sustained in the economic recovery

Because of uncertainty about the path of the pandemic and the durability of behaviour change, such as teleworking and increased walking and cycling, it is not clear whether emission reductions will be sustained to some degree in the longer term, or if emissions will bounce back to trend in the next year or so. If sustained, the reductions would marginally assist in meeting New Zealand's domestic and international emission-reduction targets. On the flipside, economic conditions may affect the ability of firms and households to make investments to improve environmental performance.

Risk and resilience

As part of recovering from the impacts of COVID-19, we will need to rebuild our resilience to future negative events. Risk and resilience is a dimension of the LSF that the Treasury is seeking to develop further.

New Zealand will continue to face unforeseen events...

In recent decades New Zealand has had to deal with several major shocks, including the 1970s' oil crises and the loss of privileged access to the United Kingdom, the 1987 stock market crash and subsequent economic recession, the 2007-08 GFC and recession and the 2011 Christchurch and 2016 Kaikōura earthquakes.

There is no reason to assume that the future will be any different. Indeed, climate change gives us reason to think major shocks might occur more frequently in the future. The upper North Island is already experiencing a severe drought, which will compound the income effects of COVID-19 on the region.

...reinforcing the importance of rebuilding resilience

New Zealand's National Disaster Resilience Strategy (Ministry of Civil Defence and Emergency Management, 2019), which was published less than a year before the onset of the COVID-19 pandemic, highlights that a resilient nation can not only absorb and mitigate the immediate blow of a shock, but also recover rapidly to ensure the country is ultimately stronger after the event. As we move out of the 'absorption' phase of the COVID-19 response, the challenge will be to rebuild resilience to ready ourselves for the inevitable next shock (see Figure 19).

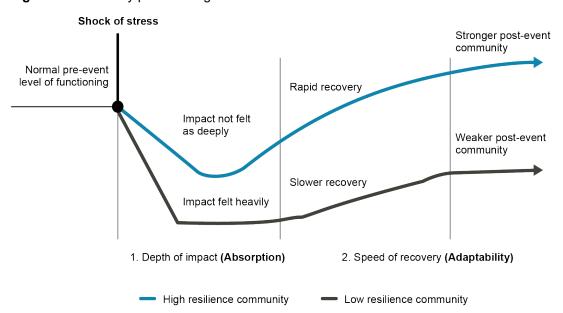


Figure 19: Recovery paths for high- and low-resilience communities

Source: Ministry of Civil Defence and Emergency Management (2019)

Distributional impacts

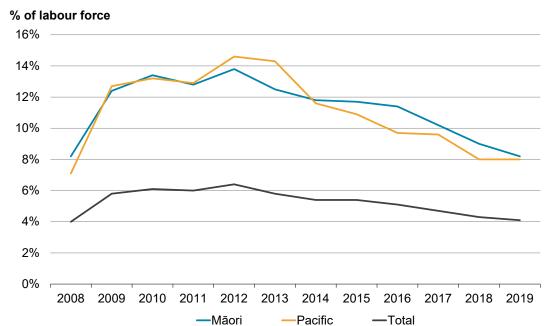
The crisis is likely to have a variety of impacts on different population groups and different worker types. The impacts are complex and there is a lot of uncertainty about who they will affect and how. The impacts could play out over a long period of time and be widespread in the population – as witnessed in the Great Depression (OECD, 2020b).

The crisis is likely to reinforce some existing disparities...

There are risks that COVID-19 will exacerbate inequalities already experienced by many socio-economically disadvantaged groups. Some population groups, such as Māori and Pacific communities, low-income New Zealanders and people with disabilities, have relatively low wellbeing across a number of the wellbeing domains. These groups are also often hit the hardest in recessions.

Previous recessions, for example, have had far more severe impacts on Māori and Pacific employment rates than on those of the total population (Cochrane and Pool, 2017). Figure 20 shows that after the GFC it took 10 years for the Māori and Pacific peoples unemployment rate to recover to around its previous level. Young people also tend to be particularly affected in economic recessions.

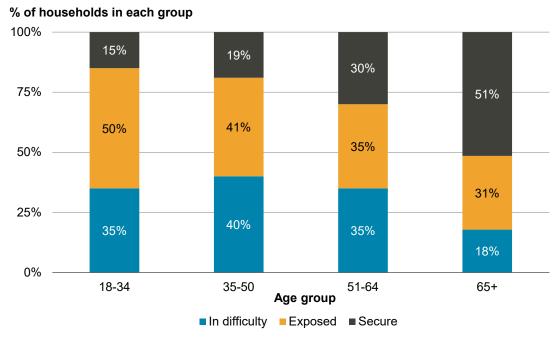
Figure 20: Unemployment rate for Māori, Pacific and total New Zealand population



Source: Household Labour Force Survey (annual average figures), Stats NZ

More than half of New Zealanders are at risk of slipping into poverty if they lose their income for three months. 11 Young people are less financially secure (see Figure 21). Figure 22 shows there were significant increases in Special Needs Grants for food during the lockdown period, although the number of grants came back a bit in May. The extent of any continued need for support will depend on the depth and duration of the economic recession.

Figure 21: Financial situation of households by age groups

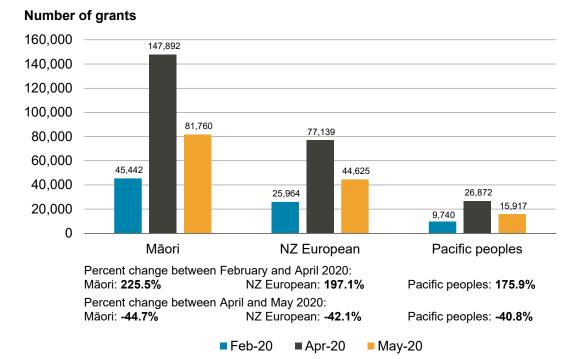


Note: The survey was in the field 14-28 April 2020.

Source: Galicki (2020)

A key driver of financial insecurity is high housing costs: 40% of households in the bottom two income quintiles have housing costs that are over 30% of their incomes.

