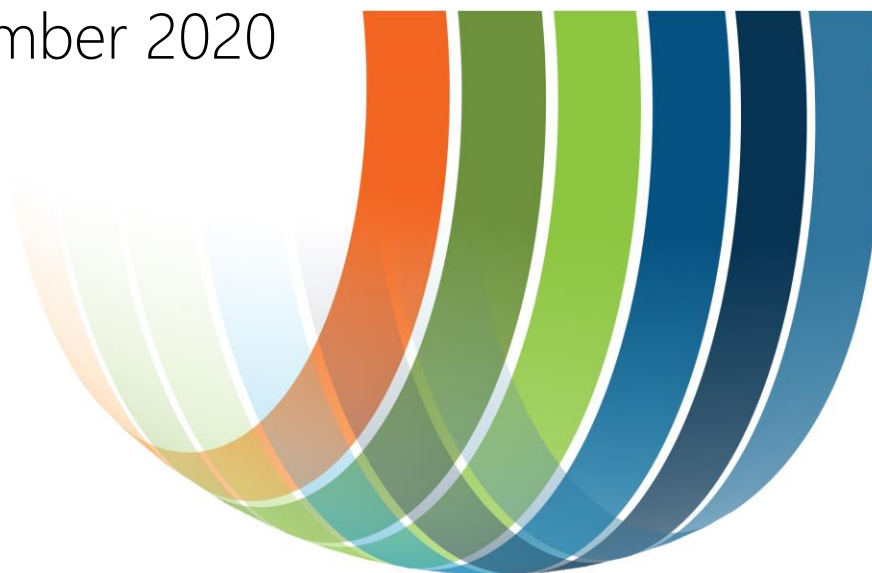


Economic Impacts of COVID-19 on the Selwyn District – Revised Estimates

for Selwyn District Council

November 2020



Infometrics

Economics put simply

Authorship

This report has been prepared by Nick Brunsdon, Brad Olsen and Alistair Schorn, with the assistance of Andrew Whiteford, David Friggens, Gareth Kiernan, and Dr Adolf Stroombergen.

Email:

nick.brunsdon@infometrics.co.nz

brad.olsen@infometrics.co.nz

alistair.schorn@infometrics.co.nz

All work and services rendered are at the request of, and for the purposes of the client only. Neither Infometrics nor any of its employees accepts any responsibility on any grounds whatsoever, including negligence, to any other person or organisation. While every effort is made by Infometrics to ensure that the information, opinions, and forecasts are accurate and reliable, Infometrics shall not be liable for any adverse consequences of the client's decisions made in reliance of any report provided by Infometrics, nor shall Infometrics be held to have given or implied any warranty as to whether any report provided by Infometrics will assist in the performance of the client's functions.

Table of contents

Executive Summary	5
Introduction.....	7
The story so far – Selwyn doing relatively well	8
GDP declined less than the national average	8
Consumer spending has recovered.....	8
Traffic flows yet to return to normal	10
Jobseeker and CIRP recipients grew by 117%.....	10
Net growth in employment.....	11
Young people and women have been hit hardest by job losses.....	12
Construction activity remains very strong	13
Housing market slow and steady	14
Government has promised support	14
Big economic hits are still to come	16
Primary exports continue to hold up.....	16
Food production will continue	16
Drop in demand for non-food exports will hit Selwyn.....	16
International tourism remains off the table	17
Selwyn's economy will contract over two years	17
Construction leads the drop	17
Employment decline spread over two years.....	18
Job losses affect all skill levels.....	19
Construction-based occupations hit hardest	20
Unemployment will reach 3.7%	21
And will result in lost earnings of \$92m	22
Construction levels are expected to decline	23
Summary of forecast differences	24
Further thoughts on recovery.....	25
Consumption patterns are changing	25
Local action will support recovery	25
More focus on skills development.....	26
Affordability and connectivity remain assets.....	26
Build build build	26
Austerity is a non-starter	27
A focus on exports	27
Wellbeing will come back into focus	28
Appendix I. New Zealand economy – the big picture	29

A rocky path through 2020	29
Economic activity crashed and rebounded	29
Jobs have been lost – although fewer than initially feared	30
Government support has helped	32
The housing market is heating up.....	32
...but when will the music stop?.....	33
Construction is a mixed bag.....	34
Exports keep on going.....	35
But is the worst yet to come?	36
It all hangs on the labour market.....	36
Crunch time for employment.....	37
Labour market squeeze to hit household spending.....	38
The housing market's remarkable resilience	38
Uncertainty the enemy of growth.....	40
The globe is a mess	40
An economy regaining momentum	41
Appendix II. Forecast Assumptions	42
Appendix III. Comparison of Infometrics and Treasury forecasts	44
Treasury scenarios serve a different purpose.....	44
Similar modelling approach, Infometrics goes to regional detail.....	45
Infometrics forecasts are more current.....	45

Executive Summary

This report provides an updated overview of the economic impacts of the COVID-19 pandemic on the Selwyn District.

The COVID-19 pandemic brought about the sharpest decline in economic activity in history. Nationally, GDP in the June 2020 quarter declined by 12.4% compared to the June 2019 quarter.

In Selwyn, GDP in the June 2020 quarter is estimated to have declined by 10.9% compared to the June 2019 quarter. In the September 2020 quarter, as the country moved to COVID-19 Alert Level 1 and activity in most industries resumed, the District's economy rebounded, ending up 2.6% larger than in the September 2019 quarter.

Contrary to initial expectations, Selwyn appears to have created more jobs than have been lost over the year to September 2020, with a net increase in filled jobs in the District of 2.3% or 640 jobs. However, the combined number of Jobseeker Support and COVID-19 Income Relief Payment Recipients (CIRP) in Selwyn increased by 117% over the year to October 2020, reaching a high of 1,179 individuals in August 2020. Both employment and benefit recipients have been able to grow at the same time because the District's population is growing very strongly, and a large proportion of workers work outside the district.

Table 1: Key indicators

Indicator	Selwyn District	New Zealand
Historic		
Est. GDP % change (Jun 2020 quarter vs June 2019)	-10.9%	-12.4%
Est. GDP % change (Sep 2020 quarter vs Sep 2019)	2.6%	-3.2%
Change in filled jobs (year to Sep 2020)	2.3%	0.9%
Change in Jobseeker Support & CIRP recipients (year to Oct 2020)	117%	49%
Forecast		
GDP % change - Apr 2020 to Mar 2021	-0.9%	-4.1%
GDP % change - Apr 2021 to Mar 2022	-0.7%	1.0%
Job losses, Apr 2020 to Mar 2022	-1,228	-115,484
Unemployment rate, Mar 2022	3.7%	8.5%
Loss in total earnings, Apr 2020 to Mar 2022 (\$m)	-\$92m	-\$5,498m
Residential construction % change, Apr 2020 to Mar 2022	-41%	-14%
Non-residential construction % change, Apr 2020 to Mar 2022	-35%	-12%

We expect approximately 100 jobs to be lost in Selwyn by March 2021, and a further 1,100 by March 2022. These job losses are predominantly driven by a reduction in construction sector workloads, as well as the loss of international tourism and broader recessionary conditions nationally. Job losses will push the unemployment rate to 3.7% from its current rate of 2.3% - still well below the national average.

Forecast job losses are expected to lead to a \$92m fall in earnings in Selwyn over the two years to March 2022.

Selwyn's construction sector is operating at record levels at present, however, we expect workloads to start easing in 2021, contributing to the bulk of job losses in the district.

Introduction

This report provides an updated overview of the economic effects of the COVID-19 recession on the Selwyn District.

It includes an assessment of the headline impacts of the recession as of September / October 2020, and an overview of forecast changes to economic activity, employment, and earnings in the District over the period to March 2022. The report also includes the outlook for construction activity in the District.

The forecast analysis presented in this report draws on a suite of economic models maintained by Infometrics. Models are only as good as the assumptions they are based on, and we include an update to our key assumptions in Appendix I.

We also include a comparison of our forecasts with Treasury scenarios in Appendix II, to support Selwyn District Council (SDC) in engaging with central government agencies who use the Treasury scenarios.

The report is intended to provide evidenced-based information and analysis to SDC and its key stakeholders, and to support annual and long-term planning activities in the District.

The story so far – Selwyn doing relatively well

GDP declined less than the national average

In the June 2020 quarter, GDP in Selwyn is estimated to have declined by 10.9% compared to the June 2019 quarter. This decline is lower than the corresponding national figure of 12.4%.

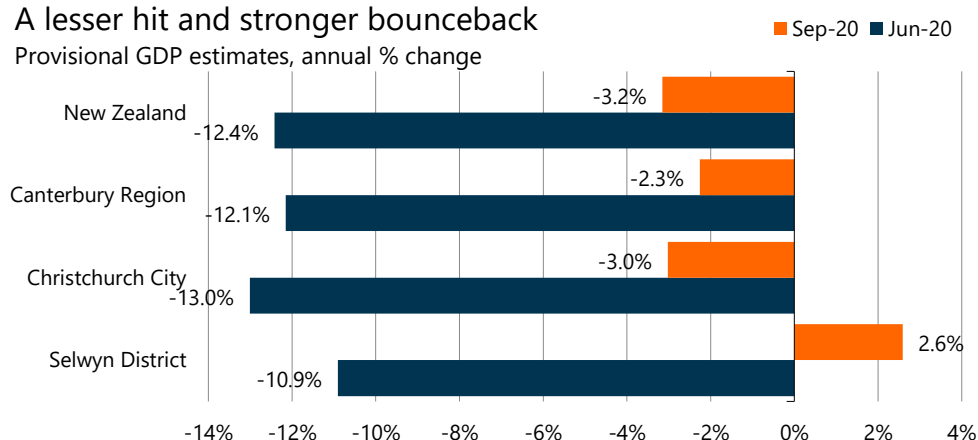
In the September 2020 quarter, as the country moved to COVID-19 Alert Level 1 and activity in most industries resumed, the District's economy rebounded, growing by 2.6% compared to September 2019, markedly better than the national decline of 3.2%.

For the year to September 2020, economic activity in Selwyn grew by 0.2%, compared to 3.3% decline in the national economy.

Figure 1

A lesser hit and stronger bounceback

Provisional GDP estimates, annual % change



Data on GDP changes by industry in the latest quarters is currently not available at regional or district level. However, based on the district's strong overall growth due to growing population, it is likely that there has been a degree of growth in most industries.

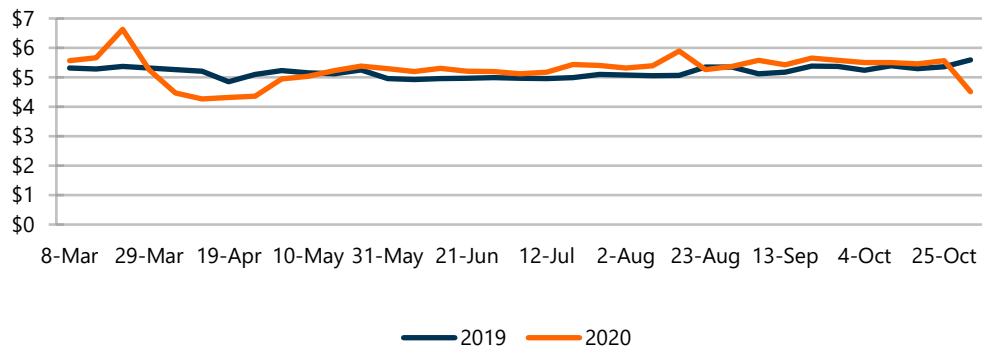
Consumer spending has recovered

Consumer spending in Selwyn has broadly recovered to 2019 levels, following the Level 3 and 4 lockdowns in April-May 2020. Spending does however appear to have slowed somewhat towards the end of October 2020.

