Financial Stability Report

November 2020

RESERVE BANK
OF NEW ZEALAND
TE PŪTEA MATUA

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This report is published pursuant to section 165A of the Reserve Bank of New Zealand Act 1989, which states that a financial stability report must:

(a) report on the soundness and efficiency of the financial system and other matters associated with the Bank's statutory prudential purposes; and

(b) contain the information necessary to allow an assessment to be made of the activities undertaken by the Bank to achieve its statutory prudential purposes under this Act and any other enactment.

In addition, under the Memorandum of Understanding between the Minister of Finance and the Governor of the Reserve Bank of New Zealand, the Reserve Bank's *Financial Stability Report* will report on matters relating to the soundness and efficiency of the financial system, including any build-up of systemic risk, and the reasons for, and impacts of, the use of macro-prudential policy instruments.

This *Report* uses data released up to 17 November 2020.

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ISSN 1176-7863 (print)
ISSN 1177-9160 (online)

Financial Stability Report in pictures

November 2020

Financial stability supported by fiscal and monetary policy responses

The New Zealand financial system entered the downturn with strong buffers and significant fiscal and monetary support has allowed these buffers to be maintained.

Fiscal and monetary support have prevented a substantial rise in unemployment

Significant downside risks remain, and some sectors will face continued stress

The financial system has been insulated from significant stress so far

Banks need to keep supporting customers and the economic recovery

We intend to reinstate LVR restrictions to manage risks from high-risk housing lending

Reserve Bank supports efforts to improve disclosure of climate risks

Fiscal and monetary support have prevented a substantial rise in unemployment

The Government's fiscal support, in particular the wage subsidy scheme, has stabilised the labour market and household incomes. The Reserve Bank has continued to ease monetary policy to support demand in the economy and alleviate financial pressures on businesses and households, including through the expansion of its Large Scale Asset Purchase programme and recent announcement of a Funding for Lending Programme.

These support initiatives have been crucial to ensure that the short-term impacts of economic lockdown did not result in longer-term disruption. Domestic economic activity rebounded relatively quickly as the country moved to lower Alert Levels. Business failure rates have remained at very low levels to date, and unemployment has not risen to the extent initially feared.

Significant downside risks remain, and some sectors will face continued stress

Although New Zealand has been successful so far in managing the pandemic, there is considerable uncertainty about the economic outlook. The continued spread of COVID-19 around the world, the ongoing closures of international travel links, and the risk of further domestic outbreaks, are weighing on businesses' investment intentions.

To date, the economic stresses faced by businesses and households have yet to show up in banks' non-performing loan metrics. As government support schemes wind down and payment deferrals come to an end, banks are likely to see a deterioration in their loan books. It will be important for banks to recognise bad loans promptly and work with their customers to resolve them.

The financial system has been insulated from significant stress so far

New Zealand's banking system entered the current downturn with strong capital and liquidity buffers, having built these up over the decade following the global financial crisis, and generally simple business models that generate strong and stable earnings. Support measures have meant the performance of banks' loans has remained high to date. Banks have increased their provisions to prepare for a rise in loan losses.

Strong capital buffers allow banks to maintain credit growth during stress events. Based on recent Reserve Bank stress tests, banks' current capital positions would allow them to survive severe but plausible economic shocks, whilst maintaining credit supply to businesses and households.

Banks need to keep supporting customers and the economic recovery

The financial system, and in particular banks, play a crucial role in supporting the economy through periods of uncertainty and volatility. Bank credit currently remains available to banks' existing creditworthy borrowers, but standards have tightened for new business borrowers and some business sectors acutely affected by the pandemic.

Banks' continued provision of credit to sound businesses and households is the best contribution they can make to supporting the economic recovery. To facilitate this, the Reserve Bank has further extended the implementation of the Capital Review, is continuing to provide the financial system with ample liquidity, and has committed to an extended period of stimulatory monetary policy.

We intend to reinstate LVR restrictions to manage risks from high-risk housing lending

Despite the large decline in economic activity earlier in the year, housing market activity and housing credit growth have rebounded strongly. A growing share of this lending is going to borrowers with low deposits, making these borrowers' balance sheets more vulnerable to a correction. If this trend were to continue, the stock of low-deposit home loans on banks' books would gradually rise to a level that would constitute a risk to financial stability.

As a result, the Reserve Bank intends to reinstate loan-to-value ratio (LVR) restrictions in early 2021. Putting LVR restrictions back in place would improve the resilience of households and banks to a future housing market downturn.

Reserve Bank supports efforts to improve disclosure of climate risks

Climate change presents a significant longer-term risk to financial stability. The Reserve Bank supports efforts to assess, manage and disclose climate-related risks. A recent announcement by the Government introducing a mandatory climate-related financial disclosures regime is a positive development.

The Reserve Bank will repeat a survey on the implementation of climate-related disclosure next year to assess the progress financial institutions are making in this area.

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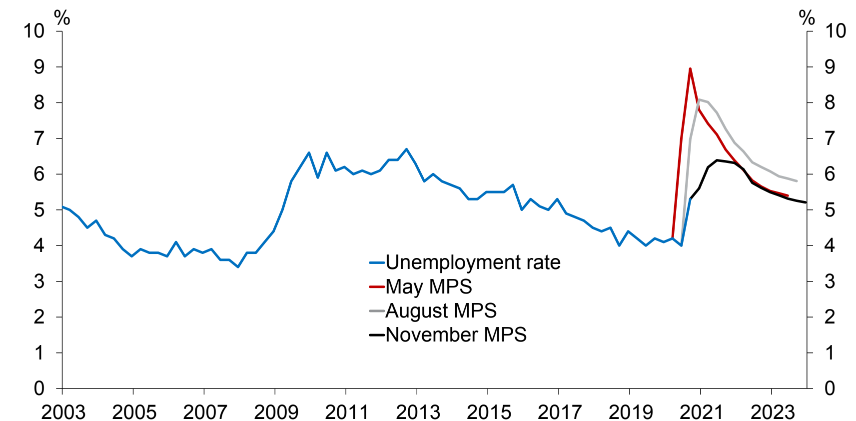
Chapter 1
Financial stability risk and policy assessment

Containment of COVID-19 in New Zealand, along with significant fiscal and monetary support, has meant that the New Zealand economy has so far been relatively resilient in the face of the economic shock caused by the pandemic. This support has also helped to contain near-term risks to financial stability. However, there remain significant downside risks that could derail the economic recovery. And growing housing lending risks present longer-term risks to financial stability.

The New Zealand financial system entered this downturn with strong buffers, and has been cushioned from losses to date by substantial fiscal and monetary support. The banking system has maintained capital and liquidity buffers, and the insurance sector has also retained capital during this period.

The New Zealand economy experienced a record contraction in the June quarter, as measures to contain the outbreak resulted in the shutdown of large parts of the economy. The business sector has proved more resilient than expected to this shock. In part, this reflects that businesses have been able to adapt to the new operating environment through the adoption of technology and flexible operating practices. Business and household incomes have also been supported through extraordinary fiscal support. In particular, the wage subsidy scheme mitigated much of the income loss for the business sector, and limited the loss of employment that could have otherwise eventuated.

Figure 1.1
Unemployment rate and *Monetary Policy Statement* baseline scenarios



Source: Stats NZ *Household Labour Force Survey*, Reserve Bank estimates.

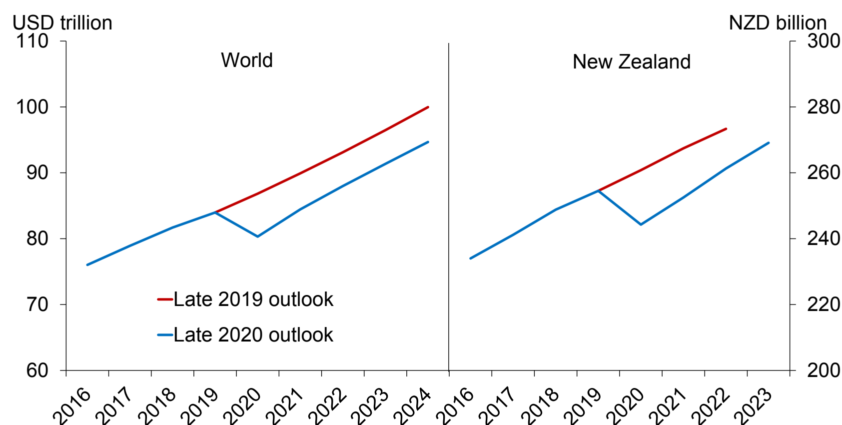
Note: Baseline scenarios from the Reserve Bank's May, August and November 2020 *Monetary Policy Statements*.

Stimulatory monetary policy has also supported the economy by improving cashflow positions of businesses and households, lowering the exchange rate relative to where it would have been and providing a stable environment for investment. Unemployment has not risen to the extent feared earlier in the year (figure 1.1) and, to date, business failure rates

have remained at very low levels. These outcomes reflect the success of New Zealand's health and economic responses, and would have been substantially worse in the absence of this policy support.

Significant downside risks to the economic outlook remain, with further outbreaks of COVID-19 a possibility. In addition, many businesses and households will face challenges over the medium term as support measures unwind. Global economic activity remains well below pre-COVID-19 levels (figure 1.2), and many trading partner economies face additional periods of lockdown due to further COVID-19 outbreaks. New Zealand's border restrictions are also likely to remain in place for some time, meaning low

Figure 1.2
World and New Zealand GDP projections, late 2019 and late 2020



Source: IMF *World Economic Outlook*, Reserve Bank estimates.

Note: World GDP estimates from the October 2019 and October 2020 IMF *World Economic Outlooks*. New Zealand GDP estimates from the November 2019 and November 2020 *Monetary Policy Statements*. World GDP in 2016 prices. New Zealand GDP in 09/10 prices.

demand for tourism and export education will persist, as well as creating challenges for industries reliant on migrant labour. Continued fiscal stimulus will support the economic recovery, but this may need to become more targeted and, where possible, support adjustment to a higher productivity, sustainable growth path.

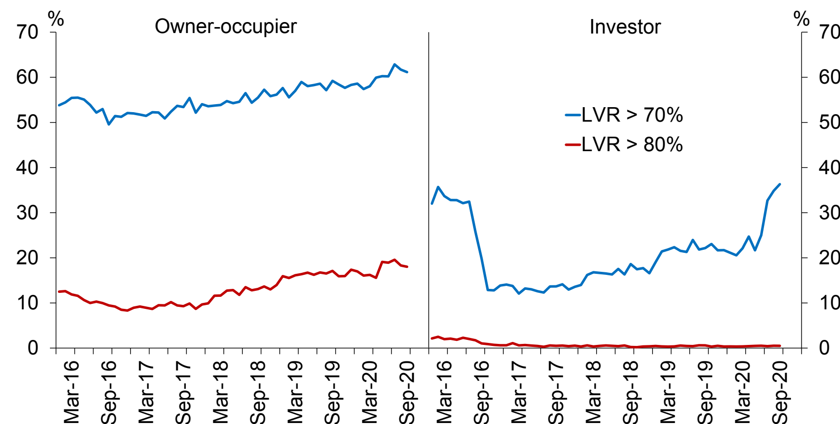
Reflecting the more resilient than expected economy, banks have experienced relatively limited loan impairments to date. In part, this also reflects the support packages that banks have implemented. At the peak of the mortgage payment deferral scheme, banks had provided full payment deferrals on around 8 percent of mortgage lending. Most customers have been able to return to making full repayments, and by early November only 1.5 percent of lending remained on deferral.

Nevertheless, impairment rates are expected to rise and banks have increased loan loss provisions in anticipation of this. Higher provisions, along with reduced net interest income as a result of lower interest rates, have seen bank profits fall from previous high levels. However, profits still remain reasonable and, with banks currently restricted from paying dividends, they have strengthened their capital buffers. A worsening in the economic outlook would likely result in banks having to raise additional provisions to cover expected credit losses, which could put further pressure on profitability. Stress tests conducted earlier this year show that banks have the capacity to withstand a significant weakening in the economy before their ability to continue supporting the flow of credit would come under question.

The financial system, and in particular banks, plays a crucial role in supporting the economy through periods of uncertainty and volatility. A rapid reduction in credit availability could result in a sharper economic downturn, and as the economy begins to recover, the continued provision of credit to sound borrowers remains crucial. Throughout the early stages of the COVID-19 crisis, the Reserve Bank undertook a number of regulatory actions to ensure that banks had sufficient headroom to continue to support borrowers. These included: providing temporary funding and liquidity support; delaying planned increases to capital requirements; suspending bank dividend payments; and temporarily adjusting loan-to-value ratio (LVR) and core funding ratio policies.

Each of these actions was undertaken on the basis that the near-term financial stability risks of banks reducing credit supply outweighed the longer-term risks from regulatory buffers being drawn down. The Reserve Bank will be evaluating the process of normalising regulatory settings over time, again balancing near-term risks to credit supply with longer-term resilience benefits from having strong buffers in place.

Figure 1.3
High-LVR mortgage lending shares by buyer type



Source: Reserve Bank *LVR New commitments survey*.

Note: Buyer type refers to collateral-based definition. Data is before policy exemptions.

Banks have largely maintained their appetites to lend to existing customers. However, banks have reduced their appetites to lend to new customers and some sectors that have been more heavily affected by COVID-19. In the current environment, proceeding with planned increases in banks' capital requirements could slow the continued provision of credit to the business sector. In response to this, the Reserve Bank has decided to defer by a further 12 months, to July 2022, the start of planned increases in banks' prudential capital buffers. To insure against continuing financial risks and to ensure that capital remains available to support lending, the Reserve Bank has decided to retain restrictions on bank dividends until at least April 2021. It remains crucial that banks use the space created by the capital postponement and retained dividends to maintain their appetites to lend to the business sector.

In May the Reserve Bank removed mortgage LVR restrictions for a period of 12 months to ensure that they did not impede banks' ability to support borrowers as part of the mortgage deferral scheme. LVR restrictions are intended to prevent excessive high-risk mortgage lending, in order to limit the damage that a potential downward correction in house prices could cause. At the time, economic weakness was expected to weigh on the housing market and banks were not expected to increase their lending to higher risk borrowers materially.

High-risk housing lending has increased recently alongside an unexpected acceleration in housing market activity. Some banks had eased maximum LVRs to property investors from 70 to 80 percent, and lending at these high LVRs increased strongly. While the share of high-LVR loans on banks' balance sheets remains relatively modest for now, a material easing in standards for new lending could see risks increase over time. The Reserve Bank intends to re-impose LVR restrictions at their previous settings from March 2021, to guard against continued growth in high-risk lending so that banks remain resilient to a potential future housing market downturn.

A longer term, yet also important risk, is that posed by climate change. The Reserve Bank supports efforts to assess, manage and disclose climate risks, and notes recent momentum such as the planned introduction of mandatory climate-related financial disclosures in New Zealand, and the release of Aotearoa Circle's Sustainable Finance Forum's report. To help assess the extent to which financial institutions are disclosing climate change related risks the Reserve Bank will repeat a survey on the implementation of climate-related disclosure next year.

Chapter 2

Macroeconomic developments and vulnerabilities

COVID-19 has had a major effect on global economic activity. The pandemic, and associated containment measures put in place to eliminate the transmission of COVID-19, have led to a significant downturn in the New Zealand economy. The severity of the initial fallout varied across industries, with greater impacts on firms that faced temporary closure, and those more reliant on international travel. Business activity rebounded quickly following the country's move back to Alert Level 1, both initially and following the Auckland August outbreak. Downside risks remain dominant however, and businesses remain cautious given the highly uncertain outlook for the pandemic and the economy.

The Government has used its strong fiscal position to support businesses and households, allowing the burden of the economic shock to be spread over the medium term. Temporary policy measures, including the wage subsidy scheme, have helped to mitigate the financial pressures on firms in the short term. The household sector has benefitted from business support schemes, in addition to direct income support relief.

Accommodative monetary policy settings have also eased debt-servicing burdens, supporting overall demand in the economy. The Monetary Policy Committee reduced the OCR to 0.25 percent, implemented a Large Scale Asset Purchase programme (LSAP), and recently announced a Funding for Lending Programme (FLP). By placing downward pressure on interest rates and the exchange rate, the easing in monetary settings is working to improve businesses' and households' cashflow positions. Continued monetary policy support will lower businesses' hurdle rates for new investment, as the economy recovers.

The New Zealand financial system's largest exposure is to households, chiefly through mortgages. In the short term, households' financial positions have been supported by the relatively stable labour market, declines in interest rates, and initiatives by banks to assist customers. The increase in house price inflation in recent months mitigates financial stability pressures in the near term, but contributes to longer-term financial stability risks. Since loan-to-value ratio (LVR) restrictions were temporarily removed in April, there has been an increase in higher-risk lending to investors. The Reserve Bank is closely monitoring trends in higher-risk lending, and in early December will consult on re-imposing the previous LVR restrictions.

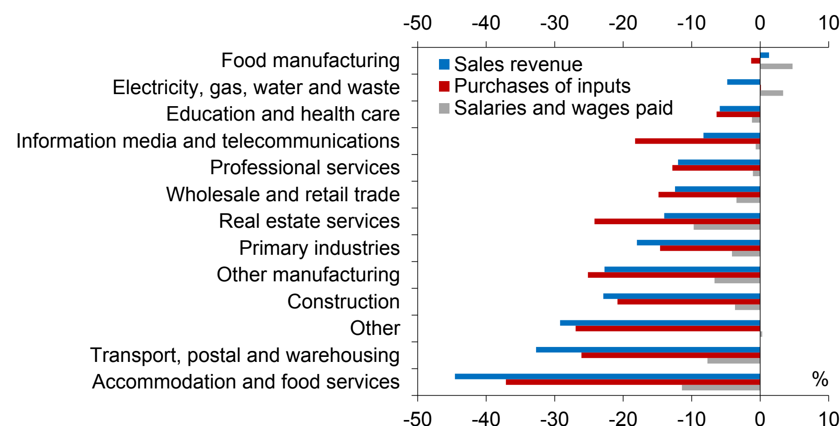
Economic impacts of COVID-19

Economic activity declined sharply during the period of lockdown.

COVID-19 has affected sectors of the economy in different ways. GDP in the June quarter fell by 12.2 percent, with industry breakdowns showing that construction, transport, trade, and accommodation and food service were among the sectors whose output fell well below previous levels.

