



Unmasking COVID-19's economic impact

A data-driven analysis of the COVID-19 lockdowns

NZIER public discussion paper

Working paper 2023/01

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Funding

Each year NZIER devotes resources to undertake and make freely available economic research and thinking aimed at promoting a better understanding of New Zealand's important economic challenges. This paper was funded as part of this public good research programme.

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Executive summary

COVID-19 has been one of the most significant disruptions to the global economy since the Global Financial Crisis and has changed how we operate. Some trends have returned to normal, but others have permanently changed.

This working paper explores how COVID-19 response measures have impacted New Zealand's economic behaviours. This is achieved by using various public data sources and data held by NZIER.

This working paper complements the Shiny dashboard on NZIER's [website](#). This dashboard provides interactive datasets at the national and regional levels to analyse the economic impact of COVID-19.

Why now?

We have chosen to examine these trends as enough time has passed that we can draw more conclusions about how behaviour has been impacted and whether it has returned to pre-COVID-19 trends.

What have we seen?

Our findings provide compelling evidence that COVID-19 has dramatically altered how consumers and businesses operate, both during and after outbreaks, with significant and far-reaching economic implications. Table 1 highlights the key results.

Using the Behaviour Change Framework,¹ the government's COVID-19 response restrictions can be viewed as a change in a factor impacting peoples' and businesses' capability, motivation, and opportunities to change consumer and working habits.

From the consumer side, there is evidence to suggest that the strictness of the different COVID-19 response measures had a profound impact on how people spent their money, with the largest fall in spending occurring during the initial Level 4 lockdown in late March 2020, when spending dropped by nearly 55 percent, and there was a shift towards more spending online. Though online spending fell in 2022 compared to 2021, it is still well up compared to 2019.

In addition, savings increased during the nationwide COVID-19 lockdowns, driven by lower spending due to the inability to spend in certain locations and the softening impact of job losses from government support payments.

In terms of work, our data suggest that there has been a switch in working location from the office to working from home, which seems to be a permanent shift.

Since the initial lockdown in 2020, the COVID-19 pandemic has also significantly impacted businesses in New Zealand, causing disruptions across various aspects of their operations.

According to NZIER's long-standing Quarterly Survey of Business Opinion (QSBO), headline business confidence and domestic trading activity fell sharply due to the lockdowns. Both

¹ <https://www.transport.govt.nz/area-of-interest/strategy-and-direction/behaviour-change-framework/>



measures bounced back remarkably as New Zealand’s lockdown policy resulted in little to no COVID-19 cases in our community between June 2020 and August 2021.

Businesses witnessed larger labour shortages that placed pressure on the ability to do business. This became and still is the largest primary constraint for business, in part leading to lower business confidence.

Currently, business concerns have shifted from lockdowns to inflation and economic uncertainty, which has caused a decline in business confidence and trading activities, resulting in an all-time low in business confidence. In addition, businesses are struggling with labour shortages, which have been exacerbated by inflation and tight profit margins.

What do we see now?

Despite the challenges consumers and businesses face in New Zealand due to the COVID-19 pandemic, the resilience and adaptability of the business community have been impressive.

Many companies have pivoted their operations to adapt to changing circumstances. While the road to recovery may be long and challenging, with continued support from the government and community, we are confident that the business landscape in New Zealand will eventually return to a more stable and prosperous state.

Table 1 Observed changes in economic trends

Observed trend change	Measure
Permanent shifts	Remote working – Household Labour Force Survey shows an increase of people who reported working from home compared to the same quarter two years prior.
	Online spending – Online retail spending in 2022 was up 62% on 2019 levels.
Returning to 2019 levels	Spending at a national level – over the last five months of data, weekly consumer spending has been, on average, the same compared to the same period in 2019.
	Spending in Wellington – over the last five months of data, weekly consumer spending has been, on average, the same compared to the same period in 2019.
	Traffic volumes – available data from the start of 2023 shows light traffic at key sites to be slightly lower in Wellington and Auckland.
	Savings – The household savings ratio has shifted back towards previous levels and is expected to continue to fall.
Uncertain	Spend levels in Auckland – over the last five months of data, weekly consumer spending has been, on average, lower than 2019 levels.
	Business confidence, ease of finding labour, average costs, and profitability – It is difficult to disentangle the impacts of COVID-19 and other factors. COVID-19 had a clear impact during the response but is less clear now with compounding effects.