Figure 22: Special Needs Grants for food



Source: Ministry of Social Development: https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/statistics/benefit/2020/monthly-public-update/monthly-benefits-update-april-2020.pdf

The Child Poverty Report, published as part of the 2020 Budget, suggests that rates of child poverty, as measured by material hardship, are expected to rise sharply. ¹² Material hardship is particularly sensitive to economic changes, and rates rose strongly in New Zealand during and after the GFC before falling back to their pre-GFC rates over a few years.

...but there may also be impacts on new groups of people

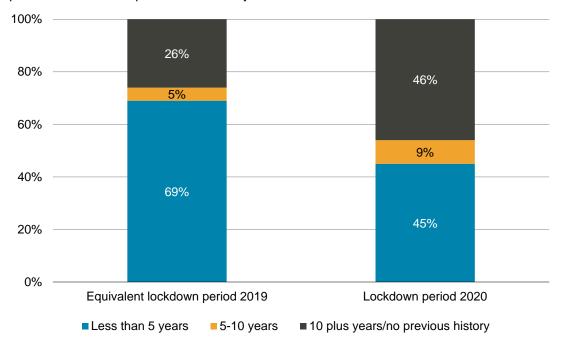
There are also new groups who will be affected – in particular, a number of people experiencing sudden, significant economic hardship for the first time as unemployment rises. For example, new applicants for Jobseeker Support have different characteristics from applicants in normal economic conditions. These new applicants come from higher-earning roles, are more likely to be young and non-Māori, and have had no previous contact with the Ministry of Social Development (see Figure 23).

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¹² Child poverty measures that compare household incomes with a fixed threshold are also expected to increase as reduced employment and earnings flows through to reduced household incomes for households currently above the poverty line. However, measures that compare income to the median income show more muted increases, show no increase at all, and even sometimes show a small fall. This is because median incomes are expected to fall faster than low incomes. For more information, see: https://budget.govt.nz/budget/2020/wellbeing/index.htm.

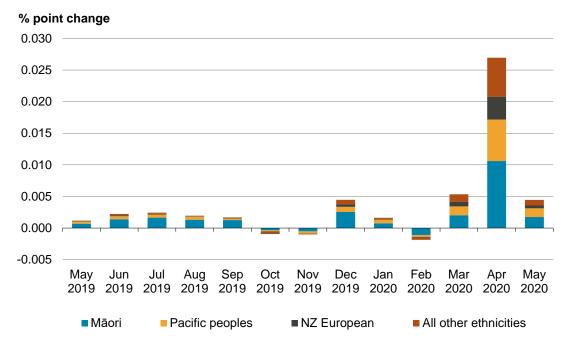
Figure 23: Comparison of new Jobseeker Support Work-Ready recipients during the lockdown period in 2020 and equivalent in 2019 by time since last on a benefit



Source: Ministry of Social Development (2020b)

However, Māori and Pacific people still have higher rates of unemployment than other ethnicities. The number of Māori and Pacific people receiving Jobseeker Support as a percent of their populations has also increased more than other ethnicities, both in the past year and during the crisis (see Figure 24).

Figure 24: Jobseeker Support Work Ready Recipients by ethnicity Monthly change in proportion of ethnicity population receiving Jobseeker Support



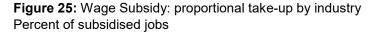
Sources: Ministry of Social Development, Stats NZ

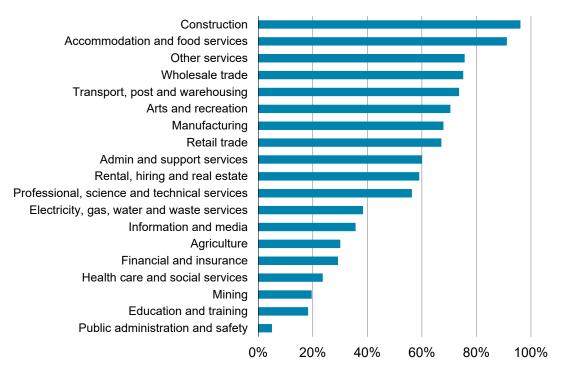
An analysis of emerging data on potential labour market impacts across different population groups...

Wellbeing is significantly affected by changes in employment, although other impacts of the economic recession are also important. This section shares some preliminary analysis of the potential distributional impacts on employment based on the emerging data available on changes in Jobseeker Support recipients and on COVID-19 Wage Subsidy applications. We recognise that this does not provide a complete picture of the level or distribution of employment and wage impacts, as they are biased by the eligibility criteria for these benefits. However, the data provides some timely initial insights until more comprehensive data becomes available.

...shows differential impacts across sectors...

The impacts on different population groups vary depending on the extent to which they work in the sectors and regions most affected by the crisis. The Wage Subsidy take-up rates have varied significantly across sectors (see Figure 25) and regions (see Box 3). There have also been variations across sectors in the extent to which the Wage Subsidy compensated workers for lost earnings. While 22% of overall employees experienced a drop in pay of more than 25%, ¹⁴ the rate was 30% in the construction sector and as low as 15% in some others (see Figure 26).



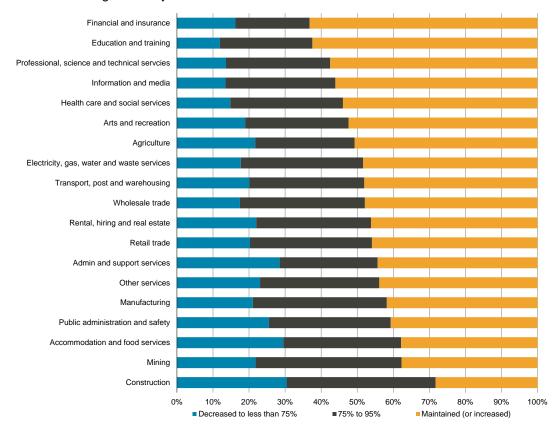


Source: Integrated Data Infrastructure (IDI), analysis by Analytics & Insights, the Treasury

The Treasury Wage Subsidy analysis is based on paid Wage Subsidy applications as at 25 May 2020 for unique employee jobs, where the employers were found in the 2020 Inland Revenue data. Take-up rates were calculated by comparing the number of unique employee jobs that received the Wage Subsidy to the number of unique employee jobs in the March 2020 Inland Revenue data.