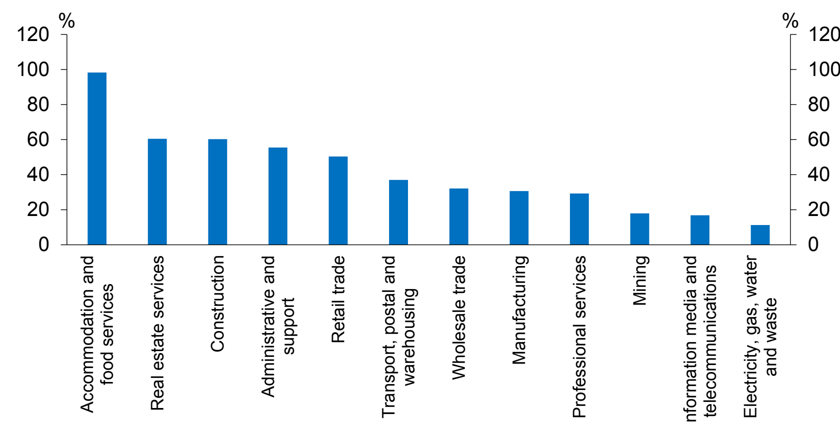
Despite this large decline in overall activity, businesses in most industries demonstrated a flexibility to the change in trading and operating conditions they faced. Industry-level estimates suggest that, in the June quarter, businesses were largely able to adjust their purchases of inputs to offset the decline in sales revenue they experienced. Supported by the Government's wage subsidy scheme, firms were able to maintain stable salary and wage payments to employees, despite the marked deterioration in trading conditions (figure 2.1). Wage subsidy payments in the June quarter covered a high proportion of firms' labour costs in the industries most acutely affected by the Alert Level restrictions (figure 2.2).

Figure 2.1
June 2020 quarter revenue and expenses by industry
(% change from June 2019 – March 2020 average)



Source: Stats NZ *Business data collection*, Reserve Bank estimates.

Figure 2.2
Wage subsidy payments
(as a % of businesses' labour costs in the June 2020 quarter, by industry)



Source: Stats NZ *Business data collection*, Ministry of Social Development, Reserve Bank estimates.

Downside risks are dominant in businesses' investment decisions.

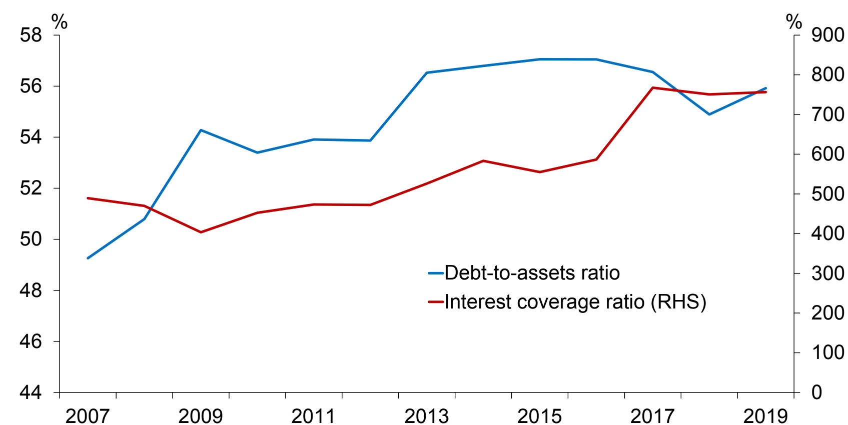
Coming into this downturn, the business sector's balance sheet carried slightly higher debt than it did prior to the Global Financial Crisis (GFC). But due to the steady decline in interest rates over the past decade, businesses' earnings were around 7.5 times their interest costs in aggregate, a material improvement in their debt servicing burden on prior years (figure 2.3).

Firms' investment intentions have fallen throughout 2020 in spite of further declines in borrowing costs, as uncertainty surrounding the economic recovery remains high. Investment intentions in buildings, as well as plant, machinery and equipment, have fallen well below their long-term averages and are close to the lows seen during the GFC. Commercial construction investment in particular is expected to dry up, as architects' expected work for the next year has declined.

In line with this, business lending has fallen considerably over the past six months. Businesses have scaled back their expansion plans, as many firms were forced to operate at a limited capacity, or not at all, during the lockdowns. Businesses are also hesitant to take on debt over and above what is necessary to remain operational. As the economic recovery begins, however, sustained low debt-servicing burdens will support business investment.

While the labour market has performed well in the circumstances, an increasing proportion of the workforce is experiencing underemployment due to the impacts of COVID-19, and this trend is likely to continue with the wage subsidy having expired. Rising underemployment may lead to a reduction in economic productivity, in addition to the financial strain on individuals. A prolonged period of high underemployment has the potential to slow economic growth in the longer term.

Figure 2.3
Business sector debt-to-assets ratio, interest coverage ratio



Source: Stats NZ *Annual Enterprise Survey*, Reserve Bank estimates.

Note: Data covers all industries excluding financial services, real estate services, public order, safety and regulatory services, education and training, and health care and social assistance. Debt-to-assets ratio is the ratio of businesses' total liabilities to total assets. Interest coverage ratio is the ratio of businesses' earnings before interest expenses, depreciation and income tax, to interest expenses.

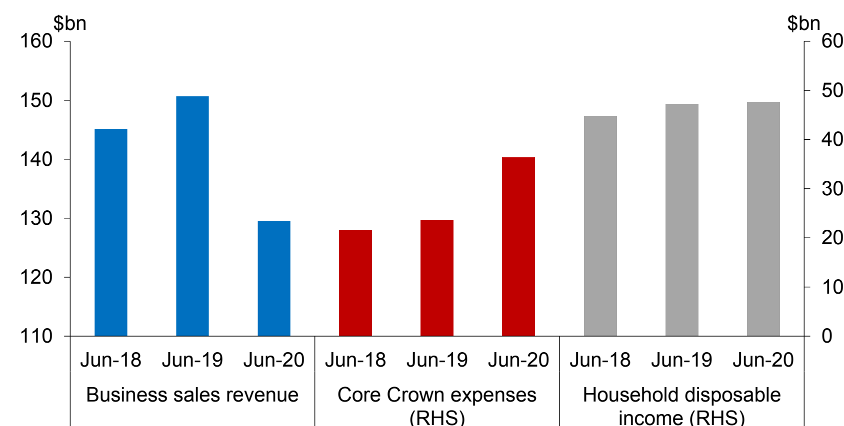
Government support measures

Large government support on the back of a strong fiscal position supported businesses and households...

Coming into the pandemic with a strong balance sheet, the Government was able to provide significant support to businesses and households to mitigate the immediate economic impacts of COVID-19. The wage subsidy, among other support measures, helped to keep employers and employees connected until restrictions were eased, and to stabilise the labour market, supporting household incomes (figure 2.4). As a result, viable businesses were in a position to return to trading once the Alert Level restrictions eased, both in the initial lockdown and in the recent Auckland resurgence. The Crown's balance sheet has been used to absorb much of the economic shock associated with COVID-19 so far.

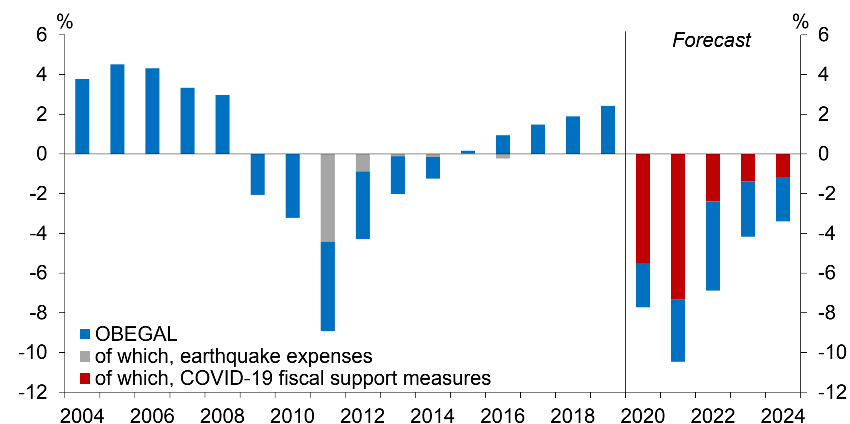
The Treasury forecasts the overall cost of the pandemic support package to be $58 billion over the next five years, or nearly 20 percent of nominal GDP, most of which is front-loaded. Accordingly, the operating balance is expected to reach -10 percent of GDP in 2021 (figure 2.5). The Government's balance sheet was in a healthy position leading up to the pandemic, with one of the lowest public debt-to-GDP ratios among advanced economies. The increase in core Crown expenses in the June quarter is expected to be sustained, to a large extent, and contribute alongside falling tax receipts to large fiscal deficits over the medium term.

Figure 2.4
Business sales revenue, core Crown expenses and household disposable income
(June quarters)



Source: Stats NZ *Business data collection*, Treasury, Reserve Bank *Household balance sheet statistics*.

Figure 2.5
Operating balance excluding gains and losses (OBEGAL) forecasts
(as a % of June year GDP)

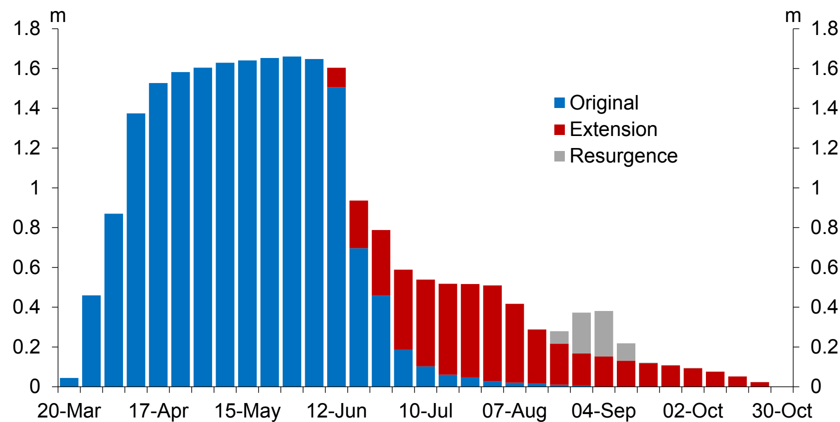


Source: Treasury *Pre-election Economic and Fiscal Update* 2020.

...and provided the private sector with a range of temporary liquidity relief options.

The Government offered short-term cashflow relief to keep otherwise viable businesses from failing and to maintain essential operations during the higher Alert Levels. Wage subsidy payments totalled around $14 billion by the end of the September quarter, supporting around 1.7 million jobs at their peak, or around 60 percent of the labour force (figure 2.6). Around $1.6 billion of Small Business Cashflow Loan Scheme loans had been disbursed by the end of October. The Government is also encouraging banks to lend to businesses by taking a substantial share of the credit risk through the Business Finance Guarantee Scheme (BFGS). However, the take-up of this scheme has been low to date, at around $500 million.

Figure 2.6
Number of jobs covered by wage subsidy scheme



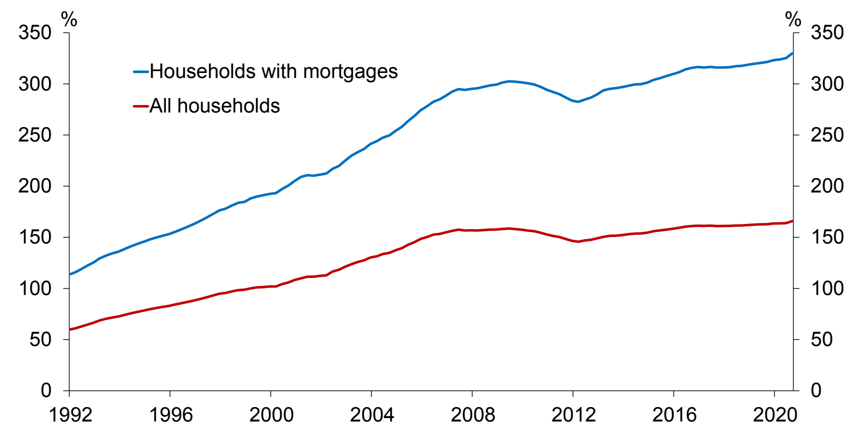
Source: Ministry of Social Development.

Household balance sheets

Household balance sheets have been resilient so far to financial stress from COVID-19...

Loans to households make up 60 percent of New Zealand banks' lending, and have been growing at an average of 6 percent a year over the past decade, outpacing household income growth. The ratio of household debt to household disposable income currently sits at around 166 percent (figure 2.7). Residential mortgages account for 97 percent of bank loans to households. The banking system would therefore be vulnerable to large losses if many households became unable to service their debts, and the value of their residential properties were to fall significantly in a severe economic downturn.

Figure 2.7
Household debt-to-income ratio



Source: Stats NZ, Reserve Bank *Household Assets and Liabilities Survey,* Reserve Bank estimates.
Note: Sum of housing, consumer, and student loans as a share of household disposable income.

Household financial stress has been mitigated by a functioning labour market, the continued decline in mortgage rates, policy actions by the Government, including the wage subsidy, and the strength of the housing market. However, there may be some segments of the household sector that are more vulnerable, for example borrowers on mortgage deferral programmes or recent homebuyers with high LVRs.

…supported by a stable labour market amidst the pandemic…

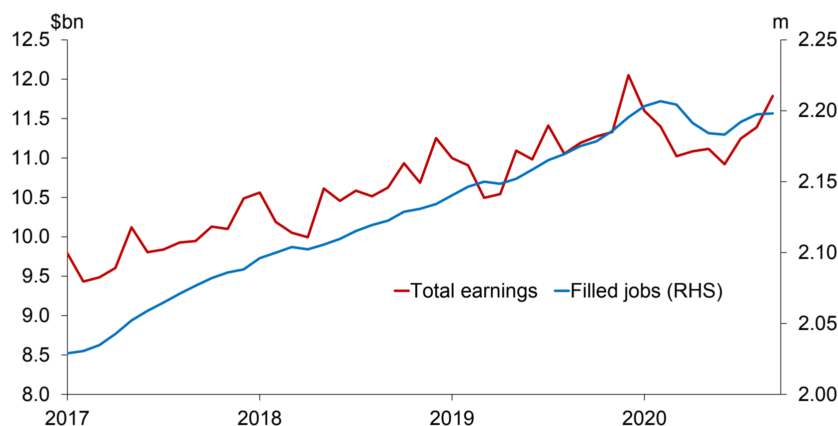
The performance of the labour market was underpinned by wage subsidies during the elevated Alert Levels, helping to stabilise jobs and household incomes (figure 2.8). As the effects of these unwind and firms in particularly affected sectors continue to review their cost structures and business models given the economic outlook, unemployment is expected to increase. That said, near-term indicators suggest the labour market has performed better than anticipated, and the peak level of unemployment is now expected to be lower than in earlier forecasts.

…and by low mortgage interest rates and supportive bank initiatives.

The cost of servicing mortgage debt has fallen further, reflecting the supportive stance of monetary policy, which has helped to alleviate financial pressures on indebted households over the course of the pandemic. Fixed interest rates for new mortgages have continued to decline accordingly, while previous falls in mortgage rates have been gradually embedded into lower debt servicing costs for the stock of existing mortgages (figure 2.9). The earlier constraints of LVR restrictions have also helped to reduce borrowers' interest expenses, while strengthening their balance sheets.

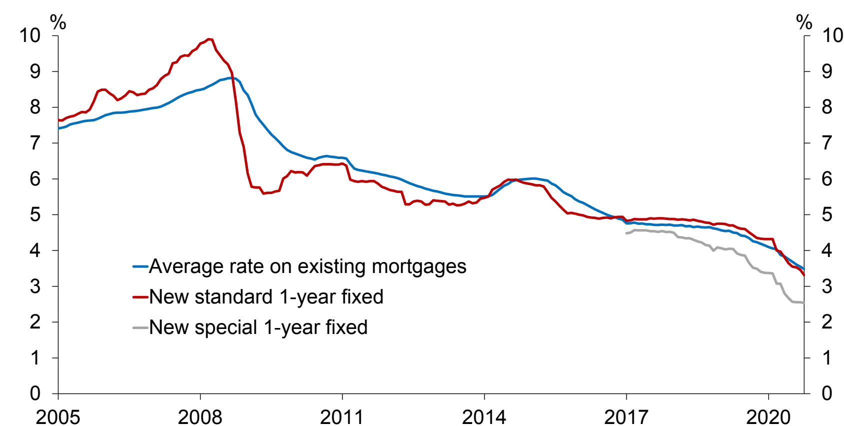
Supported by a temporary regulatory concession, banks have assisted mortgage borrowers whose incomes have been affected by the pandemic, offering options to extend loan terms, switch to interest-only, or defer all payments. The low interest rate environment has meant borrowers can take out payment deferrals without significantly increasing their indebtedness.

Figure 2.8
Monthly labour market earnings and filled jobs
(seasonally adjusted, three-month moving average)



Source: Stats NZ *Employment indicators*.

Figure 2.9
Mortgage interest rates
(average in the month)



Source: Reserve Bank *Standard Statistical Return, Income Statement Survey, Retail Interest Rates Survey*.

Strong house price inflation in recent years has also supported borrowers' equity positions, providing a buffer for households to adjust to the new economic conditions. These arrangements have helped to mitigate temporary financial pressure on indebted households, preventing forced sales of borrowers' property. Around 1.5 percent of mortgage lending currently remains on a payment deferral, and banks are actively working with customers to reduce this, through loan restructures or alternative hardship arrangements.

Asset price growth supports household balance sheets.

Household wealth has been supported by growth in prices across a range of asset classes since March, reflecting the continued downward trend in global long-term interest rates. Housing equity accounts for two-thirds of households' net wealth. Following the lockdown-related decline in housing market activity, strong house price appreciation in recent months has supported household wealth and consumer confidence, mitigating the near-term effects of COVID-19-related uncertainty. Nationwide average house prices grew 14 percent in the year to October, accelerating from 4 percent a year prior. Strong momentum evident in the housing market prior to COVID-19 has continued, supported in part by the continued decline in mortgage servicing costs. September quarter house sales rebounded strongly after the lockdown restrictions were eased, reinforcing the market perception that underlying housing demand remains strong, with constrained supply in most cities still unresolved. Pockets of weakness may, however, show up in tourism-dependent regions such as Queenstown.

