Financial Stability Report

May 2010

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This report is published pursuant to Section 165A of the Reserve Bank Act 1989.
The charts and tables in the appendix to this report use data available as at 23 April 2010.
More recent statistics may be used in the main body of the report.
This report and supporting data (with some further notes) are also available on www.rbnz.govt.nz

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1 Overview

The global economic recovery has continued to gain momentum over the past six months. Global trade has recovered from the most severe slump since World War II, while financial market pressures have continued to ease with markets now more liquid and prices no longer reflecting the extreme levels of risk aversion evident during the financial crisis. The recovery has been centred in a number of emerging economies and fuelled by a turnaround in the inventory cycle, ongoing fiscal stimulus and the resumption of capital inflows. Robust demand in emerging Asia in particular, together with higher commodity prices, has seen the outlook for the New Zealand and Australian economies strengthen.

However, the global recovery is uneven and fragile. Confidence has been dented in recent weeks by the European sovereign debt crisis centred on Greece. However, joint EU-IMF initiatives to bail out Greece and prevent wider contagion have comforted markets to some extent. Recovery remains weak in the Euro area and the UK, but the US economy has shown greater signs of improvement in recent months. Nevertheless, banks in the US and Europe continue to experience pressure on their balance sheets from the legacy of impaired assets. Ongoing deleveraging by banks has contributed to very subdued credit growth across these countries, with lending conditions tight, especially for businesses. Credit demand also remains weak as households and firms reduce their levels of debt. Global current account imbalances have narrowed over the past two years, but there is a risk that imbalances could widen again as the global recovery proceeds.

Against this backdrop, New Zealand's banking system has remained relatively healthy and appears well placed to support the domestic economic recovery. This position is strengthened by the resilience of the Australian parents of the major banks. While bank credit growth was subdued through the recession, reflecting weaker demand for credit by households and businesses and tighter lending standards, banks have the capacity to meet an increase in demand for credit and doing so will be important to sustain the economic recovery. However, at the margin some businesses may continue to find credit expensive or difficult to obtain, particularly those involved in higher risk activities.

Forward indicators suggest that non-performing loans for the banking sector may be close to a plateau, with the outlook for bank profits improving as a result. Funding conditions in the banking sector have generally improved over the past six months, with banks able to issue greater quantities of debt at longer terms without a government guarantee. Banks have been able to switch a greater proportion of their funding to more stable sources as encouraged by rating agencies and owners, and as required by the Reserve Bank's new prudential liquidity policy. New Zealand banks' efforts to lengthen the maturity profile of wholesale funding have helped to reduce their exposure to future disruptions in global funding markets. However, retail deposits – another valued source of stable funding – have become increasingly expensive for banks.

Reflecting the improvement in funding and liquidity conditions, the Crown's wholesale guarantee scheme has been discontinued, while the Reserve Bank has removed a range of special liquidity facilities introduced during the financial crisis. The Crown's retail deposit guarantee scheme has been extended but it is not likely that banks will continue to participate, given the costs of the scheme and because of the strong level of public and market confidence in the banking system.

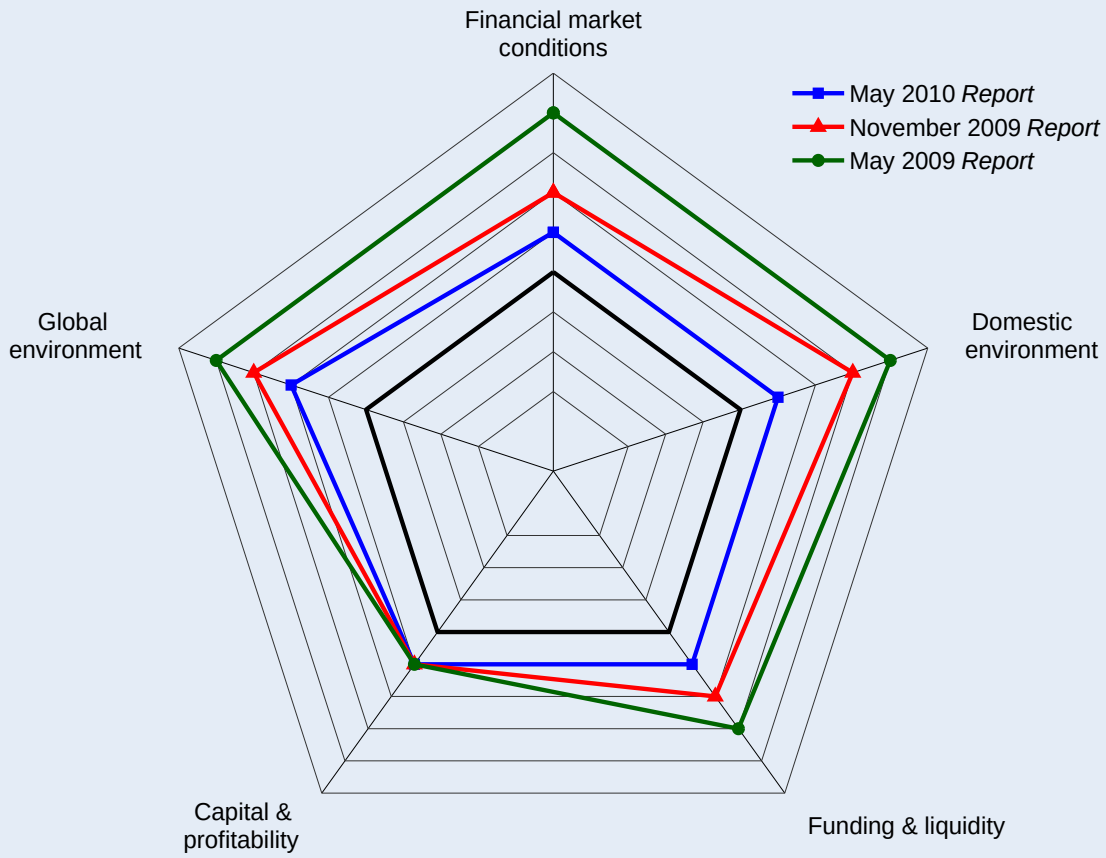
Parts of the non-bank lending sector continue to face a period of adjustment and the exit of many finance companies has reduced the availability of credit to some activities such as property development. While non-banks and other

niche financing vehicles play an important role in funding activities either outside the product profile or risk appetite of banks, it is clear that for parts of the finance company sector deposit-based funding models were unsustainable and that reorganisation of the sector is an inevitable development. In the near term, the expiry of the original term of the Crown's retail deposit guarantee scheme and the introduction of a more stringent regulatory regime for deposit-taking institutions will provide a catalyst for further consolidation within the non-bank sector. The extension of the retail guarantee scheme until the end of next year gives those institutions that participate extra time to put their business on a more secure footing.

Recent developments in Greece have focused attention on elevated levels of sovereign debt issuance and the medium-term sustainability of fiscal positions both there and in a number of other countries. While large fiscal outlays have helped to stabilise domestic demand and support the banking systems in a number of countries, the large volumes of sovereign debt expected to be issued over the coming years will likely impact the cost of funds for private borrowers. Although the borrowing demands of the New Zealand Government are modest by international standards, fiscal consolidation remains an imperative given New Zealand's high level of private sector debt.

Figure 1.1

Financial stability cobweb[1]



Source: RBNZ.
Note: The black band represents normal level of risk. Movements away from the centre of the diagram represent an increase in financial stability risks.

[1] See Bedford, P and C Bloor (2009), "A cobweb model of financial stability in New Zealand", Reserve Bank of New Zealand *Discussion Paper*, 2009/11, for the calculation methodology.

New Zealand's large stock of external debt means that it remains exposed to changes in the cost of debt in international markets. A rebalancing of the economy towards higher national savings, and less reliance on external financing, remains highly desirable to stabilise New Zealand's net external indebtedness at or near current levels, even if it means growth rates will be relatively moderate in coming years. The dramatic narrowing of the current account deficit over the past year and a half has been driven by both the cyclical slowdown in the domestic economy and deleveraging by firms and households. Less clear is the extent to which the improvement in the current account deficit will be sustained as the economic recovery gathers momentum. Rebalancing will depend on whether households change their behaviour away from debt-fuelled consumption towards higher personal savings over the medium term.

To date households have increased savings, and household credit growth has remained modest as domestic activity has increased. Firms are taking a cautious approach to their balance sheets, preferring to repay debt and reduce gearing. However, a return to moderate business credit growth is likely to be necessary over the coming year to support a gradual recovery in business investment activity.

The general improvement in the outlook for the New Zealand financial system is summarised in figure 1.1. The financial stability 'cobweb' was introduced in the last *Report*, and all but one dimension continues to shift inwards towards more historically 'normal' levels of risk and away from the elevated levels that prevailed at the peak of the global financial crisis.

The improvement in the 'global environment' and the global component of 'financial market conditions', is discussed in chapter 2. The improvement in risk appetite and global activity has been tempered by recently intensifying concerns surrounding sovereign risk and fiscal sustainability issues.

The strengthened outlook for the New Zealand economy is encapsulated by the inward shift of the 'domestic environment' dimension of the cobweb. While the end of the recession signals a decline in the credit risks associated with New Zealand households and firms, the private sector remains heavily indebted, which presents an ongoing vulnerability for the financial system (chapter 3).

Chapter 4 discusses the ability of New Zealand's bank-dominated financial sector to absorb the risks associated with the upper three dimensions of the cobweb. Pressure on bank profits from non-performing loans and abnormal expenses over the past six months have broadly offset improved capital ratios, leaving our 'capital and profitability' assessment unchanged from November. Nevertheless, an improved outlook for bank profits, together with ongoing efforts to boost capital ratios, suggests ample room to absorb any future unexpected loan losses. The 'funding and liquidity' position of New Zealand banks has been enhanced by a general improvement in access to global wholesale markets over the past six months, and a shift to more stable sources of funding.

Alan Bollard

Governor

Box A
Objectives of the *Financial Stability Report* and Reserve Bank policy actions

Under the Reserve Bank Amendment Act 2008, the Bank is required to publish a *Financial Stability Report* every six months. The document must report on the soundness and efficiency of the financial system and the activities undertaken by the Bank to achieve its statutory purposes. It must also contain certain information necessary to allow an assessment of these activities.

Chapters 2–4 of this *Report* highlight the ongoing challenges for the New Zealand financial system as the economy recovers from a lengthy period of contraction in economic activity. In light of concerns about a 'creditless' recovery for those economies most seriously affected by the global financial crisis, and whose banking systems are still impaired, the Reserve Bank is closely monitoring the efficiency with which financial intermediaries in New Zealand are channelling credit to creditworthy households and firms (chapters 3–4).

The Reserve Bank continues its efforts to reduce the vulnerability of the New Zealand financial system to future disruptions to funding markets via the implementation of the new prudential liquidity policy for registered banks (chapter 4). A review of the disclosure requirements for banks has also begun that aims to further promote market discipline – a vital element in ensuring a healthy financial system – while reducing compliance costs (chapter 6).

New Zealand's payment and settlement systems have stood up well to a period of substantial financial stress but there is never room for complacency. The Reserve Bank continues collaborative work with the industry to improve market infrastructure for the settlement of high value payments (chapter 5).