Figure 2

Spending back to pre-lockdown levels

Total consumer spending, weekly total, \$m

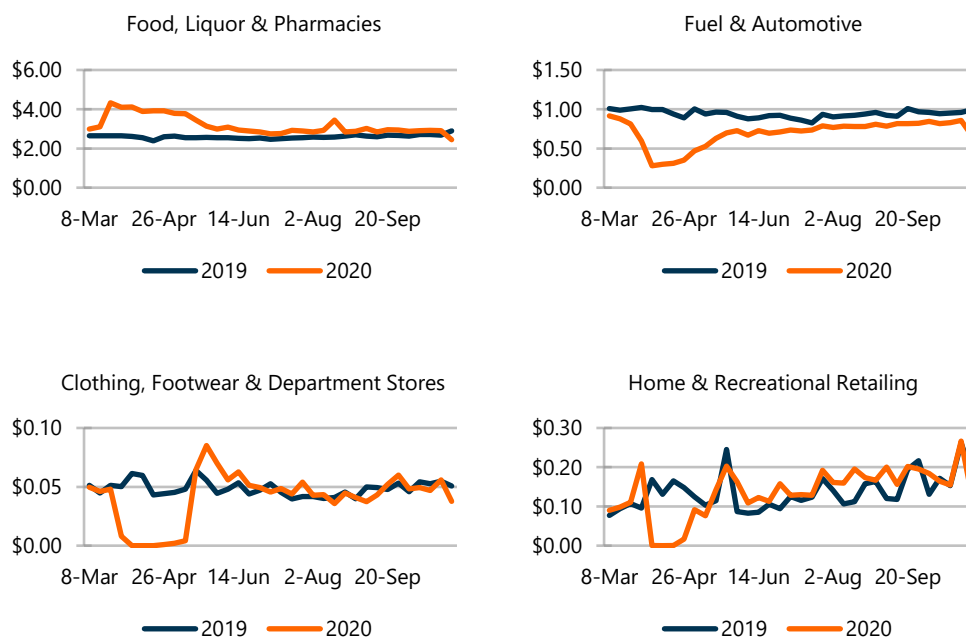


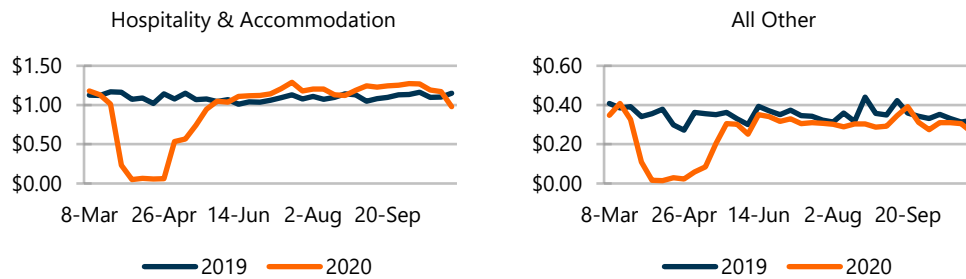
Spending in certain categories, such as food, liquor and pharmacies; home and recreational retailing; and hospitality and accommodation have consistently remained above 2019 levels. Fuel and automotive spending has been tracking 16% down since June, with cheaper retail fuel prices since March explaining around half of this drop. This is potentially an indication of changing patterns in consumer spending as households seek spending close to home. In Selwyn's case, strong population growth underpins the growth across all categories between 2019 and 2020.

Figure 3

Spending back to pre-lockdown levels

Total consumer spending, weekly total, \$m

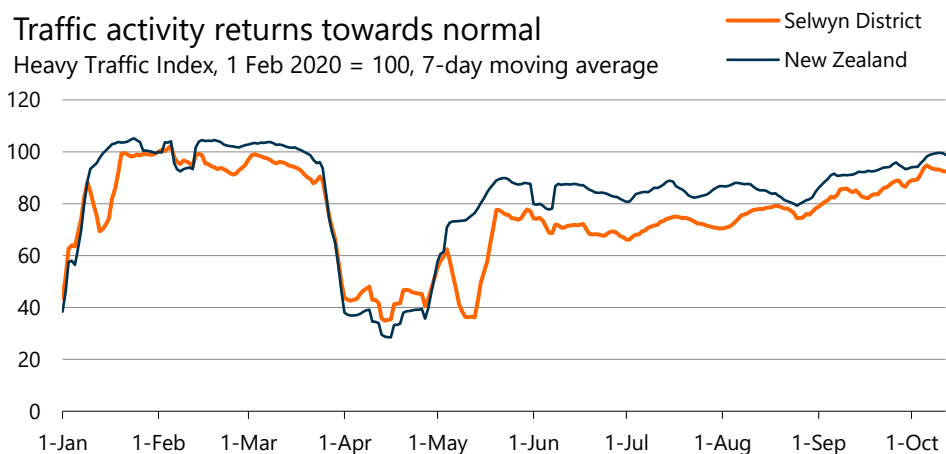




Traffic flows yet to return to normal

Traffic flows in Selwyn have are still below normal levels since lockdown. According to NZTA Data, traffic flows since February have been lower than the corresponding months in 2019. Infometrics heavy traffic index is based on NZTA monitoring sites in Springfield and Dunsandel. Heavy traffic between Selwyn and Christchurch may well have increased over this period.

Figure 4



For the year to September 2020, traffic flows in Selwyn declined by 11.7%, compared to a decrease of 10.5% across New Zealand.

Jobseeker and CIRP recipients grew by 117%

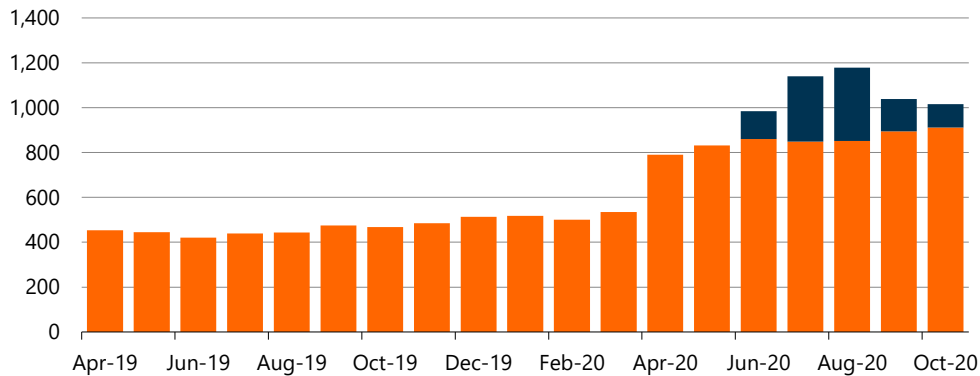
Between October 2019 and October 2020, the combined number of recipients for the Jobseeker Work Ready and COVID Income Relief Payment (CIRP) benefits in the District increased by more than 117%, reaching a high of 1,179 individuals in August.

These numbers declined slightly in September and October, as some jobs were created or re-established, and CIRP recipients began to reach the end of their 12-week eligibility period. By the end of October, the combined number of Jobseeker Support and CIRP recipients in the District stood at 1,015 individuals.

Figure 5

Rising job losses pushes support up 117%

Jobseeker Support and CIRP recipients, Selwyn District



Net growth in employment

In net terms, employment in Selwyn has grown by approximately 640 over the year to September 2020, with marked differences between industries. This net growth is a combination of factors including underlying growth due to a growing population and job losses due to COVID-19.

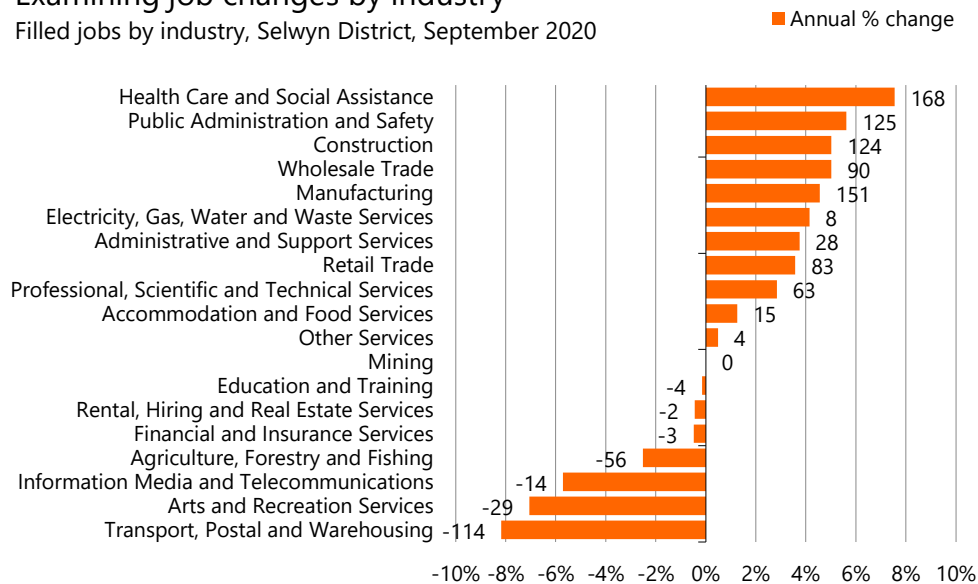
In absolute terms, the greatest job losses were incurred in the transport, postal and warehousing industry (-114, -8.2%). On a percentage basis, the arts and recreation services industry has also been heavily affected (-29, -7.1%), although employment levels in the industry are relatively low in Selwyn.

Employment growth has been led by a diverse range of industries, notably health care and social assistance (+168, +7.6%), manufacturing (+151, +4.6%), public administration and safety (+125, +5.6%) and construction (+124, +5.0%).

Figure 6

Examining job changes by industry

Filled jobs by industry, Selwyn District, September 2020



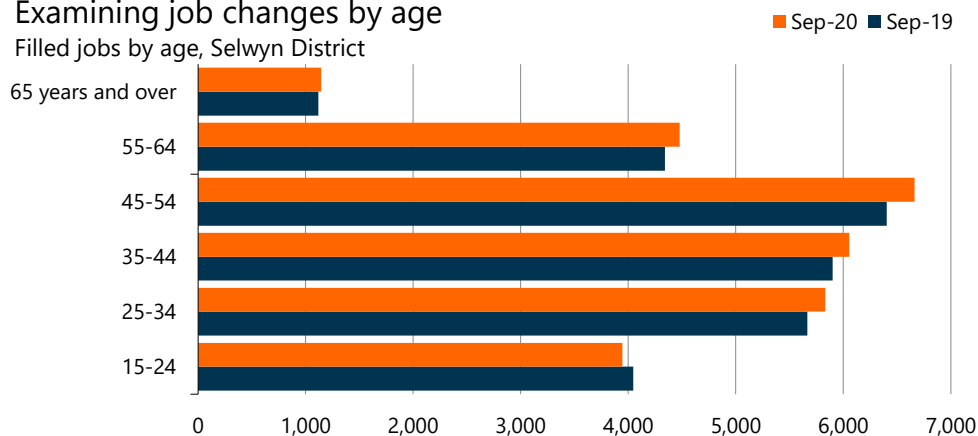
Young people and women have been hit hardest by job losses

Job losses in Selwyn have been concentrated in the 15-24 year age group, with employment down 2.5% over the past year. In all age groups 25 years and older, employment has risen.

Figure 7

Examining job changes by age

Filled jobs by age, Selwyn District

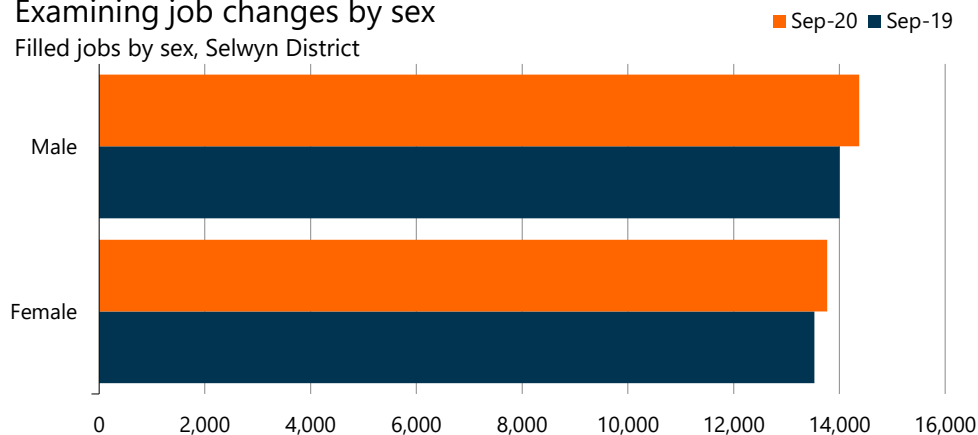


Employment has grown in net terms for both males and females over the past year. Employment growth was slightly stronger for men, up 2.6%, than women, up 1.8%.

Figure 8

Examining job changes by sex

Filled jobs by sex, Selwyn District



Construction activity remains very strong

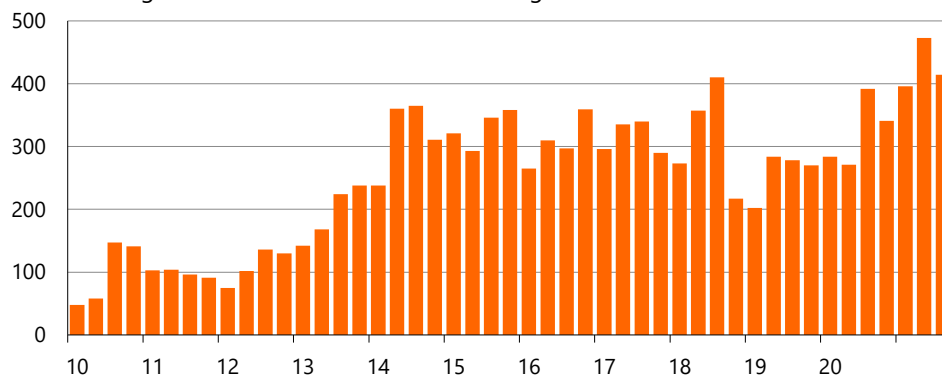
Construction activity in Selwyn has been booming since the 2010-11 earthquakes, and remains strong even after the June 2020 quarter lockdown.