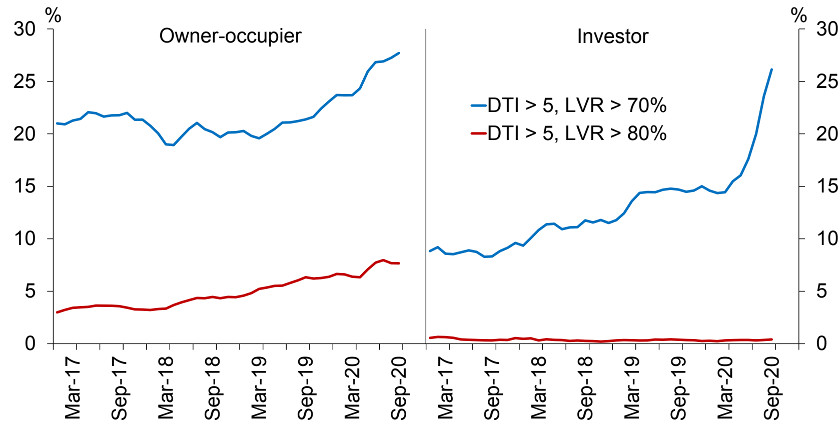
However, long-term risks remain from housing market imbalances.

House price growth continues to outpace growth in household incomes and rents. The nationwide house price-to-income ratio rose to 7.7 in October from 6.8 a year earlier, driven by strong growth in the Auckland house price-to-income ratio, which currently sits around 10.3. House prices are at very high levels, and the recent growth in house prices increases the risk of a sharp correction in the medium term, if the current demand and supply imbalances quickly unwind.

By leaning against households taking on high leverage, the Reserve Bank's LVR policy has improved the resilience of household balance sheets during the recent years of strong house price growth. In turn, the low proportion of high-LVR lending in banks' current portfolios will help reduce potential loan losses in the event of a severe housing market correction.

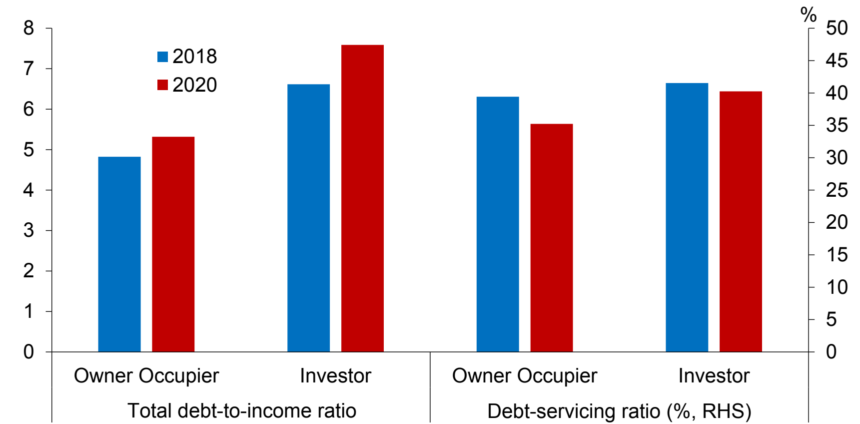
LVR restrictions were removed in May to remove any impediment to banks' restructuring or granting of payment deferrals to existing borrowers, and in light of the highly uncertain economic outlook at the time. Circumstances have changed since then, and there has been an increase in the riskier categories of mortgage lending in recent months. The proportions of new mortgages originated to borrowers with high LVRs, and to those with debt-to-income (DTI) ratios of greater than 5, have increased from a year ago (figure 2.10). The proportion of lending to investors has also increased in recent months.

Figure 2.10
Higher-risk segments of new mortgage lending, by buyer type
(% of new mortgage lending values, three-month moving average, collateral-based definition)



Source: Reserve Bank *LVR New commitments survey*, *DTI New commitments survey*, Reserve Bank estimates.
Note: DTI>5 refers to new lending at debt-to-income ratios greater than five.

Figure 2.11
Serviceability measures in hypothetical borrower exercise



Source: Reserve Bank.
Note: Figure shows total debt-to-income and debt-servicing ratios for 12 hypothetical borrowers, based on the maximum amount banks would be willing to lend and the borrowers' assumed incomes. Responses are weighted by banks' share of total new mortgage lending between September 2019 and September 2020. The debt-servicing ratio is calculated as the estimated annual principal and interest repayments as a fraction of borrowers' post-tax incomes.

The Reserve Bank recently completed a hypothetical mortgage borrower survey of mortgage lending banks.[1] Results suggested that banks are willing to grant higher DTI loans to comparable borrowers than in 2018, with the average DTI for the stylised owner-occupier borrowers increasing from 4.8 to 5.3. Despite this, average debt servicing as a share of the borrowers' incomes has fallen on average, from 39 to 35 percent, reflecting the decline in mortgage lending rates over the past two years (figure 2.11).

A lower debt-servicing ratio implies borrowers would have a higher capacity to absorb declines in income or increases in expenses, after making their loan repayments.

Until recently, some banks had increased maximum LVRs for investor lending from 70 percent to 80 percent, and there has been significant growth in lending to this category of borrowers. However, banks have been cautious in granting very high-LVR loans in the absence of Reserve Bank restrictions. And banks have reported that they have tightened serviceability thresholds for high-LVR loans to owner occupiers to maintain the flow of lending above 80 percent LVR at a relatively stable level. In part, this has been achieved by keeping the interest rates at which they assess borrower serviceability relatively high, with the average test servicing rate falling to 6.4 percent in September from 7 percent a year prior.

1 See November 2018 *Financial Stability Report* for a discussion on the 2018 hypothetical borrower exercise.

While the share of high-LVR loans on banks' balance sheets remains relatively modest for now, a material easing in standards for new lending could see risks increase over time. The Reserve Bank intends to re-impose LVR restrictions at their previous settings from March 2021, to guard against continued growth in high-risk lending so that banks remain resilient to a future housing market downturn.

Commercial property

The financial system is vulnerable to downturns in the commercial property sector.

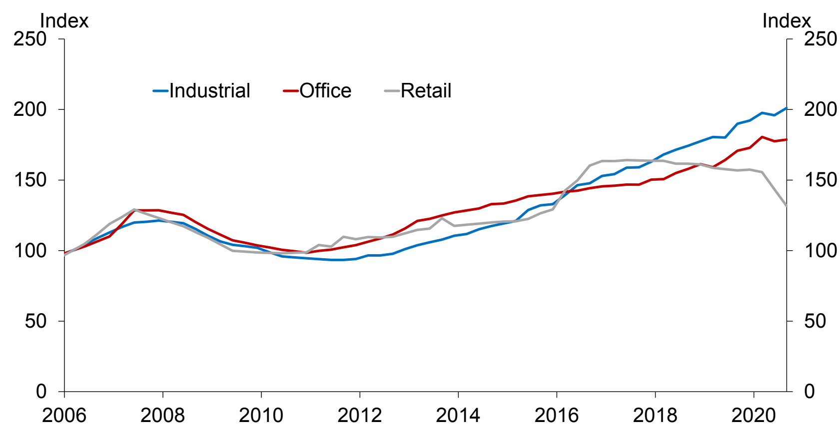
Commercial property lending accounts for around 8 percent of the banking system's loans, and is an asset class that has historically experienced large credit losses in economic downturns. In recent years, banks have maintained tight lending standards to the sector, including limiting development lending, a higher-risk segment, to around 15 percent of total commercial property lending. However, the long-term consequences of the pandemic on demand for office and retail property are uncertain, with risks skewed to the downside as work and shopping patterns evolve.

Office and industrial properties are generally withstanding the downturn so far…

Nationwide office price inflation has accelerated over the past year, led by growth in prices for Auckland prime offices and supported by investor demand for high-quality, income-producing investments. Overall office vacancy rates remain low so far, with new prime office supply entering the Auckland market expected to be absorbed by tenant demand. However, secondary office properties in major cities are at risk of increased vacancies as demand shifts to the newer and higher-quality stock, and firms reassess their long-term floorspace needs as regular remote working becomes a permanent feature of their operations. Industry contacts have reported significant subleasing activity in Auckland and Wellington offices in recent months, suggesting this shift is already underway.

Industrial property has continued its recent momentum, with strong price inflation and historically low vacancy rates largely unaffected by the pandemic. The limited availability of large-scale and well-connected industrial land in the major cities underpins the attractiveness of the sector. Rental yields on both industrial and office properties have continued to decline, but this can be attributed to further declines in long-term interest rates, and does not necessarily suggest an overvaluation in asset prices.

Figure 2.12
Major city commercial property asset values
(Q1 2006 = 100)



Source: JLL.

...but there are potential vulnerabilities in retail properties and development lending.

The economic downturn has hit the accommodation sector hard, and has exacerbated pre-existing vulnerabilities in the retail sector. Retail sales revenue declined 17 percent over the first half of 2020, as the initial border restrictions and later the lockdown weighed on consumer spending. Revenue for hotel and accommodation providers has significantly declined, with a very difficult outlook for the next few years. Retail vacancies have increased in the regions most exposed to tourism, such as Auckland and Queenstown. Retail property valuations across the major cities plunged 16 percent in the year to the September quarter (figure 2.12), exacerbating their trend decline over the preceding two years.

A development pipeline of new retail and accommodation supply is expected to enter the market over the next six months, particularly in tourism-exposed regions, presenting a further risk of oversupply. This would challenge the viability of some retail property loans, with heightened risk particularly for hotel lending.

Agriculture

The agriculture sector has shown resilience to the impacts of COVID-19.

The agriculture sector continues to show relatively less strain than other business sectors in New Zealand. Food production was considered essential during the higher Alert Levels, allowing firms to continue operations throughout the restrictions. The sector's resilience has also been aided by the comparatively rapid recovery seen in the Chinese economy, New Zealand's biggest trading partner.

Banks continue to diversify their agricultural lending portfolios to limit exposure...

Banks' appetite for overall agricultural lending has remained steady, with the shift towards greater diversification in their portfolios continuing. Horticultural lending, led by the kiwifruit industry, is growing at an annual rate of 15 percent (figure 2.13). Banks will need to monitor emerging risks associated with this growth, in light of potential constraints to labour availability in the near term due to the ongoing border restrictions.

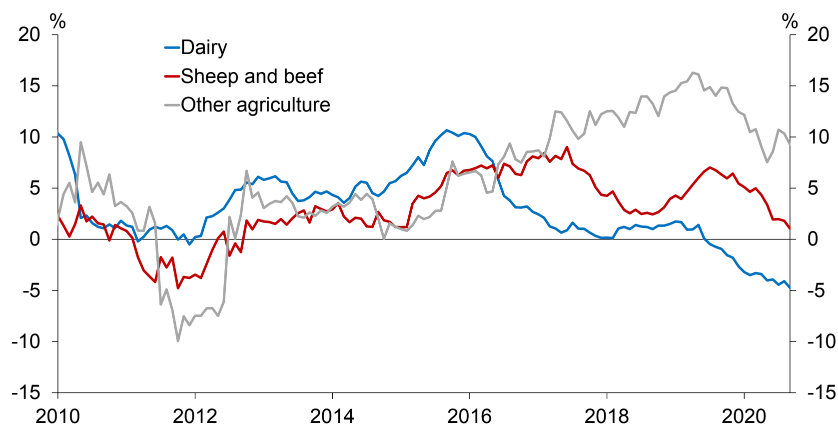
...however, long-term vulnerabilities remain a considerable concern.

Uncertainty surrounding global economic conditions is adding to the limited demand for dairy lending, particularly for farm expansion. Dairy farmers appear to be taking a more cautious approach to long-term capital investment in light of the global economic recession and ongoing consequences of COVID-19. Banks have been working with overextended dairy farmers and encouraging them to delever, by taking advantage of favourable commodity prices and historically low interest rates to repay loan principal and reduce their vulnerability to another dairy downturn.

However, there are still a number of dairy farms that remain financially vulnerable (figure 2.14). This is particularly significant as some dairy farms remain highly indebted after experiencing two downturns in the last decade, and require a high milk price just to remain operational. Furthermore, restrictions on foreign investment introduced in recent years continue to exacerbate issues with illiquidity in the farm land market.

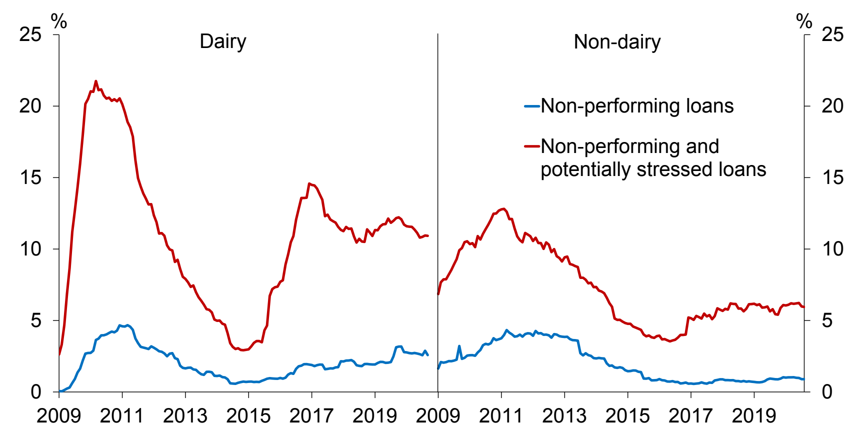
Banks' limited appetite for new dairy lending also reflects concerns around the cost of compliance with new environmental regulations on farm incomes, such as stock exclusion from waterways, the nitrogen fertiliser cap, and the introduction of agriculture to the Emissions Trading Scheme in the near future.

Figure 2.13
Annual agriculture sector credit growth



Source: Reserve Bank *Bank Balance Sheet Survey*.

Figure 2.14
Non-performing and potentially stressed loans in the agriculture sector



Source: Reserve Bank *Bank Balance Sheet Survey*, banks' private reporting.

Note: Non-performing loans includes loans classified as 90+ days past due or impaired. Potentially stressed loans includes loans that banks have assigned internal credit rating grades equivalent to B (S&P/Fitch) or B2 (Moody's) or lower, but not non-performing.

Chapter 3

International developments, bank funding and credit conditions

As a small open economy, New Zealand is exposed to global economic conditions. International shocks affect the New Zealand economy through three main channels:

- **Trade**. Over a quarter of New Zealand's output is exported. The economic strength of New Zealand's trading partners affects the demand for its exports.
- **Financial markets**. New Zealand banks source about a fifth of their funding from offshore. Instability in wholesale funding markets can affect the availability and pricing of credit to New Zealand businesses and households.
- **Uncertainty**. Global uncertainty can affect New Zealand's economic performance, even when trade and financial markets are performing well. Uncertainty regarding other countries' abilities to manage the COVID-19 pandemic and its economic fallout effectively, together with the risk of future moves to higher Alert Levels at home, is dampening businesses' appetite to invest.

While the outlook for global economic growth remains highly uncertain, global financial conditions have eased considerably since earlier in the year, supported by easier monetary policy and broad fiscal stimulus. Accommodative financial conditions have helped to avert the worst of the global economic outcomes that had looked possible in the early phase of the pandemic, but a consequence has been a significant run-up in asset valuations. Elevated asset prices in the face of significant downside economic risks raise the prospect of a disorderly correction in financial markets, depending on how the pandemic and the resumption of economic growth unfold.

New Zealand's banking system has been relatively insulated from global developments, as subdued domestic demand for credit, and strong deposit growth, have lessened banks' need to access global funding markets. Demand for business credit has been limited, as firms in a position to repay existing debt have done so, and firms have been reluctant to commit to capital investment in the current uncertain environment. Indications are that, aside from some sectors acutely affected by the pandemic, bank credit remains available to creditworthy borrowers.

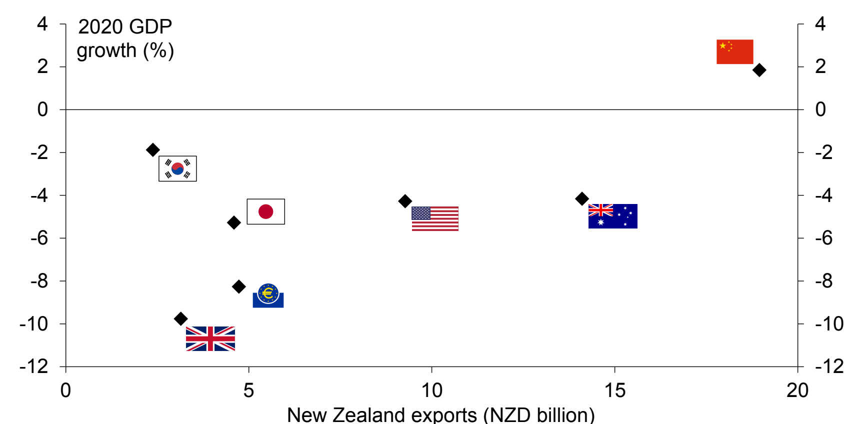
International financial market impacts of COVID-19

An uncertain global growth outlook poses risks to New Zealand's recovery.

New Zealand's exports account for 28 percent of the country's output. So far, the prices of the goods we export have held up well, and the concentration of our goods exports in primary industries has limited New Zealand's direct exposure to the deterioration in global supply chains seen in some sectors. On the other hand, two of the country's largest services export industries (export education and tourism) are not likely to return to their previous scale for several years. Uncertainty about the outlook for New Zealand's exports remains very high, and risks loom large.

In aggregate, real GDP across the OECD countries fell 10.5 percent from the March to June quarters. Despite this historic decline in economic activity, COVID-19 has thus far had a relatively small impact on incomes and spending, in large part due to the scale of fiscal support measures. The global economic outlook has improved somewhat since the last *Report*. Nevertheless, the loss in output that the global economy has already experienced will drag on confidence and demand going forward. And on top of this, new waves of COVID-19 across many countries are leading to renewed economic restrictions. This means that the pace of economic recovery is likely to be heterogeneous across economies and regions, generally slow, and marked by ongoing uncertainty that will hamper businesses' confidence to invest.

Figure 3.1
GDP growth forecasts for New Zealand's main trade partners



Source: IMF *World Economic Outlook* (October 2020), Stats NZ (exports of goods and services for year ending June 2019).

Many economies in Asia and the Pacific where New Zealand has larger trade links have been relatively successful in controlling outbreaks of COVID-19 and resuming economic activity (figure 3.1). Economies in the region have also generally benefited from a shift in global demand from services to manufactured goods during the pandemic. This has meant relatively strong regional demand for New Zealand's goods exports. New Zealand's commodity export prices have increased by 6.5 percent over the past year, compared with 3.4 percent for global commodity prices overall.[2]

2 ANZ NZ and World Commodity Price Indices as at September 2020.

However, looking ahead New Zealand's trade partners in Asia and the Pacific are exposed to risks from disruptions to supply chains, and weakened global demand. The extent to which these regional risks materialise depends on the path of public health and economic outcomes, especially in the advanced economies that make up the bulk of demand for exports from East Asia.