Please note these are just some examples and are being compared to 2019 levels. As new information is released, these conclusions may change. Further information can be found in our dashboard.

Source: NZIER

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1 Purpose

The purpose of this paper is to address three questions:

- 1 What permanent changes have we seen in consumer and producer behaviour because of COVID-19?
- 2 What were the changes in consumer and producer behaviour because of COVID-19-related lockdowns at a regional and national level?
- 3 What insight does the combination of aggregate and granular data show?

The structure of this paper is as follows: first, we provide some context around New Zealand's response to COVID-19; second, we look at what changing trends have been seen internationally; third, we consider how we can measure the change in New Zealand; four, we explore what happened to consumer and producer behaviour, and finally we discuss our findings.

We have undertaken this analysis as it has been nearly a year since most health restrictions have been removed domestically and internationally, and society has had time to adapt or return to pre-COVID-19 behaviour. COVID-19 has changed behaviours, which has been a defining feature compared to other pandemics, such as the Spanish flu in 1918 (Hawke 2022).

To show the impact of COVID-19 on the New Zealand economy, we developed an interactive dashboard using an R Shiny dashboard. Using the app, you can examine different trends at a national and regional level to compare impacts. The dashboard is accessible from our [website](#).

2 New Zealand's policy response to COVID-19

As a major part of the government's COVID-19 response, restrictive policies like lockdowns and isolation were implemented to quell the virus's spread after waves of outbreaks between 2020 to 2022.

Although lockdowns have been proven successful in eliminating the Alpha variant in New Zealand during the initial outbreak, it was less successful in containing the Delta and Omicron variants in 2021. As Omicron became widespread in early 2022, the New Zealand government removed and relaxed restrictions. Throughout the response, different restrictions were placed nationally and regionally.

Using the Behaviour Change Framework,² the government's COVID-19 response can be viewed as a change in a factor, impacting peoples' and businesses' capability, motivation, and opportunities to change consumer and working habits. Though this framework is usually applied in policy design to target what behaviours need changing to support policy objectives, it is also useful when considering what change has occurred (Public Health England 2020; Ministry of Transport n.d.).

² <https://www.transport.govt.nz/area-of-interest/strategy-and-direction/behaviour-change-framework/>

Figure 1 The Behaviour Change Framework

A framework to demonstrate factors influencing behaviour change



Source: Ministry of Transport

3 What was the impact of COVID-19 on consumer and producer behaviour?

The economic impact of COVID-19 has had more impact than the Global Financial Crisis (GFC), with global real gross domestic product (GDP) dropping nearly three times more than it did during the GFC in terms of GDP on an annual basis (Parker 2020). Data also highlights that the time between peak-to-trough was faster than the GFC, as major parts of the global economy came to a virtual halt overnight (McKinsey 2021).

Consumer patterns have also changed since COVID-19, with new trends emerging and previous trends being amplified. Around the world, we have seen changes in how people work, spend, travel and save, to name a few.

It is important to note that COVID-19 hasn't been the only disruptor of consumer trends. The conflict in Ukraine and the related sanctions on Russia have caused massive inflation in fuel prices and driven significant changes in commodity prices.

3.1 Trends in the way we shop

The COVID-19 pandemic has profoundly impacted the world in many ways, and consumer spending behaviour is no exception. With lockdowns, unemployment and economic uncertainty, consumers have had to adapt their spending habits to rapidly changing circumstances. From stockpiling toilet paper to shifting toward online shopping, the COVID-19 pandemic has significantly changed how we spend our income.

Globally, surveys on consumer trends have shown that many people have turned to online shopping for their purchases as physical stores closed or operated at limited capacity. This has led to a surge in e-commerce sales and the adoption of new technologies, such as contactless delivery. Seventy-one percent of consumers reported shopping online in 2020,

according to a survey by the European Commission (European Commission 2021a). Similarly, survey data by PwC has shown that more than 60 percent of respondents have increased their online shopping during the pandemic, while 50 percent indicated that they are looking to further increase online shopping in the near future (PwC 2022).

The pandemic also heightened the digital divide between countries, particularly regarding access to digital technology and e-commerce. In the United States, thanks to well-developed digital infrastructure, the COVID-19 pandemic accelerated digital adoption, especially in grocery shopping and healthcare. However, in many low-income countries, people with limited or no access to the internet or digital devices made it difficult for them to engage in online shopping (OECD 2020).