¹⁴ In addition, 34% of employees in subsidised jobs experienced a drop in pay of between 5% and 25%, and 44% of employees in subsidised jobs maintained or increased their pay (received at least 95%).

Figure 26: Changes in salary and wages received for jobs subsided by the Wage Subsidy Scheme Ratio of wages and salary earned in April compared to February 2020 for employee jobs that received the Wage Subsidy



Note: These figures refer to changes in salary and wages for jobs where a wage subsidy was paid Access to the data presented was managed by Statistics New Zealand under strict micro-data access protocols and in accordance with the security and confidentiality provisions of the Statistic Act 1975. These findings are not official statistics.

Source: Integrated Data Infrastructure (IDI). Analysis by Analytics & Insights, the Treasury

...which impacts on population groups concentrated in the most affected sectors

Some of the differences in impacts across population groups reflect their relative concentration in the most affected sectors:

• The Wage Subsidy disproportionally covered Asian New Zealanders, and the proportion of Asian people covered by the Wage Subsidy did not decline with age as it did with other ethnicities.¹⁵ Asian people are also more likely than those of other ethnicities to work in the four tourism-related sectors, which will continue to be affected under the lower alert levels.¹⁶ Around 20% work in the tourism-related sectors compared with 16% of Māori and Pacific people and 13% of Europeans.¹⁷

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^{63%} of Asian people were covered by the Wage Subsidy, compared to 57% of Europeans, 54% of Pacific peoples and 53% of Māori.

The sectors that are most dependent on tourism, according to the 2018 Census, are Accommodation and Food Services, Transport, Postal and Warehousing, Rental, Hiring and Real Estate Services, and Arts and Recreation Services.

¹⁷ The source is the 2018 Census (Stats New Zealand).

- Young people were relatively likely to be covered by the Wage Subsidy. They may
 also see longer-term impacts due to their relative concentration in the tourismrelated sectors (see Figure 27). One in five (20%) people under the age of 30 work
 in the four tourism-related sectors. Over half (52%) of people aged 15-19 work in
 these sectors or retail (which will also be affected by a reduction in tourists).
- Female employees were less likely to be covered by the Wage Subsidy than males (50% vs 65%), reflecting their higher representation in sectors with lower take-up rates (eg, education and training and health care and social services) and their lower representation in sectors with higher take-up rates (eg, construction and manufacturing).

% of age group workforce 25% 20% 15% 10% 0% Mining Retail trade Manufacturing Construction Wholesale trade and telecommunications social assistance Other services Accommodation and and warehousing eal estate services Arts and recreation Agriculture, forestry Electricity, gas, water insurance services Professional, scientific and rechnical Services Administrative and Public administration Education and training Transport, postal Health care and Rental, hiring and support services and waste service Financial and nformation media and fisheries food services services and safety ■ 15-19 years ■ 20-29 years ■ 30-49 years ■50-59 years ■ 60+ years

Figure 27: Share of age group workforce by industry

Source: Stats NZ Census 2018

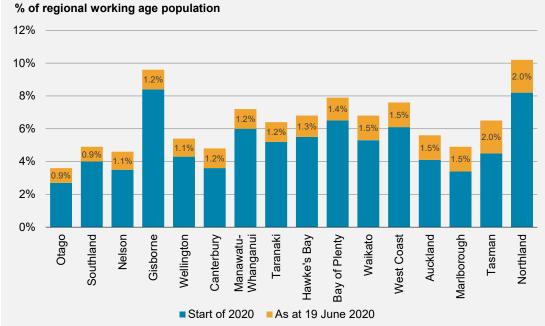
There were also differential impacts within sectors. In particular, self-employed people in some sectors had significantly higher take-up rates than employees in the same sectors (eg, in public administration and safety and in education and training). ¹⁸ People with degrees and post-graduate qualifications had lower take-up rates than people with only school qualifications or no qualifications. By occupation, the highest take-up rates were for technicians and trades workers, machinery operators and drivers, and sales workers. The lowest take-up rate was for professionals.

Wage Subsidy data was linked to the Household Labour Force Survey (Stats NZ) to produce estimates of take-up rates for self-employed people and by occupation and highest qualification. The other takeup rates are based on administrative data in the Integrated Data Infrastructure (Stats NZ).

Box 3: Emerging data on regional labour market impacts

The impacts of unemployment on wellbeing can be amplified when there are spatial concentrations (eg, Saunders, 2002 and Bécares et al, 2013). There have been significant differences in employment impacts across regions, reflecting their different mix of sectors. Regions at the top of the South Island saw large increases in Jobseeker Support recipients but from relatively low levels. In contrast, Northland saw a big increase to an already high rate of unemployment (see Figure 28).

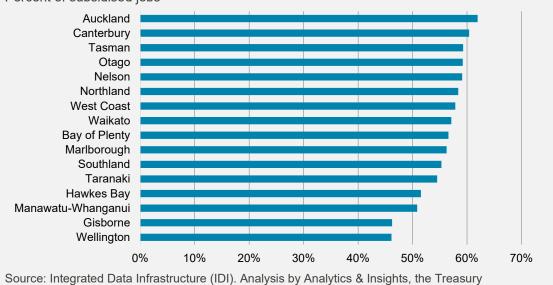
Figure 28: Jobseeker Support recipients as a percent of the 15-64 regional population



Source: Ministry of Social Development

The regional pattern for take-up of the Wage Subsidy is slightly different, with Auckland and Canterbury topping the list (see Figure 29). There is uncertainty on the extent to which the regions with high Wage Subsidy take-up will see increases in unemployment when the Wage Subsidy expires. The regions that rely most on travel and tourism (West Coast, Otago, Nelson and Tasman) may be the most vulnerable to further increases in Jobseeker Support applicants when the Wage Subsidy is no longer available.