Key areas of uncertainty are around the development and rollout of effective vaccines and therapies, policy responses that restrict economic activity, and the continuation or phasing out of fiscal support packages. The course of the global pandemic will determine the resumption of international travel and tourism, which is normally New Zealand's largest services export industry, as well as affect demand for our commodities and other exports.

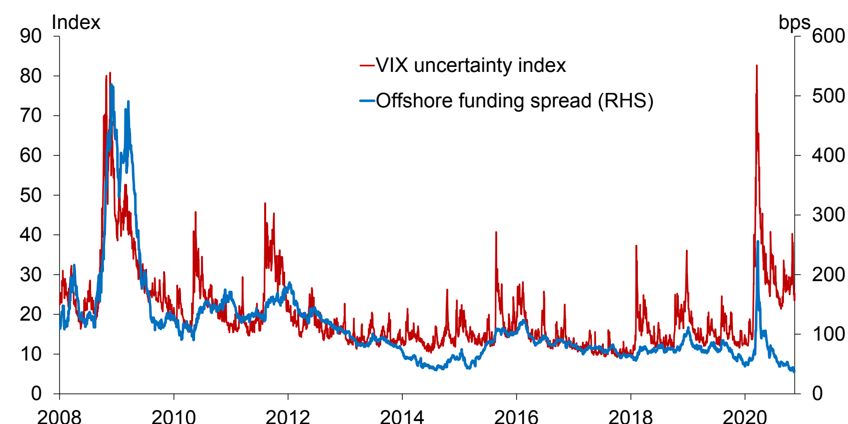
Global financial conditions have stabilised…

Due to the persistent gap between savings and investments in New Zealand, banks source about 20 percent of their funding from offshore. Changes in the availability and pricing of offshore funding can therefore disrupt banks' ability to lend to businesses and households.

A dependence on wholesale markets for funding at short maturities was a key vulnerability for New Zealand banks during the Global Financial Crisis. Over the past decade, banks' wholesale funding has moved to much longer average maturities. This gives banks the ability to wait out short-lived disruptions to wholesale markets.

In the early stages of the pandemic, the significant rise in uncertainty meant the price that New Zealand banks would have had to pay for offshore wholesale funding rose considerably (figure 3.2). However, over this period banks had sufficient stable funding to allow them to wait out the turbulent market conditions. Once the initial market reaction to the pandemic subsided, funding conditions returned to normality, particularly for credit markets due to central bank support. Nonetheless, New Zealand banks have continued to issue very little in offshore markets due to strong domestic deposit growth. The Reserve Bank's Funding for Lending Programme (see box A) may continue this trend.

Figure 3.2
Offshore funding spread for New Zealand banks



Source: Bloomberg.

Note: The offshore funding spread is the cost of an AA-rated financial institution issuing a five-year bond in the US relative to the five-year US swap rate, accounting for the cost of swapping into NZD. The VIX index is an indicator of the market's expectation of the 30-day volatility in the S&P 500 equity index.

...and corporate debt issuance has increased.

Unprecedented interventions by major central banks have kept global financial markets liquid and functioning, supporting very high levels of corporate debt issuance.

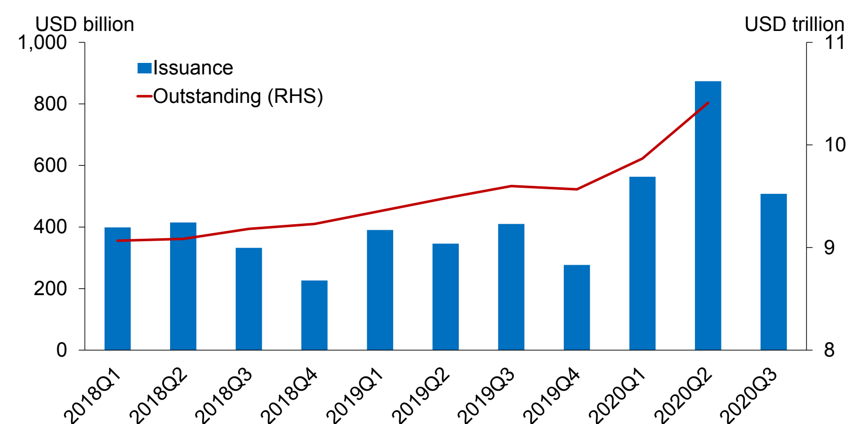
In the years leading up to the pandemic, low interest rates contributed to a gradual buildup of global corporate debt levels. For the G20 countries as a group, total credit to non-financial corporations rose from 80 percent of GDP in 2011 to 95 percent of GDP in 2019. Cheap debt helped to boost returns for equity holders, but left companies vulnerable to losses should revenue fall or interest rates rise.

Corporate debt issuance further accelerated after central banks intervened directly in corporate debt markets in response to markets briefly seizing up following the onset of the pandemic (figure 3.3). Central bank purchases account for only a small fraction of outstanding debt, but have had a strong signalling effect. Firms' need for funding in the face of cashflow problems and heightened uncertainty, central banks' market liquidity backstops and reduced policy rates, and investors' search for yield combined to lead to large amounts of issuance

Asset markets have recovered rapidly.

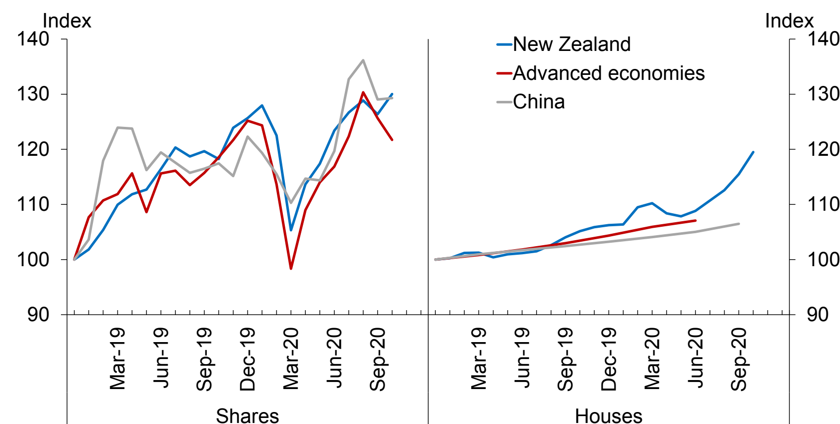
Stable global financial markets, together with reductions in interest rates to new record lows, also gave rise to a rapid recovery in equity prices after a steep dip in the early phase of the pandemic, and contributed to a continuation of rising house prices (figure 3.4).

Figure 3.3
US non-financial corporate bond market



Source: SIFMA.

Figure 3.4
Asset prices
(December 2018 = 100)



Source: S&P, MSCI, CS Index, Real Estate Institute of New Zealand, OECD.
Note: House prices for OECD members serve as a proxy for advanced economies.

Strong asset prices have been beneficial for the global economic recovery so far, likely having a wealth effect on spending as well as feeding back to consumer and business confidence. However, in the presence of continued economic uncertainty – exemplified by a 'wait and see' approach to business investment – and a worsening health crisis with further lockdowns in some countries, elevated asset prices may mean that the risk of a correction is building.

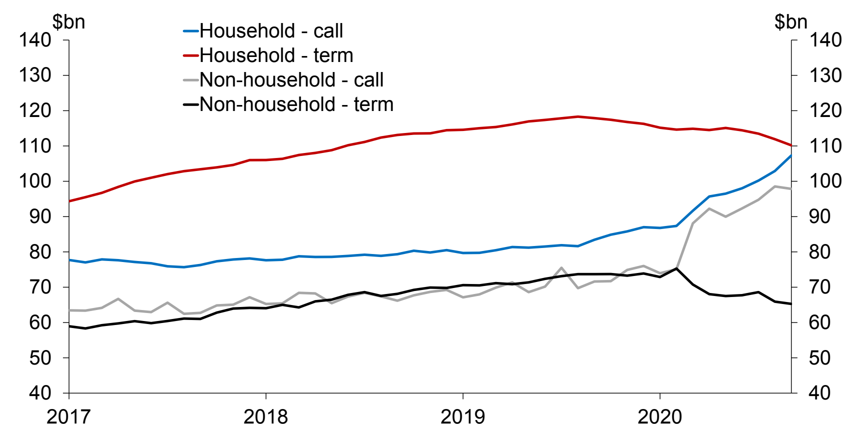
Price corrections in the markets for corporate debt, equities, and property could be precipitated by a phasing out of governments' economic support programmes, or a prolonged development period for a COVID-19 vaccine. Under some adverse scenarios, a rise in corporate bankruptcies could add to the global economic headwinds, with spillovers from corporate balance sheets to broader economic and financial conditions amplified by high corporate debt levels.

New Zealand banks' funding

New Zealand banks have ample funding to meet customer needs.

Government support for New Zealand businesses, such as the wage subsidy, and monetary stimulus through the Reserve Bank's LSAP programme (see box A), have boosted the level of deposits in the banking system. At the same time, depositors have increasingly shifted funds from term deposits into call accounts, as the liquidity benefits of having their funds available on demand outweigh the low returns now available on term products (figure 3.5). While the even lower rates paid on call deposits, relative to term, initially present a benefit to banks' net interest margins, banks can also become more susceptible to sudden deposit outflows. Banks manage this by holding greater levels of liquid assets, but this comes with an offsetting cost, as the returns banks earn on the liquid assets are very low.

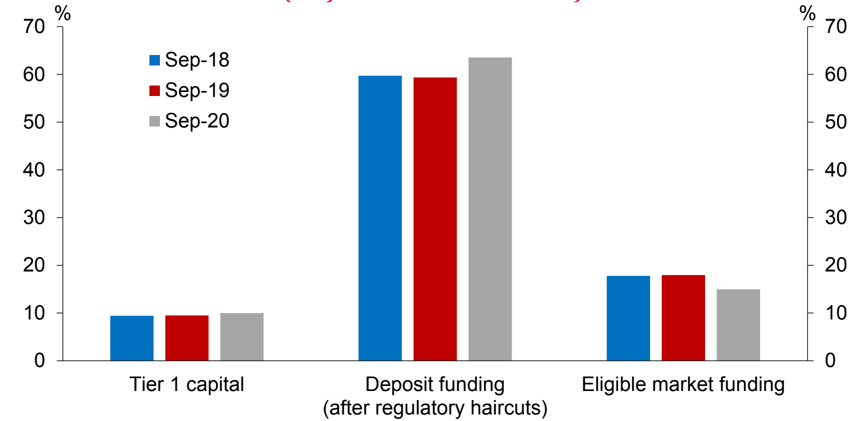
Figure 3.5
Deposits of registered banks by sector and maturity



Source: Reserve Bank *Bank Balance Sheet Survey*.

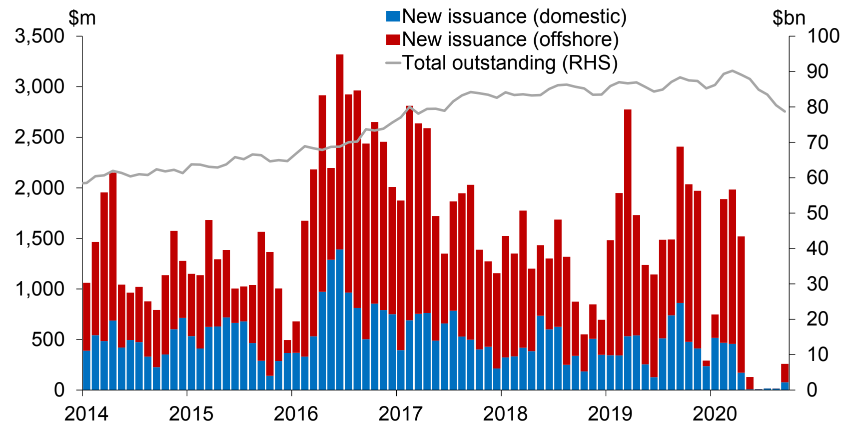
As noted above, wholesale funding market conditions deteriorated rapidly earlier in the year. While markets have now largely returned to normal, with relatively low credit growth and high deposit growth, banks have generally not needed to issue any material volumes of long-term wholesale funding since March to meet their stable funding needs. As a result, banks' outstanding long-term wholesale funding has declined by around $10 billion (figure 3.6), and deposit funding has taken the place of eligible market funding in meeting banks' Core Funding Ratio requirements (figure 3.7).

Figure 3.7
Components of the aggregate Core Funding Ratio of locally incorporated banks
(% of total loans and advances)



Source: Reserve Bank *Liquidity Survey*, *Capital Adequacy Survey*.

Figure 3.6
Long-term wholesale funding of New Zealand banks



Source: Reserve Bank *Liquidity Survey.*

Note: Three-month moving average issuance of wholesale funding with initial maturity greater than two years.

Box A

Alternative monetary policy tools and bank balance sheets

In the November 2020 *Monetary Policy Statement* the Reserve Bank's Monetary Policy Committee announced the establishment of a Funding for Lending Programme (FLP). FLP will work in tandem with the Reserve Bank's Large Scale Asset Purchase programme (LSAP) to lower lending rates and enhance the transmission of monetary policy.[3]

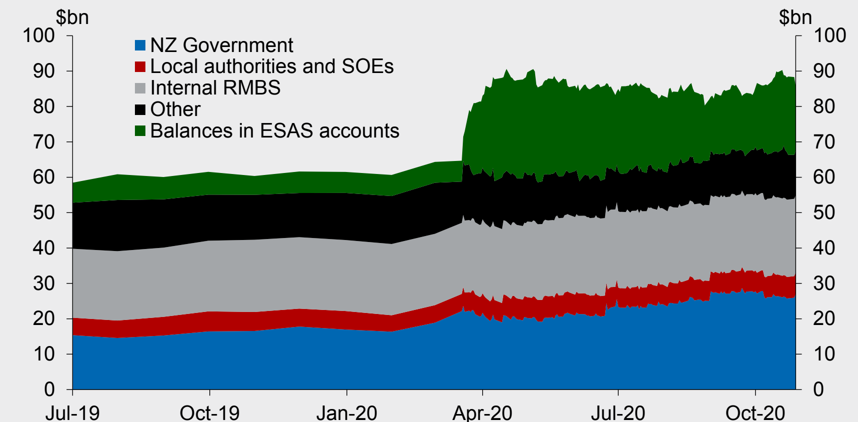
How does LSAP affect bank balance sheets?

The aim of LSAP is to lower interest rates across the yield curve, through transactions in the New Zealand Government Bond market. The Reserve Bank achieves this by purchasing bonds at a range of maturities in the secondary market. In LSAP operations, commercial banks act as intermediaries between the Reserve Bank and existing holders of New Zealand Government Bonds – which may include banks themselves, but also asset managers, pension funds and other types of investor. When the Reserve Bank purchases bonds from a bank participating in LSAP, it does so by crediting that bank's Exchange Settlement Account System (ESAS) balance. The bank will similarly credit the deposit account of its customer that is selling the bonds. In this way, LSAP increases the amount of deposits in the banking system. All else being equal, the Reserve Bank's purchases raise the price of Government Bonds, thereby lowering their yields, which has flow-on effects to a broad range of market interest rates.

3 The November 2020 ***Monetary Policy Statement*** provides further detail on the monetary policy transmission channels of the FLP.

ESAS balances are deposits that banks have with the Reserve Bank that are used to settle transactions between banks, the Reserve Bank, and the Crown. ESAS balances qualify as liquid assets for the purposes of banks' regulatory liquidity requirements. An impact of LSAP is therefore to contribute to an increase in banks' liquid assets, in the form of ESAS balances. Since the beginning of 2020, banks' ESAS balances have increased by around $14 billion, which has driven an increase in total liquid assets in the banking system (figure A.1).

Figure A.1
Primary liquid assets of locally incorporated banks



Source: Reserve Bank *Liquidity Survey*.
Note: Daily data from 18 March 2020.

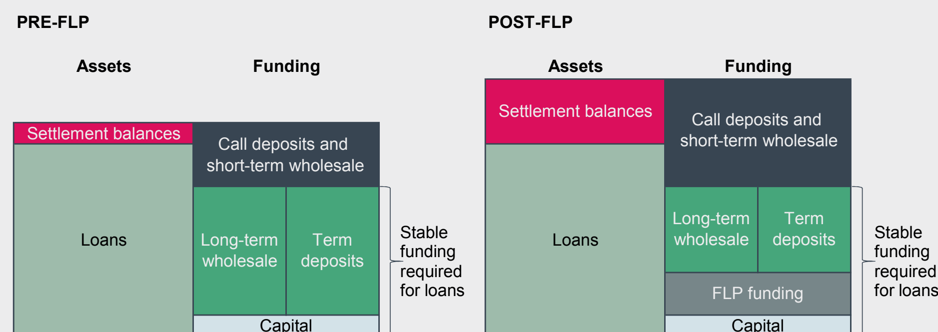
How does FLP affect bank balance sheets?

The purpose of FLP is to lower customer lending rates by providing a low-cost marginal source of long-term funding. Banks need to have a sufficient quantity of long-term and stable funding, to match the maturity profile of their assets, and to meet regulatory requirements. The Reserve Bank's Core Funding Ratio requires banks to fund a certain proportion of their lending with long term and stable funding, to reduce their exposure to short-term disruptions to funding markets and other liquidity stresses. Credit rating agencies also take into account the duration and stability of banks' funding when assessing their risk profiles.

Under FLP, banks are able to borrow from the Reserve Bank for a term of three years, receiving ESAS balances in exchange for pledging eligible collateral. FLP provides banks with a cheaper source of stable funding than current alternatives such as term deposits and long-term wholesale funding. For a given loan book, banks can meet the corresponding stable funding required by substituting FLP funding for these more expensive alternatives (figure A.2). Banks' average funding cost would fall as FLP gives them the option to allow these more expensive sources of stable funding to roll off. By reducing banks' demand for term deposits, FLP would see interest rates on these fall. This has already been observed as banks have lowered the interest rates they offer on term deposits, partly in anticipation of FLP (figure A.3).