The number of residential building consents issued in Selwyn has grown strongly over the past decade, with strong growth recorded over 2012-14, and reaching record highs in the June and September 2020 quarters.

Figure 9

Residential consents hit record high in lockdown

Annual average number of new residential building consents

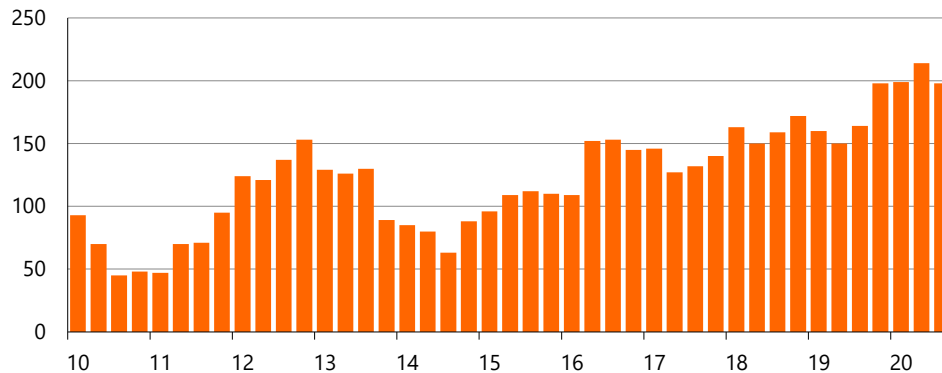


Non-residential construction in the district has been strong too, albeit growing slower than residential construction.

Figure 10

Non-residential consents keep growing

Annual average value of non-residential building consents



Housing market slow and steady

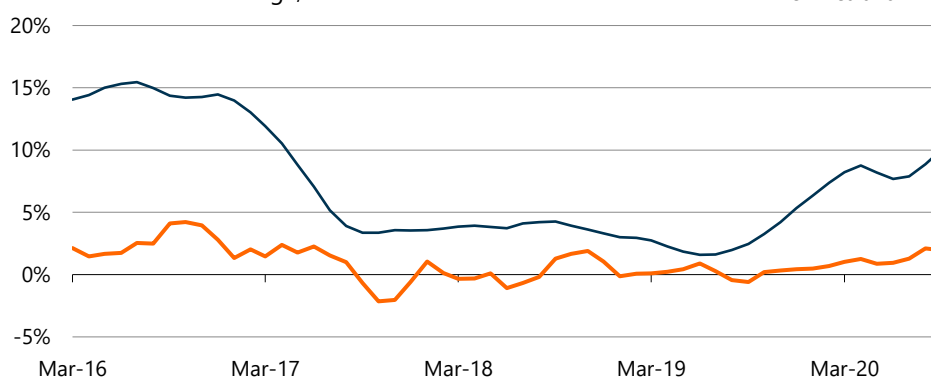
One of the most unexpected aspects of the COVID-19 recession has been the resilience of the New Zealand housing market. Nationally, this has meant strong house price growth. However, in Selwyn, housing market resilience has supported strong growth in new house construction while house prices have grown only modestly.

Over the year to September 2020, house prices in the District increased by 2.0%, well behind the 10.1% rise nationally. The number of houses sold in Selwyn grew by 16.1%, compared to 1.1% nationally.

Figure 11

Examining house price movements

3-month annual % change, REINZ House Price Index



Government has promised support

Selwyn District council's capital works programme will serve to buoy the local economy, with big ticket items including the Aquatic Centre extension (\$13.8m), Te Ara Atea and Rolleston town centre (\$14m), Foster Park indoor courts (\$14m) and health hub (\$13m).

Funding from Central Government has been more limited, totalling \$1.6m from the provincial growth fund for environmental and tourism related projects.

Big economic hits are still to come

All districts and regions of New Zealand will continue to be affected by COVID-19 for the foreseeable future. Border restrictions and the lack of international tourism and international education will have knock-on effects on industries sectors such as hospitality, accommodation and retail trade. While most of New Zealand has seen a surge in economic activity since June, particular consumer spending, this surge isn't sustainable. Heading into 2021, we expect the consumer spending surge will run out, and headwinds of border closures and a global recession will start to affect all parts of the country.

Selwyn's reliance on primary production and food manufacturing means that is likely to perform relatively well through the recession. On the negative side, the district's large construction industry is likely to feel a substantial hit when household and business confidence collapses.

A few factors will determine how the local economy performs.

Primary exports continue to hold up

New Zealand's exports of food products continue to hold up reasonably well, with meat, fruit and dairy export volumes all up on 2019 levels.

Agriculture, forestry, and fishing is Selwyn District's largest industry, employing 16.5% of the local workforce directly, with a further 7.7% involved in downstream manufacturing. Continued primary export activity is therefore likely to support the District's economic recovery.

One possible dark cloud on the international trade horizon is the resurgence of COVID-19 in several of New Zealand's key international markets. A return to varying levels of lockdown in these countries may limit the opportunities for exports, even of food-based products.

Food production will continue

Apart from international demand for New Zealand's primary production, the recovery in consumer spending levels after lockdown suggest that demand for local produce remains healthy.

While initial data suggests a switch from off-premises restaurant consumption to in-home consumption, it remains to be seen whether this change in consumer behaviour will become more permanent, both globally and in New Zealand. Our impression is that for countries other than New Zealand, this will very much depend on effectiveness of their responses to COVID-19, and the time horizon for the availability of an effective vaccine for the pandemic.

Drop in demand for non-food exports will hit Selwyn

The global economic downturn is expected to limit global production needs, limiting demand for Selwyn's non-food manufacturers.

According to the latest forecast from the World Trade Organisation (WTO), world merchandise trade volumes are expected to decline by 9.2% in 2020.

International tourism remains off the table

The lack of international tourism over the summer months will weigh heavily on many areas, but isn't a major factor for Selwyn. In 2019, tourism contributed around 2% to the District's GDP, with 32% of this figure coming from international tourists. Selwyn's proximity to a large population in Christchurch means that it is well placed to benefit from a surge in domestic tourism activity such as spontaneous weekend trips.

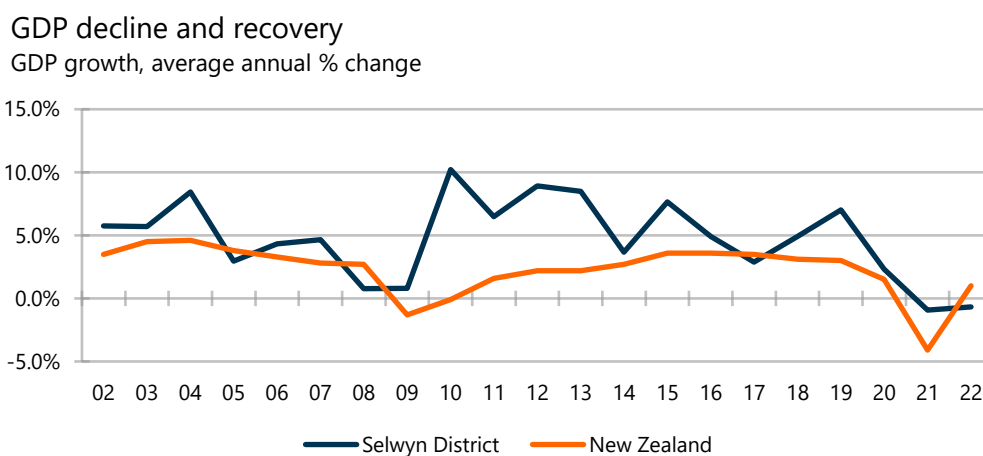
Selwyn's economy will contract over two years

Our revised forecast is for Selwyn District's GDP to shrink by 0.9% over the year to March 2021, and 0.7% over the year to March 2022. Nationally, we expect a 4.1% decline in 2021 followed by a minor recover of 1.0% in 2022.

Selwyn takes a lesser hit initially due to its strongly growing population, which has growing demand for services, and strong construction workloads. However, construction activity is forecast to ease later in 2021 (more on this below), which then dents economic activity into 2022. By taking a hit later than NZ, this means that Selwyn's recovery will be slightly delayed compared to New Zealand overall.

Selwyn

Figure 12



Construction leads the drop

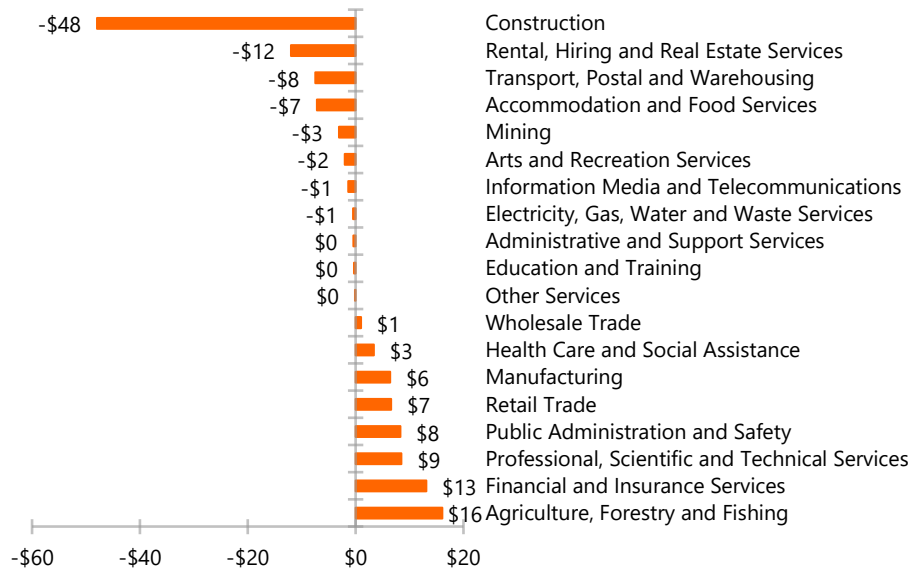
The largest declines in the Selwyn District will take place in the construction industry, with GDP down by \$48m or 25% between 2020 and 2022. Lesser declines in rental, hiring and real estate (-\$12m), transport, postal and warehousing (-\$8m) and accommodation and food services (-\$7m) relate to the loss of international tourism as well as weaker economic conditions overall.

By contrast, the agriculture, forestry and fishing industry is expected to grow by \$16m.

Figure 13

Construction leads the drop

GDP change by industry 2020 to March 2022, \$m



Employment decline spread over two years

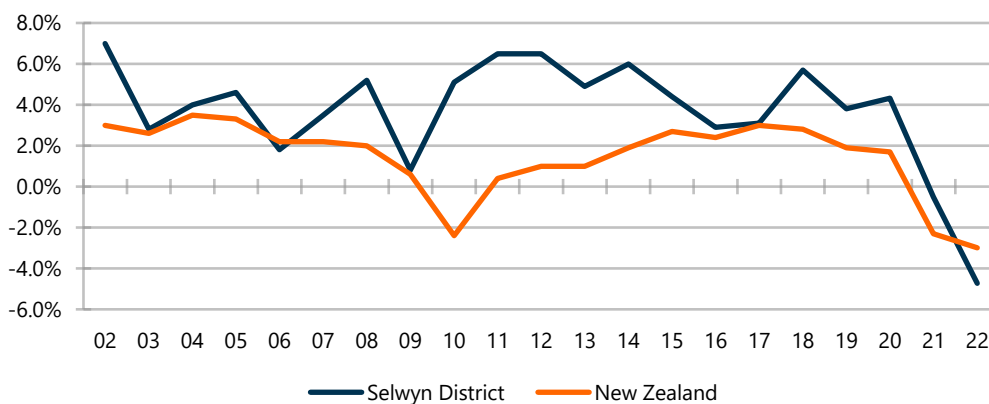
Employment in Selwyn District is projected to decline by 0.5%, or approximately 100 jobs, in the year to March 2021. In the year to March 2022, employment is forecast to decline by a further 4.7%, equating to a further loss of approximately 1,100 jobs.

In the national economy, employment is forecast to decline by 2.3% in the year to March 2021, and by 3.0% in the year to March 2022.