3.2 Trends in saving patterns

Household savings have varied due to the volatility caused by COVID-19 disruptions. While household incomes have remained relatively steady, household expenditure has moved up and down as consumer behaviour changed in response to changing economic conditions. However, increased government assistance helped some parts of society save. This trend was seen in the United Kingdom, the United States and Germany, with estimated increases in savings ratio of 2.6, 2.3, and 1.5 percentage points, respectively, for 2020 compared to 2019 (McKinsey 2021).

3.3 Trends in the way we travel

The COVID-19 pandemic has had a devastating impact on the tourism industry. According to the World Tourism Organization (UNWTO), international tourist arrivals declined by 74 percent in 2020, the largest decrease in modern history. This resulted in a loss of over 1 billion international tourist arrivals and over US\$ 1.3 trillion in export revenues from tourism. The Asia and the Pacific region was the hardest hit, with a decline of nearly 84 percent in international tourist arrivals, followed by the Middle East and Africa with a decline of 75% (UNWTO 2021).

Domestic travel has also been negatively impacted due to COVID-19. According to a study by the World Travel & Tourism Council (WTTC), domestic travel in the United States declined by 47.4 percent in 2020 compared to the previous year (WTTC 2021). In Europe, domestic travel also declined significantly, with some countries reporting a decline of up to 40 percent in domestic tourists (European Commission 2021b).

The travel restrictions, quarantines, and border closures implemented by governments around the world to control the spread of the virus have been the main driver of this decline in tourism. The pandemic has also significantly impacted consumer confidence, with many people avoiding or postponing travel for fear of contracting the virus.

The impact of the COVID-19 pandemic on the tourism industry has been far-reaching and has had a knock-on effect on many other industries, including hotels, airlines, and tourist destinations. It has also significantly impacted the employment and livelihoods of people working in the tourism sector.

Despite the challenges, many countries and companies in the tourism industry have recovered or are working to recover, focusing on promoting domestic tourism and developing new health and safety measures to rebuild consumer confidence. Recently, the UNWTO published an overview of works associated with transforming the tourism sector,

highlighting the importance of a sustainable recovery and lasting changes for the future of tourism (UNWTO 2022).

3.4 Trends in how we work

COVID-19 has changed how we work and has been described as “*the largest mass exercise in remote working in global corporate history*” (Field 2020). The pandemic made working from home (or remote working) an essential tool to reduce the spread of COVID-19. There has been a shift in the number of people being able to work from home and the frequency with which it occurs.

Using data covering 31 countries worldwide, The International Labour Organization found that 557 million workers worked from home in 2020, accounting for 17.4 of the world’s employment. Before the COVID-19 pandemic, only 7.9 percent of the workers worked from home.

Although this highlights the increasing trend towards flexible work arrangements and the growing capability for individuals to work remotely, we have seen a higher proportion of employees in high-income countries opting to work from home compared to those in middle or lower-income countries.

In 2020, 35.4 percent of the workers in the United States worked from home, compared to 17 percent for upper to middle-income countries and around 13.5 percent for low-income countries (International Labour Organization 2021). In 2021, the number of employees in the United States doing some or all their work at home increased to 38 percent, while this number was around 24 percent before the pandemic (U.S. Bureau of Labour Statistics 2022).

4 How can we measure changes in economic behaviour?

One way businesses and governments can measure these changes is with the use of high-frequency granular data. High-frequency data can refer to information that is produced rapidly. Granular data refers to the data's level of detail or precision; an example would be regional or territorial authority level data rather than nationwide. Combining these traits with supporting macroeconomic data creates the ability to make near real-time decisions focused on commercial or public policy decisions.

An example is utilising real-time data in a readily accessible form, such as dashboards. Data dashboards have been used extensively during the pandemic, collating real-time public-health data, including confirmed cases, deaths and testing figures. One such example of a dashboard is the WHO Coronavirus (COVID-19) Dashboard (World Health Organization 2020). Several dashboards show wider responses to the pandemic, such as policy and economic interventions to highlight changing consumer patterns. These dashboards utilise time-series information and mapping to inform people and support policy decisions (Budd et al. 2020).

In this study, we focus on using high-frequency granular data to examine the effect of COVID-19 lockdowns on the New Zealand economy. We extend this by combining public data with NZIER’s Quarterly Survey of Business Opinion (QSBO) data.