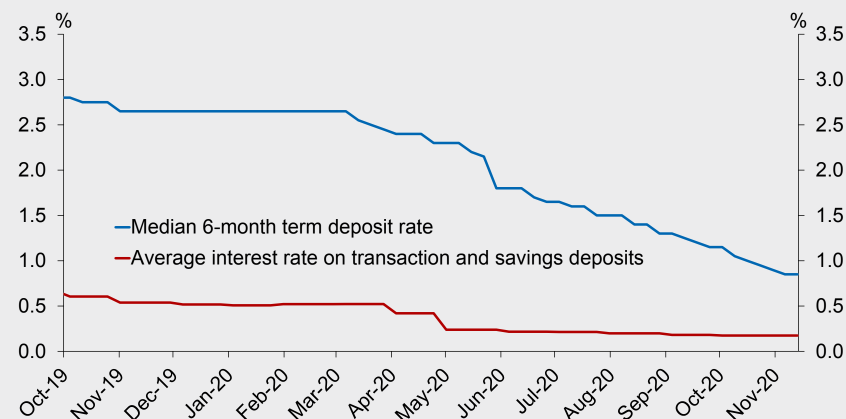
Price competition in loan markets leads banks to pass through their lower average funding costs to their lending rates for businesses and households, enhancing monetary policy transmission. Funding banks receive under FLP would not directly translate into new lending to businesses and households, as loan growth is determined by a range of factors including customer demand, banks' available capital, and general competitive pressures. However, by lowering the overall cost of credit, FLP lowers borrowing costs for businesses and households, which serves to boost demand in the economy, helping the Reserve Bank to meet its monetary policy objectives for inflation and employment.

Figure A.2
Stylised bank balance sheet before and after receiving FLP funding



Source: Reserve Bank.

Figure A.3
Deposit rates for the five largest banks



Source: interest.co.nz, Reserve Bank *Income Statement Survey*.

New Zealand bank credit conditions

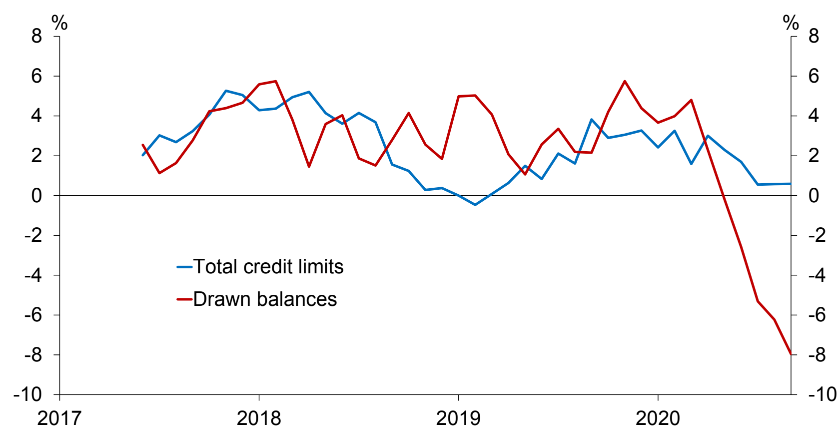
Business credit demand has been weak...

Economic uncertainty has kept investment demand subdued. Demand for business credit has been weak overall, and mainly driven by demand for working capital, as opposed to new capital expenditure. Banks have generally been supporting their business customers, as evidenced by the stable level of business credit limits (figure 3.8). Despite this, outstanding bank business credit has contracted by about 8 percent since March, as businesses that are in a position to do so have paid down existing debt.

In addition, the value of outstanding domestic corporate debt securities has been stable over the past year. Delevering has been observed across firms of differing sizes, with credit limit utilisation steadily declining over 2020 (figure 3.9).

The Reserve Bank and the Government have taken actions to support the flow of credit to businesses through the Business Finance Guarantee Scheme (BFGS) and Small Business Cashflow Loan Scheme, providing low-cost substitutes to existing bank lending. While the BFGS has seen a pickup in usage in recent months, overall demand for business lending has been subdued.

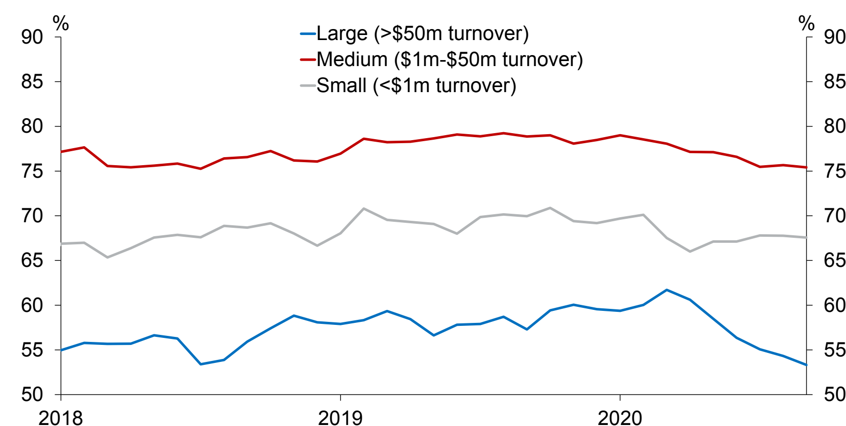
Figure 3.8
Business sector credit limits and drawn balances, all registered banks
(% change from six months ago)



Source: Reserve Bank *Bank Balance Sheet Survey.*

Note: Covers business lending excluding agriculture and commercial property lending. Credit limits are the sum of drawn lending balances and undrawn committed credit lines.

Figure 3.9
Business sector credit limit utilisation, all registered banks, by firm size



Source: Reserve Bank *Bank Balance Sheet Survey.*

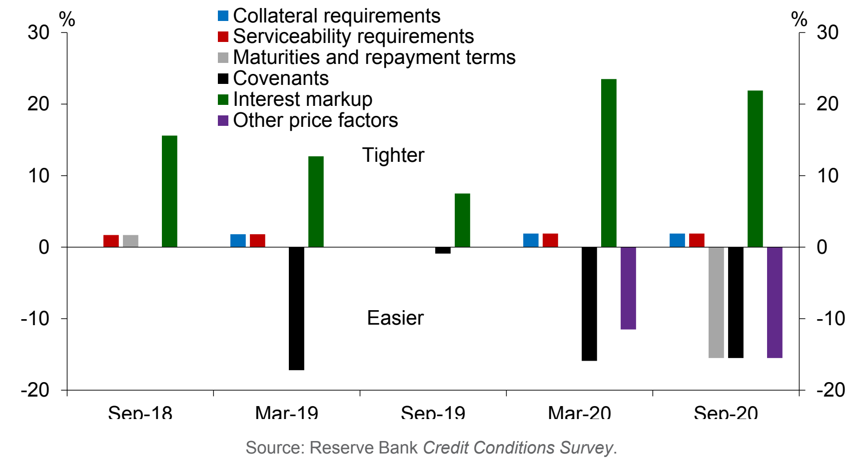
Note: Covers business lending excluding agriculture and commercial property lending. Limit utilisation is the ratio of drawn balances to total credit limits.

...and banks have selectively tightened business lending standards, which bears continued monitoring.

Discussions with banks indicate that, while they are in general continuing to support existing business customers, some have reduced their appetite for taking on board new-to-bank customers in the current environment. Banks have also reassessed their appetite for lending to some business subsectors, identifying areas of acute risk (such as hospitality and retail trade businesses in tourist centres, and new large commercial property developments) in order to limit further exposure. Banks have reported an increase in the interest mark-up, but an easing of other lending policies for new SME lending (figure 3.10).

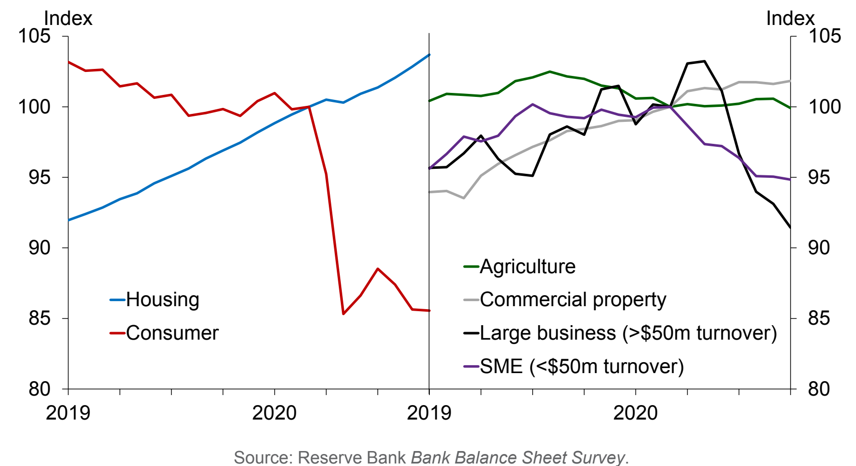
Meanwhile, the growth of mortgage credit has remained steady, with both banks and borrowers showing a high degree of confidence in the housing market (figure 3.11). Agriculture lending has contracted from recent highs, driven by debt reduction in the dairy sector. So far, activity in this sector has been relatively unaffected by COVID-19, and prices of agriculture exports have remained strong. Consumer lending remains around 15 percent lower than before COVID-19.

Figure 3.10
SME lending policies and credit terms
(market share-weighted percentage of respondents, change from six months ago)



Source: Reserve Bank *Credit Conditions Survey*.

Figure 3.11
Registered banks' lending by type
(indexed to February 2020)



Source: Reserve Bank *Bank Balance Sheet Survey*.

Box B

Preparation for the end of LIBOR

The London Interbank Offered Rate (LIBOR), traditionally a key interest rate benchmark used to price credit contracts and derivatives throughout the global financial system, is being phased out. The UK's Financial Conduct Authority (FCA) and the Bank of England have stated:

> "The LIBOR benchmark relies on estimates from banks of their borrowing costs in markets which are no longer active, so is not considered sufficiently robust or sustainable given its widespread use. The FCA has secured agreement from banks that they will keep contributing to LIBOR until the end of 2021. This will give users time to switch to alternative rates before LIBOR is discontinued. Continuing to rely on LIBOR after this point will create a number of risks to firms."[4]

UK and international regulatory bodies have confirmed that this timeline will stay in place despite disruptions caused by COVID-19.[5] This may require some entities that still rely on LIBOR to step up the pace of their preparations for completing the transition.

The Financial Stability Board (FSB), an international body of central banks and finance ministries, recently published a transition roadmap for firms with exposures to LIBOR. Key recommendations in the roadmap include: "By the end of 2020, firms should be in a position to offer non-LIBOR linked loans to their customers. By mid-2021, firms should have established formalised plans to amend legacy contracts where this can be done and have implemented the necessary system and process changes to enable a transition to robust alternative rates. By end-2021, firms should be prepared for LIBOR to cease."[6]

The impetus for ending LIBOR was its manipulation by some large international banks, which came to light in 2012. New Zealand's Bank Bill Benchmark rate (BKBM), which has a role in New Zealand that is similar to LIBOR's internationally, was not subject to these problems and will continue to function as the main benchmark interest rate in New Zealand. The New Zealand Financial Markets Association (NZFMA), in consultation with industry, is making improvements to the benchmark regime to ensure that BKBM remains fit for purpose and meets international regulatory guidelines.

4 Bank of England and FCA (9 March 2020), joint letter to trade association chairs/CEOS, *How the discontinuation of LIBOR may affect your members and stakeholders*: **www.bankofengland.co.uk/-/media/boe/files/letter/2020/how-the-discontinuation-of-libor-may-affect-your-members-and-stakeholders.pdf**.

5 FCA (25 March 2020), *Impact of the coronavirus on firms' LIBOR transition plans*: **www.fca.org.uk/news/statements/impact-coronavirus-firms-libor-transition-plans**.

6 FSB (16 October 2020), *Global transition roadmap for LIBOR*: **www.fsb.org/2020/10/global-transition-roadmap-for-libor/**.

Part of these reforms to New Zealand's benchmark regime is the selection of the OCR as a fall-back benchmark interest rate for BKBM. The Reserve Bank supports this. The NZFMA is developing an OCR Compound Index and calculators to facilitate this new role of the OCR, and has announced that these will be available by the end of 2020.

The International Swaps and Derivatives Association (ISDA) recently released new documentation that will help ease the transition from Interbank Offered Rates (IBORs) to alternative risk-free rates. The Reserve Bank has signed the ISDA's 'IBOR Fallbacks Protocol'. As a market participant this is an important step for the Bank to support an effective and efficient transition away from LIBOR and other key IBORs by the end of 2021.[7]

For the transition away from LIBOR to go smoothly, it is essential that preparations stay on track. New Zealand's banks and other financial market participants broadly recognise that the total transition away from LIBOR is a complex undertaking, but there is a wide spectrum of preparedness for the transition. In light of these complexities, the Reserve Bank expects all regulated entities to continue with preparations so they will be well placed to manage the end of LIBOR. Lenders need to work with their customers to make sure that best practices are followed as legacy products are revised, and that entities understand any exposures they have to LIBOR and how the changes will affect them so they can operate confidently post-LIBOR.

7 More information about the Reserve Bank signing the ISDA's Protocol can be found here: **www.rbnz.govt.nz/news/2020/10/rbnz-signs-isdas-ibor-fallbacks-protocol**.

Chapter 4
New Zealand's financial institutions

The financial system plays an essential role in supporting economic growth. Banks and other lending institutions allow businesses and households to borrow against future income streams to invest in capital and assets today. The insurance sector also provides certainty, which can indirectly support business and household investment behaviour.

During an economic downturn, as we are currently experiencing, it is important that the banking system remains resilient. Strong financial institutions are able to recognise promptly and absorb the loan losses that will occur given the economic conditions, while continuing to lend to creditworthy businesses and households, which supports investment and spending in the broader economy. In turn, having resilient institutions avoids the feedback effects that can otherwise reinforce a downturn, benefiting the financial system as stronger economic conditions further reduce loan losses.

New Zealand's banking system entered the current downturn with strong capital and liquidity buffers, and generally simple business models that generate strong and stable earnings. To date, banks' asset quality remains high, although a deterioration is expected over the coming quarters as government support and loan payment deferral schemes wind down.

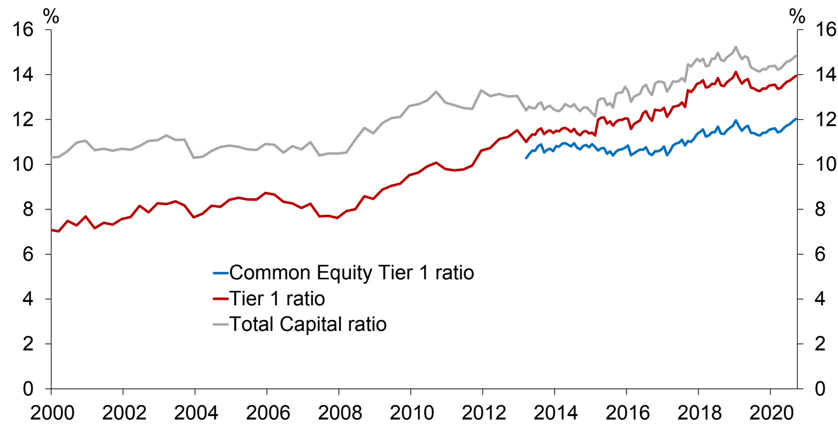
Banks have increased their provisions in anticipation of future losses, although there remains a high degree of uncertainty about the ultimate cost of the pandemic to banks' loan books. The declining interest rate environment is further weighing on profitability, and banks' net interest margins (NIM) have compressed.

Banks

Banks entered the downturn with strong capital and liquidity buffers, high profitability and good asset quality...

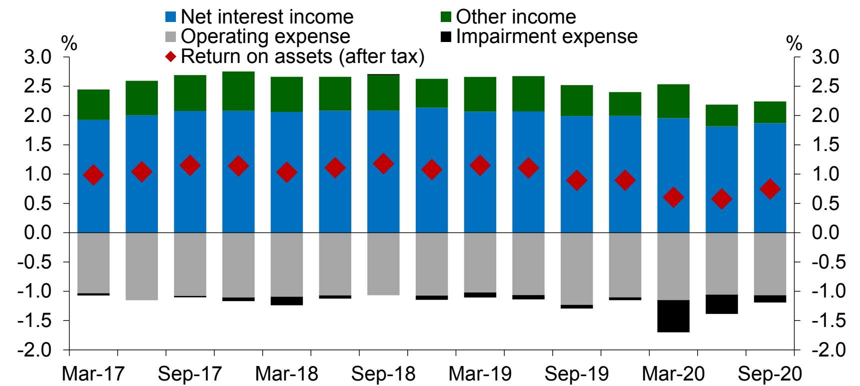
Since the Global Financial Crisis (GFC) banks have strengthened their capital and liquidity positions. The introduction of prudential liquidity requirements has resulted in banks operating with conservative liquidity buffers and with more stable funding bases. New Zealand banks have also enjoyed a high level of profitability relative to their international peers. Combined with higher regulatory requirements and evolving investor expectations, this has seen banks build up their capital ratios (figure 4.1).

Figure 4.1
Aggregate capital ratios of locally incorporated banks



Source: Registered banks' *Disclosure Statements*, Reserve Bank *Capital Adequacy Survey*.

Figure 4.2
Quarterly earnings of locally incorporated banks
(% of assets, annualised)



Source: Reserve Bank *Income Statement Survey*.

Higher capital buffers allow banks to maintain credit growth during stress events; in lieu of rationing credit, banks can absorb declines in capital through their buffers. Based on recent Reserve Bank stress tests, banks' current capital positions would allow them to survive severe but plausible economic shocks, whilst maintaining credit supply to businesses and households.[8] The extension to the implementation of the Capital Review announced earlier this month will support banks' ability to use their current buffers over the near term, should this be necessary (see chapter 5).

...but bank profitability has recently declined.

Banks have increased their loan loss provisions in anticipation of future loan losses, dragging down their profitability relative to previous years (figure 4.2). NIM has also been compressed. Price competition saw lending and term deposit rates adjust quickly to changes in monetary policy settings. However, the overall decline in interest rates has reduced the margin banks earn on non-remunerated deposits, such as transaction accounts, reducing NIM. Adjusting for the larger settlement cash balances banks are now operating with as a result of the Reserve Bank's Large

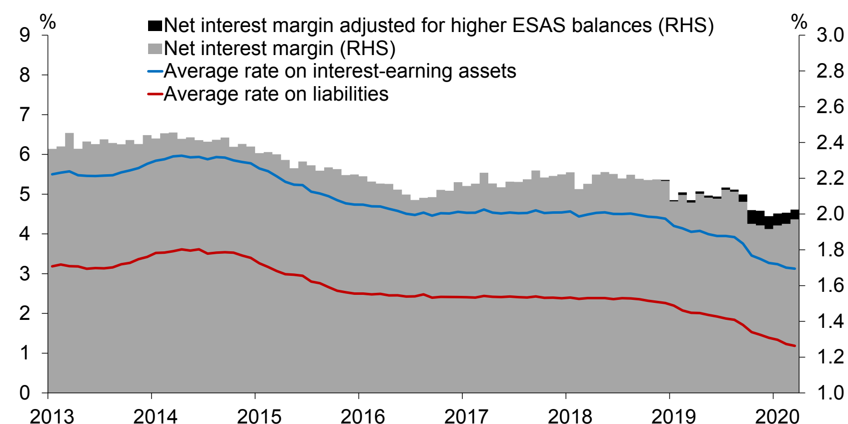
8 See **www.rbnz.govt.nz/research-and-publications/reserve-bank-bulletin/2020/rbb2020-83-03** for discussion of recent stress tests the Reserve Bank undertook to assess potential economic scenarios resulting from COVID-19.