The development of regulatory requirements for non-bank deposit takers (NBDTs) continues, including liquidity requirements, capital and related party regulations and mandated credit ratings for most institutions (chapter 6). These new regulatory requirements will make the sector safer, while ensuring that equity holders bear a fair share of the risks faced by this sector.

In other prudential initiatives, the Reserve Bank will soon assume responsibility for regulating and supervising the New Zealand insurance sector. Chapter 4 provides an overview of the sector, while further policy developments are discussed in chapter 6.

The Reserve Bank continues to monitor global regulatory developments and has responded to the Basel Committee's consultation documents aimed at improving micro-prudential standards for both capital and liquidity (chapter 6). The Bank is also considering the merits of various macro-prudential tools designed to address the build up in systemic risk over the course of the economic cycle.

2 The international environment

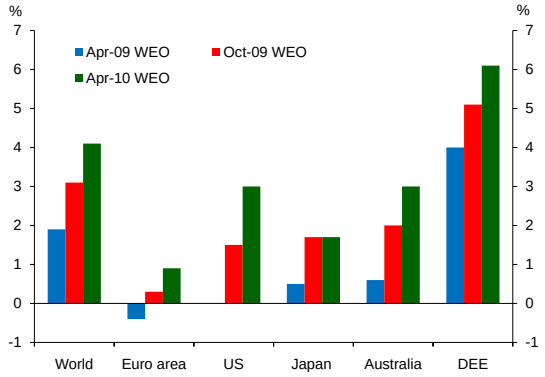
The global recovery has continued to progress since the November *Report*, helping to reduce the risks to financial stability. This is reflected in the improvement in both the 'global environment' and 'financial market conditions' dimensions of the cobweb described in chapter 1. However, the recovery is uneven and fragile. The banking systems of Europe and the US in particular continue to face balance sheet pressures which will impact credit growth and economic activity. Advanced economies remain heavily reliant on policy stimulus and there are some concerns that elevated sovereign borrowing could undermine stability and add to strains on private borrowers.

On a more positive note, the recovery in emerging Asia, a region with an increasing influence on the global economy, appears relatively robust. Policymakers in the region are increasingly focused on the risk that easy credit conditions and capital inflows could fuel credit and asset bubbles. Momentum in emerging Asia has helped underpin a robust outlook for the Australian economy and financial sector.

The economic recovery has progressed...

Since the last *Report*, the global economic recovery has continued from the sharp declines in activity seen in most economies in late 2008 and early 2009. IMF forecasts for global growth in 2010 have been revised upwards by 1 percentage point since October 2009 (figure 2.1). The projections suggest a relatively slow recovery in comparison to other episodes following major disruptions to economic activity. This is consistent with the fact that recoveries in the aftermath of financial crises are typically more gradual relative to normal business cycle recoveries.

Figure 2.1
Evolution of IMF growth forecasts for 2010
(annual percent change in real GDP)



Source: IMF *World Economic Outlook (WEO)*.
Note: DEE refers to Developing and Emerging Economies.

...but is uneven and fragile.

The economic recovery has been subdued in the major advanced economies and remains susceptible to further disruption. Recovery remains weak in the Euro area and the UK, but the US economy has shown greater signs of improvement with a range of more positive economic indicators in recent months. Massive policy stimulus has cushioned most advanced economies from the worst effects of the financial crisis but there is significant uncertainty about the robustness of the recovery once stimulus is withdrawn. Since the last *Report*, risks surrounding increasingly elevated levels of sovereign debt issuance, and the sustainability of fiscal positions in some economies, have become sharply evident (see box B).

In contrast, recoveries in emerging Asia and Australia have been fairly robust. Banks in these economies have remained relatively healthy throughout the crisis, with little impairment in the financial system's ability to intermediate credit as the recovery continues. Policymakers in the region have begun, or are considering, exiting from stimulus measures, in light of increased concerns about unsustainable credit and asset price booms.

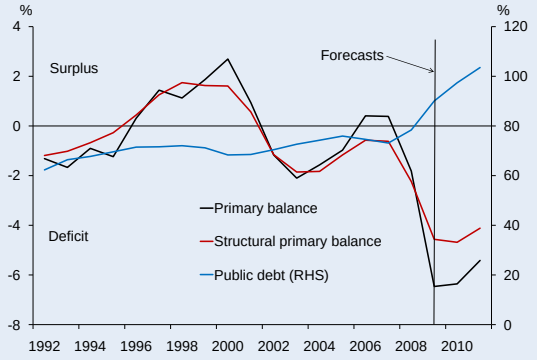
Box B

Sovereign risks and the global economy

Fiscal policy has been a major factor stabilising the global economy in the wake of the global financial crisis. However, sizeable fiscal support packages, combined with declining revenue related to the recession, have exposed vulnerabilities in the public debt positions of many advanced economies. Based on official figures, the collective public debt of OECD economies is expected to exceed 100 percent of GDP in 2011 (figure B1), nearing 60-year highs. In the near term this increases the possibility of contagion in sovereign risk premiums from those economies with weak fiscal fundamentals, such as Greece, to other advanced and emerging economies. Those economies with large current account deficits and large external debt financing requirements could be particularly affected as global yields spike and financial markets become more volatile.

Further out, the fiscal outlook for many advanced countries is even more worrisome, given the current build up in (largely unfunded) contingent liabilities as populations age and health costs increase. Fiscal consolidation will therefore be necessary to alleviate both the near-term risks and age-related structural pressures.

Figure B1
Gross public debt and primary fiscal balance in OECD economies
(percent of GDP)



Source: OECD *Economic Outlook*, RBNZ calculations.
Note: Weighted average based on 2005 GDP and PPP exchange rates. Primary balance excludes the impact of interest payments. Structural primary balance is also cyclically adjusted.

However, stabilising or reducing the level of fiscal debt will present an ongoing challenge for a number of advanced countries. There is a possibility of a pervasive feedback loop between growing public debt levels and future growth prospects. Lower growth rates in the wake of the crisis will force governments to rely on a reduction in structural deficits to stabilise the fiscal position. High levels of public debt, in turn, may further weaken growth, as a greater share of resources go to servicing debt, particularly as global interest rates rise from their current lows. This is particularly concerning given the structural increase in expenditures related to ageing populations over coming decades.

Recent projections from the Bank for International Settlements (BIS) suggest that, without drastic action to reduce structural deficits, public debt will continue to rise for the foreseeable future – reaching 300 percent of GDP in Japan, 200 percent in the UK and 150 percent for the US by 2040.[1]

In the near term, unprecedented volumes of sovereign debt issuance at the global level could stress wholesale debt markets. In particular, if the increased issuance in sovereign debt is not matched by a rise in global savings, funding costs for private borrowers could be bid up. The flow-on effects for systemic stability could be particularly adverse because bank balance sheets in many advanced economies are already under significant strain.

Another possibility is that markets lose confidence in the sustainability of fiscal deficits and the growing levels of public debt. While measures of sovereign risk have generally declined since their peak in 2009, the credit default swap (CDS) spread for Greek government debt has increased by around 300 basis points since the start of 2010, and the spreads for other highly indebted Euro area countries have also increased significantly (figure B2, right panel). These developments reflect elevated levels of public debt and a heavy reliance on external borrowing in these economies. Markets appear to perceive a risk that some governments may be unwilling or unable to embark

[1] Cecchetti, S, M Mohanty and F Zampolli (2010), "The future of public debt: prospects and implications", BIS *Working Papers*, No. 300.

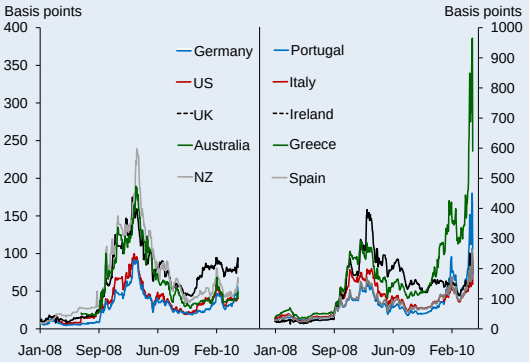
on the degree of fiscal austerity necessary to restore public debt to more sustainable levels. This will create a risk that some form of debt restructuring or forgiveness might be required from international creditors to avert the possibility of sovereign debt default. In addition, these sovereign risk pressures may also threaten the stability of banks in the worst affected countries, and other banking systems exposed to countries threatened with default.

However, the risk of default on Greek sovereign debt has been mitigated by a joint EU-IMF bailout package worth 110 billion euro over three years. Further, the establishment of a European Financial Stabilisation Mechanism, available to all members of the Euro area, and potential additional funding from the IMF, should reduce the risk of regional contagion.

Encouragingly, the CDS spreads of other advanced economies have remained relatively contained (figure B2, left panel).

Figure B2

CDS spreads in advanced economies



Source: Bloomberg.
Note: CDS spreads are on 5-year government bonds.

In New Zealand, the level of fiscal debt is relatively low by international standards. Nevertheless, as discussed in chapter 3, the high level of private sector indebtedness highlights the importance of fiscal restraint and a further rebuilding of domestic savings.

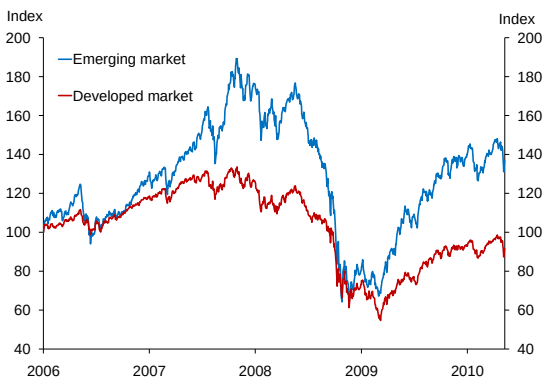
Financial market sentiment and functioning has improved.

The improved economic outlook has seen a broad range of asset prices recover from their trough in March 2009. Risk appetite has continued to improve which has contributed to equity market strength over the past six months, particularly in emerging markets (figure 2.2). However, market sentiment has been recently dented by negative news about the sovereign fiscal positions of several highly indebted countries in the Euro area, especially Greece.

Figure 2.2

Developed and emerging market equity prices

(January 2006 = 100)



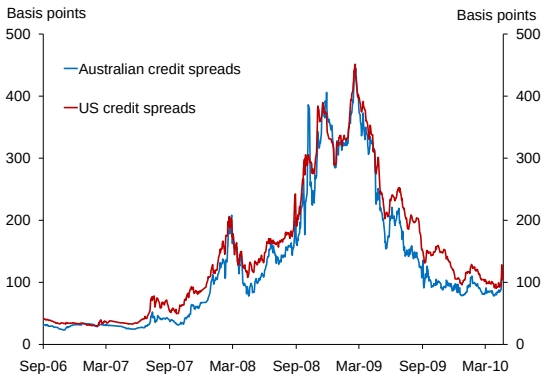
Source: Bloomberg.