4.1 How can we examine the causal effect of COVID-19?

This paper examines the causal effect of COVID-19 lockdowns on various economic indicators. However, we must acknowledge that changes in these indicators cannot be entirely attributed to COVID-19 since other confounding factors may also be at play. For example, when studying the effect of COVID-19 on people's spending, changes in spending behaviour may not only be due to the lockdowns but also to factors such as general economic conditions and income levels.

Untangling the causal effect of COVID-19 on the economy requires a careful analysis that holds other confounding factors constant. One way to achieve this is by using high-frequency data. High-frequency data can help identify causal effects using various methods, such as regression discontinuity. This approach can be considered a 'natural experiment' that occurs when units just before and after a policy implementation are similar in all other relevant ways except for the policy intervention. For example, we can use regression discontinuity to study the effect of COVID-19 lockdowns on people's spending behaviour by comparing spending patterns just before and after the lockdowns.

High granular data can increase the precision of the estimated discontinuity, as it provides more confidence in the similarity just before and after the policy intervention, which reduces bias in the causal effect of interest. Hence, in this paper, we attribute most of our findings in the early days of the lockdown to COVID-19. However, since the study period spans an extended timeframe, other confounding factors that affect the economy have also changed (e.g. inflation and the Ukraine war). Therefore, we refrain from fully attributing any long-lasting effects to COVID-19 lockdowns. Additionally, although we believe COVID-19 has impacted businesses significantly, we do not fully attribute any long-lasting business impact to COVID-19 lockdowns since QSBO data is unavailable at a high frequency.

5 What happened to economic behaviour in New Zealand?

The COVID-19 pandemic has profoundly impacted how we lead our economic lives. Extensive survey reporting has shown these changes, but how do we measure these changes?

Using different data, we can examine trends in New Zealand and how various COVID-19 response measures impacted them. In this section, we look at how COVID-19 lockdowns have affected New Zealand businesses, using some evidence from NZIER's long-standing QSBO.³

5.1 Measuring alert levels

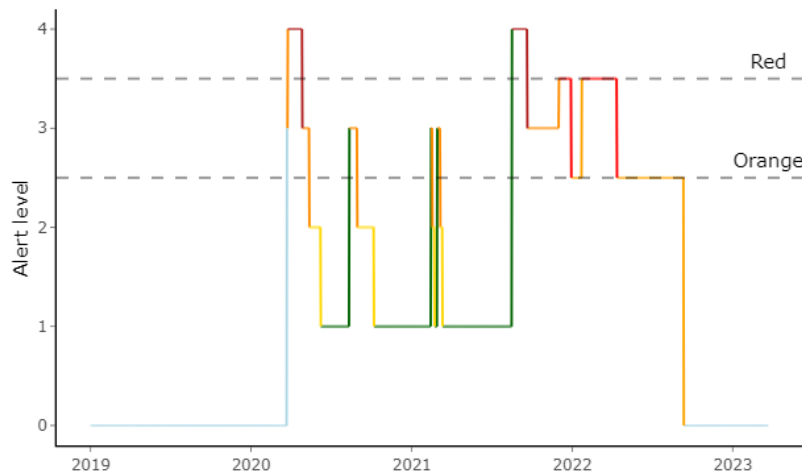
We use two ways to visualise the strictness of different response settings. The first is to use the set alert levels and the traffic light system used under the COVID-19 Protection Framework, as seen in Figure 2. The second is to use the Oxford Coronavirus Government

³ The QSBO typically begins by inquiring about a business's situation over the past three months and their expectations for the next three months. It also asks whether the business conditions are anticipated to worsen, remain stable, or improve. We also ask businesses about their constraint, costs, profitability etc.

Response Tracker (OxCGRT) Stringency Index, a composite measure of nine response metrics (see Figure 3).⁴

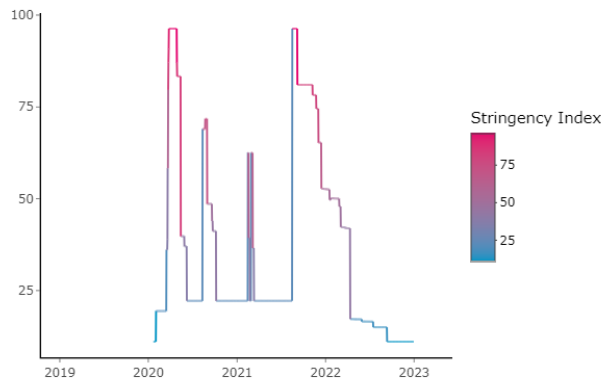
Though these measures have been discontinued, as most restrictions have been lifted domestically and internationally, this provided a useful measure to compare the impacts of response levels on different outcomes (Mathieu et al. 2020).