Scale Asset Purchase programme (LSAP, see box A), banks' NIM declined from 2.12 percent in the six months to March to 2.01 in the six months to September (figure 4.3).

Looking ahead, the significant downward repricing of term deposits in recent months, supported by the implementation of the Reserve Bank's Funding for Lending Programme (FLP), is likely to support a stabilisation of NIM in the near term. A negative OCR, on the other hand, would see further NIM compression, as it is unlikely that banks would apply negative interest rates to retail deposit accounts. Banks with high proportions of funding from retail sources, including most of the smaller banks in New Zealand, would see greater NIM compression as their funding costs would not fall by as much as the interest rates they would be able to earn on their assets.

Despite the decline in profitability, the banking system has still maintained positive earnings over the past six months. With restrictions on distributions to shareholders in place, this has led to higher retained earnings and a strengthening of banks' capital positions. In addition, the subdued overall growth in credit, and the limited deterioration in banks' credit quality to date, have limited growth in risk-weighted assets. As a result, the aggregate Common Equity Tier 1 ratio reached 12 percent in September, up from 11.5 in December 2019.

Figure 4.3
Net interest margin of locally incorporated banks
(monthly, annualised)



Source: Reserve Bank *Income Statement Survey*, *Bank Balance Sheet Survey*, interest.co.nz, Reserve Bank estimates.

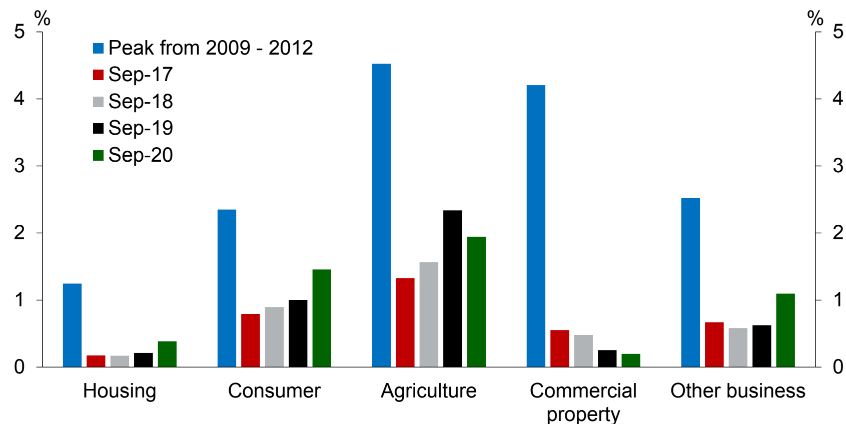
Note: The Reserve Bank's LSAP operations lead to higher balances in banks' ESAS accounts, which are remunerated at the OCR. The growth in ESAS balances inflates the denominator of NIM, interest-earning assets, lowering reported NIM despite LSAP having a broadly neutral effect on banks' overall profitability. The calculation excludes interest revenue from ESAS balances in the numerator of NIM, and balances from the denominator of NIM, to provide a view of banks' underlying net interest income.

Asset quality metrics remain relatively strong...

The combination of accommodative monetary policy and initiatives such as the wage subsidy scheme has improved borrowers' debt-servicing ability and softened the shock to businesses' and households' balance sheets. Banks' payment deferral schemes have also allowed borrowers who have lost income to defer principal and interest repayments for six months to avoid becoming overdue in their loans. These initiatives, alongside the large economic stimulus provided, have reduced the feedback effects that potentially rising unemployment and falling asset prices could otherwise have had on businesses and households. Non-performing loans have thus only increased modestly, particularly when compared with the peaks seen during the GFC (figure 4.4).

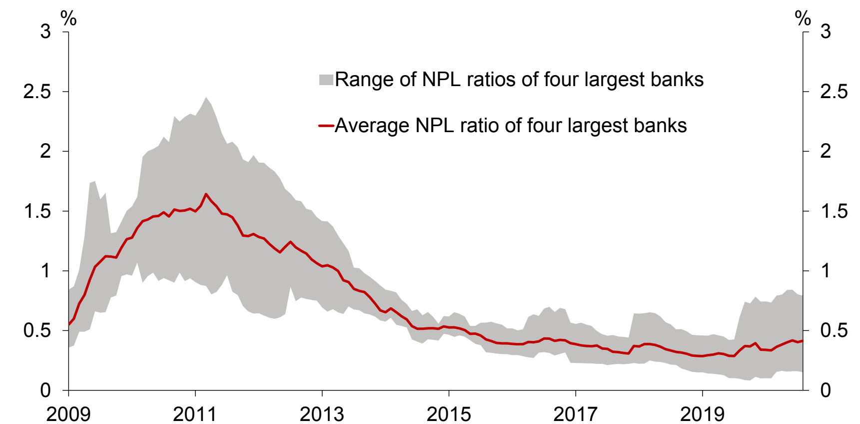
However, relief initiatives are likely masking pockets of stress within regions and industries particularly affected by COVID-19. And while the initial economic impacts of the pandemic outbreak have been softened, lower demand in the economy and confidence over the coming quarters are likely to continue to pressure firms and households. During the GFC it took around three years from the onset of the recession for non-performing loans (NPLs) to peak (figure 4.5). It is likely there will be a similar lag in this downturn, with the share of NPLs likely to increase over the coming years as economic output remains subdued, relief initiatives are withdrawn, and unemployment rises.

Figure 4.4
Non-performing loans of locally incorporated banks



Source: Reserve Bank *Bank Balance Sheet Survey*, private reporting of registered banks.

Figure 4.5
Non-performing loan ratios of the four largest banks



Source: Reserve Bank *Bank Balance Sheet Survey*, registered banks' *Disclosure Statements*.

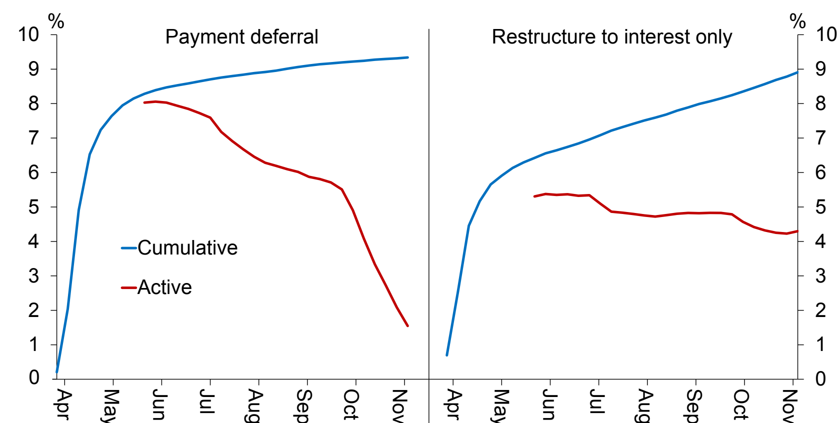
...but non-performing loans are expected to increase as support packages expire.

The mortgage deferral scheme has been important in supporting good customer outcomes and preventing a large-scale disorderly exit of borrowers from the housing market, which could have caused a sharp decline in house prices had borrowers facing temporary difficulties been forced to sell their properties. As unemployment grows, however, a number of customers who have no realistic prospect of resuming repayments may fall into arrears.

In total, around 9 percent of mortgage lending received a payment deferral, with a further 9 percent temporarily restructuring to interest-only (figure 4.6). Banks have been proactively working with customers to assess appropriate paths to resumption of repayment. Supervisory discussions with banks suggest that the majority of borrowers ending payment deferrals have returned to principal and interest payments, commonly with term extensions.

As at 6 November, around 1.5 percent of banks' mortgage lending had not yet resumed any form of repayment. The concessionary regulatory treatment that supports banks' granting of payment deferrals expires on 31 March 2021. At that stage, the proportion of loans that will require extended assistance or managed sales of properties, and the appropriate levels of loss provisioning by banks, will become clearer.

Figure 4.6
Bank mortgage lending granted payment deferrals and restructured to interest only
(% of March 2020 loans)



Source: Reserve Bank *Bank Customer Lending Survey*, *Bank Balance Sheet Survey*, Reserve Bank estimates.

Table 4.1

Key metrics for New Zealand's banking system

Metric	Value (%) September 2020	Value (%) 1 year ago	Regulatory minimum (%)	Comment
Tier 1 capital ratio	13.9	13.3	8.5*	Banks' Tier 1 capital ratios exceed regulatory minimums and have increased over the past 12 months. The Tier 1 capital ratio has been supported by the restriction on dividend payments, which has increased banks' retained earnings.
Mismatch ratio (one month)	7.2	6.8	0	Banks' mismatch ratios remain elevated, but below their all-time historical highs. Mismatch positions have been supported by LSAP, which has increased the banking system's settlement balances.
Core funding ratio	88.6	87.4	50	Banks' high level of stable core funding has enabled them to withstand disruptions in wholesale markets this year. The combined impact of LSAP and the large fiscal stimulus has increased the volume of deposits in the banking system.
Annual return on assets (after tax)	0.7	1.0		Banks' profitability has fallen over the past year, but remains high relative to peer country banking systems. Lower profitability was primarily driven by impairment charges in the March and June quarters.
Net interest margin (monthly, annualised)	1.85	1.97		The low interest rate environment has compressed banks' net interest margins. Over the past few months bank margins have partially recovered as term deposits rolled off or were repriced at lower rates.
Non-performing loan ratio	0.71	0.60		Banks' asset quality metrics remain benign. Strong asset quality has been supported by government relief measures and accommodative monetary policy, which has reduced borrowers' debt-servicing costs. Banks have increased their collective provisions in anticipation of future non-performing loans as support measures dissipate.
Cost-to-income ratio	46.8	41.6		New Zealand banks' cost-to-income ratios remain low relative to their international peers, although costs have risen over the past year.

* Includes the capital conservation buffer of 2.5 percent of risk-weighted assets, which banks must maintain to avoid dividend restrictions.

Source: Reserve Bank *Capital Adequacy Survey*, *Liquidity Survey*, *Income Statement Survey*, *Bank Balance Sheet Survey*.

Notes: Mismatch ratio (one month) is presented as a three-month moving average to remove short-term volatility.

Non-bank deposit takers

Non-bank deposit takers (NBDTs) represent only a small fraction of New Zealand's financial system, with total assets of the 20 licensed NBDTs equal to around 0.4 percent of the value of the banking system's assets (figure 4.7). While small relative to the rest of the financial system, the NBDT sector covers a diverse range of organisations that support financial inclusion by serving communities that may traditionally be under-serviced by the banking system.

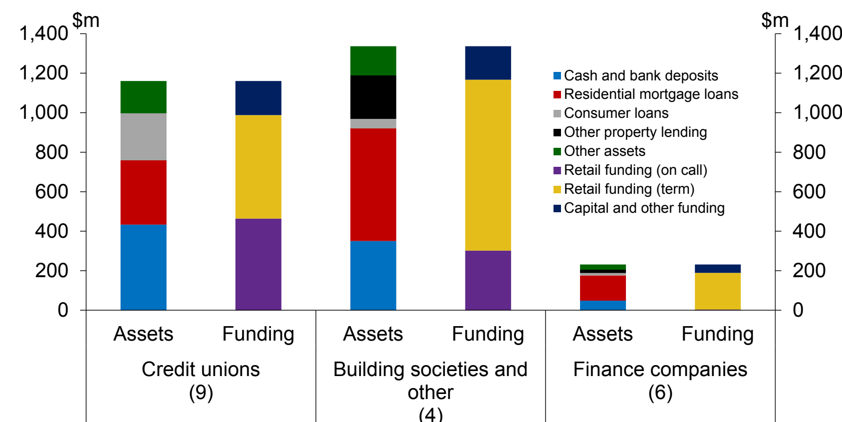
Some institutions face longer-term structural challenges to their business models...

Credit unions and building societies (CUBS) are customer-owned financial institutions that aim to provide affordable financial products to their members. Some credit unions face longer-term structural challenges to their business models that precede COVID-19, such as high operating cost structures relative to their size, which weigh on their ability to generate earnings (figure 4.8). Combined with a limited ability to raise external equity given their mutual structure, some institutions have a limited capacity to build up the capital buffers that are needed to absorb unexpected shocks while maintaining credit growth.

...and as with banks, CUBS will be challenged by falling interest rates.

CUBS' earnings challenge may be compounded in the current low interest rate environment. CUBS are traditional credit intermediaries, earning a margin on the difference between the rates they pay on deposits and interest they earn on loans and other assets. A high proportion of their funds is invested in deposits at banks and other relatively low earning assets

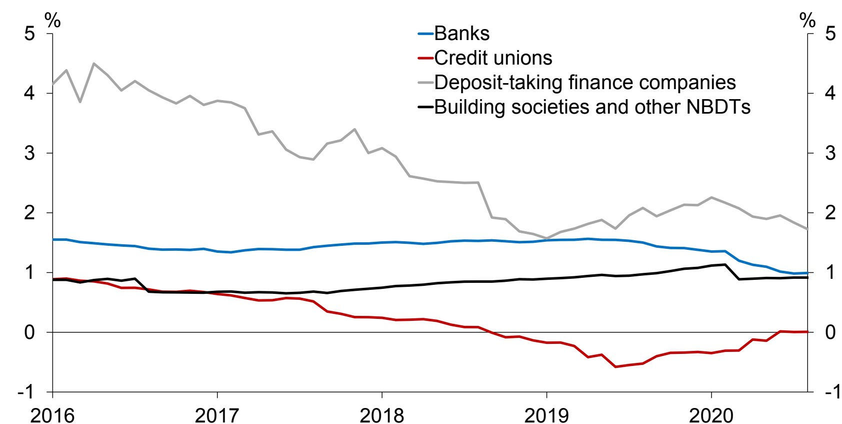
Figure 4.7
Balance sheets of NBDTs
(number of entities in parentheses, September 2020)



Source: Reserve Bank *Non-bank deposit takers survey*.

Note: Building societies and other includes Christian Savings Limited. FE Investments Limited is a licensed NBDT but is currently in receivership, and excluded from these figures.

Figure 4.8
Return on assets of banks and NBDTs
(annual, before tax)



Source: Reserve Bank *Non-bank deposit takers survey*, *Income Statement Survey*.

such as residential mortgages. CUBS do not generally issue wholesale debt, instead relying on retail deposits of their members. While not direct participants in the Reserve Bank's FLP, the anticipated decline in market term deposit rates should nevertheless help these entities to offset some of the falling earnings on their assets by lowering their deposit funding costs.

Low profitability, and limited means to increase their regulatory capital, threaten some CUBS' long-term viability. Two credit unions have recently entered negotiations to merge their balance sheets and strengthen their financial positions. Further consolidation may be necessary to capitalise on economies of scale and boost the resilience of the sector. In the nearer term, CUBS are likely to face pressures to their asset quality that are similar to those experienced by banks, particularly in higher-risk segments such as unsecured consumer lending.

Deposit-taking finance companies are also exposed to the downturn.

Deposit-taking finance companies operate a diverse range of business models. In general, they tend to operate in higher-risk segments of the market, and some provide financial services to those who are unable to access credit from the banking sector. Although the finance company sector has been relatively profitable in recent years, this in part reflects its higher risk profile. Asset quality for finance companies has remained stable in the past six months, with NPLs rising from 7 to 7.2 percent. While current capital ratios are high, the sector is exposed to a deterioration in economic conditions, and stresses could emerge over the coming year.

Table 4.2
Selected metrics for the NBDT sector

Metric	September 2020			September 2019		
	Credit unions	Building societies and other[1]	Finance companies[2]	Credit unions	Building societies and other	Finance companies[3]
Number of licensed institutions	9	4	7	12	4	8
Total assets	$1,160m	$1,337m	$231m	$1,141m	$1,232m	$284m
Capital ratio (%)	14.1	14.1	17.2	14.7	12.1	14.2
Non-performing loan ratio (%)	3.2	0.0	7.2	2.4	0.2	8.8
Annual return on assets, before tax (%)	0.0	0.9	1.8	-0.4	1.0	1.9

Source: Reserve Bank *Non-bank deposit takers survey*.

1 Includes Christian Savings Limited.

2 Finance companies' financial data for September 2020 excludes FE Investments Limited, which entered receivership in March 2020.

3 Finance companies' financial data for September 2019 excludes UDC Finance Limited, which was consolidated into its then parent ANZ Bank New Zealand Limited.

Insurance

Insurers have an important role in the financial system as they allow businesses and households to mitigate risks. General insurers account for the largest part of the New Zealand insurance sector, with around 59 percent of total gross premium revenue. Life insurers account for around 30 percent, and health insurers around 11 percent.

Insurers have retained capital during the period of economic uncertainty.

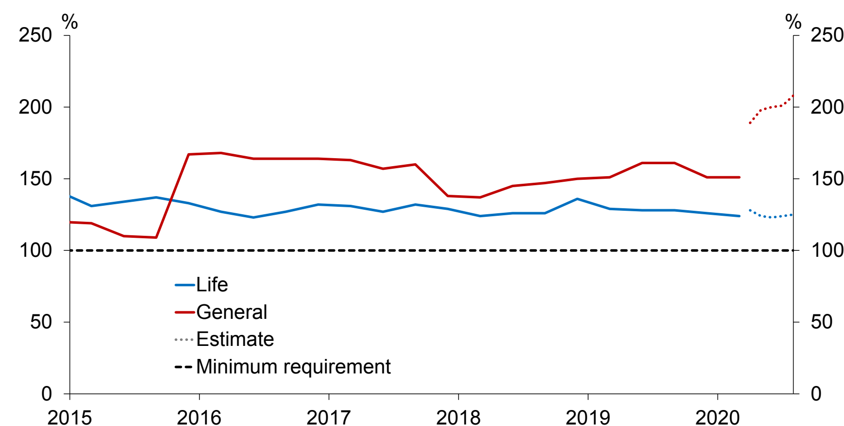
Beginning in April 2020, the Reserve Bank engaged with the insurance industry and expressed its expectation that insurers would restrict dividends and maintain capital in their businesses until the economic picture and financial impacts of COVID-19 became clearer. Overall, the solvency capital ratio of the general insurance sector increased from 151 percent in December 2019 to an estimated 208 percent in August 2020, though remained flat around 125 percent for the life insurance sector over the same period of time (figure 4.9). The Reserve Bank has recently commenced a review of the solvency standards applying to insurers (see chapter 5).