Figure 14

Employment declines over two years

Employment change, average annual % change

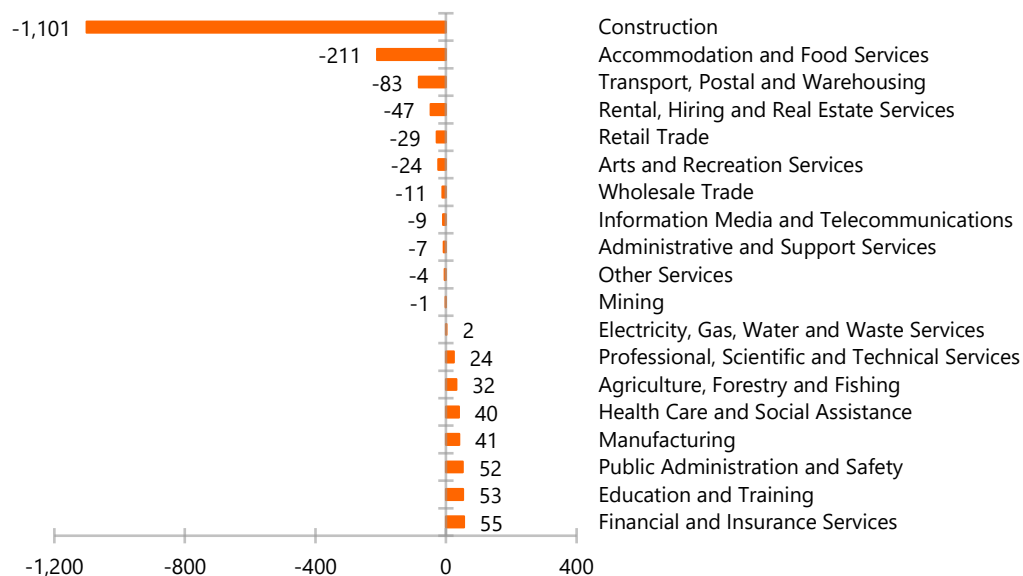


The bulk of these job losses are forecast to be in the construction industry, with over 1,101 jobs lost in this industry alone. Lesser job losses take place in tourism related industries such as accommodation and food services (-211 jobs), transport, postal and warehousing (-83) and rental, hiring and real estate services (-47) industries.

Figure 15

Construction employment hit hardest

Employment change to March 2022, by ANZSIC Level 1 industry



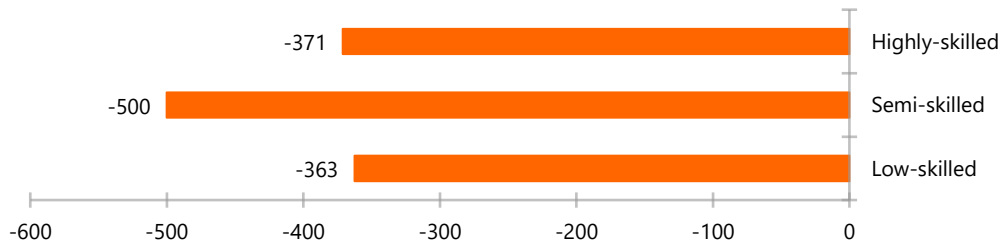
In the positive column, jobs are forecast to be created across a range of industries, notably in the financial and insurance services, education and training, and public administration. Selwyn's population growth means that the underlying demand for services is increasing, which usefully creates job opportunities to cushion the blow of the recession.

Job losses affect all skill levels

Job losses are forecast to be spread across all three occupation skill levels. Notably, semi-skilled workers are the hardest hit, with a decline of 500 jobs between 2020 and 2021. Semi-skilled workers include many construction trades affected by the decline in construction industry activity.

Figure 1

Job losses across all skill levels
Employment change 2020-2022



Construction-based occupations hit hardest

Reflecting the concentration of forecast job losses in the construction industry, job losses are expected in a variety of construction related occupations as well. Employment is forecast to decline between 2020 and 2022 for construction trades workers (-249), construction and mining labourers (-68), and electrotech trades (-68). Employment is forecast to decline in several management occupations such as specialist managers (-285), chief executive and general managers (-58), and hospitality, retail and service managers (-47). Decline in these management occupations is likely to be associated with the declines of the construction industry and tourism sector.

Figure 2

Construction-based occupations hit hardest

Change in employment 2020-2022 by ANZSCO Level 2



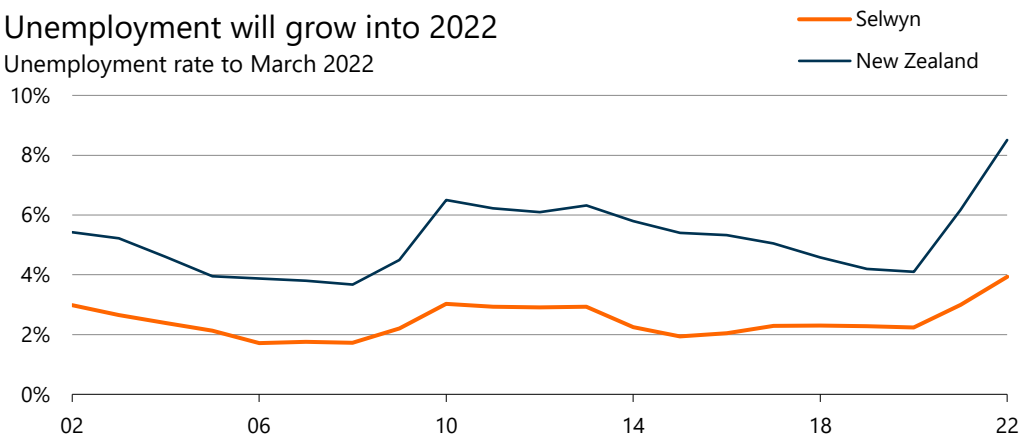
Unemployment will reach 3.7%

Selwyn District's overall unemployment level is forecast to rise from 2.3% in March 2020 to 3.7% in March 2022. Selwyn has had a relatively low unemployment rate for some time, and even through the recession, Selwyn's unemployment is expected to remain relatively low. The forecast national unemployment rate in March 2022 is 8.5%.

Figure 18

Unemployment will grow into 2022

Unemployment rate to March 2022



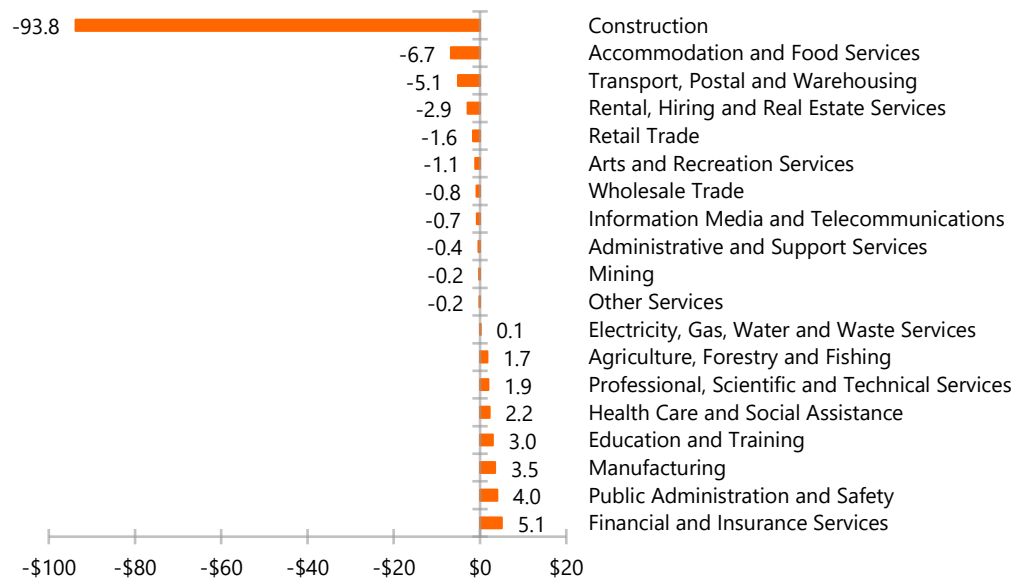
And will result in lost earnings of \$92m

Earnings across the Selwyn District economy are forecast to decline by \$92m over the two years to March 2022. The majority of this occurs in the construction industry, with a decline of \$93.8m in earnings. Modest growth in earnings is expected in industries such as financial and insurance services and public administration and safety, which partially offset the decline in construction.

Figure 19

Largest loss of earnings comes from construction

Earnings changes by broad industry, \$m, 2020-2021



Construction levels are expected to decline

According to the Infometrics Regional Construction Outlook, Selwyn's construction sector is set to slow over the coming years. Current levels of construction activity are underpinned by a backlog of consented work, strong net migration, a relatively strong labour market, low interest rates and favourable credit conditions. However, many of these factors are expected to tumble in the coming year.

International net migration reached a record high of 82,650 in the year to June 2020, however this is expected to fall to less than 1,000 over the year to June 2021. Job losses have been relatively limited so far, aided by the wage subsidy. However, once the current unsustainable consumer spending surge comes to an end, this will lead to job losses and weaker consumer confidence. Widespread job losses are likely to prompt an increase in lenders forcing house sales for borrowers who can't afford mortgage repayments, which will apply downward pressure on house prices. Low interest rates are likely to remain and continue to spur on house price growth, but may be tempered by tighter credit availability through restrictions such as Loan to Value Ratios (LVR).

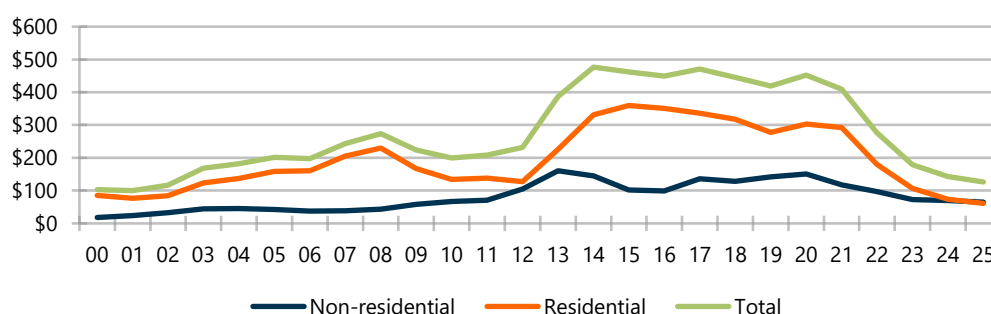
Selwyn's construction sector will take a lesser hit than other areas, owing to the relative strength of the local economy. However, the district is not immune to the national headwinds described previously, and faces the additional challenge of sitting within the Greater Christchurch housing market which features relatively strong housing supply. As the District's builders work through the backlog of consented work, we expect consent issuance to ease, leading to lower activity in 2022 and beyond. Residential construction will take a greater hit, down by 41% over two years to 2022, whereas non-residential activity is underpinned by public sector and rural investment, falling by a lesser 35%.

The key drivers and tipping points in relation to the housing market nationally are discussed in greater detail in [The housing market's remarkable resilience](#). If Selwyn's housing and construction markets remain strong for longer than expected, then this would have a substantially positive effect on the District's overall economic performance.

Figure 20

Construction activity declines

Construction work put in place, real \$m (2009/10 prices), annual totals



Summary of forecast differences

Infometrics forecasts for Selwyn District have changed since our initial report in April 2020. The national economy has bounced back from the COVID-19 lockdown more strongly than expected, with fewer job losses and stronger consumer spending. Selwyn in particular has recovered strongly, particular with respect to residential building consents. This has given us reason to be more optimistic overall, thus we are now forecasting a lesser economic hit. We also expect the economic decline to be spread over a greater period of time, meaning that the hit is more gradual.

Additionally, our April 2020 report covered the change from the year ending March 2020 to March 2021. In this report we extended the forecast horizon out to March 2022.

Table 2. Comparison of Infometrics April and November 2020 forecasts for Selwyn District

Indicator	April	November
GDP growth to March 2021	-5.4%	-0.9%
Employment growth to March 2021	-8.6%	-0.5%
Unemployment rate March 2021	7.1%	2.8%
Non-residential construction change to March 2021	-36%	-22%
Residential construction change to March 2021	-47%	-3%

Further thoughts on recovery

COVID-19 has already brought about some fundamental changes to New Zealand's society and economy. Some of these changes may be reversed in the future – for example we will at some point see a resumption of activity in the international tourism and international education sectors. However other changes, such as the trend of increased working from home, may prove more enduring.

Below we detail some of the major trends arising from COVID-19, and the actions that Councils, EDAs and their stakeholders might consider in effectively addressing these.

Consumption patterns are changing

COVID-19 has already brought about wide-ranging changes in consumption patterns in New Zealand. Apart from the increases in consumer spending following lockdown, as described above, the increase incidence of working from home means that both the location and magnitude of consumer spending has changed.

As an example, people commuting into a town centre office might be inclined to undertake discretionary spending, for example on lunches or take-away coffees. They might also be inclined to shop at stores close to their offices for groceries, clothing and other necessities. By contrast, when working from home, these consumers are far less likely to make such discretionary purchases, and will for the most part do their grocery and other shopping in locations close to home.