Figure 2 Strictness of the government’s response using alert level data



Source: New Zealand Government (2022a; 2022b)

Figure 3 Strictness of the government’s response using the Stringency Index



Source: Our World in Data (2020)

5.2 Spending falls as a result of lockdowns and shifts online

The strictness of the different response measures impacted how New Zealanders could spend their money. Utilising data from the Ministry of Business, Innovation & Employment, we explored national and regional spending trends.

⁴ The nine metrics used to calculate the Stringency Index are: school closures; workplace closures; cancellation of public events; restrictions on public gatherings; closures of public transport; stay-at-home requirements; public information campaigns; restrictions on internal movements; and international travel controls.

Comparing weekly consumer spend to the same week in 2019, the largest fall in spending was in the initial Level 4 lockdown beginning in late March 2020, when spending dropped by nearly 55 percent. The second largest drop was during the lockdown in August 2021 in Auckland, where spending dropped by almost 45 percent. Spending has been comparable to 2019 levels since March 2022 at a national level (Ministry of Business, Innovation & Employment 2023), suggesting a recovery in demand as lockdown restrictions were progressively relaxed.⁵

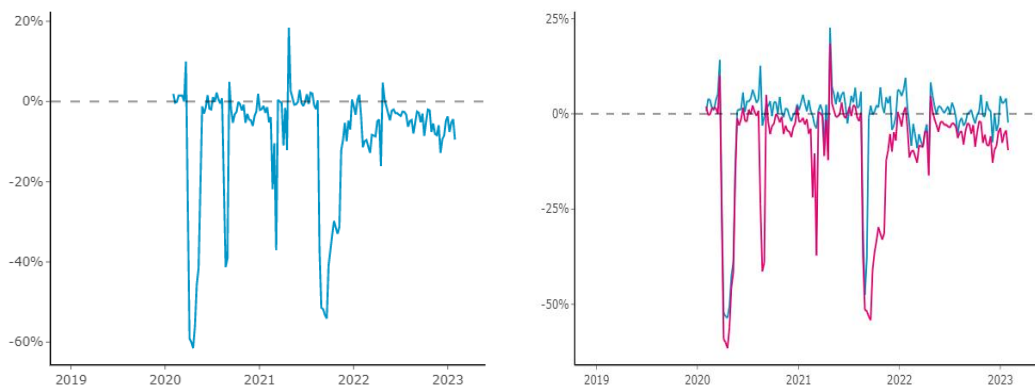
Comparing Auckland’s spending (pink) to Wellington’s (blue), we see that Auckland had a larger decrease in spending during the initial lockdown period starting in March 2020. Several changes in regional alert levels resulted in decreased spending throughout 2020 and 2021. Though Wellington’s spending levels returned to those in 2019, spending in Auckland remains below its 2019 level.

Utilising data measuring how money is being spent, we can see that across 2020 there was a distinct jump in the proportion of domestic and international online spending, reflecting the decrease in physical store availability. Though online spending fell in 2022 compared to 2021, it is still well up compared to 2019 levels (NZ Post 2023).

This dataset highlights the impact on the Auckland region due to the regional lockdowns in 2021. There is a clear discrepancy between regional spending during the Auckland lockdowns and the extended lockdown in late 2021.

Figure 4 Spending falls during COVID-19 lockdowns

Compared to the same week in 2019. National – left; Auckland (pink) and Wellington (blue) – right



Source: Ministry of Business, Innovation & Employment (2023)

5.3 Savings increase during the initial lockdown

Worldwide saving patterns changed during the COVID-19 outbreaks, and New Zealand was no different. Lower spending led to an increase in the ratio of household saving to net disposable income (Stats NZ 2022a), as seen in Figure 5.