Figure 29: Wage Subsidy: proportional take-up by region Percent of subsidised jobs



Role and resilience of collective structures

The 'collective structures' through which wellbeing is generated all have a role in managing the impacts of the crisis. Families/whānau, iwi and civil society and central and local government all compensated for the loss of market activity during the lockdown.

While all parts of society will have had their resilience tested by the initial phase, every part of New Zealand society will also have a role in the recovery:

- For families/whānau and households, the impacts are likely to be greatest on families/whānau who lack collective resources or are simultaneously affected by multiple family/whānau members experiencing unemployment at the same time.
- Iwi and community organisations have responded to meet people's needs in the
 crisis, but may face financial pressure. Iwi with exposure to the tourism and
 commercial property sectors are likely to suffer balance sheet losses, with the
 impacts dependent on the pace of the economic recovery. However, as outlined in
 the He Ara Waiora section, iwi, Māori and Pacific people also have some unique
 assets and resilience factors that can assist in the recovery.
- The impacts will vary among firms in the *market sector*, with firms in the tourism sector, hospitality sector and some parts of the retail sector potentially facing longer-term challenges. While the effects may be most concentrated on these sectors, the greater the recession and the slower the recovery the more that the subsequent loss of demand across the economy will affect all firms in all sectors.
- Within government, individual agencies and sectors are experiencing operational
 challenges to reduce backlogs and meet increasing demands from the impacts of
 the crisis, particularly the Ministry of Social Development and the health system.
 Many local governments are facing sudden losses in revenue, and are constrained
 in their ability to take on debt to smooth out their expenditure. This may be a
 particular issue for smaller local governments and those most exposed to
 international tourism, such as Queenstown-Lakes and the Mackenzie District.
- The crisis is having major global impacts and many multilateral and international institutions, such as the World Health Organisation, are under pressure. Given New Zealand's reliance on multilateral arrangements to secure its wellbeing in the global arena, an important risk of the crisis is a retreat into protectionism and bilateral arrangements, particularly given the crisis is exacerbating pre-existing geopolitical tensions.

Concluding LSF comments

This LSF analysis highlights that there are likely to be interconnected impacts across the different dimensions of wellbeing. The sharp falls we are seeing in income and employment may have flow-on and long-term impacts, particularly on mental health.

There are risks of disproportionate impacts on existing vulnerable groups, which reinforce existing inequalities. However, new groups of people will also be affected, particularly a number of people experiencing economic hardship for the first time as unemployment rises.

There are risks to the four LSF capitals that underpin our wellbeing, particularly human capital due to the impacts on education and the erosion of skills.

Figure 30 provides a summary of the potential impacts across the LSF wellbeing domains and capitals (not all of which have been covered in this section). They are unlikely to be comprehensive. There is also significant uncertainty around the scale of these impacts and who will be most affected, particularly in the longer term.

Figure 30: Potential wellbeing impacts based on previous New Zealand and international experience





Current wellbeing



Civic engagement and governance

- · Increased sense of community.
- · Risk of deterioration in Māori and Pacific fragile trust in government.



Cultural identity

Restrictions in cultural activities.



Environment

- · Positive climate and pollution impacts.
- · Environmental access issues.



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Health

- COVID-19 deaths.
- · Postponement of non-essential treatments.
- Fewer accidents.
- Exacerbate mental health conditions and flow-on impacts.
- · Increase inequities.
- · Mental health impacts and infection risks for the health workforce.



Housing

- · Lower incomes may exacerbate housing affordability challenges.
- · Increased health risk of homelessness and crowded housing.



Income and consumption

- · Significant falls in income.
- Exacerbate New Zealand's high level of financial insecurity for vulnerable groups.
- · Increases in child poverty.



Jobs and earnings

· Sharp increase in unemployment with significant variation in impacts across population groups, sectors and regions.



Knowledge and skills

· Digital divide in learning during lock-down may lead to students falling further behind.



√ √ √ √ Time use

- · Involuntary reductions in working hours.
- · Increased pressure on time of working parents.
- · Potential increases in school leaving and those Not In **Employment or Training** (NEETs).



Safety and security

- · Increases in domestic violence.
- · Most other criminal offences down.
- Reduced access to justice from delays in court proceedings.



Social connections

· Increased loneliness and loss of social connection.



Subjective wellbeing

· Impact varies according to socioeconomic status, unemployment, age and having chronic conditions.

Natural capital

- · Uncertainty as to whether lower emissions and pollution levels will be sustained.
- · Firms or households may be less able to make investments to improve environmental performance.

Financial and physical capital

- · Under-utilised physical capital and potentially stranded assets.
- · Households will experience wealth loss from declines in house values and in the value of financial assets.
- · Sectoral variability in firm viability in face of income drops.
- · Net public debt is forecast to more than double.

Future wellbeing Human capital

- · Impacts on learning from increased material deprivation.
- · Decline in skills from labour force detachment and loss of relevance of firm- or sector-specific skills, with wide variability in impacts.
- · Possible negative impact on life expectancy.

Social capital

- · High levels of social capital helping with the response.
- · Risk of distributional impact and capacity constraints on public services eroding social capital.
- · Potential for groups who already experience discrimination, particularly Asians, to feel more isolated.

Distribution

There are risks that the crisis reinforces some existing inequalities across the wellbeing domains, but there are also likely to be a number of people experiencing sudden, significant economic hardship for the first time as unemployment rises.

He Ara Waiora

This chapter analyses the wellbeing impacts of COVID-19 through the lens of He Ara Waiora, a Māori wellbeing framework. We use He Ara Waiora and the LSF alongside each other to explore wellbeing from different cultural perspectives, values and knowledge systems. While the principles of He Ara Waiora are derived from mātauranga Māori, many of its elements are relevant to lifting the intergenerational wellbeing of all New Zealanders.

The framework

He Ara Waiora is a tikanga-based wellbeing framework...