This trend has already become apparent in the shift of spending from Auckland and Wellington city centres to outlying suburban centres. It remains to be seen whether the same trend will hold true on a smaller scale in regional centres.

Given Selwyn's large commuting population, the District could consider how to capitalise on an increase in residents working at home by connecting their discretionary spending with local businesses. This presents an opportunity for the district to capture a greater share of its resident's consumer spending.

Local action will support recovery

The past several months have seen economic resilience and recovery partnerships created in many districts and regions across New Zealand. These entities haven taken on a variety of forms and involve a range of stakeholders including Councils, EDAs, Chambers of Commerce, industry bodies, employers' organisations, community organisations and local representatives of central government departments such as MBIE and MSD.

These partnerships will play a critical role over the next several years in shaping local economic recovery strategies, promoting new industries and enhancing the competitiveness of existing ones, determining skills needs and identifying training and employment opportunities for local school leavers.

The ability for targeted action in regional labour markets has also been enhanced by the establishment of interim Regional Skills Leadership Groups (iRSLGs). These Groups are a key element of the government's Reform of Vocational Education (RoVE) process.

However in the short term, their principal roles will be to assist employees who lose jobs in the current recession to get back into employment, and to source workers for industries facing immediate shortages of appropriately skilled employees, for example due to the closure of New Zealand's borders to seasonal foreign workers.

For Selwyn, this might involve monitoring local needs and connection employers in growing industries with workers coming out of declining industries.

More focus on skills development

The government has provided early signals of its intention to support skills development as part of the recovery process. Measures put in place over the past several months include the Targeted Training and Apprenticeship Fund (TTAF), which complements existing programmes such as programmes such as Mana in Mahi and Fees Free study.

In addition, various skills development and education to employment programmes are being established at a local level, often with the support of local representatives of central government departments such as MBIE and MSD.

While these measures provide an excellent starting point for addressing the skills shortage in some key industries, we see opportunities for the implementation of similar programmes in other industries facing critical skills shortages, such as health care, education and training, and professional, scientific and technical services.

Economic recovery partnerships will need to work closely with their local RSLGs, and with secondary and tertiary education providers, to develop effective skills development pathways that will address current and future skills needs in their local economies.

The RoVE process will see the establishment of six Workforce Development Councils (WDCs) that will take over many of the functions currently performed by Industry Training Organisations (ITOs).

Selwyn should consider how the unique needs of its businesses are conveyed to and communicated by the RSLGs.

Affordability and connectivity remain assets

One of the direct effects of the increased trend of working from home, is an increase in the attractiveness of regional centres.

A combination of (relatively) affordable property prices, high quality communications infrastructure and reasonable travel connectivity to major centres, is likely to provide regions with a competitive advantage in attracting domestic migrants, or the much-discussed and seemingly growing group of returning New Zealanders.

Selwyn is well-placed to benefit from this trend as it has historically had a strong commuting population. Selwyn could benefit further by developing and promoting its lifestyle opportunities.

Build build build

Initiatives such as the New Zealand Upgrade Programme, along with central government financial support for regional infrastructure development projects, will play a key role in stimulating the recovery of local economies.

Councils and EDAs will need to collaborate with their local construction industries, to accelerate to implementation of infrastructure development programmes, and ensure optimum allocation of available resources across different projects and different construction types.

In the residential construction sector, we see opportunities for local government interventions on the supply side of the housing market, for example through increasing the availability of land for residential construction, consenting residential development and providing the necessary infrastructure. These processes will once again need to be planned and implemented in collaboration with relevant stakeholders such as local property developers, and local residential and non-residential construction firms.

Austerity is a non-starter

The 2008 Global Financial Crisis provided some stark lessons regarding the negative consequences that can arise from increased austerity on the part of central and local governments, in the face of declining employment and earnings. Thus far, New Zealand's approach to the COVID-19 recession suggests that these lessons have been absorbed. Government spending on direct support measures such as the wage subsidy and CIRP has proven effective in minimising some of the worst effects of the recession. More indirect measures such as the Funding for Lending Programme are likely to rein in the cost of private sector debt, despite contributing to rising house prices.

In this environment, we would reiterate the need for local governments to, wherever possible, continue providing impetus to local economic activity through their planned operational and capital expenditure programmes.

We also maintain that a balanced approach between rates increases and the maintenance of services on the one hand, and consideration of increasing financial stress in the community on the other, will provide the best chance for Councils and their communities to recover from the recession.

A focus on exports

Given the consistent performance of New Zealand's primary food-based exports, we see the opportunity for Councils, EDAs and local economic recovery partnerships to play a proactive role in promoting exports that originate within their regions.

Such collaboration activities might take place across a number of districts that share common export products, or between districts that participate in the same value chain for a particular export product. For example, districts in which an export commodity is produced, might benefit from collaboration with districts in which that product is processed or packaged for export.

Collaboration will also be increasingly important in the face of potential supply chain disruptions, which may result in shortages of imported inputs into production processes, or in a reduced ability to transport products to overseas markets.

We would equally see opportunities for regions producing primary export commodities, to explore the possibilities for adding value to these products in New Zealand. As a rule, high-value exports result in high-value jobs and increased earnings in local communities.

Finally, we would encourage Councils, EDAs and their partners to investigate the opportunities that might exist for the export of services, or of product and service

combinations, for example in sectors such as agricultural technology, where regional economies might possess a competitive advantage.

Wellbeing will come back into focus

As local economies begin to recover from the COVID-19 recession, issues of community wellbeing are likely to reappear on the radar of national and local government. The mental health toll of the Level 3 and 4 lockdowns, as well as of job losses, reduced earnings, business closures and reduced future employment opportunities is yet to become clearly visible in our communities. Similarly, declining housing and rental affordability is likely to result in negative wellbeing outcomes in almost all regions.

We therefore foresee a need for central and local government, DHBs and their community development partners, to allocate resources towards effectively addressing these and other wellbeing issues, that are likely to emerge or be worsened as a result of COVID-19.

Appendix I. New Zealand economy – the big picture

A rocky path through 2020

Economic activity crashed and rebounded

GDP figures for the June 2020 quarter confirm that the COVID-19 pandemic brought about the sharpest decline in economic activity in history. Nationally, GDP declined by 12.4% from the June 2019 quarter.

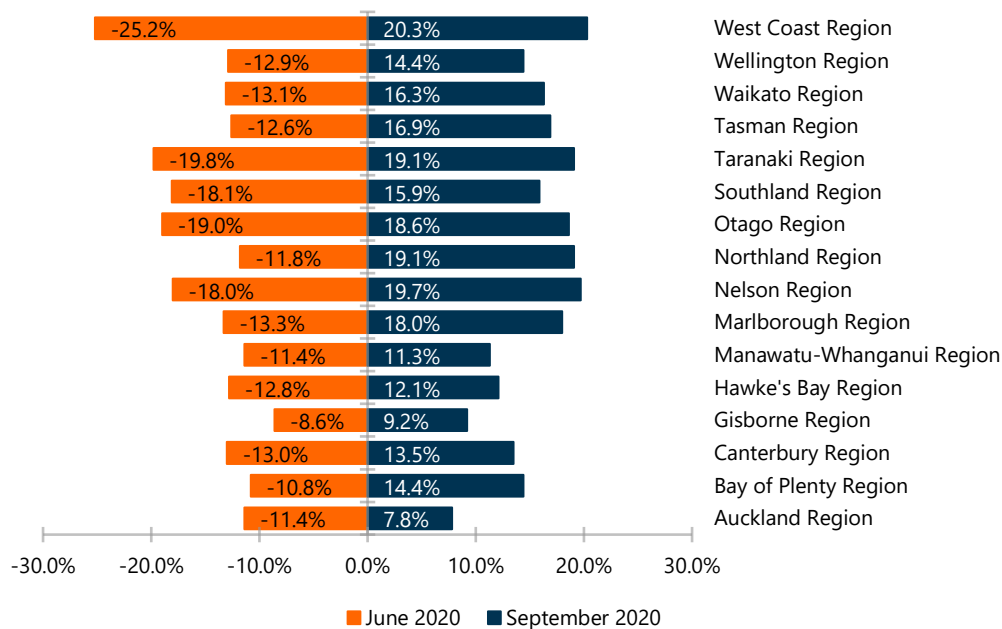
The previous largest quarterly fall in economic activity experienced in the New Zealand economy took place following the Global Financial Crisis of 2008. In the March 2009 quarter, GDP declined by 2.8% compared to the March 2008 quarter.

As expected, this downturn in economic activity was unevenly spread across New Zealand's regions. Districts with a high reliance on international tourism, such as Queenstown-Lakes and Mackenzie, experienced contractions of more than 20% compared to the June 2019 quarter. By contrast, districts with large food-based primary sectors fared much better – GDP in the Wairoa, Tararua and Carterton Districts declined by less than 5% compared to June 2019.

Economic activity rebounded in the September 2020 quarter, as the national lockdown ended and the country returned to more normal levels of activity. Nationally, GDP for the quarter was 3.2% lower than the September 2019 quarter. In Selwyn GDP for the September quarter was 2.6% higher than last year.

Figure 23

Feeling the economic hit differently
Infometrics provisional GDP, annual % change



Jobs have been lost – although fewer than initially feared

The recession has understandably had a negative effect on employment. Our estimate is that over the year to September 2020, more than 70,000 jobs have been lost across the economy.

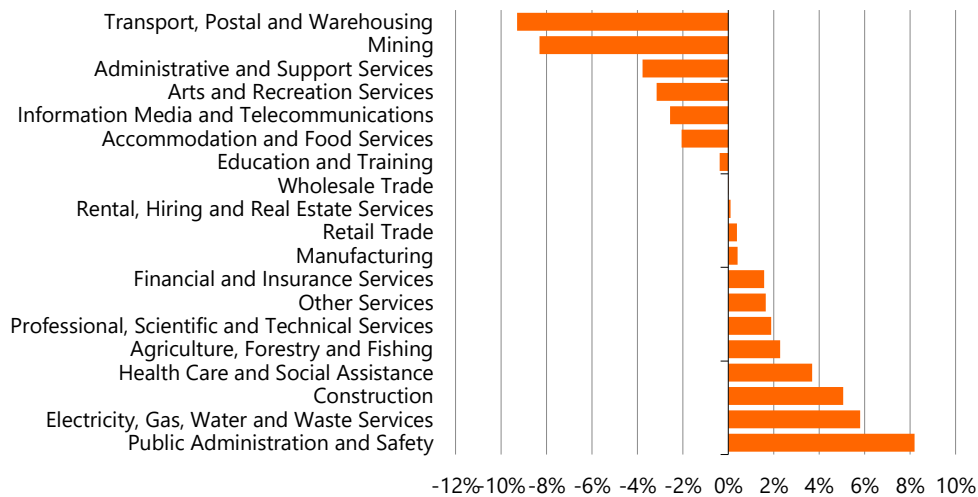
On a percentage basis, these job losses have been concentrated in the transport, postal and warehousing (for the most part Air New Zealand), mining and administrative and support services industries. In absolute terms, the largest numbers of jobs have been shed in the following industries – transport, postal and warehousing, accommodation and food services, administrative and support services and arts and recreation services.

Figure 42

Examining job changes by industry

Filled jobs by industry, New Zealand, September 2020

Annual % change



While the effects of these job losses will ripple through New Zealand's communities over the next several years, the level of job losses is likely to be well below the figure of 120,000 initially forecast for the year to March 2021. The various financial measures implemented by the government, most notably the wage subsidy and small business loan scheme, have had the intended outcome of reducing immediate job losses and allowing employers to recover from lockdown.

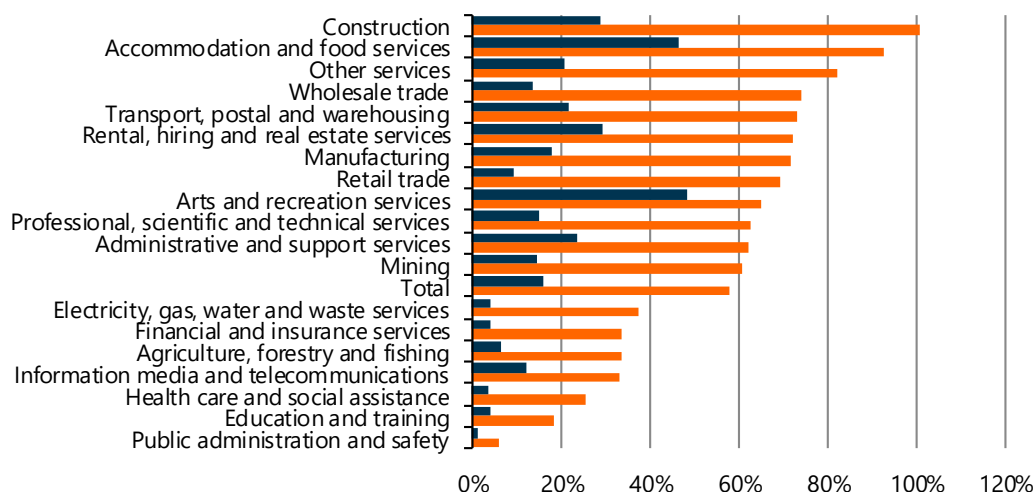
Figure 23

Wage Subsidy helped, a lot

Estimated share of industry supported

Wage Subsidy Extension - to 24 July 2020

Wage Subsidy



A number of industries have also begun to create jobs, as the economy recovers from the shock of lockdown and activity resumes (see Figure 23 above). In particular, the public administration and safety, construction, health care and social assistance and

professional, scientific and technical services have each created several thousand jobs over the past year. Our estimate is that approximately 20,000 jobs have been created or re-established, mainly in the September 2020 quarter.