Conditions in international wholesale debt markets have continued to improve since the November *Report*. Credit spreads have continued to decline from their peaks in late 2008 and early 2009 (figure 2.3, overleaf), although spreads for long-term debt remain above levels seen before the financial crisis. Market funding conditions for corporates have improved more generally, allowing larger firms to partially offset a tightening of bank funding through the issuance of corporate debt, particularly in the US (figure 2.4, overleaf). Lower credit spreads have benefited New Zealand banks, which source a sizeable portion of their funding in international markets (see box E in chapter 4).

While the major central banks have indicated that low interest rates will be maintained for some time, improved functioning of funding markets will be tested as large-scale support measures (including wholesale guarantee schemes, quantitative easing packages and liquidity support facilities) are wound down throughout 2010 and 2011. Indeed, many countries have closed, or have announced the closure of, their bank wholesale funding guarantee schemes to new borrowing. Even with continued support, there are lingering signs of dysfunction in funding markets. For example, issuance in securitisation markets remains very low, cutting

Figure 2.3

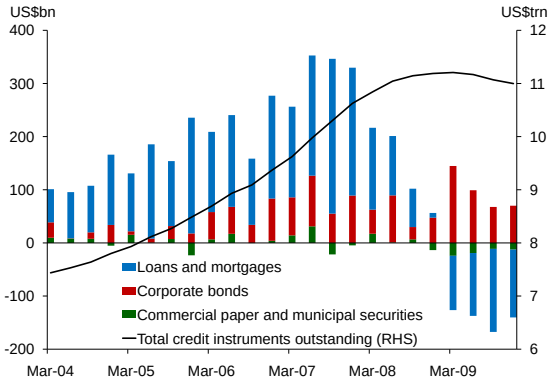
Credit spreads for Australia and the US



Source: Bloomberg.
Note: North American CDX and Australian iTraxx credit spreads.

Figure 2.4

Sources of funding for US corporates



Source: US Federal Reserve.
Note: The bars in the chart refer to net issuance.

off a funding source for banks. There is a risk that spreads will widen again as policy support measures are scaled back. The withdrawal of support measures may therefore be a delicate exercise, especially if there are further debt market disruptions.

Banks in advanced economies remain under strain.

Banks in advanced economies continue to face pressures on both sides of their balance sheets. Asset quality remains an issue given the legacy of bad loans and weak or volatile securities values. Operating conditions are challenging given the fragile nature of the recovery, a difficult funding environment and more conservative regulatory requirements.

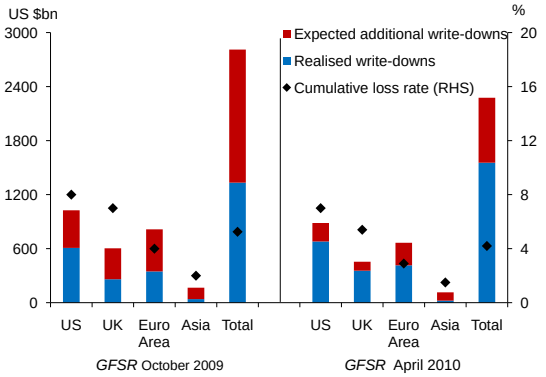
The latest IMF estimates are for total bank asset write-downs of US$2.3 trillion over the period 2007 to 2010. So far about two thirds of these expected losses have already been realised by banks (figure 2.5). While estimated total write-downs have fallen from US$2.8 trillion in November 2009, problem mortgages are expected to rise in a number of countries due to high or still-rising unemployment and fragile property prices.

US property prices remain weak and delinquency rates elevated (figure 2.6). The removal of foreclosure moratoria and house purchase tax incentives, which have so far protected home-owners in a position of negative equity, could see loan losses rise sharply with flow-on effects to house prices. Bank losses could also rise substantially in the US commercial property market, where prices were still declining at an annual rate of 33 percent at the end of 2009. This is mainly a problem for small- to medium-sized US banks which typically have a higher exposure to commercial property.

Banks are likely to face the added challenge over the next few years of meeting demands for higher capital buffers from markets, rating agencies and regulators. New regulatory proposals (an enhanced Basel II, or 'Basel III') are likely to include increases in the quality of capital and a reduction in leverage. While the new rules (discussed further in chapter 6) will not be implemented until 2012, prudent

Figure 2.5

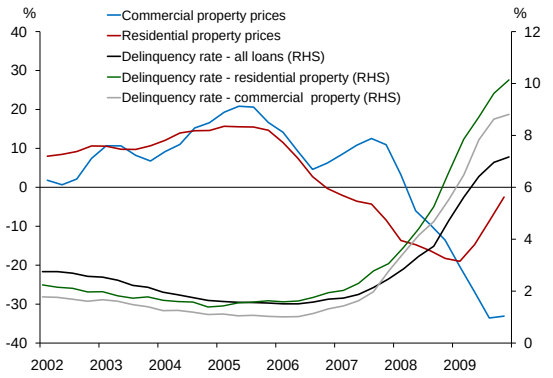
Realised and expected write-downs by region, 2007-2010



Source: IMF *Global Financial Stability Report (GFSR)*.
Note: Cumulative loss rate is total potential write-downs divided by total outstanding loans and securities. Asia includes Hong Kong SAR, Japan, Singapore, Australia and New Zealand.

Figure 2.6

Growth in US property prices and delinquency rates



Source: Haver Analytics.

Note: Annual percent change in commercial and residential property prices. Loans are classified as delinquent when they are 30+ days past-due or not accruing interest.

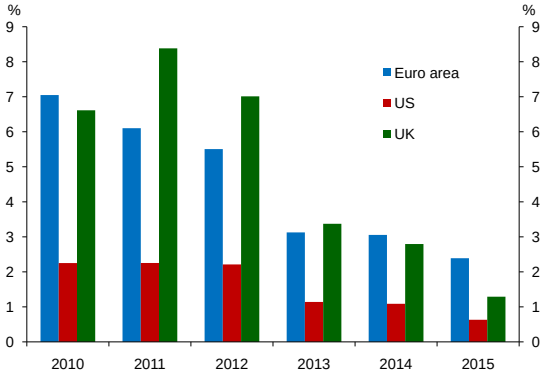
management will see many banks continue efforts to raise high quality capital.

This adjustment is set to occur in the context of challenging global funding market conditions. Many banks have shortened the tenor of borrowing, having taken advantage of low short-term interest rates and emergency central bank facilities. As a consequence, a significant amount of debt needs to be rolled over in 2010 and 2011 (figure 2.7) – an amount much higher than in recent years. At the same time, sovereign borrowing needs are set to increase significantly potentially pressuring funding costs higher (see box B).

Figure 2.7

Roll-over of bank funding in advanced economies

(percent of GDP)



Source: IMF *GFSR*, RBNZ calculations.

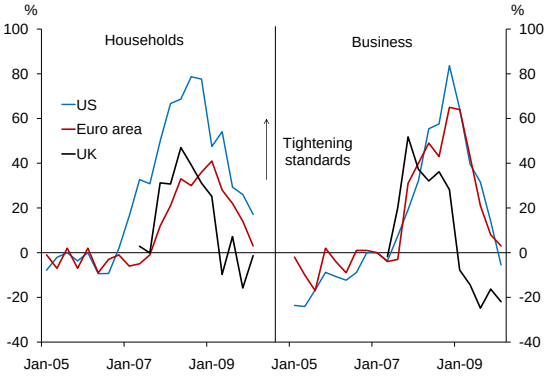
Credit growth is likely to remain subdued.

As banks continue to restructure their balance sheets, the supply of funding to the real economy is likely to remain constrained over the medium term, slowing the global recovery. Credit standards tightened dramatically over 2008 and 2009 in a number of advanced economies and have not materially eased since (figure 2.8).

Figure 2.8

Survey measures of lending standards

(net percentage)



Source: Bank of England, ECB, US Federal Reserve.

Note: Net percentage is the percentage of respondents reporting a tightening of lending standards over the past three months minus the percentage of respondents reporting a loosening of lending standards.

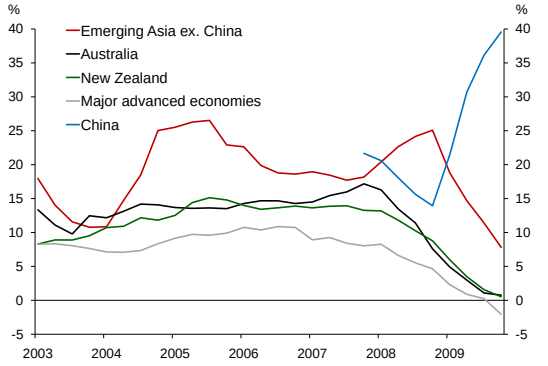
The demand for credit is also expected to remain subdued as households restructure their balance sheets. Declines in asset prices in major advanced economies have exposed excessive leverage which, in conjunction with high unemployment and weak income growth, will limit the recovery in household consumption. The need to reduce debt levels will also influence the demand for credit from firms, although the level of corporate indebtedness varies across advanced economies.

As a result, credit is contracting in many advanced economies (figure 2.9, overleaf). Business credit has been particularly weak (see box C in chapter 3) with business fixed investment activity well down in most countries. Although some larger firms may have been able to cushion the decline in bank lending through non-bank funding sources, small- to medium-sized firms will have faced a significant decline in available funding.

Figure 2.9

Credit growth in selected economies

(annual percent change)



Source: IMF *WEO*, Haver Analytics, RBNZ.
Note: 'Major advanced economies' is an average of credit growth in the Euro area, UK and the US.

The outlook for emerging Asia has continued to improve...

Economic activity recovered strongly in mid-2009 in emerging Asia, as global trade rebounded and the inventory cycle turned. The region has continued to lead the global recovery, and output has already returned to pre-crisis levels in many economies. A major part of the resilience of demand can be attributed to the strong balance sheets that were in place before the onset of the crisis. Strong financial sector balance sheets have meant that while credit growth softened across the region, the decline has not been as marked as in the advanced economies. In addition, low public debt levels have allowed for aggressive fiscal policy stimulus. However, policymakers across the region are increasingly concerned about overheating in certain sectors of their economies, such as the property market.

The recovery in emerging Asia has been led by growth in China, with strong growth in investment due to public sector infrastructure projects and a very large expansion of credit. While credit growth has been relatively robust in the region as a whole compared to the US, credit growth in China has been exceptional, prompting some concern about credit quality. Chinese infrastructure spending is expected to continue to underpin growth in countries with large exports of capital goods and raw materials, such as South Korea and Australia. In addition, growth in China has provided some support to commodity prices, which have recovered from their trough in early 2009. This has supported the immediate outlook for the New Zealand dairy industry (see chapter 3).

Weak demand in the advanced economies means a return to pre-crisis GDP growth rates will require an increased reliance on domestic and intra-regional demand growth. There have been some initial signs of this rebalancing. For example, the private consumption share of GDP in China has started to arrest its decade-long decline. However, increased public consumption has played a more significant role in boosting domestic demand. While in the near term, policymakers are likely to continue to provide additional stimulus, this is unlikely to be sufficient to significantly alter China's dependence on external demand.

...and credit growth has heightened risks of asset and credit bubbles.