He Ara Waiora is centred on a te ao Māori view of wellbeing. It was initially developed for the Tax Working Group by expert Māori thought leaders to understand how tikanga Māori could inform a future-focused tax system. The process of developing He Ara Waiora began with kōrero with iwi and Māori thought leaders, academics and business leaders. It involved wider engagement across the country for more than a year. What came out of this process were some deep insights from te ao Māori and a prototype version of He Ara Waiora focusing on Māori wellbeing and the opportunity to lift Māori living standards.

A number of expert Māori thought leaders – Ngā Pūkenga – have remained engaged with this mahi and have further evolved He Ara Waiora. It was subsequently developed contiguously with the LSF and Whānau Ora. This version further explores a mātauranga Māori-sourced conceptualisation of wellbeing. Ngā Pūkenga continue to work with the Treasury, Te Puni Kōkiri and Te Arawhiti as we pilot practical policy tools to implement He Ara Waiora. He Ara Waiora is also being adapted for use by a number of commercial iwi organisations.

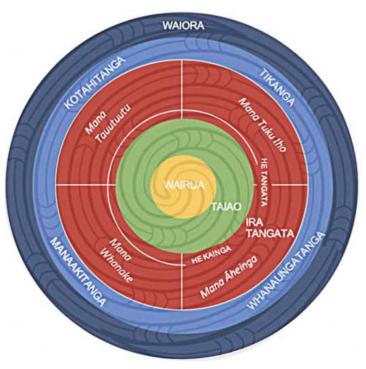
...that presents a holistic, intergenerational approach to wellbeing

He Ara Waiora (see Figure 31) demonstrates the inter-relationship between the elements of waiora (wellbeing), as depicted by the takarangi (connecting spiral pattern) that is overlaid on the framework. The 'means' (kotahitanga, tikanga, whanaungatanga, manaakitanga, tiakitanga) are the tikanga values or principles that help us to achieve the following 'ends':

- Wairua (spirit) is at the centre to reflect that it is the foundation or source of wellbeing. Values, beliefs and practices related to wairua are essential to Māori conceptions of health and wellbeing.
- Te Taiao (the natural world the environment) is close to the centre of the model to reflect the sequence of Māori creation or cosmology. The concept of wellbeing is not human-centric in He Ara Waiora. Rather, the wellbeing of Te Taiao is paramount and a determinant of human wellbeing. Humans have responsibilities and obligations to sustain and maintain the wellbeing of Te Taiao, which is inextricably linked with the wellbeing of the people. Rights and obligations relating to the natural world particularly apply where iwi, hapū and whānau hold mana in a particular area to which they are tied by whakapapa.

• Te Ira Tangata (the human domain) encapsulates human activities and relationships, including the relationships between generations. The concept of mana (power, authority) is seen as key to wellbeing. People thrive when they are empowered to grow and develop, connect with others, and to access the resources they need. Individuals are shaped by their social experiences and circumstances, and their culture. The wellbeing of the collectives such as iwi, whānau/families and communities is therefore vital.

Figure 31: He Ara Waiora



Key concepts in He Ara Waiora		
ENDS	Wairua	Spirit
	Taiao	Natural world, environment
	Ira tangata	Human domain, including activities and relationships between generations
	Mana tuku iho	Mana deriving from a strong sense of identity and belonging
	Mana tauutuutu	Mana found in participation in and connectedness to one's community, including knowing and fulfilling one's rights and responsibilities
	Mana āhienga	Mana in the individual's and community's capability to decide on aspirations and realise them in the context of their own unique circumstances
	Mana whanake	Mana in the power to grow sustainable, intergenerational prosperity
MEANS	Kotahitanga	Working in an aligned, coordinated way
	Tikanga	Making decisions in accordance with the right values and processes, including in partnership with the Treaty partner
	Whanaungatanga	Fostering strong relationships through kinship and/or shared experience that provide a shared sense of belonging
	Manaakitanga	Enhancing the mana of others through a process of showing proper care and respect
	Tiakitanga*	Guardianship, stewardship (eg, of the environment, particular taonga or other important processes and systems)
* Under discussion for inclusion in framework.		

Source: McMeeking et al (2019)

Within Te Ira Tangata, He Ara Waiora defines four aspects of mana that are important to the wellbeing of individuals and collectives:

- Mana tuku iho: mana deriving from a strong base of identity and belonging.
- Mana tauutuutu: mana found in knowing and fulfilling one's rights and responsibilities to the community, and in the participation and connectedness of an individual in their community.
- Mana āheinga: mana in the individual's and the community's capability to decide on their aspirations and realise them in the context of their unique circumstances.
- Mana whanake: mana in the form of the power to grow sustainable, intergenerational prosperity.

The principles of He Ara Waiora guide the way in which we work

He Ara Waiora also offers principles or the 'means' to guide the way in which government agencies work in developing COVID-19 response and recovery initiatives to lift intergenerational wellbeing for Māori and all New Zealanders.

The principles of He Ara Waiora emphasise co-ordination and alignment; partnership; collective and strengths-based actions; protecting and building mana; and stewardship. These principles are also closely aligned with the values, beliefs and world views of the Pacific community (The Treasury, 2018). The following explains how the Treasury thinks about the application of the principles in developing policy advice:

- Kotahitanga means working in an aligned, co-ordinated way across the system and in partnership with business, communities, iwi and those in society with unique needs. It may mean finding ways to incorporate both mātaranga Māori and western science to build a more holistic understanding of an issue, including protection of Te Taiao.
- **Tikanga** means that decisions have to be made in accordance with the right processes, even in the context of an emergency such as COVID-19. This includes working in partnership with the Treaty partner. It is vital to work visibly in partnership with affected communities, and to communicate in ways that resonate with those communities.
- Whanaungatanga means working with Māori and Pacific leaders to develop pathways towards recovery, leveraging off the assets and skills in those communities. 19 Collective action is more likely to address entrenched inequalities and to restore mana to communities and to people.

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Working in partnership is a common expectation of Māori and Pacific communities, and is reflected throughout the analysis in this section.