The claim effects of COVID-19 on most insurers remain modest…

During Alert Levels 3 and 4, some insurance business lines, such as health and motor vehicles, saw significant reductions in claims, reflecting delayed health procedures, lower activity and the greatly reduced movement of people. Some insurers provided rebates to customers to reflect the lower claim rates. As restrictions eased claims returned to normal levels.

The success to date (compared with other countries) of New Zealand's response to COVID-19 means that there have been very few death and disability claims made against life insurance policies, over and above normal claim volumes. There may be future increases in claims for life insurers due to delayed diagnoses during and after lockdowns, increased

Figure 4.9
Solvency ratios



Source: Reserve Bank *Insurer Solvency Return*.

Note: Monthly estimates from March 2020 are prepared by insurers on a best endeavours basis and do not include (for example) year-end accounting adjustments that can have a material impact on the balance sheet and solvency ratio.

mental health issues, reductions in termination rates for disability income claims, and increased redundancy claims as various government support schemes for businesses expire.

Across the entire sector, insurers have offered support to their customers with varied financial assistance packages, such as temporary suspension of premiums and cover, and hardship premium discounts. Individuals and businesses taking advantage of these arrangements should be aware of the potential risks associated with taking up these offers, which can include loss of cover for the periods of the deferrals.

…but the risks are highly varied across the sector.

Some insurance product lines have been more directly affected by COVID-19 than others. Insurers offering credit protection, loan repayment and redundancy insurance products may be exposed to greater claim costs if the New Zealand economy remains weak. Some insurers have ceased to offer new redundancy and unemployment protection insurance as there is typically a stand-down period before a customer can claim on a policy. Continuing to offer such policies to the public now could lead to poor customer outcomes, as job losses that occur in the coming months would be ineligible.

Travel insurance providers initially dealt with large increases in claim applications, customer enquiries and policy refunds when countries instigated their border restrictions. Those providers are now operating in an environment where overseas travel (and consequently the demand for travel insurance policies) has effectively halted, meaning that their premium revenue is near zero or negative after refunds.

The insurance industry is also monitoring overseas legal precedents being established for business interruption claims against government-imposed COVID-19 restrictions. The insurance industry believes that the policy exclusion wordings used in New Zealand are clearer than those in other jurisdictions, and there is no need for legal test cases like those currently going through, for example, the UK and Australian courts. Those courts have ruled in favour of insured parties, but the findings are subject to appeals. It is not yet clear how these rulings might affect the insurance industry in New Zealand either directly or indirectly through decisions made by overseas parent-entities.

Investment and economic impacts are significant for some insurers.

In addition to the COVID-19 effects on claims, insurers are affected through investment and economic effects. Most insurers invest heavily in fixed income, and as such have experienced market value gains from falling interest rates. These may be offset by losses from increased spreads for some, and potentially higher rates of default in the future. Relatively few insurers invest in equities, and these are mostly in respect of insurance products with savings components whereby the policyholders bear most of the investment risk. The heightened volatility in markets and interest rates has been challenging for insurers to manage.

Some insurers need to make advances in how they model and manage catastrophe risks.

In 2016 the Reserve Bank carried out a survey of insurers to obtain information on how they went about assessing their exposure to catastrophes like earthquakes, floods, and tsunamis. The review identified some weaknesses in insurer processes and governance, and the Reserve Bank committed to undertaking a follow-up survey to assess improvements.

In 2020 the follow-up survey found that insurers with significant exposure to catastrophe risk continued to manage it distinctly from other forms of insurance risk and have stronger assessment processes and governance arrangements, when compared to those insurers with little direct exposure to catastrophe risk. The latter nevertheless need to continue assessing how catastrophes can affect their business model and capital adequacy.

A key area of concern identified in the 2020 follow-up was the lack of evidence to show that property insurers had considered the implications of more up-to-date catastrophe risk models. These are models that have been finalised in recent years and that allow for more detailed learnings from the 2010-11 Canterbury earthquake sequence. The use of outdated versions of catastrophe models does not necessarily imply that an insurer is insufficiently capitalised in the event of a catastrophe. However, insurers need to apply prudent scrutiny to the outputs of these models, making adjustments when necessary, when they are used to inform financial decisions such as the purchase of reinsurance or capital adequacy.

The Reserve Bank will publish the 2020 catastrophe risk survey report on 26 November. Individual feedback and recommendations to those insurers that were part of the 2020 survey will be provided before the end of December.

Table 4.3
Selected metrics for the insurance sector

Metric	Value (%)		Reg. min. (%)	Comment
	Current[1]	1 year ago[1]		
Non-life insurers				
Solvency ratio – general	151	151	100	All general insurers are currently meeting the Reserve Bank's solvency requirements. Buffers are estimated to have improved since March.
Solvency ratio – health	339	344	100	Health insurers generally have stronger capital buffers than general insurers, reflecting that many are mutual companies with restricted access to capital.
Profit margin	8.7	10.9		Profit margins appear to be in line with those of international peers. Margins for both general and health insurers have decreased over the year.
Expense ratio	13.3	12.7		Expense ratios compare favourably with those of international peers. Expense ratios for health insurers are generally lower than those of general insurers.
Life insurers				
Solvency ratio	124	129	100	Life insurers' buffers have declined slightly on average, and in some cases insurers are operating very close to their regulatory minimum.
Profit margin	10.9	17.3		Profit margins appear to be high relative to international peers, although they have decreased over the year. Bancassurers* and mature traditional businesses tend to have higher profits than insurers that distribute through advisors.
Expense ratio	23.3	22.0		Bancassurers have expense ratios in line with international averages. Expense ratios for other types of life insurer are significantly higher.

Source: Reserve Bank *Insurer Solvency Return*, *Quarterly Insurer Survey*, *Insurer Monthly Return*.

1 Profit and expense figures – from quarterly insurer survey to June 2020 for current, and to June 2019 for one year ago. These cover just under 90 percent of the insurance sector by premium. Profit margin is profit after tax divided by gross premium (expressed as a percentage); note that this measure overstates profitability for mature traditional life insurers with large balance sheets and low levels of premium. Expense ratio is non-commission expenses divided by gross premium (expressed as a percentage). Solvency figures – current is the *Insurer Solvency Return* to March 2020, and to March 2019 for one year ago.

* Bancassurers are insurers that distribute products largely through banks.

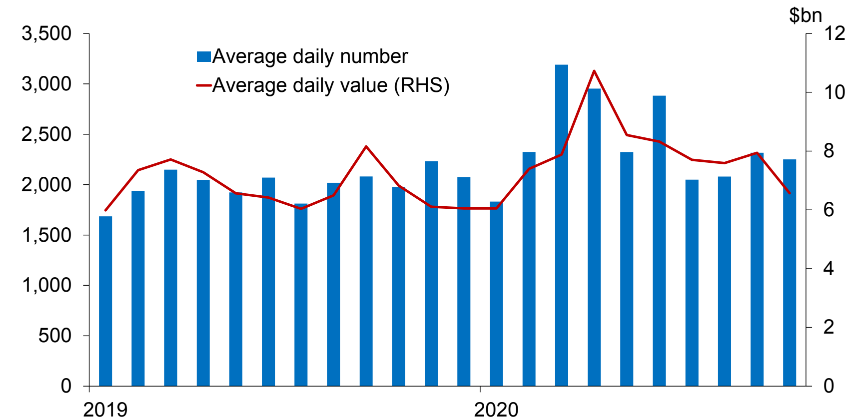
Financial market infrastructures

Financial market infrastructures continue to show resilience during uncertain times...

The Reserve Bank and the Financial Markets Authority have continued to engage frequently with financial market infrastructure operators (FMIs) as they respond to a changing operating environment due to COVID-19. FMIs have generally been operating satisfactorily through the different Alert Levels. They have been able to move between on-site and off-site split operations and normal operations with no issues.

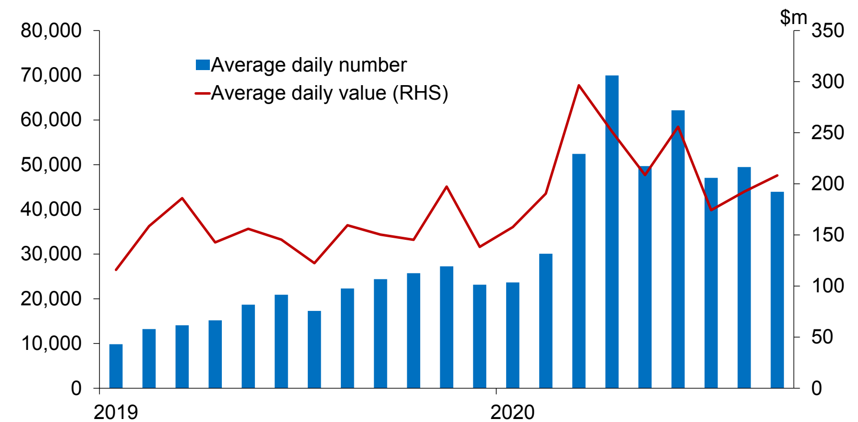
ESAS and NZClear continued to operate at a high standard since system updates were successfully implemented in February. ESAS has had 100 percent availability. While NZClear experienced some minor operational incidents, the number and extent of these incidents have reduced. NZClear's settlement volumes have returned to pre-COVID-19 levels (figure 4.10). However, NZCDC is continuing to experience above-average clearing volumes of securities trades, in terms of both values and number of trades (figure 4.11).

Figure 4.10
NZClear transactions



Source: Reserve Bank.

Figure 4.11
NZCDC securities trades accepted for clearing



Source: Reserve Bank.

…but there are other risks to watch out for.

NZX's website experienced distributed denial-of-service (DDoS) cyber-attacks in late August and early September, disrupting trading activities for several days as the exchange was unable to distribute market announcements. The Reserve Bank and Financial Markets Authority closely monitored the potential impacts of the DDoS event on NZCDC. The countermeasures since put in place by NZX have been effective in preventing further attacks affecting market trading. Overall, the attacks had a limited impact on NZX Clearing, with clearing and settlement completed daily.

The joint regulators will continue to engage with NZCDC as part of a broader review of NZX's IT systems. The Reserve Bank recently released a consultation paper proposing a three-step framework to promote cyber resilience in the financial sector, including FMIs (see box D).

The Reserve Bank takes a leadership role at EMEAP.

Since the 1990s the Reserve Bank has been an active member of the Executives' Meeting of Asia-Pacific Central Banks (EMEAP), a forum for dialogue between central banks in the wider East Asia and Pacific Region. The Reserve Bank has recently been appointed chair of the Working Group for Payments and Market Infrastructures, one of the three main working groups operated under the EMEAP umbrella.

This aligns with and supports the Reserve Bank's expanding regulatory and operational focus in the area of payments and FMIs, and its preparation to establish a new and enhanced regulatory regime for FMIs operating in New Zealand. More broadly, the Reserve Bank sees FMIs as increasingly important in the context of an interconnected and digitally enabled world, and is looking for opportunities to engage more with the international community.

The payments industry is also busy with significant projects.

Despite the uncertainties of COVID-19, the payments industry continues to make progress on significant projects that are expected to bring about benefits to all New Zealanders. Two major industry projects, SBI365 and ISO 20022, will enable daily payment settlement, including over weekends, and provide richer information for each transaction. Payments NZ has also been working to identify the next priorities and initiatives it should focus on over the medium term, to modernise New Zealand's payments ecosystem.

Open banking could be supported by a customer data right framework.

The Ministry of Business, Innovation and Employment is currently consulting on options for establishing a Consumer Data Right (CDR) in New Zealand. A CDR would give individuals and businesses greater choice and control over their data, and could encourage innovation and facilitate competition, including open banking.

The Reserve Bank is supportive of establishing a CDR in New Zealand, as it will support competition in retail banking, payments and other financial services, and therefore efficiency in the financial system. This could also support a growing FinTech sector in New Zealand.

Table 4.4

New Zealand payment and settlement systems

System		Description	Designated[1]	Owner/operator
High value transactions	Continuous Linked Settlement (CLS)	Provides settlement services for foreign exchange transactions.	✔	CLS Bank International
	Exchange Settlement Account System (ESAS)	Provides real time gross settlement of interbank transactions across exchange settlement accounts held at the Reserve Bank.	✔	Reserve Bank of New Zealand
Retail payments	EFTPOS NZ	Provides payment services for point of sale debit and credit card transactions.		EFTPOS NZ Limited
	Paymark	Provides payment services for point of sale debit and credit card transactions.		Paymark Limited
	Settlement Before Interchange (SBI)	Provides payment services for retail transactions. Payments are exchanged using SWIFT and settlement of net interbank positions occurs in ESAS.		Payments NZ Limited
Securities settlement	ASXCF Settlement System	Provides clearing and settlement services for transactions on ASX derivative transactions.	✔	ASXClear (Futures) Pty Limited
	NZCDC Settlement System	Provides clearing and settlement services for transactions on NZX markets. The system include a central counterparty and securities depositories.	✔	New Zealand Clearing and Depository Corporation Limited
	NZClear	Provides clearing and settlement services for fixed interest and equity transactions. Interbank payments occur directly in ESAS.	✔	Reserve Bank of New Zealand
Critical service providers	SWIFT	Provides secure global financial messaging services.		Society for Worldwide Interbank Financial Telecommunication

1 Designation provides legislative backing to the finality of settlements effected, netting done, and personal property transferred, in accordance with the rules of the designated settlement system. This means settled trades cannot be unravelled.

Box C

Disclosure and supervision of climate-related risks

The May 2019 *Report* included the results of an industry survey of selected banks and insurers as part of a global survey on the implementation of disclosures developed by the Task Force on Climate-related Financial Disclosures (TCFD). The survey highlighted broad consensus among institutions that climate change will have an impact on the financial system but little evidence that concerns about climate change risks were influencing day-to-day business decisions.

The New Zealand Government recently approved the introduction of a mandatory climate-related financial disclosures regime.[9] Disclosures would be made against a standard developed in line with the recommendations of the TCFD.

This regime would be on a comply-or-explain basis and apply to all publicly listed companies, as well as large insurers, banks and investment managers. This captures 90 percent of the assets under management in New Zealand. The broad approach to coverage would be a world first. If the proposal is approved by the incoming Parliament in 2021, organisations could be required to make disclosures in 2023 at the earliest.

The Reserve Bank places significant emphasis on disclosure and broadly supported the proposal to introduce the mandatory disclosure of climate-related risks, while noting challenges around the availability of data capacity and resources. Disclosure is an important tool to: facilitate the pricing of climate-related risks by market participants; help build organisations' data collection, risk identification, and risk management practices; and ultimately encourage climate change-resilient investment.

The announcement comes as the Reserve Bank is stepping up its understanding and supervision of climate change-related risks for the banking and insurance industries. The supervisory approach will adjust to include climate-related risks in entity assessments, and for discussion of these risks to be included in regular supervisory engagements. One of the ways the Reserve Bank will assess the extent to which financial institutions are disclosing climate-related risks will be to repeat the survey on the implementation of disclosure developed by the TCFD. Options for climate change-related stress tests are also being explored.

The Reserve Bank has moved to incorporate climate change as a key priority in its activities, and is raising awareness of climate-related risks to financial stability through external engagement.[10] This includes working with regulatory counterparts to increase coordination and build capability by leading New Zealand's Council of Financial Regulators' climate workstream.

9 More detail is available here: **www.mfe.govt.nz/climate-change/climate-change-and-government/mandatory-climate-related-financial-disclosures**.

10 More information about the Reserve Bank's climate change strategy and external engagement is given in a recent speech from Governor Adrian Orr, *Progressing Climate Action by Driving Transformational Change*: **www.rbnz.govt.nz/research-and-publications/speeches/2020/speech2020-10-28**.

Box D

Building cyber resilience to promote a sound and dynamic financial system

Cyber resilience has become widely recognised as a public good, where there is a clear role for government agencies to help industry achieve socially desirable outcomes for New Zealand. The importance of building cyber resilience has grown over time alongside an increasingly digital economy, and the pace of change has recently accelerated as a result of disruptions brought by COVID-19. An example of this is the rapidly growing interest in the use of cloud computing services by financial sector entities. Cloud services offer the ability to improve efficiency and resilience, but also present new challenges and risks. Looking further ahead, the growing community of FinTech service providers presents opportunities for improved competition and inclusion in the delivery of financial services, alongside new points of potential vulnerability.

Exposure to cyber risks will continue to grow for the financial sector in the future, and this means cyber resilience will remain an important area of focus for the Reserve Bank. The recent series of high-profile DDoS attacks is a timely reminder of the ongoing need to build resilience across the financial sector.

A three-step approach to promote cyber resilience.

Over the past year the Reserve Bank has progressed its work to build cyber resilience in the financial sector. This has included releasing risk management guidance for public consultation,[11] and seeking feedback on plans to collect cyber-related information from industry. The consultation period is open until the end of January 2021.

These activities fit with the Reserve Bank's intention to become more proactive in supporting cyber resilience alongside industry and other public bodies, including the National Cyber Security Centre (NCSC), the Computer Emergency Response Team (CERT NZ) and the Financial Markets Authority (FMA).

The consultation document also outlines the Reserve Bank's longer-term, three-step approach to help build the cyber readiness of the financial sector. The first two steps, risk management guidance and information collection, are being progressed in tandem and details are outlined in the consultation document. The third step is future oriented and aims to enhance coordination across industry, regulators and government agencies on a collective response to cyber incidents.

11 See **www.rbnz.govt.nz/regulation-and-supervision/cyber-resilience**.

Principles-based risk management guidance adapted to New Zealand's financial sector.

The risk management guidance seeks to clarify Reserve Bank expectations of regulated entities and aims to raise awareness of the importance of building cyber resilience, especially at board and senior management levels. The guidance draws heavily from well-known international and national cybersecurity frameworks but is adapted to reflect the scale, complexity and diversity of entities regulated by the Reserve Bank. The guidance has four parts:

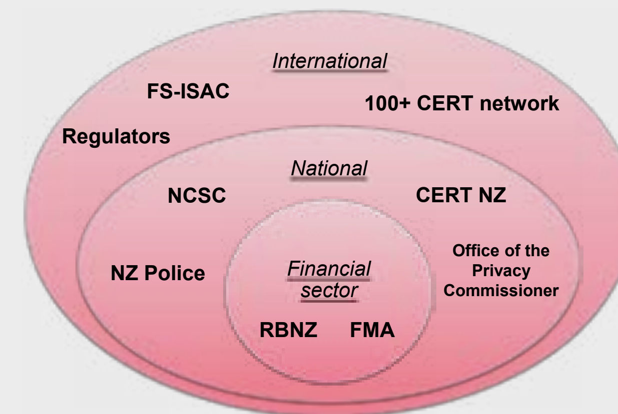
- **Governance** outlines clear roles and responsibilities for the board and senior management and emphasises the need for effective strategy to achieve cyber resilience.
- **Capability building** outlines five areas of focus for building cyber resilience.
- **Information sharing** encourages entities to choose reliable channels and cultivate a trusted environment for information sharing.
- **Third-party management** focuses on cyber risk related to outsourcing.