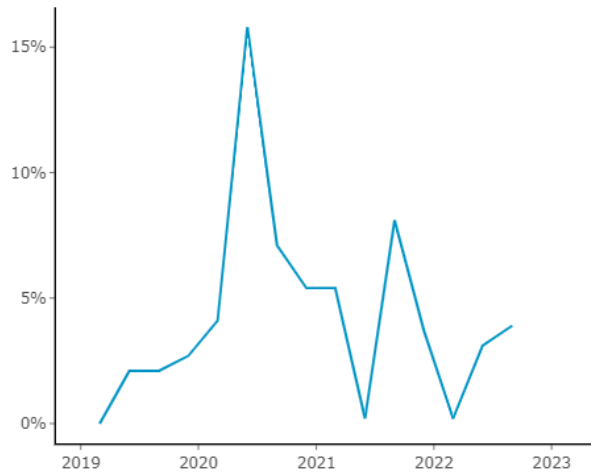
⁵ The consumer spend data covers more than 70 percent of the EFTPOS transactions around the country. This 70 percent is not evenly distributed. Some regions in New Zealand may be more or less represented in the data.

During the initial lockdown, the household savings ratio reached 14.9 percent during the June 2020 quarter. This was driven by both the inability to spend in certain locations (food services, accommodation etc.) and by government support payments (Stats NZ 2022a).

It is unclear what has happened to savings trends due to the quarterly frequency of the data, though we expect it has fallen given current inflationary pressures.

Figure 5 Savings increase during the COVID-19 lockdown

Savings ratio.



Source: Stats NZ (2022)

5.4 Working from home has become the new normal

One of the defining features of the COVID-19 pandemic and response was the shift to working from home rather than in the office. Google mobility data helped measure the difference in the time spent in an area compared to early 2020.

In Figure 6, we see large drops in workplace activity with each alert level increase and, conversely, an increase in workplace activity for each alert level decrease for Auckland (pink) and Wellington (blue). As of the end of 2022, workplace activity levels have not returned to pre-pandemic levels in the two major city centres.

The trends seen in Figure 6 are supported by the Household Labour Force Survey (Stats NZ 2022). Vehicle counts in major city centres decreased to reflect more people working from home during lockdowns but have returned to near-normal levels across the traffic locations examined (NZTA 2022).

Figure 6 Lockdowns changed where we worked

Compared to workplace activity between Jan 3 and Feb 6, 2020. Auckland (pink), Wellington (blue)



Source: Google (2022)

5.5 Business confidence and trading activity fall

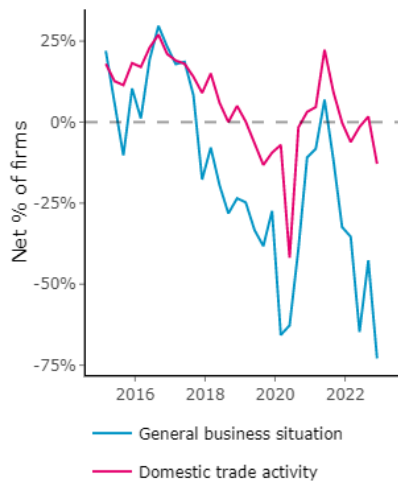
Figure 7 shows business confidence and trading activity in New Zealand. The vertical scale indicates the percentage of businesses expecting their business situation/activities to increase or decrease over three to six months on a seasonally adjusted basis.

Since the initial COVID-19 lockdown in 2020, there has been a substantial decrease in both business confidence and domestic trading activities. Headline business confidence and domestic trading activity bounced back remarkably as New Zealand's lockdown policy successfully eliminated COVID-19 in our community between the second quarter of 2020 and the third quarter of 2021. However, the entry of the Delta and Omicron variants into New Zealand caused a decline in business confidence and trading activity once again, as new lockdowns were imposed to limit the spread of COVID-19 in our community.

The key concerns amongst businesses have now shifted from the impact of the lockdowns to high costs and general uncertainty over the outlook more broadly. Despite the relaxation of COVID-19 restrictions, business confidence hit an all-time low in the December 2022 quarter. Seventy-three percent of businesses expect general economic conditions to deteriorate over the coming months, and 13 percent of firms reported a decline in activity over the past quarter. The survey was conducted between 28 November 2022 and 9 January 2023, which captured the more hawkish than expected Reserve Bank Monetary Policy Statement in November 2022. Therefore, the decline in confidence can be partly attributed to concerns amongst businesses about what the Reserve Bank's commitment to controlling inflation would mean for borrowing costs.



Figure 7 General business situation and trading activity impacted by COVID-19



Note: A positive number indicates the percentage of firms expecting a better economic situation and trading activity, while a negative number indicates the percentage of firms expecting a worse economic situation and trading activity.

Source: NZIER, QSBO data

5.6 Labour shortages place pressure on businesses

COVID-19 brought significant challenges for businesses when planning their operations. Many businesses responded to the uncertainty in business outlook by cutting operating expenses through reduced production or laying off workers. This is reflected in the increase in the unemployment rate between December 2020 to March 2021.