- Manaakitanga means maintaining a focus on improved wellbeing and enhanced mana for all New Zealanders, including Māori and Pacific people. It means supporting each other and demonstrating an ethic of care for our fellow New Zealanders.
- Tiakitanga means managing government institutions and operational systems in a
 way that supports wellbeing.²⁰ One of the impacts identified by iwi, Māori and Pacific
 communities is that procurement and contract management practices are
 unintentionally onerous for some community groups and may have the effect of
 excluding them. Upcoming reviews, including that of the Public Finance Act 1989,
 will provide an opportunity to consider some of these issues.

COVID-19 impacts

He Ara Waiora provides another lens to understand the unique way the COVID-19 crisis affects Māori, and the way in which iwi and Māori organisations have adapted and mobilised support for their whānau and communities.

Wairua impacts

Iwi and Māori organisations have demonstrated their resilience throughout the crisis, including through the adaptation of tikanga, to support and uphold the wellbeing of their whānau and communities. Examples of this are outlined further below.

Te Taiao impacts

Iwi and Māori shared the concern about people's safety during the Alert Level 4 and 3 restrictions, but also recognised the impacts on wellbeing given that many whānau rely to some extent on the gathering of kaimoana (seafood) and other resources. Some exercised their role as kaitiaki (guardians) through the customary practice of placing rāhui (protection or restrictions) on certain areas and activities.

Rāhui are restrictions with cultural legitimacy and represent an exercise of mana by iwi and Māori, which also enhances wellbeing (see below). The rāhui provided the wellbeing benefit that the whenua (land), awa and moana (the waterways), which are a source of sustenance and spiritual inspiration, were given time to rejuvenate and regenerate. Waikato imposed such a rāhui on its awa during the Alert Level 3 restrictions and lifted it after the country moved to Alert Level 2.

Tiakitanga is not expressed in Figure 31. However, the first prototype of He Ara Waiora did include kaitiakitanga (stewardship). Discussions are still underway between Ngā Pūkenga and the Treasury, Te Arawhiti and Te Puni Kōkiri as to whether tiakitanga may also be included more explicitly in the current version.

Te Ira Tangata impacts

Mana tuku iho

Iwi and Māori leaders with whom the Treasury met during the crisis raised concerns about the health and wellbeing of their whānau, particularly their kaumātua. The health and wellbeing of kaumātua is a priority for whānau, hapū and iwi, as their cultural strength and enrichment depends on the active participation of kaumātua. The mana of a hapū or iwi relates to the visible presence and authority of its elders, who carry the status, tradition and integrity of their people. Without leadership at this level, "a Māori community will be the poorer and unable to function effectively or to fulfil its obligations" (Durie, 2003).

Iwi and Māori organisations have prioritised action in supporting communities and safeguarding their own people, including their kaumātua, throughout the crisis. The historical memory of previous pandemics and their role in the experience of colonisation remains strong. The impacts of colonisation linger in the collective consciousness of contemporary Māori and Pacific whānau and communities, contributing to both communities' fragile level of trust in government institutions.

Traditional and emerging Pacific leaders have also had a critical role in responding quickly to the needs of their people and the wider New Zealand community during the COVID-19 crisis. Elders in Pacific communities are also highly valued as the holders of traditional knowledge. It is a positive indicator of wellbeing that new leaders have earned the trust of local communities and would be valuable allies in partnership with government.

Mana tauutuutu

COVID-19 affected the ability of iwi and Māori communities to exercise traditional ways of coming together, including for tangihanga and funerals, under Alert Levels 4 and 3. Tangihanga involves an intensive process of acknowledging the deceased, supporting the whānau pani (grieving whānau) and welcoming visitors from far and wide who have come to participate. Well before the advent of COVID-19, Tā Timoti Karetu put it this way:

Ki te wareware i a tātau tēnei tikanga a tātau, arā te tangi ki ō tātau tūpāpaku, kātahi tō tātau Māoritanga ka ngaro atu i te mata o te whenua ki te Pō, oti atu.

If we forget our cultural practices, particularly those pertaining to the dead, the very essence of our existence as Māori will be lost from the face of this earth, to the underworld forever.²¹

Some prominent rangatira passed away during the COVID-19 restrictions. The use of technology and the adaptation of tikanga to enable people to participate safely in those tangihanga mitigated the wellbeing impacts somewhat.

However, there was some public commentary on the impacts of the Alert Level 4 and 3 restrictions on Māori wellbeing, particularly the effects on the mana of marae and iwi, and on the ability to provide manaakitanga. The distress caused by the restrictions was acknowledged by the Government. The return to Alert Level 1 has meant restrictions do not apply at the time of writing.

²¹ Quoted at https://teara.govt.nz/en/tangihanga-death-customs.

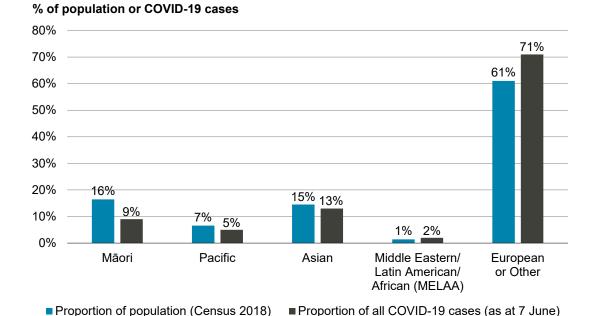
Mana āheinga

Iwi and Māori organisations recognised the risks to whānau in need in their communities. They moved early to provide goods and social services to their people, creating their own infrastructure and supply chains and largely bearing the additional costs themselves. This placed a considerable strain on their resources. Pacific Non-Government Organisations similarly responded quickly to the crisis by mobilising community resources and technical expertise at local levels.

That iwi and Māori organisations were able to respond quickly and effectively to mitigate the effects of the crisis is a positive indicator of wellbeing. The support they provided very likely mitigated the initial effects of the crisis, including the sense of fear and isolation that many people felt. This was an expression of both mana and manaakitanga – a principle discussed in more detail in other sections of this report.