Multi-agency landscape and a collaborative approach.

Cyber risks are widespread and borderless. The Reserve Bank recognises that there is a range of public sector bodies with interests in cyber security. In New Zealand, the NCSC and CERT NZ are centres of technical expertise but also have a broad focus, which means there is a role for financial sector regulators like the Reserve Bank and the FMA in supporting wider efforts to build cyber resilience.

Information gathering and sharing is an area where there is a strong case for close coordination among agencies. In developing information gathering and sharing arrangements, the Reserve Bank is working closely with the NCSC, CERT NZ and the FMA to avoid duplication and reduce unnecessary compliance costs.

Figure D.1
Multi-agency landscape in the cyber security domain



*FS-ISAC: Financial Services Information Sharing and Analysis Centre

Chapter 5
Regulatory initiatives

Update on COVID-19 related regulatory actions to support financial stability

Recognising the impacts of COVID-19 on the economy and financial institutions, the Reserve Bank took a number of steps earlier this year to support the ongoing provision of credit to the economy and promote financial stability. These included relaxing a range of regulatory requirements, restricting dividend payments, and placing on hold external-facing regulatory initiatives to allow entities to dedicate their resources to responding to the pandemic.

In relation to banks, table 5.1 provides an update on the key regulatory actions.[12] The Reserve Bank continues to monitor the effects of these actions on the wider economy and financial stability, and will carefully consider their ongoing appropriateness over the coming months.

12 See 11 November 2020 letter to bank CEOs for further details: **www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Policy-development/Banks/Review-capital-adequacy-framework-for-registered-banks/Letter%20to%20Banks%20on%20Capital%20Review%20including%20CFR.pdf**.

Table 5.1
Regulatory actions for banks in response to COVID-19

Action	Description	Current status
Dividend restrictions	No dividend payments permitted.	In place until at least 31 March 2021.
Capital instrument repayment	Optional repayment of capital instruments not exercisable.	In place until at least 31 March 2021, although banks may apply to replace instruments with ones of equal or higher value.
Payment deferrals	Concessionary capital treatment for loans on payment deferral.	In place until 31 March 2021.
Core Funding Ratio (CFR)	Minimum reduced from 75 to 50 percent.	Will remain at 50 percent until at least 31 March 2021.
Loan-to-Value Ratio (LVR) limits	Removed on all residential mortgage lending.	Reserve Bank will consult in December on reinstating high-LVR limits from March 2021.
Capital Review	Implementation delayed by one year, to start in July 2021.	Consultation on new framework began in November 2020. Increases to capital levels delayed one further year, to begin in July 2022.

Beginning in April 2020, the Reserve Bank engaged with the insurance industry and expressed its expectation that insurers would restrict dividends and maintain capital in their businesses until the economic outlook and financial impacts of COVID-19 became clearer. This aimed to support financial stability by preserving insurer capital so it is available if circumstances deteriorate. The insurance industry understood the Reserve Bank's expectations and the industry's aggregate capital level has increased with retained profits, as discussed in chapter 4.

Since the last *Report*, the impacts of COVID-19 on most general and health insurers have been moderate. The public health response, along with government support such as the wage subsidy, has so far limited the impacts of COVID-19 on life and disability insurance products. The Reserve Bank has therefore withdrawn its guidance to insurers on dividends. Insurers are expected to operate prudently at all times, and their capital and dividend decisions must be informed by robust risk management practices and stress testing analysis.

The Reserve Bank has also deferred external-facing work on regulatory initiatives, including planned public consultations, for the past six months.[13] As detailed below, some of this work has now resumed. The Reserve Bank is in close contact with other agencies in the Council of Financial Regulators and will keep the timing of its regulatory work programme under review as the economic situation and the impacts of regulatory projects on entities evolve.

13 A comprehensive list is available in the following link: **www.rbnz.govt.nz/-/media/ReserveBank/Files/regulation-and-supervision/banks/relationships/cofr/CoFR-table-of-deferred-regulatory-initiatives-April-2020.pdf**.

Loan-to-value ratio (LVR) limits

In early December the Reserve Bank will release a consultation document on re-introducing LVR restrictions from 1 March 2021, with submissions due in late January. This will provide an adequate consultation period for all stakeholders, keeping in mind the summer holiday period.

The removal of LVR restrictions earlier this year was done on a much faster timetable than normal, but this reflected the urgency of the situation, particularly with respect to supporting a steady supply of credit, and removing a potential obstacle to the mortgage deferral scheme. Re-introducing LVR restrictions requires a lead time of two to three months to enable banks to adjust lending practices and manage their pipeline of lending applications (including lending applications that have been approved but not yet settled). Re-imposing restrictions on a shorter timeframe could force banks to withdraw existing loan offers in order to avoid breaching LVR limits applying from 1 March. This effectively means that banks would begin to tighten LVR limits to new loan applications in the months prior to March.

The Reserve Bank intends to reinstate LVR speed limits at the same level they were set at prior to their removal in April this year. That is, no more than 20 percent of new lending to owner-occupiers at LVRs greater than 80 percent, and no more than 5 percent of new lending to investors at LVRs greater than 70 percent, after exemptions. However, the final decision on the restrictions will be made after the consultation. At present, lending by most banks to owner-occupiers remains within the previous LVR speed limits, and hence reinstating the restrictions is expected to predominantly affect investors instead of owner-occupiers.

Implementation of the Capital Review for locally incorporated banks

In December 2019 the Reserve Bank announced final decisions on a comprehensive review of the capital adequacy framework that applies to locally incorporated registered banks (the Capital Review). To support the stability of the financial system during the period of economic uncertainty resulting from COVID-19, the Reserve Bank delayed the implementation of the Capital Review to 1 July 2021. As announced earlier this month, the Reserve Bank has recently decided to further delay parts of the Capital Review decisions by 12 months, to July 2022.[14]

The delay covers the parts of the Capital Review decisions that would require banks to build their capital levels during 2021. This provides more headroom for banks to support lending by drawing on their capital buffers as the economy recovers from the impacts of COVID-19. Other parts of the Capital Review decisions that have little impact on required capital levels will proceed from July 2021, to provide certainty about the rules underlying the framework. These changes strike a balance between ensuring that there is more headroom for banks to continue lending, while also ensuring that capital levels lift in the longer term to support financial stability.

COVID-19 has demonstrated the importance of capital buffers in managing risks to financial stability. Increasing these in the future, in line with the Capital Review decisions, remains a high priority for the Reserve Bank to ensure banks can withstand a range of severe shocks.

The delayed parts of the Capital Review decisions are:

- Increases in capital buffers, which will now begin from 1 July 2022.
- An increase in the scalar applied to risk-weighted assets (RWA) under the Internal Ratings-Based (IRB) approach, which is now due to begin from 1 October 2022.

The following changes will be implemented as planned:

- Changes to the requirements for Additional Tier 1 (AT1) and Tier 2 capital instruments (in place from 1 July 2021).
- The de-recognition of existing AT1 and Tier 2 capital instruments (from 1 July 2021).
- Requirements for IRB banks to report both IRB and Standardised capital calculations (from 1 January 2022).
- Setting a floor on RWA for IRB exposures at 85 percent of the equivalent Standardised calculation (from 1 January 2022).

14 See **www.rbnz.govt.nz/news/2020/11/further-regulatory-steps-to-promote-cashflow-confidence-and-stability**.

As part of the implementation of these changes, the Reserve Bank has released detailed consultation material, as well as exposure drafts of documents to replace all the capital adequacy policy in the current Banking Supervision Handbook.[15] Changes proposed include:

- A revised dividend restriction policy to incorporate the larger prudential capital buffer.
- The terms and conditions for AT1 and Tier 2 capital instruments, including the optional use of template terms sheets.
- The replacement of the current non-objection process with a notification process for banks to issue qualifying AT1 and Tier 2 capital instruments.

The project to restructure and replace the whole Banking Supervision Handbook has been under way since 2015, with the help of informal feedback from banks in a working group. The Capital Review exposure drafts are the first public consultation on the restructured material, and are intended to replace the current Handbook documents BS2A, BS2B, BS6, BS12 and BS16, and parts of BS1.

The consultation will run until the end of March 2021. The revised Handbook is currently planned to be issued before 1 July 2021.

15 See **www.rbnz.govt.nz/news/2020/11/reserve-bank-launches-consultation-to-implement-capital-review-changes**.

16 The IMF undertook an FSAP for New Zealand in 2016, with the findings and recommendations released in May 2017. An FSAP is a comprehensive review of a country's financial system, with a particular focus on the quality of financial sector regulation. See: **www.rbnz.govt.nz/regulation-and-supervision/financial-sector-assessment-programme**.

The Insurance (Prudential Supervision) Act Review and the Solvency Standard Review

The New Zealand insurance industry is regulated under the Insurance (Prudential Supervision) Act 2010 (IPSA). IPSA was put in place with the objectives of ensuring the maintenance of a sound and efficient insurance sector and of promoting public confidence in the sector. In line with these objectives, IPSA gives the Reserve Bank the power to impose minimum capital requirements on insurers in the form of solvency standards.

Background of the reviews

Regulatory stewardship requires regular reviews of legislation to ensure it continues to be robust and relevant. Developments in the international and local insurance markets may also affect legislative tools, rendering them no longer fit for purpose. In the case of IPSA, the Financial Sector Assessment Program (FSAP), conducted by the International Monetary Fund (IMF) in 2016, identified a number of areas where alignment with international best practice could be improved.[16] In addition, as New Zealand solvency standards are closely linked to accounting standards, the impending introduction of a new accounting standard (IFRS 17) means that the solvency standards have to be updated accordingly.

A review of IPSA first commenced in 2017, but was put on hold due to the reallocation of resources to other priorities, including the Reserve Bank Act Review. An attempt to recommence the IPSA Review, and launch the Solvency Standards Review, in April 2020 was further delayed by COVID-19. With regulatory initiatives resuming, the Reserve Bank recently announced the recommencement of the IPSA Review and the commencement of the Solvency Standards Review.

The IPSA Review will build on issues discussed during the first stage of the consultation, beginning with key issues that underpin the legislation such as what is covered under the Act and the treatment of overseas insurers. Both are areas that the Reserve Bank considers to have a significant impact on policyholder protection. The recommenced project will also have the benefit of lessons from the liquidation of CBL Insurance Limited.[17] Any legislative changes resulting from the IPSA Review are expected to be enacted in late 2023 at the earliest.

The Solvency Standards Review will address the impact of IFRS 17 on insurers' capital requirements, along with a number of other proposals relating to the structure of the solvency standards. This consultation will be followed by the exposure for consultation of interim standards, expected to take place in the second half of 2021. Following the implementation of the interim standards in early 2022, other improvements will be explored throughout 2022 and 2023. The Reserve Bank plans to issue final standards towards the end of 2023.

Updates on the Financial Market Infrastructures Bill

The Financial Market Infrastructures Bill (the Bill) establishes a new legislative framework for the regulation and supervision of financial market infrastructures (FMIs) such as payment systems, settlement systems, and central counterparties. The Bill provides the Reserve Bank with information-gathering and investigative powers that apply to all FMIs, and an enhanced set of regulatory powers that apply to those FMIs that are identified as systemically important, or that opt-in to access legal protections around settlement finality, netting, and the enforceability of their rules (these powers include powers to set legally binding standards for these FMIs, powers to oversee their rules, and crisis management powers). The basic framework reflected in the Bill was supported by the IMF in its 2016 FSAP review of New Zealand.

The Bill was introduced into Parliament in December last year and was referred to the Finance and Expenditure Committee (FEC). FEC reported back on the Bill in August with a number of recommendations, including:

- Adding a streamlined process for existing designated settlement systems to transition across to the new regime,
- Making various changes to simplify and clarify some of the decision making processes under the Bill,
- Making some technical changes to help ensure that the application of the Bill is appropriately tailored to the circumstances of different FMIs.

Once the Bill is enacted, the Reserve Bank anticipates that there would be a transitional period of approximately 18 months before the new regime is completely in force. The Reserve Bank is working closely with the Financial Markets Authority (as co-regulators under the Bill) on various matters that will be needed to implement the new regime once the Bill is enacted. These include guidance on how systemic importance assessments will be undertaken, and the design of standards that will be made under the Bill.

17 CBL Insurance Limited was placed into liquidation by order of the High Court on 12 November 2018. The Reserve Bank commissioned an independent review of its supervision of CBLI to identify lessons for itself and the insurance regulatory regime. See: **www.rbnz.govt.nz/regulation-and-supervision/insurers/regulation/cbl-insurance-limited-in-liquidation**.

Chapter 6

Regulatory compliance and enforcement

In the event of identified non-compliance, the Reserve Bank has the discretion to take enforcement action and to decide what enforcement action to take. This discretion is exercised for the purposes of promoting the maintenance of a sound and efficient financial system.

The Reserve Bank is reviewing its enforcement framework with the aim of ensuring it is fit for purpose and optimised to enable the Reserve Bank to regulate the entities for which it is responsible effectively. This is in the context of the Reserve Bank increasing the intensity of its supervision, as well as the establishment of a Deposit Takers Act, which will result in a greater range of enforcement tools for the Reserve Bank.

This inaugural section of the *Report* on regulatory compliance and enforcement provides information on the enforcement activities recently undertaken by the Reserve Bank to achieve its statutory purposes.

Areas of regulatory non-compliance

Open Bank Resolution

The Open Bank Resolution (OBR) requirements are set out in the Reserve Bank's Banking Supervision Handbook (BS17). The OBR policy aims to allow a distressed bank to be kept open for business, while placing the cost of a bank failure primarily on the bank's shareholders and creditors, rather than the taxpayer.

A few minor instances of non-compliance with the OBR requirements have been identified over the past six months. These relate to banks' treatment of some small product and business lines under the policy, but did not affect their ability to implement OBR should the need have arisen. The Reserve Bank is currently discussing these issues with the banks concerned.

Outsourcing

As noted in the May 2020 *Report*, the Reserve Bank has been carrying out a review of banks' compliance with the outsourcing requirements as set out in the Reserve Bank's Banking Supervision Handbook (BS11). As expected, this review has identified a number of instances of non-compliance among the five banks in scope of BS11 (banks whose net liabilities exceed $10 billion).

Over the past six months, further instances of non-compliance have been identified, including failures to enter outsourcing arrangements into the outsourcing compendium. These were minor breaches that were raised with the relevant banks and the breaches were remediated.

Prescribed Transaction Reporting

Prescribed Transaction Reporting (PTR) requirements under the Anti-Money Laundering and Countering Financing of Terrorism Act 2009 (AML/CFT Act) continue to be an area of focus for the Reserve Bank. Eight banks have identified PTR compliance issues over the past six months, primarily relating to failing to report prescribed transactions within the 10 day statutory timeframe. Most of these instances involved a small number of transactions and were due to technical error, human error, or coding error. However, PTR is an important requirement, and the Reserve Bank is continuing to investigate these issues.

Responding to non-compliance

Forbearance due to COVID-19

The COVID-19 outbreak and Alert Level restrictions presented particular challenges for regulated entities' financial reporting and auditing processes, as well as the broader pressures on staff and the need to revise priorities. Furthermore, requests for additional information during this time put extra pressure on reporting functions.

As the Reserve Bank could not change entities' statutory reporting and disclosure requirements quickly, the Reserve Bank decided to waive, in advance, its right to enforce against registered banks' and licensed insurers' failures to meet certain reporting and disclosure deadlines, as long as extended deadlines were met. Normal reporting and disclosure deadlines have now been reinstated.

In some instances the lockdown prevented some regulated entities from meeting other statutory requirements. Where the Reserve Bank was satisfied that non-compliance was a one-off issue, due to the circumstances, and that the entity had come to compliance within a specified timeframe, the Reserve Bank would exercise its discretion not to take enforcement action in respect of the non-compliance. This was done in respect of four entities.

Independent reports on ANZ's governance, risk management and internal controls, and risk capital models

In June 2019 the Reserve Bank requested two reports from ANZ Bank New Zealand Limited (ANZ) under section 95 of the Reserve Bank of New Zealand Act 1989. This followed the identification of issues with ANZ's compliance with Reserve Bank capital adequacy requirements, and its Director Attestation and Assurance Framework. ANZ engaged Deloitte, with the approval of the Reserve Bank, to prepare the reports.

In December 2019, the first report on ANZ's Director Attestation and Assurance Framework was published. As a result of the first report, the Reserve Bank issued a further section 95 notice, requiring ANZ to engage an external party to confirm before the end of 2021 that ANZ has implemented all the recommendations set out in the December 2019 report. A summary of this subsequent report will be published when finalised next year.

In April 2020, the Reserve Bank received the second report, which assessed ANZ's compliance with the Reserve Bank's capital adequacy requirements. The report concluded that there had been insufficient rigour in ANZ's processes, which led to the failure to identify the issues.

The Reserve Bank continues to work with ANZ to address identified areas of non-compliance. The terms of reference for the further section 95 review referred to above have been amended so that the external party will also confirm that the issues raised in the April 2020 report have been addressed.

Investigations

Where supervisors are concerned about an entity's non-compliance, for example the non-compliance is material, or there is a pattern of non-compliance, supervisors may refer the matter to the Reserve Bank's enforcement function. Enforcement investigates the matter and makes a recommendation as to what action to take, allowing the supervisor to continue to work with the entity to bring it into compliance.

The Reserve Bank is investigating ongoing non-compliance by a licensed insurer with its regulatory reporting, disclosure, and notification requirements. It is also looking into two banks' compliance with the AML/CFT Act, including TSB Bank Limited's compliance with its obligations relating to its risk assessment and AML/CFT compliance programme as disclosed in its 2020 full-year disclosure statement.

Table 6.1

Matters referred to Enforcement as at November 2020

Sector legislation	Number of matters under investigation
Reserve Bank of New Zealand Act (Banks)	0
Insurance (Prudential Supervision) Act	1
Non-bank Deposit Takers Act	0
AML/CFT Act	2