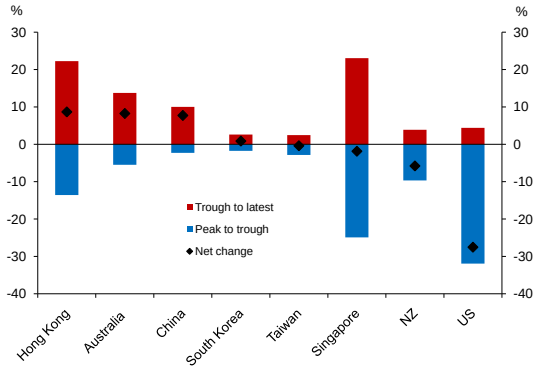
Residential property markets in a number of emerging Asian economies have recently witnessed a sharp increase in activity and prices, particularly in high-end apartment markets. In many economies, nominal house prices have already surpassed their pre-crisis peak (figure 2.10). Strong activity has been driven by relatively easy domestic lending conditions and tax incentives, and a resumption of capital inflows from advanced economies attracted by the prospect of higher interest rates in the region.

It is likely that a range of macro-prudential or fiscal instruments will be used to complement monetary tightening to help avoid the need for very aggressive interest rate policy. Measures that have been employed in the region include tightening mortgage lending standards, higher risk weights on bank lending, and greater taxes and fees in the property market. Some of these macro-prudential tools are being considered in international forums, as discussed in chapter 6.

Figure 2.10

Real estate prices in selected Asia-Pacific economies

(percentage change relative to pre-crisis peak level)



Source: Haver Analytics.
Note: See data sheet for details.

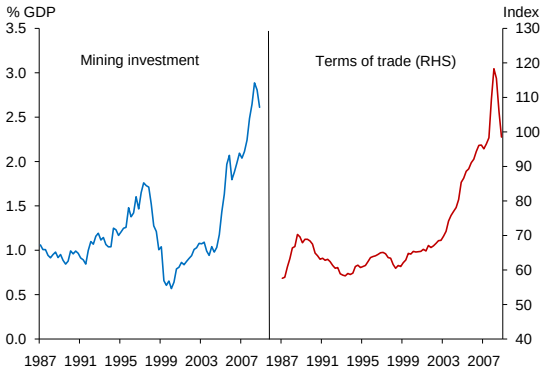
The Australian economy has remained resilient...

The Australian economy has outperformed other advanced economies throughout the global downturn. A host of fiscal stimulus measures, including public investment and grants for first-time home buyers in the housing market, have bolstered Australian growth. Strong economic activity in China has resulted in a tremendous boost to Australia's terms of trade and an associated boom in capital investment in the mining sector (figure 2.11). Australia's terms of trade over the next year is likely to be further boosted as current high prices for hard commodities get locked into longer-term contracts. These positive developments in the mining sector have supported a broader economic recovery. There are increasing signs that the labour market has recovered, with the unemployment rate peaking at the lower than expected level of 5.8 percent. In light of the relatively robust recovery, the Reserve Bank of Australia has begun moving interest rates towards neutral, having already increased the cash rate by a total of 150 basis points since October 2009.

The recovery in economic activity has supported an improvement in the balance sheets of Australian households. Gross household wealth has increased, supported by a 10 percent increase in house prices since December 2008 and the recovery in equity prices. However, households are likely to exercise more caution than previously, with debt levels still high in relation to incomes, and unemployment yet to fall to pre-crisis levels. As interest rates continue to rise and the various first home-buyer initiatives are phased out, the recovery in the household sector may slow.

Figure 2.11

Australian mining investment and the terms of trade

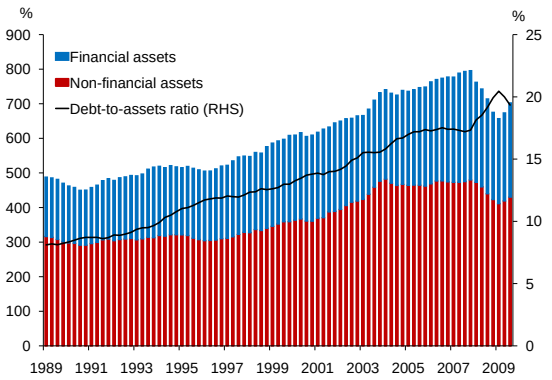


Source: Haver Analytics, Australian Bureau of Statistics.
Note: Terms of trade is defined as export prices divided by import prices (both in AUD).

Credit to businesses declined by 10 percent in the year to December 2009. This probably reflects a combination of tighter lending standards on the part of the Australian banks and weak demand for credit. Substantial equity raisings over the past year have reduced business indebtedness, such that the aggregate debt-to-equity ratio for listed companies has fallen from 85 percent at the end of 2008 to 55 percent as at December 2009. Further improvements to business confidence suggest that the demand for credit is likely to strengthen.

Figure 2.12

Australian gross household assets



Source: Reserve Bank of Australia.
Note: Financial and non-financial assets are expressed as a percentage of household disposable income.

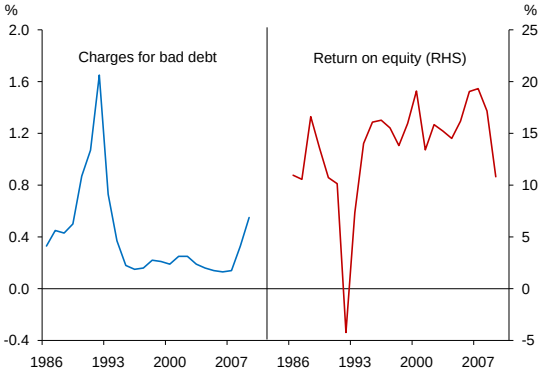
...as has its financial system.

Australia's financial system remained relatively resilient throughout the global financial crisis and has recently been bolstered by the economic recovery. Profitability declined throughout the crisis period largely because of increased charges for bad debts, although the decline was more muted than in other advanced economies. There are early indications that profitability is improving. For the major banks, the return on shareholder equity may have troughed at a healthy 11 percent (figure 2.13), with bank analysts generally expecting an improvement in the first quarter of 2010. Charges for bad debts are also likely to have peaked. As in New Zealand, the decline in profitability and the increase in loan losses has been far less than occurred during the recession of the early 1990s, a period which put the banks in both Australia and New Zealand under considerable stress.

Strong profitability and a series of equity raisings have allowed the banking system to bolster already strong capital positions. The major Australian banks have issued a combined AU$37 billion of equity since 2007. Australian banks have continued to experience improved access to international funding markets. By early 2010 most debt issued by banks was unguaranteed and in March 2010, the wholesale guarantee was removed with no discernible effect on funding markets. Another important development for the Australian banking sector has been the reduced reliance on short-term wholesale funding markets, with a corresponding increase in the share of long-term wholesale and retail funding. As in New Zealand, this will increase resilience to future disruptions in global funding markets.

Figure 2.13

Major Australian bank profitability



Source: Reserve Bank of Australia March 2010 *Financial Stability Review*.

Note: Charges for bad debts are expressed as a percentage of total average assets.

3 New Zealand's economy and financial markets

The domestic environment has improved with the New Zealand economy returning to growth in the second half of 2009. This is reflected in the improvement in the 'domestic environment' dimension of the cobweb diagram in chapter 1. Activity in the business sector has increased and indicators of financial stress have moderated over the past six months. However, firms' earnings are subdued, and activity in the property and construction industries is still particularly weak. While household incomes will improve as the recovery progresses, some households may be vulnerable as interest rates increase.

Financial market pressures have eased further and markets are functioning more normally, as is reflected in the improvement in the 'financial market conditions' dimension of the cobweb diagram. Wholesale interest rates have fallen and funding spreads have narrowed. However, funding costs remain elevated relative to the Reserve Bank's policy rate.

The current account deficit has narrowed markedly over the past 18 months but this improvement is expected to reverse over the coming years. A rebalancing of the economy towards higher national savings, and less reliance on external financing, is desirable in order to moderate or stabilise New Zealand's net external liability position at or near current levels, even if this means growth will be moderate in the near term. Rebalancing would be assisted by a weaker currency, but the NZD has remained high on a trade-weighted basis.

There are encouraging signs of rebalancing at the sectoral level. Households have increased savings and household credit growth has remained modest as domestic activity has increased. Firms are taking a cautious approach to investment, preferring to repay debt and reduce gearing. The weak demand for bank lending, along with a tightening in bank lending standards, has caused a continued contraction in business credit. It is uncertain whether these changes will be sustained as the economy strengthens. However, a return to moderate credit growth will be important for a durable economic recovery.

3.1 The economic environment

New Zealand remains highly indebted.

The New Zealand economy is highly indebted as a result of its low national savings and consequent reliance on external financing. Net external debt has grown significantly over the past decade, peaking at 87.5 percent of GDP at the beginning of 2009. The net debt position eased to just over 84 percent of GDP in December 2009, but remains high by international standards. Net international liabilities, which includes net equity, are currently around 90 percent of GDP. The risks associated with this high net debt position are partly mitigated by a high prevalence of currency-hedging and the fact that much of the debt is denominated in New Zealand dollars.[1]

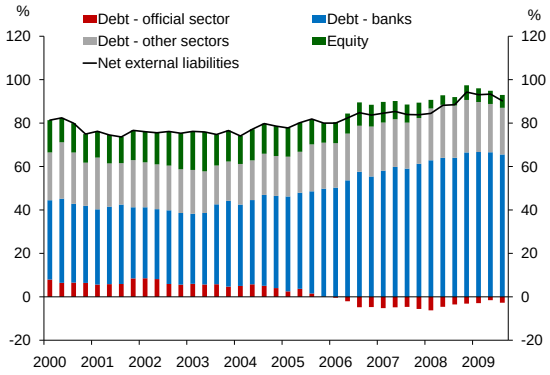
About two thirds of New Zealand's net debt is borne by the banking system, which has funded much of its lending over the past two decades by borrowing from non-residents (figure 3.1). In the years leading up to the financial crisis, much of this borrowing was short term. However, the banks have lengthened the maturity profile of their liabilities over the past year (see chapter 4), helping to mitigate roll-over risks.

[1] In addition, New Zealand's gross debt position (which may better reflect the extent of a country's exposure to global financial shocks) is modest relative to many other countries. For further discussion see the November 2009 *Report*.

Figure 3.1

Composition of net external liabilities

(percent of GDP)



Source: Statistics New Zealand.

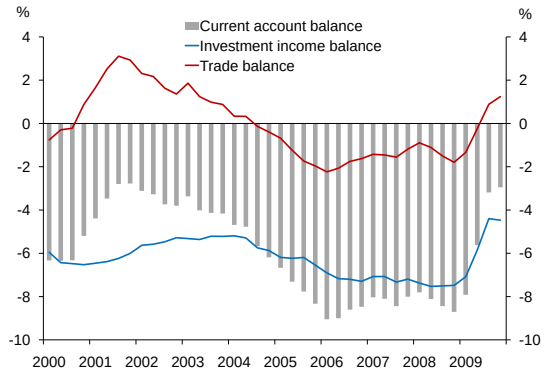
The narrowing of the current account deficit has been driven mainly by cyclical factors…

The current account has improved markedly over the past 18 months. The deficit has fallen from a recent peak of 8.7 percent of GDP in December 2008, to 2.9 percent in December 2009 (figure 3.2). However, much of the change appears to have been driven by cyclical, rather than structural, factors. Lower interest rates and reduced profit outflows have narrowed the investment income balance. The trade balance has moved to surplus as imports have fallen more dramatically than exports. Much of the improvement in the current account is expected to reverse over the coming years as business profitability improves, interest rates rise, and households and businesses return to more normal spending patterns.