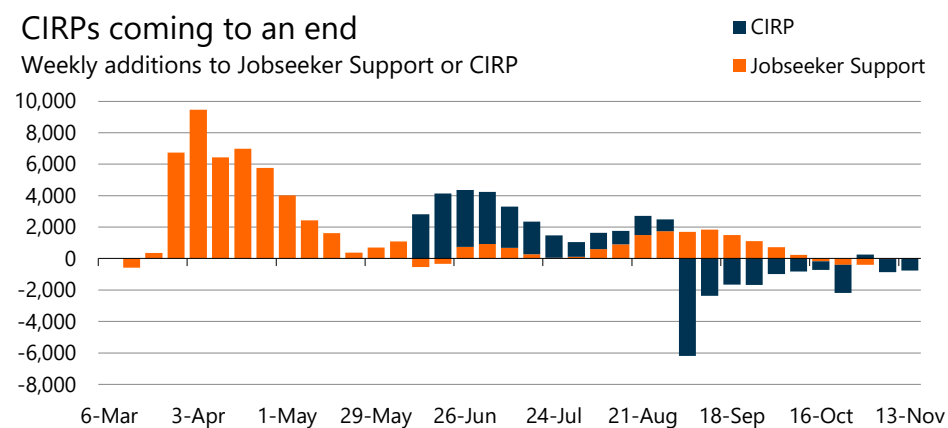
Preliminary data indicates that while job losses at the scale initially feared have been avoided, the nature of some employment has changed. In many instances, employees have been compelled to accept pay cuts, or have seen their working hours reduced, as employers seek to reduce costs and maintain the financial viability of their businesses. This trend seems to be particularly prevalent in tourism-dependent industries such as accommodation and food services, and in service-based sector such as arts and recreation, and administrative and support services.

Government support has helped

The 12-week COVID Income Relief Payment (CIRP) helped to stabilise the economy during and immediately after the lockdown period. At the height of its uptake, in August 2020, the CIRP was supporting close to 25,000 individuals in total.

Interestingly, as CIRP recipients have reached the end of their eligibility period, we have not yet seen a corresponding increase in the number of Jobseeker Support recipients. At the same time, the rates of job creation or job re-establishment in the economy do not appear sufficient to accommodate all these previous CIRP recipients. This suggests that unemployment might be higher than the official unemployment rate suggests, or that the decline in the labour participation rate in the economy might be larger than estimated.

Figure 24



The housing market is heating up...

Another significant intervention in the economy during the June 2020 quarter, involved the negotiation between government and the commercial banking sector of six-month mortgage holiday scheme. This scheme was designed to prevent homeowners from being forced to sell their homes in the event of losing their jobs as a result of COVID-19.

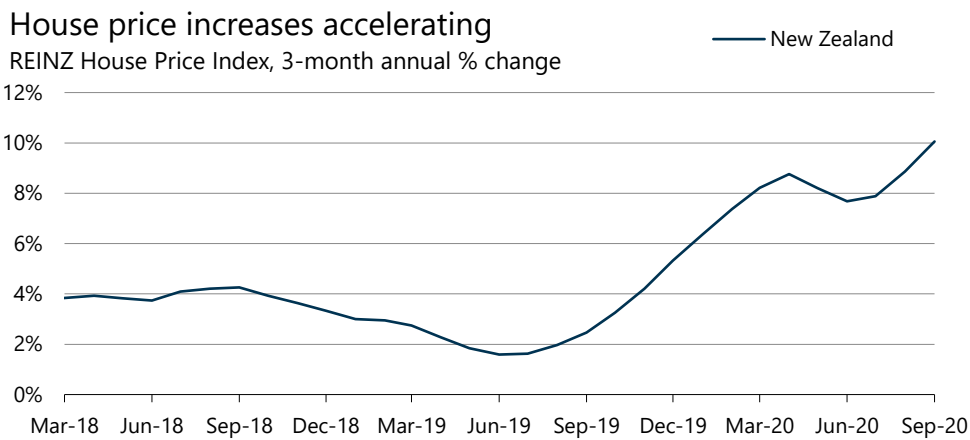
One of the potential unintended consequences of this measure has been an increase in consumer spending, as funds that might normally be used to service a mortgage became available for other uses. Another outcome appears to have been a reduction in

short-term household debt, as consumers have become somewhat less confident of their job security and future employment prospects.

The COVID-19 lockdown, along with the mortgage holiday and subsequent uncertainty amongst homeowners, resulted in a reduction in the stock of existing houses available for sale. This, along with historically low interest rates and the removal of loan-to-value restrictions, has contributed to an unanticipated boom in house prices over the September 2020 quarter.

Following a decline between April and June 2020, the Real Estate Institute of New Zealand's (REINZ) House Price Index, which tracks annual percentage changes in house prices over a rolling three-month period, turned positive in July, and accelerated sharply in August and September. Over the three months to September 2020, house prices across the country were more than 10% higher than in the corresponding period of 2019.

Figure 25



...but when will the music stop?

The strength and length of the post-lockdown housing boom has surprised forecasters and commentators. As we enter unprecedented territory with a fragile global economy and booming local housing market, it is hard to forecast house prices at a regional level with high degree of confidence. However, we can speak to the variety of conditions which may lead to a housing slow down.

One of the contributors to the housing market's surge has been the removal of loan-to-value restrictions (LVR) in April, a measure intended to support the mortgage holiday scheme. In the light of continued house price growth and investor activity, it remains a distinct possibility that the Reserve Bank will re-introduce LVRs in 2021, possibly targeted at investors. Such a move would partially mitigate the risk of of further interest rate cuts leading to a runaway housing market. Should LVRs be introduced, this would likely slow, but not stop, house price growth.

The Reserve Bank drove down interest rates earlier in 2020 by cutting the official cash rate, and may make further cuts in 2020 should the labour market deteriorate further. The Bank is currently implementing a funding for lending programme which will also serve to drive down interest rates faced by households and businesses. These moves will add further fuel to the housing fire.

The strength of the labour market has contributed to the strength of house price growth too. Lower than expected job losses combined with the mortgage holiday scheme (although uptake has been limited) have meant there few house sales have been forced due to financially stressed vendors. Should the labour market deteriorate substantially then we might expect a greater trend of forced sales which will mute price growth.

One of the factors in our initial expectations of a house price decline was the absence of international net migration bring people into the country and into competition for houses. Should our borders open to the rest of the world and significant net migration flows come into the country, this would add fuel to the housing fire. Anecdotally, Selwyn has attracted returning expats in the past, so this may be a significant factor in Selwyn's housing market. Any significant net migration into greater Christchurch will spill over into Selwyn District by contributing to housing demand, unless there is a significant increase in housing supply in Christchurch City and Waimakariri District.

Selwyn offers an attractive lifestyle and this will continue to improve. The opening of the Christchurch Southern Motorway has reduced commuting times into Christchurch City. Significant works are underway to develop and improve community amenities in Rolleston. These lifestyle factors will shore up demand for Selwyn's housing and may mean that the district's house prices outperform the New Zealand average over the coming years. This could be an upside risk for the District's construction outlook.

Construction is a mixed bag

Activity in the construction sector has also not declined across the country to the extent that we initially anticipated. One initial reason for this appears to be the delays caused by the Level 3 and 4 lockdown to construction projects that were already underway. The long lead times for both residential and non-residential construction that exist in some regions, due to capacity constraints in the local industry, are also a contributing factor.

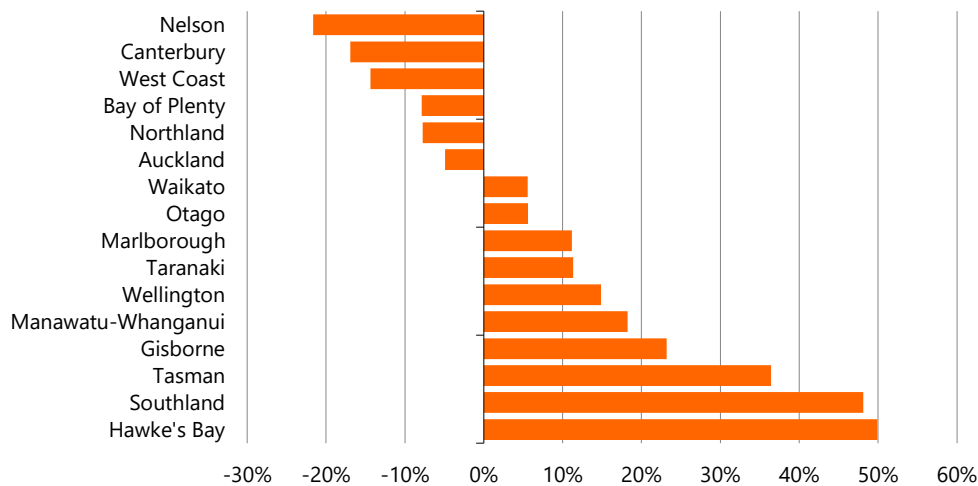
For many Councils across the country, the issuing of building consents was an activity that could continue almost unaffected during lockdown. It is therefore perhaps not surprising that the number of residential consents nationally increased by 8% over the year to June 2020, and by 3.5% for the year to September.

By contrast, the value of non-residential consents declined by 8.6% over the year to June 2020 and by 7.6% for the September year. This is hardly surprising considering the sharp reduction in business confidence during and immediately after lockdown.

Figure 26

Construction hit felt differently across New Zealand

Building consents, %pa change to September 2020



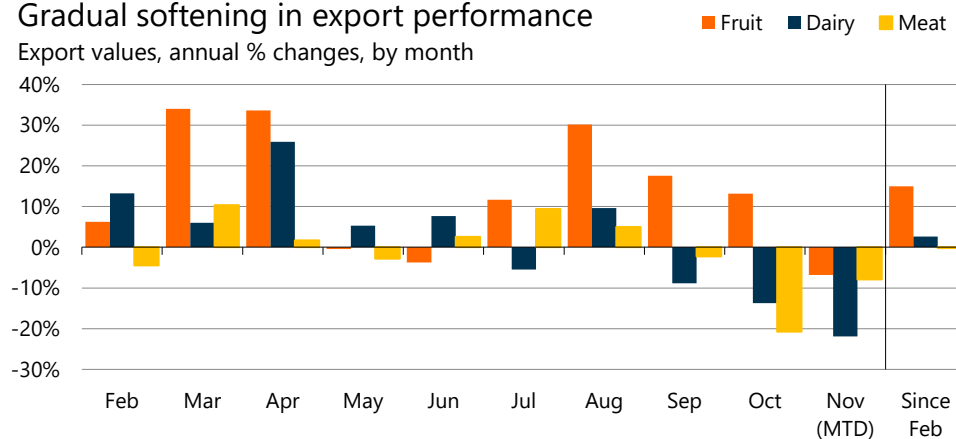
Exports keep on going

As expected, food-based primary exports have continued to perform, as foreign consumers have been increasingly attracted to New Zealand's produce due to its reputation for high quality and food safety standards.

Figure 27

Gradual softening in export performance

Export values, annual % changes, by month

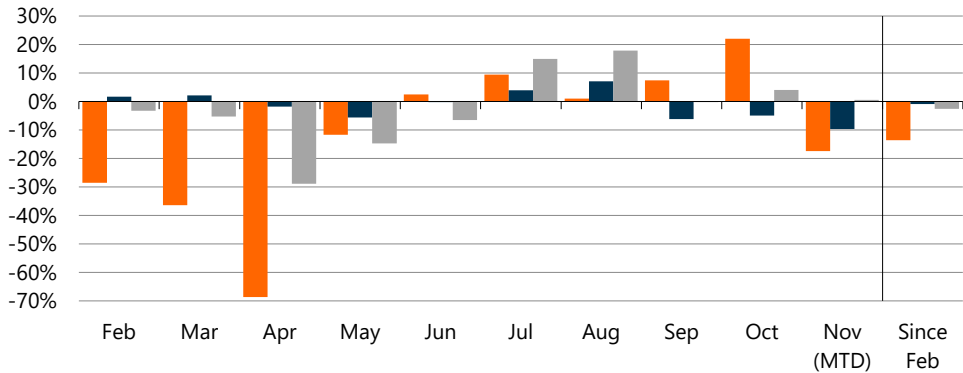


The picture is similar for non-food primary and manufactured exports. In the case of wood and forestry products, New Zealand has been faced with a global oversupply and a Chinese processing sector that has been somewhat slow in getting back to pre-lockdown activity levels. A lack of overseas processing activity has also reduced demand for some local mining outputs.