However, as huge amounts of government stimulus were injected into the New Zealand economy, significantly boosting demand for goods and services, businesses began to hire more people to increase production. As a result, the unemployment rate began to decrease rapidly, making it difficult for businesses to find labour.

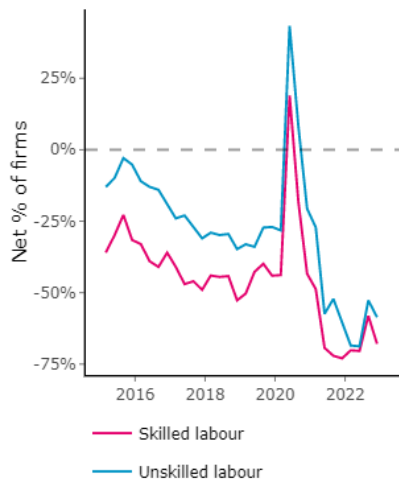
In addition, part of the COVID-19 response in New Zealand was to limit international and domestic travel. As international workers represent a significant portion of the New Zealand labour force, travel restrictions have significantly limited the ease of finding labour for businesses, making it hard for businesses to expand their production to meet demand between 2021 to 2022.

This trend in labour shortage is reflected in Figure 8. Our survey results show that businesses found it challenging to acquire labour before the COVID-19 pandemic. Labour constraints were reduced briefly in the initial COVID-19 breakout as businesses coped with uncertainty by reducing their output. However, with the rise in demand for products, businesses are once again facing difficulties in hiring both skilled and unskilled labour.

Despite the relaxation of international borders, which allows more firms to bring in workers from overseas, firms continue to face more difficulty hiring labour compared to pre-pandemic periods.



Figure 8 Ease of finding labour spikes during 2020



Note: A positive number indicates the percentage of firms reporting that they can easily find labour, while a negative number indicates the percentage of firms reporting difficulty in finding labour.

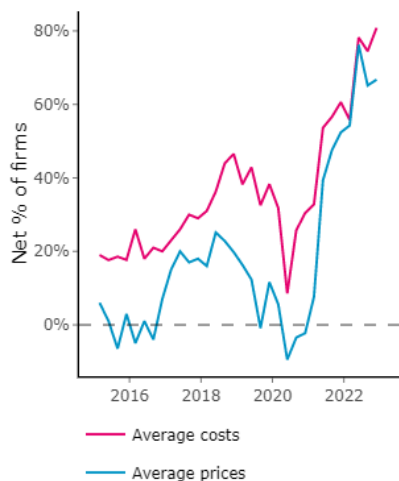
Source: NZIER, QSBO data

5.7 Rising costs affect firms' profitability

When asked about the cost pressure and selling prices, most businesses in our latest QSBO survey (December 2022) indicated that costs and prices have increased in recent years. As demand grew domestically and internationally, cost pressures remained intense for New Zealand businesses.

A greater proportion of businesses are passing higher costs to customers by increasing prices. We see both costs and prices increase for businesses in Figure 9.

Figure 9 Average costs and prices



Note: A positive number indicates the percentage of firms reporting that their costs and prices have increased, while a negative number indicates the percentage of firms reporting that their costs and prices have decreased.

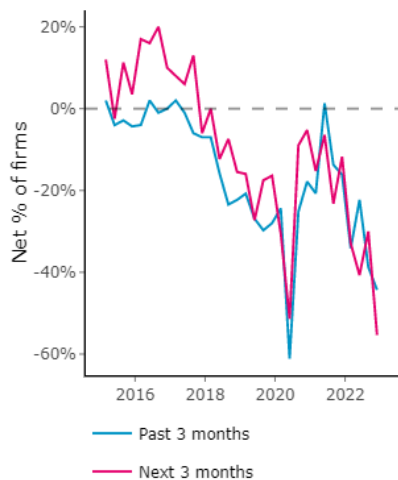
Source: NZIER, QSBO data



Figure 10 shows firms' profitability between 2015 to 2022. Firms' profitability has been very volatile since the initial COVID-19 outbreak due to high uncertainty and reduced economic activity due to the lockdowns. However, more recently, the reduction in profitability can be primarily attributed to intensified cost pressures. Although some of the increases in costs are passed onto consumers, businesses are still experiencing very low levels of profitability.