Figure 3.2

Trade balance, investment income balance and current account balance

(annual totals, percent of GDP)



Source: Statistics New Zealand.

…however, structural rebalancing remains desirable…

As discussed in the November *Report*, the trade balance will need to remain in surplus over the coming years to ensure a sustained reduction in the current account deficit and to stabilise the net foreign liability position near current levels or reduce it. Rebalancing will require a shift in productive capacity toward the tradable sector, and a structural change in household behaviour away from debt-funded consumption toward higher savings. The process of rebalancing is likely to be associated with weaker GDP growth for a period, particularly in the absence of stronger external demand, further improvements in the terms of trade, or a lower exchange rate.

…and would be assisted by depreciation in the NZD.

A gradual depreciation of the NZD remains desirable for a sustainable rebalancing of the New Zealand economy, as it would boost export returns and discourage household spending on imports.

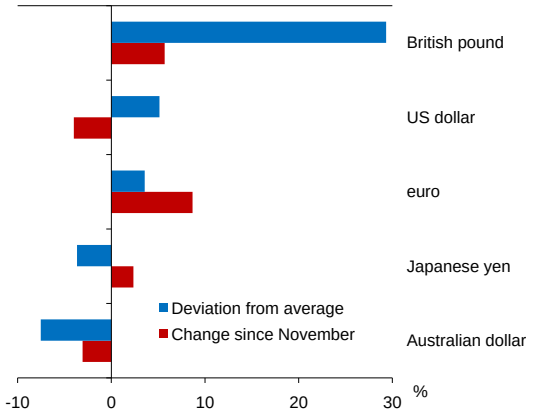
On a Trade Weighted Index (TWI) basis, the NZD has remained high over the past six months. The NZD has risen against the euro and British pound (driven in part by sovereign debt concerns throughout Europe) and fallen against the US dollar (USD) and Australian dollar (AUD) (figure 3.3). The depreciation against the USD has reflected safe-haven demand for the USD, while depreciation against the AUD reflects the divergence in interest rates and the relative strength of the Australian economy.

Liquidity conditions in the NZD market have continued to improve over the last six months, but bid-offer spreads remain elevated relative to pre-crisis levels (figure 3.4). Volatility in the market has also been decreasing and is near pre-crisis levels.

Figure 3.3

NZD against major currencies

(April 2010 average)



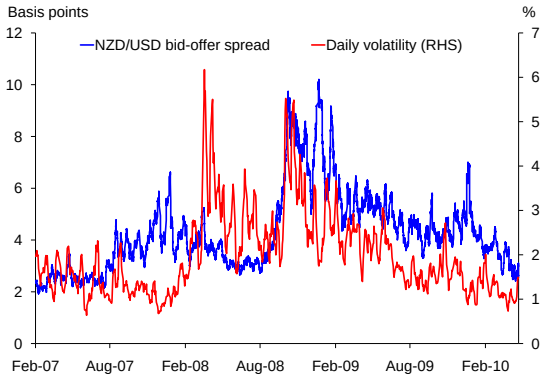
Source: RBNZ.

Note: The historical average for the euro is for the period January 1999 to April 2010. For all others the average is for the period January 1989 to April 2010.

Figure 3.4

NZD/USD bid-offer spreads and volatility

(five-day moving average)



Source: Reuters, Bloomberg.

Note: Daily volatility is the intra-day range as a percentage of the closing price.

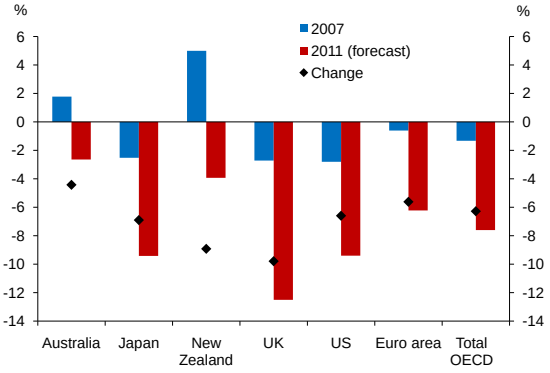
The fiscal deficit remains modest relative to other countries…

The Government supplied the domestic economy with a large amount of fiscal support throughout the crisis.This, along with cyclically lower tax revenues, has shifted the government accounts from a surplus to a deficit position. The forecast deficit for the 2010 fiscal year of 4 percent of GDP is modest by international standards, largely reflecting the positive state of public finances prior to the recession. However, the change in the fiscal balance has been of a similar magnitude to that seen in other advanced economies (figure 3.5).

Figure 3.5

Change in fiscal balances across selected OECD countries

(percent of GDP)



Source: OECD *Economic Outlook*.

…and demand for government debt remains robust.

New Zealand government debt issuance has increased in order to finance the fiscal deficit. This is occurring within the context of increased issuance of government debt internationally. As global issuance rises, there is a risk that this could lead to increased funding costs for debt issuers, including governments and corporate issuers such as banks (see box B in chapter 2). To date, domestic demand for New Zealand dollar denominated debt remains robust and the share of New Zealand government debt held offshore has also remained stable since November, despite increased issuance.

However, fiscal consolidation is important.

Over the next few years, net public debt is expected to rise as a share of GDP. An improvement in the fiscal balance will be essential to reduce the public debt position over the longer haul. Given the high level of private sector debt in the New Zealand economy, structurally lower public debt would help to contain the country's stock of external liabilities and the cost of funding these liabilities. It would also provide additional capacity for support of the economy in the future should this become necessary. Fiscal consolidation would help to encourage rebalancing of the wider economy by taking some pressure off monetary policy and the exchange rate in the medium term. A credible long-term fiscal strategy

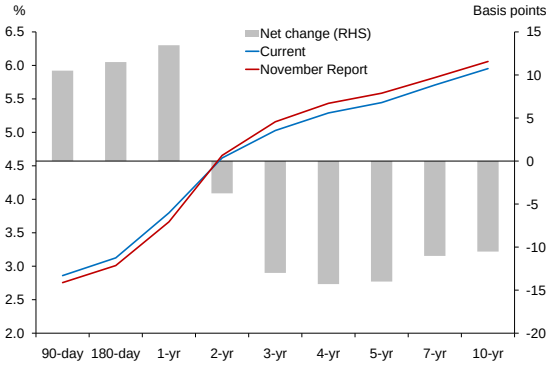
also remains important in light of building demographic pressures related to the ageing New Zealand population.[2]

Wholesale yield curve flattens and funding costs remain elevated.

New Zealand's wholesale (swap) interest rates at the shorter end of the yield curve have risen as the market has become increasingly confident that the Reserve Bank will begin raising the Official Cash Rate (OCR) over the coming months (figure 3.6). This has been supported by recent signs of a more robust recovery, such as the unexpected strength in the labour market during the March quarter 2010. Longer-term wholesale interest rates have been held down by lower longer-term rates in key offshore markets.

Figure 3.6

Wholesale interest rate curve



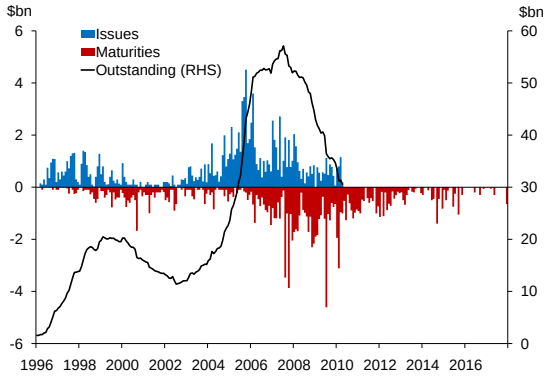
Source: Bloomberg.

The functioning of debt markets has improved further since November and funding spreads have continued to narrow. Offshore issuance of New Zealand dollar denominated securities has increased over recent months (figure 3.7) as market confidence has improved, and as higher basis swap spreads have reduced the cost of issuance for foreign entities. Further increases in issuance should stabilise the total amount of Eurokiwi and Uridashi bonds outstanding, and further improve funding spreads for New Zealand issuers of foreign currency denominated debt. However, the overall cost of funding for banks remains elevated with funding spreads still above levels prior to the crisis (see box E in chapter 4) and sovereign debt concerns have placed further pressure on markets in recent weeks.

[2] New Zealand Treasury (2009), "Challenges and choices: New Zealand's long-term fiscal statement", October.

Figure 3.7

Issuance and maturities of Eurokiwi and Uridashi bonds



Source: Reuters, Bloomberg, RBNZ calculations.

3.2 Household sector

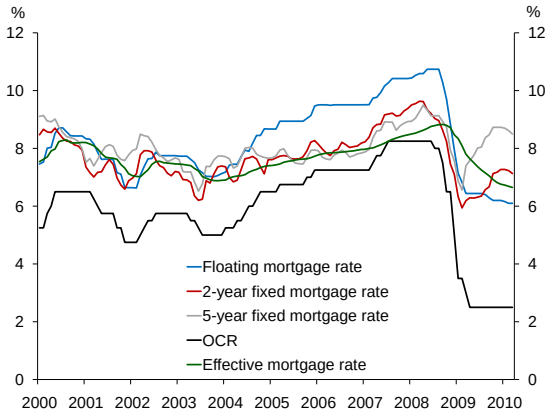
The fall in interest rates has eased income pressures…

Unemployment declined sharply in the first quarter of 2010 to 6 percent after peaking at 7.1 percent in the December quarter of 2009. However, despite the recent growth in employment, wage growth remains weak. Consequently, growth in household income remains moderate.

However, the overall decline in interest rates paid over the past 18 months has considerably reduced household debt servicing costs, relieving pressure on household disposable incomes (see figure A7 in the appendix). The average mortgage interest rate paid by borrowers has continued to decline over the past six months as some households continue to roll off higher fixed interest rates (figure 3.8). The steepening in the mortgage curve, driven by declines in floating rates, is encouraging borrowers to move more toward floating rates. This has further shortened average mortgage duration. Fixed rates for new borrowers have remained relatively stable since November, and remain notably higher than floating rates.

Figure 3.8

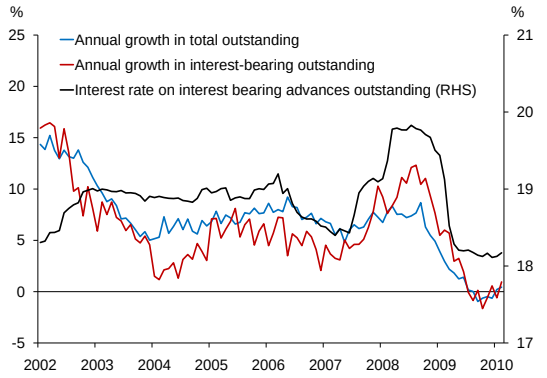
Mortgage rates and the OCR



Source: RBNZ Standard Statistical Return (SSR).

Figure 3.9

Growth in credit card debt



Source: RBNZ.
Note: Personal cards only.