Modelling by public health researchers in April estimated that if the disease had established itself throughout New Zealand, Māori would likely have had significantly higher fatality rates (Steyn et al, 2020). In the end, the effectiveness of the response meant that cases were overrepresented among Pākehā, perhaps reflecting the fact that most people with COVID-19 in New Zealand caught it overseas or were close contacts of people who did, and that clusters were concentrated in areas such as Southland and Canterbury with small Māori populations (see Figure 32).

Figure 32: COVID-19 cases and total population by prioritised ethnicity Percent of ethnic group population and percent of COVID-19 cases



Note: Following Ministry of Health practice, prioritised ethnicity classification is used for reporting purposes. Each case is allocated to a single ethnic group based on the ethnic group with which it has identified. This means that if a person identifies as being Māori and New Zealand European, the person is counted as Māori.

Sources: Ministry of Health, Stats NZ

It is important to remember that many whānau still lack the ability to determine and achieve their aspirations, owing to disadvantages that existed before the pandemic and may have been deepened by it. During COVID-19 Alert Levels 4 and 3, there was up to a tripling of housing enquiries in some regions due to chronic overcrowding, poor living conditions and problems meeting daily living costs. Evidence showed a significant increase in whānau seeking the provision of goods and social services. COVID-19 further exposed existing inequities such as in digital connectivity and access to devices for distance learning.²²

Whānau needs have become more complex through the crisis, presenting with multiple welfare requests. Rangatahi (youth) and those with few skills and qualifications are facing difficulties in the job market due to increased competition from redeployed workers from other industries.

A number of iwi developed and implemented COVID-19 response plans to meet the needs of their people. For example, Ngāti Whātua Ōrakei developed its COVID-19 response plan after surveying whānau to identify the impacts of COVID-19 on a range of issues that included health and wellbeing, education, housing, employment and finance.²³ The response plan divided the total respondents into three priority groups based on risk factors, and identified short-term actions to support their needs and medium-term actions to prepare their people for a new future.

Mana whanake

Some Māori businesses and iwi portfolios have been hit hard by COVID-19, particularly through the downturn in tourism and the drop in kōura (lobster) exports early in the pandemic. The estimate of the Chair of the Federation of Māori Authorities is that the Māori economy may lose \$500 million through the crisis. However, many strengths remain. In 2017 the size of the Māori economy was estimated at \$50 billion, with assets largely concentrated in primary industries.²⁴ Many iwi and asset-owning whānau operate their businesses with a view to providing sustainable benefits for generations to come.

The evidence for statements in this section came from a variety of qualitative and quantitative sources, both regional and national, of which some was derived from hui between the Treasury and sector stakeholders.

Ngāti Whātua Ōrākei COVID-19 Whānau Survey Insights http://ngatiwhatuaorakei.com/wp-content/uploads/2020/05/NWŌ-Covid-19-Whānau-Survey-Insights.pdf

²⁴ Te ao Māori: Trends and insights, Chapman Tripp presentation to the Treasury, June 2017.

Opportunities to enhance wellbeing

COVID-19 will inevitably change many things about our society and economy. Some economists have speculated that it provides an opportunity to rethink economic structures rather than return to a pre-COVID-19 status quo.²⁵

A number of Māori leaders spoken to by the Treasury also recognised the potential for a reset of social and economic conditions to enable them to achieve their wellbeing aspirations. An obvious starting point for thinking about opportunities to enhance wellbeing in New Zealand is to look at the Māori and Pacific populations, which are comparatively young and comprise a significant part of the future workforce.²⁶

Also important is the focus of He Ara Waiora on protecting the wellbeing of Te Taiao throughout the economic recovery. The following sections explore these opportunities for enhancing wellbeing.

Te Taiao opportunities

He Ara Waiora prioritises the protection of Te Taiao as an end in itself. Iwi and Māori communities have their own aspirations to fulfil their kaitiaki obligations and responsibilities and build resilience to environmental challenges.

The crisis has highlighted the potential of ways of working differently to support the transition to a low-carbon economy. The Government has already set up a framework in legislation for New Zealand to transition to a low-emission and climate-resilient economy. There may be scope to work in partnership, particularly given the overlapping environmental interests of the Crown and Māori, and the potential impacts on whenua, awa, moana and taonga species resulting from environmental degradation.

Understanding mātauranga Māori alongside science can foster a sustainable, innovative recovery with an active protection of Te Taiao. A holistic, intergenerational approach to restoring Te Taiao to a state of ora (wellbeing) is required, alongside innovative responses to climate challenges. The Government could now consider how best to support sectors and businesses that are innovating sustainable practices, climate resilience and the transition to a low-carbon economy, including mātauranga-based practices (such as regenerative agriculture, green energies and green technologies).

In some regions the COVID-19 crisis has been exacerbated by ongoing drought. This has provided a reminder that issues around the sustainable and equitable use of freshwater continue to hold a high priority for iwi and Māori.

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Eg, 'Joseph Stiglitz on a Post-Covid Economy', retrieved from https://www.cigionline.org/big-tech/joseph-stiglitz-post-covid-19-economy

²⁶ https://www.stats.govt.nz/information-releases/2018-census-population-and-dwelling-counts

Te Ira Tangata - enhancing mana

In the recovery process there will be numerous opportunities to enhance the mana of individuals, whānau, iwi and communities. Some examples are outlined below.

Mana tuku Iho

As noted above, the COVID-19 virus posed a threat to the kaumātua population. Iwi and Māori communities moved to protect kaumātua, who carry traditional knowledge and play important roles within iwi.

Traditional knowledge and practices may hold the potential to enhance the recovery. An example of tuakana/teina (peer mentoring) models in business, social enterprise and social entrepreneurship was the establishment of Manaaki, a support network of business experts and advisors for businesses struggling during COVID-19.

Government agencies have acknowledged the importance of identity and culture as resilience factors that contribute to Māori wellbeing outcomes.²⁷ Cultural revitalisation may therefore be one area for further policy exploration.