Our most recent survey results (December 2022) show that, compared to pre-pandemic levels, firms report significantly lower profitability levels. We expect the high-cost environment will continue to weigh on firm profitability over the coming year.

Figure 10 Firm profitability



Note: A positive number indicates the percentage of firms reporting that their profitability has increased, while a negative number indicates the percentage of firms reporting that their profitability has decreased.

Source: NZIER, QSBO data

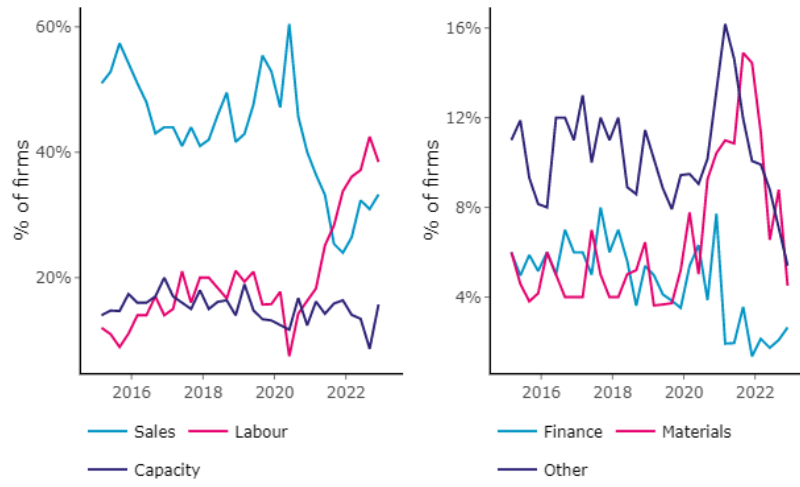
5.8 Labour remains the biggest constraint for firms

Figure 11 shows the key factors firms consider as the primary constraint on their business. Before the COVID-19 pandemic, most firms cited sales as their primary constraint. This constraint on sales intensified during the first wave of COVID-19 lockdowns in New Zealand, reflecting softer demand. However, as the economy received stimulus injections and COVID-19 lockdown measures were relaxed, demand began to rebound, leading to increased sales for firms. Recently, with the unemployment rate reaching an all-time low, firms are reporting an increasing trend where labour has become their primary constraint in production.

Regarding finance and materials, an increasing number of firms report that these aspects are the primary constraints for their business operations since the initial COVID-19 outbreak. However, labour shortages quickly became the primary constraint for business operations, surpassing other constraints as the primary source of limitation for businesses.



Figure 11 Factor constraints



Note: The percentages indicate the extent to which firms report each limitation as their primary constraint.

Source: NZIER, QSBO data



6 Discussion

The COVID-19 pandemic has caused unprecedented changes in people's behaviour over the last three years, and New Zealand has not been an exception. Using data, this paper has analysed the impacts of COVID-19 on various aspects of New Zealanders' lives, including spending patterns, savings, working and business trends.

Our findings suggest that the strictness of the different COVID-19 response measures profoundly impacted how people spent their money, with the largest fall in spending occurring during the initial Level 4 lockdown in late March 2020, when spending dropped by nearly 55 percent. In addition, we've also seen savings increase during the nationwide COVID-19 lockdowns, driven by lower spending due to the inability to spend in certain locations and government support payments. Regarding work, our data suggest a switch in working location from the office to working from home.

The pandemic has also had a profound impact on businesses in New Zealand. Drawing on evidence from NZIER's QSBO, our analysis suggests that the pandemic has caused declines in business confidence and trading activity multiple times due to various rounds of lockdowns implemented to limit the spread of new COVID-19 variants.

Our analysis also highlights that businesses are facing labour shortages due to travel restrictions and inflation, making it hard to expand their production to meet demand. Regarding profitability, although firms can pass on some increased costs to customers, profitability is still negatively impacted by rising cost pressures.

Using a combination of different data sources at different levels of granularity and frequency, we have gained valuable insights into the challenges faced by individuals, households and businesses during the pandemic. NZIER's QSBO survey results provide useful insights into the current state of New Zealand's business environment, which will be helpful in comprehending the challenges faced by businesses during extraordinary circumstances such as COVID-19 lockdowns. Our findings highlight the importance of ongoing adaptability and resilience in the face of persistent pandemic-related challenges. Moreover, they emphasise the crucial role of timely data analytics in evaluating the impact of policy changes such as COVID-19 lockdowns.



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