...but some borrowers may encounter stress as interest rates rise.

Household incomes are expected to improve as the economic recovery progresses. But as monetary policy returns to more neutral settings, debt servicing costs will rise.

As interest rates declined over the past two years, many households have maintained the level of their mortgage payments, thereby accelerating principal repayments. As interest rates rise, it is possible that these households will choose to reduce these principal repayments again and continue to meet their debt servicing obligations without significant additional stress on their finances. However, some households are likely to experience renewed stress as interest rates rise, particularly first-home buyers who entered the market at low interest rates. Significant lags between the recovery in economic activity and improvement in labour incomes may intensify this stress.

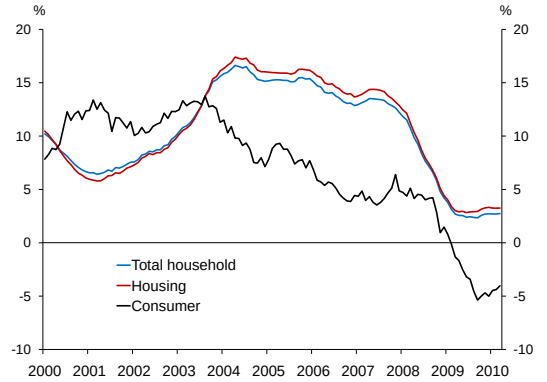
Evidence of household rebalancing is mixed.

Household savings have increased and households are generally demonstrating a reduced appetite for debt. Consumer credit from banks and non-bank financial institutions has been declining since the beginning of 2009. The amount outstanding on personal credit cards (both interest bearing and total) has remained relatively flat over the past six months (figure 3.9).

Figure 3.10

Household credit growth

(annual percent change)



Source: SSR.

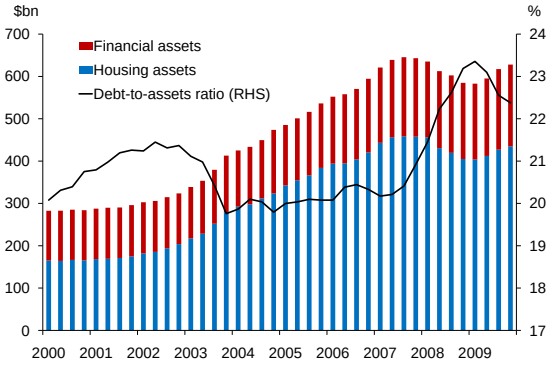
Housing credit growth moderated significantly through 2008, and has been continuing at a low but steady rates since early 2009 (figure 3.10). The acceleration of principal payments mentioned above, along with the inactivity in the housing market over recent months, will be dampening housing credit growth figures. Banks have reported some increase in demand for mortgages over the past six months, but mortgage approvals remain at very low levels. Tighter lending standards may be one factor reducing housing credit growth.

Overall household debt is still increasing in absolute terms, but is declining as a share of estimated household disposable income (see figure A7 in appendix). After falling about 11 percent from peak to trough, house prices rose almost 10 percent between January and November 2009, boosting household assets (figure 3.11, overleaf). The value

of household financial assets has also increased strongly, rising by about 7 percent over 2009. This reflects continued gains in equity markets over the period, as well as some further increase in household deposits. Net assets have likely moderated recently, with house prices having softened since November as activity in the housing market has stalled, together with more recent softness in equity markets.

Figure 3.11

Household net assets and debt-to-assets ratio



Source: RBNZ.

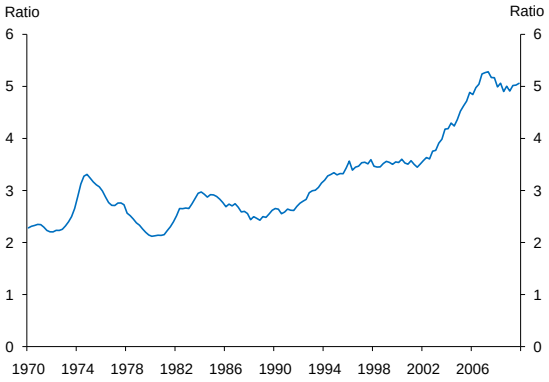
It is too early to say whether the shift in household behaviour toward higher saving and lower credit growth marks the beginning of a long-lived structural change, or whether it is simply a temporary adjustment in response to recent events. A strong rebound in appetite for debt in the household sector seems unlikely at this stage, particularly given uncertainty around the housing market and employment prospects. However, as the recovery progresses and incomes recover, it will remain important for households to manage their balance sheets wisely.

Activity in the housing market has softened.

Activity in the housing market has softened recently, perhaps in part due to market participants awaiting proposed changes to the tax treatment of property. House sales weakened through the early months of 2010 and average days to sell have increased. Median house prices have fallen about 2 percent since November. However, house prices remain only slightly below the 2007 peak. The decline of the past two years has been much less than many forecasters projected and considerably less than in some other advanced countries. This may reflect relatively robust underlying demand for housing due to population growth at a time of weak housing supply.

Figure 3.12

House prices to disposable income ratio



Source: Quotable Value Ltd, Statistics New Zealand, RBNZ calculations.

Note: House prices are Quotable Value's median measure from 1983 onwards, and Quotable Value's house price index previously. Household disposable income is backdated with RBNZ estimates.

Despite an increase through the beginning of 2010, the level of residential building consents remains historically low, and building activity is still declining in annual terms. In part this reflects cyclical weakness, but the tightening in banks' lending standards in relation to residential mortgages and property development could also be slowing investment. Activity in some sectors of the property market may have also been affected by reduced availability of finance due to weakness in the non-bank sector and the absence of second-tier financiers.

On a number of measures, house prices remain high, particularly relative to household incomes (figure 3.12). House prices could display greater weakness in the future in response to any adverse changes in household incomes or unemployment. The expected increase in interest rates over the medium term also presents some downside risk to house prices.

3.3 Business sector

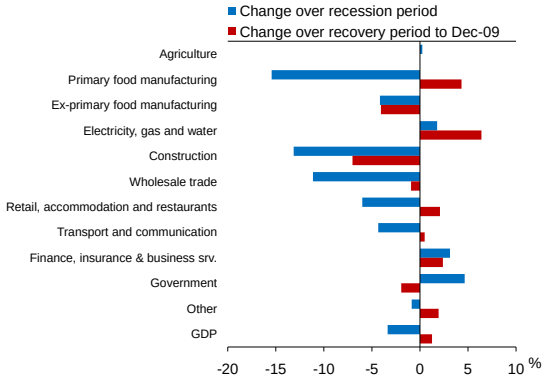
Business activity has improved…

Conditions in the business sector improved through the second half of 2009 as the New Zealand economy returned to growth. Measures of business confidence have rebounded strongly over recent months, as have survey measures of firms' own activity.

...but earnings and balance sheet pressures remain...

Earnings are subdued and activity remains weak in some industries (figure 3.13). The construction industry continues to be affected by weakness in property markets, and the property development sector in particular. Although parts of the manufacturing sector remain under pressure, prospects appear to be brightening, especially for those selling into the Australian market. The lower NZD/AUD exchange rate and robust Australian economy are supporting demand and profitability in this sector.

Figure 3.13
Components of production GDP



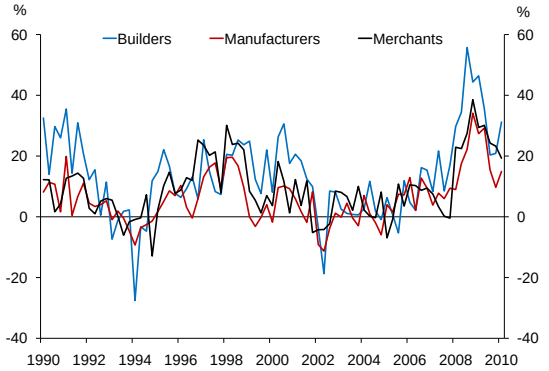
Source: Statistics New Zealand, RBNZ calculations.
Note: The recession period is from the cyclical peak in GDP in 2007Q4 to the trough in 2009Q1. The recovery period is from the trough to 2009Q4.

Indicators of financial stress in the business sector have moderated over the past six months. The net percentage of firms reporting a higher incidence of overdue debtors has declined but is still elevated (figure 3.14). Banks report that businesses' demand for working capital facilities remains high but demand for credit to support expansion is weak.

Debt levels in the business sector increased as a share of GDP through the mid-2000s. Strong earnings growth and rising asset values helped to support this level of debt. However, over the past two years declining asset values and weak earnings have increased the burden of this debt and many businesses are seeking to reduce their reliance on debt.

Businesses generally appear to have managed their cash flows and balance sheets effectively through this period of stress by cutting costs, raising capital and repaying debt to reduce gearing. The number of company liquidations has been less than in previous recessions and has been declining as activity has recovered.

Figure 3.14
Businesses reporting overdue debtors
(net percentage)



Source: NZIER *Quarterly Survey of Business Opinion (QSBO).*
Note: Net percentage of survey respondents reporting higher incidence of overdue debtors over the past three months.

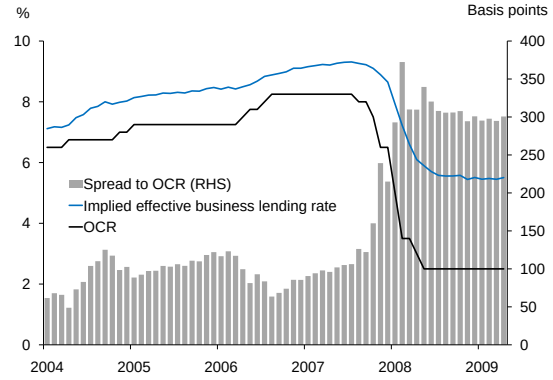
...and businesses are facing a relatively higher cost of credit.

The estimated average interest rate paid on business lending declined markedly through 2009, helping to reduce businesses' debt servicing costs. However, these declines have flattened off recently and the spread between business lending rates and the OCR has remained high (figure 3.15), due in part to banks' increased funding costs (see chapter 4).

The cost of intermediated credit may be proving too high for some businesses. Some larger businesses have been able to raise funds at a lower cost directly from bond or commercial paper markets as conditions in those markets have improved. However, the pool of issuers is small in relation to the business sector as a whole. Many smaller businesses do not have the scale or opportunity to secure funds directly from those markets and remain reliant on banks and non-bank financial institutions for funding. While net issuance of corporate bonds has increased over the past 12 months, the overall level of business sector debt outstanding has declined since the beginning of 2009 (figure 3.16).

Figure 3.15

Effective business lending rate and the OCR

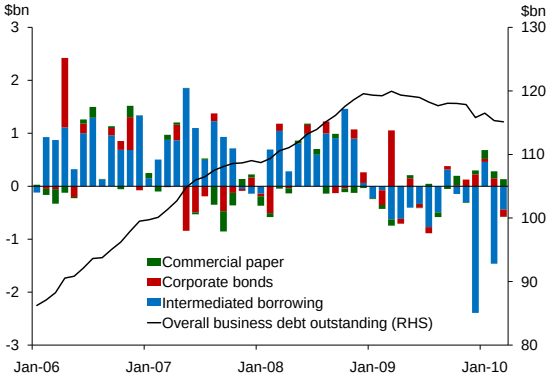


Source: RBNZ.