Figure 28

Recovering, but not recovered

Export values, annual % changes, by month



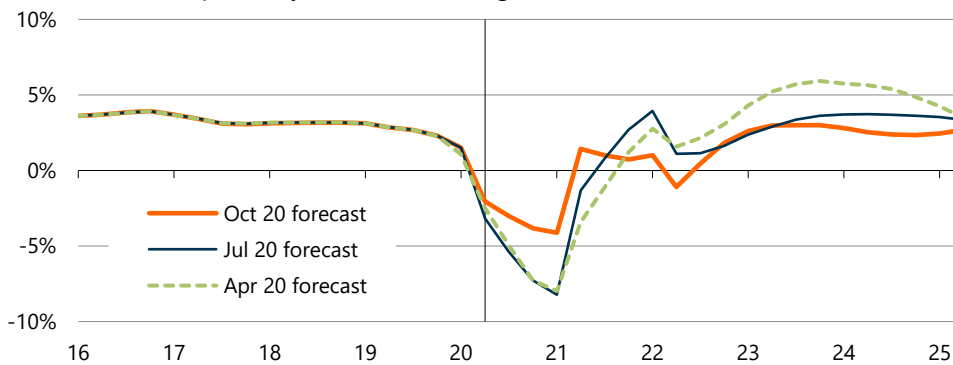
But is the worst yet to come?

The latest Infometrics macro-economic forecast, released in October 2020, confirms that the economy's immediate bounce back from the initial COVID-19 lockdown has been better than expected. Labour market indicators, the housing market, construction activity, and household spending have all defied expectations of an immediate and sharp downturn. Despite this good news, we're worried that the worst is yet to come, and we now expect more fallout to hit the New Zealand economy next year. We are now forecasting the second half of a double-dip recession to occur in 2021.

Figure 29

Less pain now, but another downturn in 2021/22

GDP forecast comparison, year-ended % changes



It all hangs on the labour market

Credit must be given to the government's wage subsidy for limiting the immediate rush of job losses from the border closures, lockdown, and collapse in business confidence. Weekly additions to the number of Jobseeker Support beneficiaries averaged 7,160 during April amid a wave of reactionary redundancies from businesses. But since tailing

off in mid-May, additions to the jobseeker queue have stayed relatively low, averaging just 784 per week.¹

We estimate that the September unemployment rate was 6.5%.

We believe that we are now at a crossroads for the New Zealand economy. If we can somehow avoid another substantial wave of job losses, then the negative flow-on effects for other key pillars such as the housing market and spending activity will also be muted. Alternatively, if the government's wage subsidy and its various extensions have only delayed job losses, rather than prevented them, then we would expect to start seeing things unravel as businesses plan for the year ahead.

Crunch time for employment

The next four months will be a crunch time for many businesses and their employees. Summer will be a key bellwether of fortunes. Retailers will be hoping that the post-lockdown buoyancy in spending can be sustained through into the Christmas period. For tourism operators, the absence of foreign tourists during the peak summer months could have a negative effect on their revenue three times as large as it did during winter. And other businesses will be weighing up trading conditions in the lead-up to Christmas, deciding whether it is worthwhile retaining staff and having to pay them through the holiday period if demand is going to stay soft into 2021.

We are not confident that further job losses can be avoided. Our updated forecasts predict a 6.5% decline in employment over the year to June 2021, implying a total fall in job numbers of 6.9% from its March 2020 peak (see Figure 5).

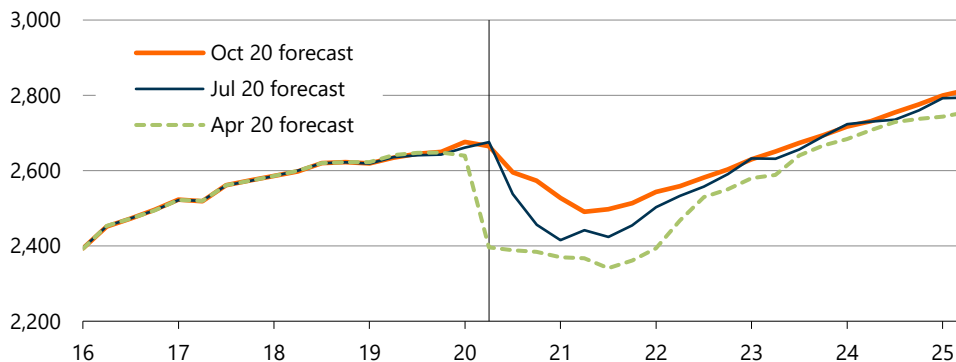
Our forecast loss of 186,000 jobs from peak to trough is a significant improvement from the 253,000 decline we were predicting in July or the 307,000 we anticipated in April. As previously noted, the government's support has proven to be very important for the labour market, while job losses have also been limited by the New Zealand economy's successful elimination of COVID-19 and quick bounce back out of lockdown.

¹ Trends in Jobseeker Support numbers are muddled somewhat by the COVID-19 Income Relief Payment. However, there has been a relatively small number of people moving onto Jobseeker Support after their Relief Payment entitlement has run out, suggesting many of these people are not eligible for Jobseeker Support.

Figure 5

A slower and shallower hit to employment

Seasonally adjusted employment (000)

**Labour market squeeze to hit household spending**

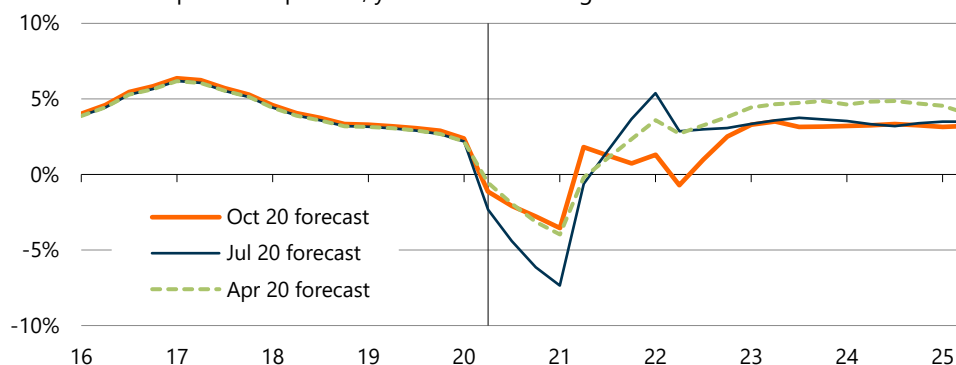
Declines in employment have a clear and dramatic effect on the spending power of consumers. But reductions in hours worked and a lack of wage inflation also have negative implications for household budgets.

Indicators to date suggest an immediate bounce back in household spending following lockdown, with private consumption in the September quarter likely to be similar to its pre-COVID level. However, Figure 31 shows that we expect 2021 to be much less positive as the labour market's deterioration affects spending activity. We forecast a 3.2% fall in private consumption between December 2020 and September 2021, with household spending not surpassing its pre-COVID peak until the second half of 2022.

Figure 31

Household spending still vulnerable to job losses

Private consumption comparison, year-ended % changes

**The housing market's remarkable resilience**

Alongside household spending, the other important facet of the economy being buoyed by the labour market's resilience is the housing market. Our previous forecasts of house price falls were premised on jobs being lost and people being unable to meet their mortgage payments, along with a collapse in population growth due to border closures.

Instead, we have so far been spared the worst of the job losses and, since our last forecasts were published in July, the government has extended its mortgage holiday scheme until March next year. No one is under pressure to sell their property, so the increasing pool of interested buyers is fighting over a limited number of houses available to purchase. House prices have defied expectations from six months ago and have actually gathered more upwards momentum.

It's worthwhile outlining the contributors to this pick-up in demand for housing to better understand how long it might continue.

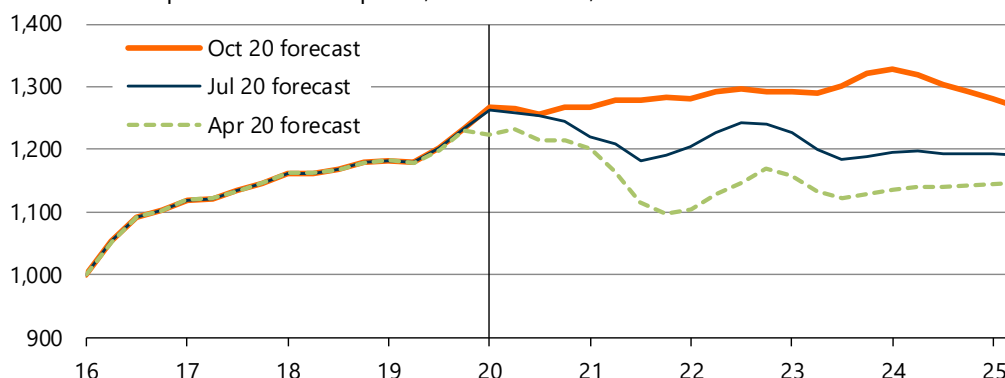
- Population growth unexpectedly spiked in late 2019 and early 2020. The pandemic created a pool of foreigners that have stayed in New Zealand longer than originally intended, due to border closures, reduced air connectivity and visa extensions. There was also an influx of returning Kiwis in early 2020 who chose to come back to live in New Zealand as conditions deteriorated offshore. Even if they are not homeowners, many of these people have needed somewhere to live. Also, many of the working Kiwis returning at short notice from overseas will have been cashed up and keen to buy a house.
- Very low interest rates have proven effective in enticing buyers into the market. First-home buyers have been particularly active, with new lending over the three months to August up 31% from the same period in 2019. As well as the boost to demand from lower mortgage servicing costs, parents are more likely to be helping their adult children get onto the property ladder, given the lack of return on their term deposits.
- Investor demand for property has picked up, with lending growth over the three months to August sitting at 25%pa. The removal of the Reserve Bank's loan-to-value restrictions effectively reduced the deposit requirement for investors from 30% to 20% (the latter requirement has generally been imposed by the banks themselves since the pandemic began). The lack of returns available from other investments such as term deposits has also driven up investor demand for property and shares.
- Where job losses have occurred, those people affected are on average more likely to be renters than homeowners. This uneven nature of the downturn so far has limited the negative effects on the housing market.

Add in the fact that neither the Reserve Bank nor the government want to see house prices fall, and it is becoming increasingly difficult to envisage a decline in property values in the near term. We still expect house price growth to slow in coming quarters in response to lower net migration and a weakening labour market, in combination with the significant continuing supply of new residential building activity in the pipeline. However, house price inflation holding between 0% and 2%pa between March 2021 and March 2023 is a much "better" outcome than the falls of 11% we were predicting back in April at the height of lockdown (see Figure).

Figure 32

One direction is what makes housing beautiful

Forecast comparison of house prices, Mar 2016 = 1,000



We still see scope for downward pressure on house prices over the longer term as interest rates start lifting from their record lows and the market absorbs the big increase in supply that is currently being constructed. We have factored in modest falls in house prices during 2024 and 2025.

Uncertainty the enemy of growth

Auckland's community outbreak in August was an unwelcome reminder that COVID-19 and its associated restrictions on business activity and freedom of movement can reappear at any time. From both a business and household point of view, this incredible level of uncertainty makes it very difficult to make major decisions or commit to significant future plans. Although businesses have shown increasing flexibility and agility in how they operate, we expect uncertainty to remain a constraining factor on spending and investment throughout the next year.

The on-again, off-again nature of the possible Trans-Tasman and Pacific travel bubbles has also made it difficult to reliably assess prospects for the tourism industry. For this set of forecasts, we have maintained a conservative assumption that travel bubbles start to open up from the second quarter of 2021. However, the recent move to allow New Zealand travellers into New South Wales and the Northern Territory without having to quarantine suggests that things might progress sooner.

Timelines for a COVID-19 vaccine also seem to be highly variable. Our forecasts have been prepared on the basis that a vaccine becomes readily available late next year. However, the roll-out of the vaccine will not necessarily be uniform around the world, and we can envisage some restrictions persisting throughout 2022 and limiting travel.