Mana tauutuutu

Loneliness and isolation were significant threats to wellbeing during the COVID-19 Alert Levels 4 and 3. Iwi and Māori communities offset these impacts through the delivery of health and food packs (as has been discussed), as well as simple initiatives such as creating phone trees for the care of kaumātua.

It is likely that collectives taking responsibility for the wellbeing of their members will remain a strong factor in assisting people through this crisis. Whānau/families are the foundations of Māori and Pacific societies. Māori and Pacific service providers are often strongly connected with communities. One area for future exploration is how government systems can better enable iwi and Māori organisations to design, develop and deliver local solutions.

Māori have demonstrated in the past, through movements such as Kōhanga Reo and Māori-medium education, that they are well placed to generate their own solutions. In 2019 an agreement between the Crown and Ngāti Toa Rangatira saw the iwi managing more than 900 state houses in Porirua and gaining the opportunity to build additional houses or units for the use of social housing. The self-mobilisation of iwi and Māori providers in the initial response to the COVID-19 outbreak underscores this.

²⁷ For example, https://practice.orangatamariki.govt.nz/our-work/care/caring-for-tamariki-in-care/culture-belonging-and-identity

Using data from Te Kupenga, this study showed strong connections between self-rated whānau wellbeing and individual life satisfaction (see Kukutai et al, 2017).

Mana āhienga

COVID-19 has brought with it a focus on maintaining employment and building skills, both of which are strong factors in providing individuals and whānau with greater choices and scope to fulfil aspirations. The median ages of Māori (24) and Pacific people (21) are significantly lower than that of the general population (38),²⁹ meaning that these groups are important to the overall strength of the future workforce.

Support for and partnership with Māori businesses in priority sectors can help generate more employment and training opportunities. The Government made significant investments in Māori skills and employment in response to the COVID-19 crisis in Budget 2020. A deliberate focus on the design and evaluation of programmes will be vital to ensure they build wellbeing outcomes.

Mana whanake

Many iwi and asset-owning whānau operate their businesses with a view to delivering sustainable investment for generations to come, to support broader social outcomes.

With assets largely concentrated in primary industries, a number of Māori enterprises may be well placed to help lead an export-driven recovery. The Government could explore partnerships with Māori businesses and assets in priority sectors to generate more employment and training opportunities and help lead the recovery.

The principles of He Ara Waiora can guide policy development and implementation

The principles outlined above – kotahitanga, tikanga, whanaungatanga, manaakitanga and tiakitanga – can guide the Government in developing policy that is effective in enabling iwi and Māori to fulfil their aspirations.

These principles are normative or value-based in nature and derived from te ao Māori. Policy initiatives that make genuine efforts to understand and reflect these principles are likely to resonate with Māori. Encapsulating ideas such as manaakitanga may in fact resonate with a wide range of New Zealanders.

In keeping with these principles, it will be important in the difficult times ahead for government agencies to explore the calls of iwi, Māori and Pacific communities to partner with the Crown and develop solutions that they can increasingly design and deliver themselves.

http://archive.stats.govt.nz/browse_for_stats/population/estimates_and_projections/Maori PopulationEstimates HOTPAt30Jun17.aspx

Wellbeing analysis in the COVID-19 recovery

There remains considerable uncertainty about how the crisis will play out over time. The Treasury will continue to use the LSF and He Ara Waiora to support our advice to the Government on the economic response and recovery.

This analysis is a snapshot in time. In the next decade – and perhaps beyond – New Zealand will deal with the fallout of the COVID-19 crisis. There is significant uncertainty about how the crisis will play out in the coming weeks, months and years.

LSF and He Ara Waiora will continue to frame the Treasury's advice...

The Treasury will continue to apply the LSF and He Ara Waiora to frame our analysis and advice to the Government on the recovery from COVID-19.

We have been partnering with Māori thought leaders to continue developing He Ara Waiora in response to calls for the LSF to better reflect Māori perspectives. We will use He Ara Waiora and the LSF alongside each other to explore wellbeing from different cultural perspectives, values and knowledge systems. The frameworks will help to build the Treasury's capability to ensure te ao Māori and Pacific concepts of wellbeing are woven into policy development with integrity.

The analysis in this paper highlights how the two frameworks provide different emphasises. Both frameworks highlight the multi-faceted impacts of COVID-19 on wellbeing. There are significant touch-points between them. However, there are also differences of emphasis given their differing cultural contexts. The primacy of mana in He Ara Waiora emphasises spiritual and mental wellbeing. The centrality of Te Taiao also places greater value on the protection of Te Taiao in the economic recovery, relative to the LSF where it is one of four capitals to be considered and balanced.

... and frame how we monitor progress...

We also recognise that many of the traditional data sources we use for wellbeing analysis are not produced frequently enough to inform an adaptive response strategy as the situation evolves. Stats NZ has developed Ngā Tūtohu – Indicators Aotearoa New Zealand as a repository of wellbeing data. The Treasury draws on this database for its LSF Dashboard. 30 However, these are datasets of wellbeing outcomes that change slowly over time and for which there are significant lags in data availability.

He Kāhui Waiora: Living Standards Framework and He Ara Waiora

³⁰ See more about the LSF Dashboard at: https://treasury.govt.nz/information-and-services/nzeconomy/higher-living-standards/measuring-wellbeing-lsf-dashboard.

We need more timely and leading indicators to track the recovery from the COVID-19 crisis. The Treasury is working with other agencies to ensure reliable, timely data sources are in place to support an understanding of its social, economic and environmental impacts. More work is also required to develop measures that reflect te ao Māori and Pacific values and concepts of wellbeing, including whanau/family and collective-based measures. Alongside this type of outcome monitoring, it will be important for agencies to build evaluations into key initiatives to support learning and adaption to improve wellbeing impacts.

... as we recover from the economic and social impacts of COVID-19

The analysis in this paper has highlighted that the COVID-19 crisis is multifaceted, with a range of interconnected wellbeing impacts in the short and longer term. The role of advising the Government on how to support wellbeing through the recovery will continue to challenge the Treasury – and the wider public sector – to strengthen its capability to produce robust and evidence-based wellbeing advice.

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