Note: The effective business rate is estimated residually by adjusting system level interest rates using information on mortgage rates and estimates of consumer and interbank rates. It does not include the effects of hedging activity such as interest rate swaps.

Figure 3.16

Contributions to changes in outstanding business debt



Source: Bloomberg, SSR, Westpac, Reuters, RBNZ calculations.

Note: Net monthly issuance of bonds and commercial paper. Net monthly change in business credit. Commercial paper data are domestic non-financial issuance only. Corporate bond data are domestic and offshore non-financial issuance.

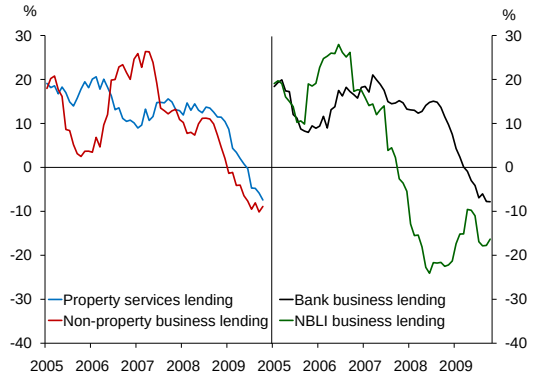
Lending to the business sector continues to contract.

Lending to the business sector by both banks and non-bank financial institutions has continued to fall since November. Declines have been most prominent for non-property lending, although lending to the property sector is also contracting. Lending by non-banks has declined more than lending from registered banks (figure 3.17). These trends are discussed in more detail in box C.

Figure 3.17

Business credit growth

(annual percent change)



Source: SSR.

Note: NBLI refers to non-bank lending institutions.

The commercial property market remains weak.

Confidence in the commercial property sector remains low. The general weakness in economic activity has seen vacancy rates continue to increase, albeit at a moderating pace. Property owners continue to use incentives (such as rent holidays) to retain tenants. The reduced demand for space has maintained downward pressure on rents, and in line with this, commercial property values have fallen significantly and non-performing loans have increased.

Completed property developments continue to come on line placing further pressure on vacancy rates and rental yields in the short term. Weakness in non-residential building consents over the past year may help to rebalance demand and supply in the sector.

There are signs of increased activity and stabilisation in prices in the industrial property segment of the market, which tends to lead developments in the commercial property sector. Nevertheless, significant weakness remains and any recovery will probably be slow.

After large declines through 2008, share prices of listed property trusts improved mildly through the second half of 2009, as confidence in equity markets lifted. More recently share prices have stabilised (figure 3.18, overleaf) and a number of trusts have successfully raised additional capital. Market contacts indicate that investment trusts may become more active in acquiring commercial (particularly industrial) properties through the latter part of 2010.

Box C

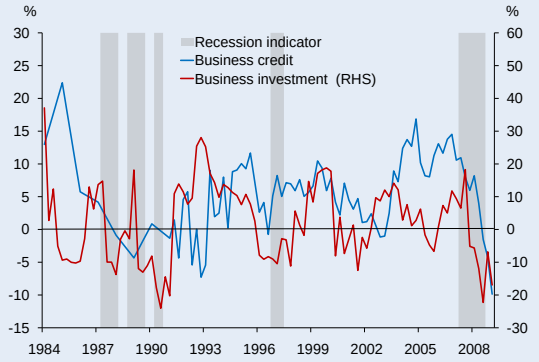
Drivers of recent trends in business credit growth

Lending to the business sector by bank and non-bank financial institutions has been declining since mid-2009. Business credit typically moves with the business cycle and a contraction in business credit is common during recessions due to large swings in business investment spending. However, growth in business investment and business credit are currently even weaker than in the early 1990s (figure C1).

Figure C1

Real growth in business credit and investment through recessionary periods

(annual percent change)



Source: RBNZ, Statistics New Zealand, Hall and McDermott (2007).[3]

Note: Recessions are identified where the level of GDP declines over two quarters. Business credit is SSR data backdated with RBNZ estimates.

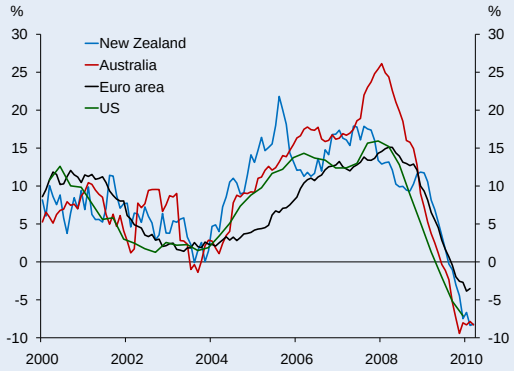
Business credit has also been contracting in the major advanced economies (figure C2) raising concerns about the effects of weak credit growth on the economic recovery. Both weak demand for credit and tighter credit supply globally are driving current trends in business credit growth. As confidence continues to recover and businesses' demand for credit increases, there is concern that, should bank balance sheets remain under pressure, credit supply may remain tight, keeping credit growth depressed and retarding the economic recovery.

[3] Hall, V and CJ McDermott (2007), "A quarterly post-World War II real GDP series for New Zealand", Motu *Working Paper* 2007/13, Motu Economic and Public Policy Research.

Figure C2

Business credit growth in selected advanced economies

(annual percent change)



Source: RBNZ, Haver Analytics, US Federal Reserve.

The New Zealand business sector's demand for credit decreased as the economy (which was already in recession) was hit by the real effects of the global financial crisis and firms pulled back on investment activity. Businesses have also sought to reduce their reliance on debt given increased risk aversion in the face of weaker economic conditions. Despite improving business conditions, businesses have continued to take a more cautious approach to investment, focusing on repaying debt and reducing gearing.

Banks have tightened their lending standards over the past 18 months. New Zealand did not experience a banking crisis, and the banking system has remained healthy and generally well placed to continue the role of financial intermediation (see chapter 4). The tightening in lending standards by New Zealand banks has largely been in response to heightened perceived credit risks associated with a weak economy, rather than attempts by banks to restructure and safeguard their balance sheet positions. The latter has been a key driver of lending practices in the US and Europe as banks have restricted lending and actively deleveraged their balance sheets after suffering significant credit losses (see chapter 2).

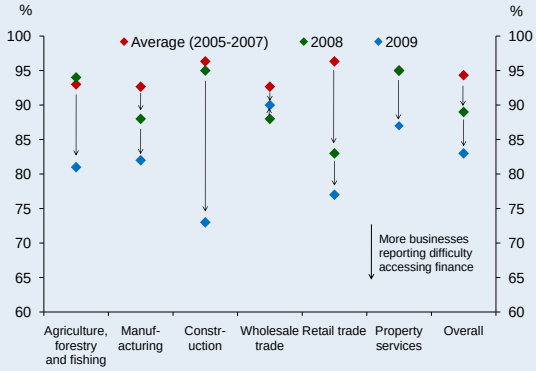
Higher borrowing costs relative to the OCR are also contributing to a tightening of credit conditions facing businesses. Weakness in the non-bank sector has further reduced the availability of credit to some parts of the business sector. As a consequence, some businesses have

reported increased difficulty accessing debt finance on what they consider to be acceptable terms (figure C3).

Figure C3

Businesses with access to finance on acceptable terms[4]

(percent of businesses, as at August 2009)



Source: Statistics New Zealand.

Note: Percentage of firms that requested debt finance reporting that finance was available to them on acceptable terms.

[4] Information gathered through the *QSBO* and discussions with business contacts suggest that the availability of finance has tightened further since December 2009.

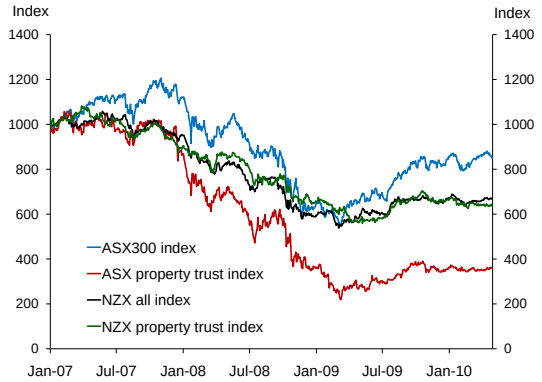
As the domestic recovery progresses, demand for investment finance is likely to increase across the business sector and it is important that creditworthy businesses can access finance on reasonable terms. The New Zealand banking system should be well placed to support this recovery, particularly in light of the improvement in offshore funding markets. While banks are likely to continue to take a more cautious approach to lending practices, it is expected that they will be prepared to reverse some of the recent tightening in lending standards. The Reserve Bank will continue to monitor banks' lending standards and general credit conditions through the recovery.

At the margin, some businesses (particularly those in higher risk industries) could continue to find it difficult to access credit on favourable terms in light of the contraction of the finance company sector. As noted in chapter 4, the deposit-taking finance companies have traditionally played an important role in financing activities that fall outside the traditional product profile or risk appetite of banks. The pitfalls inherent in retail deposit-based funding of high risk lending have been amply demonstrated over the past few years.

Figure 3.18

Share prices of listed property trusts

(January 2007 = 1000)



Source: Datastream.

3.4 Agriculture sector

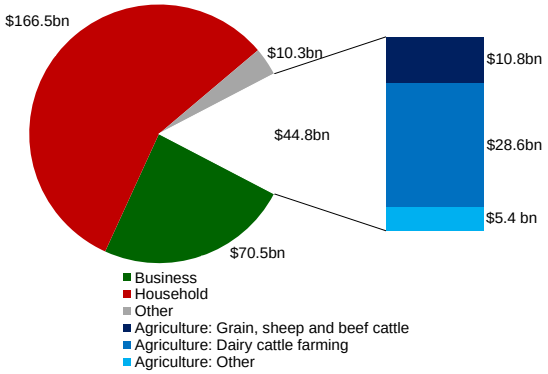
The dairy sector has faced a period of stress…

The agriculture sector comprises around 16 percent of total lending by New Zealand banks, with lending to the dairy sector accounting for about 10 percent of total lending (figure 3.19). As discussed in previous *Reports*, debt levels within the dairy sector have increased strongly over recent years and this debt is concentrated in a small proportion of farms. The incomes used to service this debt are vulnerable to movements in commodity markets. Over the past two years the sector has experienced a period of significant volatility and stress driven by volatile dairy prices, a tightening in credit conditions, and drought affecting some dairy farming regions.

Figure 3.19

Registered bank lending by sector

(as at June 2009)



Source: RBNZ.
Note: NZD resident loans excluding interbank loans.

…but pressures on the sector have eased recently.