The globe is a mess

COVID-19 is not going away any time soon. Global daily new case numbers reached an all-time high of 385,848 on October 9, almost four times the highest daily total recorded in April. However, it's important to note that this increase in case numbers reflects much more widespread testing than there was capacity for six months ago. Global deaths averaged 6,306 per day in April; the corresponding number for September was 5,406.

Lockdown fatigue means that countries are reluctant to continue or reimpose significant restrictions on economic activity and people's freedoms. But it is also clear that the

ongoing threat of the virus is acting as a constraint on activity anyway. Even without lockdowns, people are more reluctant to venture out and about than they were pre-pandemic, and this hole in demand will have a lasting effect on economic outcomes. The latest Consensus forecasts show that by June 2022, Spain, Italy, the UK, Japan, and France are all likely to still have smaller GDPs than in the September 2019 quarter.

Aside from the prospects of prolonged weakness in the world economy, which could extend for longer than most forecasters are predicting, the pandemic is also affecting people's consumption patterns. Reduced spending on travel and associated goods and services is an obvious change, but our exporters are also being affected by lower levels of restaurant and hospitality activity that are hitting demand for higher-value foodstuffs. This trend is likely to show through in reduced incomes for meat and wine producers, for example, as they are forced to settle for lower prices from international consumers with a reduced willingness or ability to pay top dollar.

Concerns about international supply chains also remain on the radar. Imports of a range of manufactured products are well down from a year ago. Some of this decline reflects weaker demand, particularly related to business investment spending. But there are ongoing anecdotes about shortages of electronics and other manufactured consumer goods.

At this stage, we remain reluctant to predict a pick-up in domestic manufacturing activity on the back of these issues. However, supply chain disruptions have the potential to constrain economic growth if they persist or become more acute in coming months.

An economy regaining momentum

It's undeniable that the New Zealand economy has regained momentum following the chaos of early 2020. The effects of the pandemic on the economy to date have been less severe than we originally feared. But this downturn is still the most severe in living memory, and the path ahead remains highly uncertain.

We still expect the ramifications for the economy of the lockdown and border closures to persist for an extended period. Caution remains a key feature of our forecast outlook. One of the biggest risks is that New Zealand's better-than-expected economic performance is not matched by a rebounding global economy.

Appendix II. Forecast Assumptions

We have revised the macro-economic assumptions used in modelling the effects of COVID-19 on the New Zealand economy as follows:

- **No further lockdowns** – we have not modelled further nationwide lockdowns in the remainder of the year to March 2021 or the following year.
- **Vaccine rolled out by late 2021** – timelines for a COVID-19 vaccine are highly variable. We have assumed that a vaccine is rolled out in late 2021, but complete rollout will take time, and we assume that travel restrictions will persist in some form into 2022.
- **Global demand for food products holds up, but non-food exports decline** – our forecast of a 16% contraction in non-food manufacturing exports volumes over the year to March 2021 remains unchanged, while the forecast for the year to March 2022 is revised to a decline of 8.1%.
- **Foreign tourism remains off the table** – the ongoing closure of New Zealand's border to all but returning citizens and residents, essential workers and a limited number of exemption holders, mean that we have revised our estimates of the reduction in foreign tourism demand to 99% for the year to March 2021, and 91% for the year to March 2022.
- **Domestic tourism spending increases** – continued constraints on the ability of New Zealanders to travel internationally, along with the strong demand for domestic travel, have led us to revise our estimate of 21% decline in domestic tourism spending, to a 3.3% increase in this spending category in the year to March 2021, and a 12.3% increase in the following year.
- **International education revenue halves** – we retain our forecast of a 49% reduction in international education revenue in both the year to March 2021 and the year to March 2022.
- **Domestic education demand increases** – we have estimated the increase in domestic demand for tertiary education at 8.3% for the year to March 2021, and 4.4% for the year to March 2022.
- **House prices growth will continue** – the combination of government support measures and market forces has caused us to revise our assumption of an 11% decline in average house prices by the end of 2021. Instead, following the sharp price increases of the past two quarters, our forecast is for house price inflation of between 0% and 2%pa for the two years to March 2023.
- **Construction gets a boost** – the heat in the housing market will have a buoyant effect on residential construction, counteracting the effects of the sharp decline in international net migration. We have therefore revised our estimate of a 35% decline in new dwelling construction, to a 16% decline in the year to March 2021 and an 8% decline in the following year. Non-residential construction is likely to be boosted by the New Zealand Upgrade Programme, COVID Response and Recovery Fund (CRRF), and the acceleration of various projects earmarked for funding from the Provincial Growth Fund.

- **Government comes to the party** – our modelling includes the wage subsidy and its subsequent extension, the COVID-19 Income Relief Payment and increase social welfare benefits. Collectively these benefits have injected close to \$20 billion into the national economy in the current financial year.

Appendix III. Comparison of Infometrics and Treasury forecasts

Infometrics forecasts of the post-COVID-19 macroeconomic and regional economic environment differ substantially from Treasury forecasts due to different purposes and modelling approaches.

Treasury forecasts are occasionally used by central government agencies in assessing regional funding (for example, NZTA funding for roading project). This appendix explains the differences to support council staff in engaging with central government agencies.

Treasury scenarios serve a different purpose

The Treasury scenarios and Infometrics projections ultimately serve different purposes.

As an economic forecaster, Infometrics' purpose is to present a view of the future which considers the range of likely outcomes across a variety of domains. Our forecasts could be considered an average of the range of possible outcomes, including our judgement on what policy responses the government will make to respond to COVID-19.

Treasury's role as advisor to the government is to help the government understand the implications of the different policy decisions which the government is being asked to make. Therefore, the purpose of Treasury's COVID-19 scenarios is to illustrate the potential economic implications of specific policy options, without second-guessing which combination of options the government will choose. In Treasury's own words, the scenarios "are not official Treasury forecasts or the Treasury's view of what will happen".²

In April 2020, the Treasury modelled five scenarios, of which three were utilised by NZTA to provide scenario paths for the New Zealand economy. All scenarios feature a sharp fall in economic activity in the June 2020 quarter.

- Scenario 1: Assumes one month under Alert Level 4, one month under Level 3, and ten months under Levels 1 and 2. International borders closed to foreign visitors for 12 months. Global GDP growth 6% lower than Treasury's pre-COVID forecast.
- Scenario 4: As per scenario 1, with an additional two months under Level 4, and additional two months under Level 3
- Scenario 5: As per scenario 1, with lower global economic growth in 2020 and 2021.

It should be noted that Treasury's scenario forecasts released in April 2020 are substantially different from later forecasts published in the Budget Economic and Fiscal Update (BEFU) and Pre-Election Economic and Fiscal Update (PREFU). Treasury's forecasts are national-level forecasts with a focus on gross domestic product (GDP),

² <https://www.treasury.govt.nz/news-and-events/news/covid-19-economic-scenarios-and-weekly-data-published>

whereas Infometrics' forecasts focus on national and local-level forecasts with a focus on employment levels.

For local government to understand how COVID-19 will affect their local economy, Infometrics forecasts are more appropriate than the Treasury scenarios.

Similar modelling approach, Infometrics goes to regional detail

Infometrics forecasts of the macroeconomy (i.e. national economic conditions) follows a similar approach to Treasury's scenarios. Infometrics operate a macro-economic model which takes in our assumptions of the economic environment (such as interest rates, trading partner growth) and models how they will interact across the main sectors of the economy (households, private sector, government, trade). In parallel, we use our Computable General Equilibrium (CGE) model to model how these macroeconomic conditions translate into the performance of individual industries such as agriculture. CGE models are particularly well-suited at modelling economic shocks, such as COVID-19. Treasury operate its own macroeconomic model which broadly serves a similar function to the Infometrics model. In line with its different purpose, Treasury modelled five distinct scenarios.

Infometrics Regional Forecasting Model (RFM) translates national forecasts into regional forecasts by industry. Infometrics has developed RFM by building on our deep experience in analysing regional economies. Infometrics use RFM to translate our national macroeconomic forecasts into regional forecasts and was commissioned by NZTA to translate the Treasury scenarios into regional forecasts using RFM.

Infometrics forecasts are more current

Both Infometrics and Treasury released economic modelling in mid-April, at a time when the country was under Alert Level 4 lockdown and coming to terms with what that might mean for the future. However, since April, Infometrics and other forecasters have made revisions to reflect the surprising strength of the country's economic recovery. Infometrics has released two further upward revisions to our forecasts since April – in July and October – reflecting our improving understanding of how the economy is performing post-COVID-19. The forecasts for Selwyn District presented in this report are based on Infometrics' October forecasts.

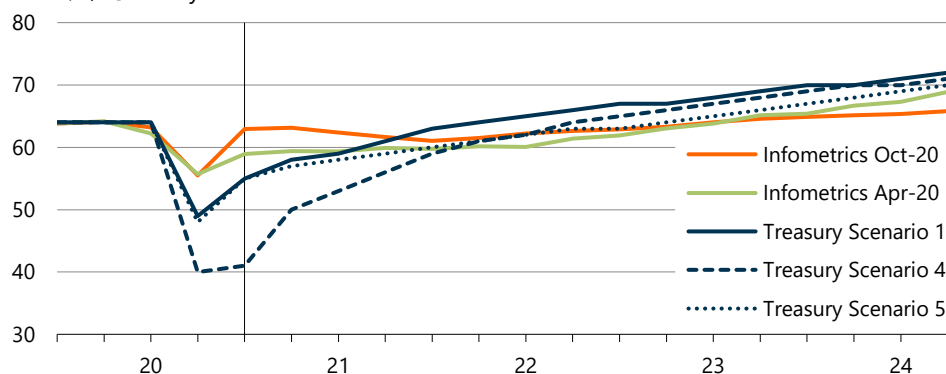
COVID-19 and the related recession are economically unprecedented events, and this has meant that economic forecasts have continued to change substantially under each revision as the global situation evolves and as we better understand the resilience of our own economy. Figure 6 shows how Infometrics forecasts of GDP have evolved between April and October, in relation to Treasury scenarios. The Treasury scenarios depict extreme possible outcomes, as can be seen with the characteristically swift and deep decline projected for the June 2020 quarter, and extremely strong recoveries. Infometrics projections exhibit more gradual changes with a lesser decline and slower recovery. Infometrics forecast for October 2020 shows a bounce back in economic activity in the September 2020 quarter reflecting the resilience of the economy to date. Treasury scenarios 1 and 4 exhibit a weaker recovery between the June and September quarters. Infometrics October forecast is substantially more positive than all three Treasury

scenarios for the near term, although we expect a slightly slower growth rate in the longer term recovery.

Figure 6

GDP projections by scenario

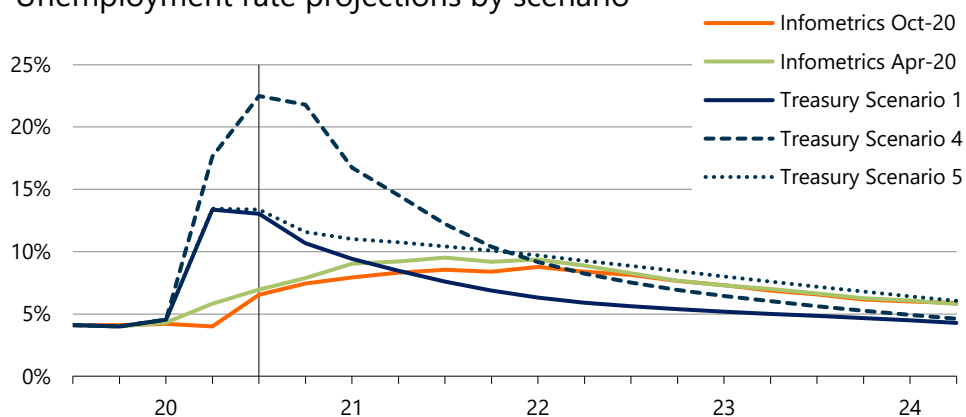
2019 \$b, Quarterly



The differences between Infometrics forecast and Treasury scenarios are more pronounced for the unemployment rate. All three Treasury scenarios expected a very rapid rise in unemployment in response to the Level 4 lockdown, however this has not materialised in practice as the wage subsidy was highly effective at both retaining jobs during the subsidy and as a catalyst for retaining jobs after the subsidy. Infometrics expects a slower rise in unemployment, and a slower recovery, than Treasury. Current activity has not occurred in the way assumed under the Treasury's earlier April forecasts, with Treasury themselves adjusting their view upwards.

Figure 7

Unemployment rate projections by scenario



Forecasts are difficult to produce in a crisis and are subject to significant changes as more information is received and expectations change. The uncertainty over the current economic outlook is highlighted by the significant changes in forecasts by all major forecasters, including Treasury, over the last eight months. To best inform decision makers, forecasts must adapt as conditions change, and as the New Zealand economy evolves, Infometrics will monitor activity and update our economic expectations accordingly.