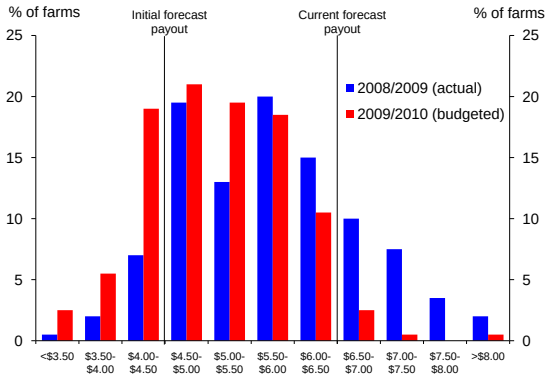
Dairy prices rebounded strongly through the latter half of 2009. While the strength of the NZD has constrained New Zealand dollar price increases, Fonterra has revised up its dairy payout significantly since the November *Report*. The current forecast payout for the 2009/10 season is $6.55 per kilogram of milk solids, a significant improvement from the start of season forecast and comfortably above the Ministry of Agriculture and Forestry's (MAF) estimated median farm break-even payout of $4.91 (figure 3.20).[5] The increased payout has eased the tight liquidity conditions within which dairy farmers have been operating over the past year. Lower interest rates have further alleviated cash flow pressures, as has the significant decline in farm input prices over the past year.

Despite the general improvement in conditions in the sector, a number of farms are likely to remain under significant financial stress, particularly the more highly leveraged farms. The ability of those farms to reduce their debt levels by selling property and other farm assets is being inhibited by low activity in the rural property market.

Figure 3.20

Distribution of farm expenses relative to milk solid payout

(dollars per kilogram of milk solids)



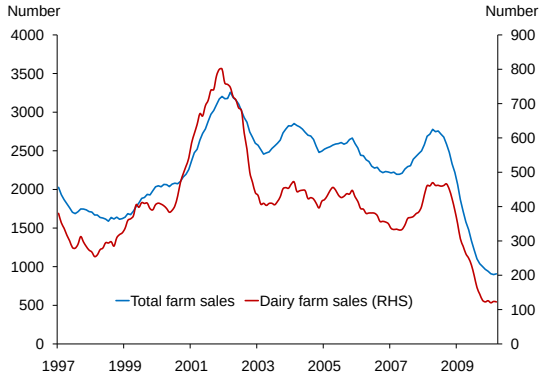
Source: MAF.
Note: Distribution is formed from a sample of 200 dairy farms monitored by MAF. Farm expenses include working expenses and interest servicing costs. 2009/10 data is budget forecast data from the beginning of the season.

Dairy farm sales remain at historically low levels – just 120 sales were recorded in the 12 months to January 2010, one quarter of the average annual sales since 1997 (figure 3.21). Activity in the wider rural property market is similarly depressed. This low level of activity is causing significant uncertainty around the true market valuation of farm properties and the extent to which prices might fall before buyers are prepared to re-enter the market.

Figure 3.21

Farm sales

(annual totals)



Source: REINZ.

[5] The quoted payout figure comprises both Fonterra's milk price forecast and forecast distributable profit.

Agricultural credit growth has moderated significantly.

Dairy farms built up a large amount of debt over the past decade. Bank lending to the agricultural sector increased at an average annual rate of around 16 percent in the five years to 2008, as existing farms expanded their operations, or new operators entered the sector bidding up the price of land. Through the crisis period, as commodity and land prices fell, agricultural credit growth remained high as farms continued to draw heavily on bank credit lines to meet farm working expenses.

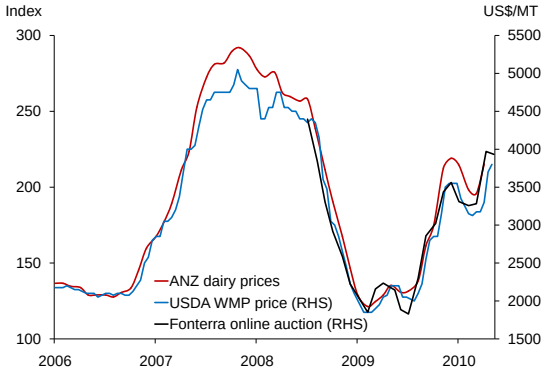
As the cash flow position of farms has improved, demand for these working capital facilities has declined. Demand for credit for investment purposes remains weak as farmers are demonstrating a reduced appetite for debt. Farm investment is limited to essential capital expenditure, and it is expected that much of the cash surpluses generated by the increased Fonterra payout will be channelled into debt repayment. Banks have also tightened lending standards in the agriculture sector, reflecting the higher credit risks revealed over the past two years. Credit growth in the agriculture sector has moderated from peak annual growth of 22.9 percent in January 2009, with little net growth in credit over the past six months. We expect credit growth in the sector to remain subdued over the coming years, particularly as lenders will be wary of highly leveraged borrowers and may demand more conservative loan-to-value ratios.

Dairy prices have recovered.

Dairy prices have recovered sharply from the lows seen in 2009, but softened through the initial months of 2010 as restocking came to an end and retail demand for dairy products remained weak (figure 3.22). More recently prices have increased, although the strong gain in April appears to have been driven by temporarily low global production. Subdued global growth prospects and the release of intervention stocks held in the US and Europe could constrain further increases in dairy prices over the coming months. Nevertheless, structural factors remain broadly supportive of commodity prices in the longer term.

Figure 3.22

Dairy commodity prices



Source: ANZ, USDA, globalDairyTrade.
Note: MT denotes metric tonne. WMP denotes whole milk powder.

There has been some easing of pressure in other agricultural sectors.

Strong increases in world meat and wool prices have outpaced the continued strength of the NZD, resulting in a rebound in NZD prices since late 2009. This will relieve some pressure on sheep and beef farmers' cash flows. Rural servicing industries have been affected by the pressures facing farmers. These pressures are expected to ease somewhat as farmer cash flows recover.

4 New Zealand's financial institutions

The New Zealand banking sector has weathered the global financial crisis well, and the outlook for the sector is generally improving. The 'funding and liquidity' dimension of the cobweb diagram presented in chapter 1 has continued to shift towards more normal levels since the last *Report*. Banks are now issuing greater quantities of debt at longer terms without a government guarantee. However, the costs of retail deposits have risen as banks vigorously compete for this additional source of stable funding.

The 'capital and profitability' buffer has remained broadly unchanged as bank efforts to boost their capital ratios have been broadly counterbalanced by reduced banking system profitability driven by rising non-performing loan levels and abnormal expenses. However, forward indicators suggest that non-performing loans may be close to a plateau, implying an improvement in the outlook for banking system profits, and hence an improvement in the 'capital and profitability' dimension of the cobweb over the next 12 months.

Parts of the non-bank deposit-taking sector continue to face a period of adjustment. In the near term, the expiry of the original term of the retail deposit guarantee scheme and the introduction of a more stringent regulatory regime will provide a catalyst for further consolidation within the sector. The extension of the retail guarantee scheme until the end of next year gives participating institutions extra time to put their business on a more secure footing.

The Reserve Bank will soon have responsibility for regulating and supervising the New Zealand insurance sector. Despite a challenging environment for the insurance sector globally, New Zealand insurers have remained profitable. Figure 4.1, overleaf, illustrates how the sector fits into the overall regulatory and institutional structure of New Zealand's financial system.

4.1 Banking sector

Bank asset quality has weakened...

The period of weak macroeconomic performance over the past two years has translated into deteriorating asset quality for the New Zealand banking system (figure 4.2, overleaf). Since the recession began at the start of 2008, non-performing loans in the banking system have increased from historically low levels to 1.7 percent of total lending by the end of 2009.[1] Despite the increase, the level of non-performing loans remains low compared to the experience of the early 1990s (see figure A21 in the appendix), and much lower than has been experienced in many other banking systems over the past two years.

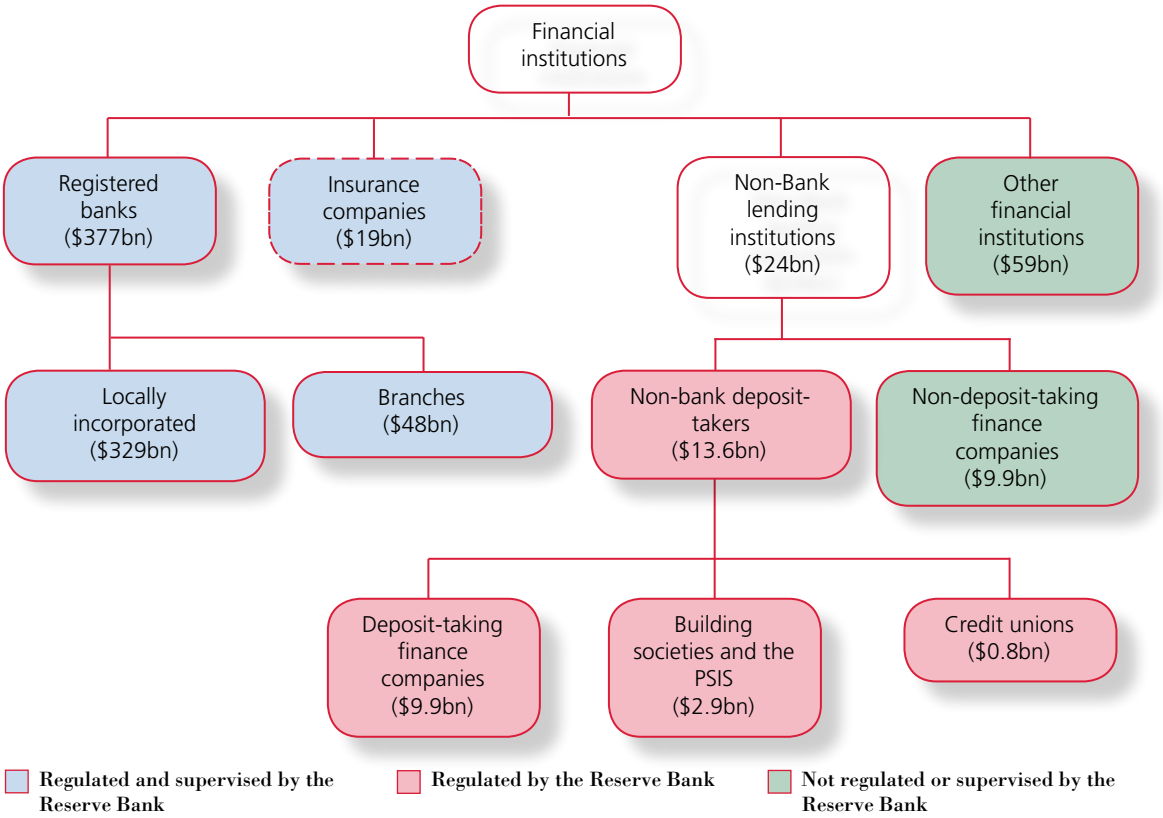
This deterioration in asset quality has been most pronounced for the largest four banks, with the domestically owned banks exhibiting lower levels of impairment. In part, this reflects a different composition of lending, with the domestically owned banks specialising in residential mortgages, which have shown lower impairment rates than corporate lending (figure 4.3, overleaf).[2]

[1] **Non-performing loans refer to banking system assets that are either impaired or at least 90 days past-due.**

[2] **Corporate lending – which includes lending to large businesses, mortgages on commercial property, most lending to small businesses and lending to the agricultural sector – accounts for 41 percent of major bank lending. This compares to 55 percent for residential mortgage lending, and 4 percent for the 'other retail' category, which is mainly consumer lending.**

Figure 4.1

Institutional structure of the New Zealand financial sector

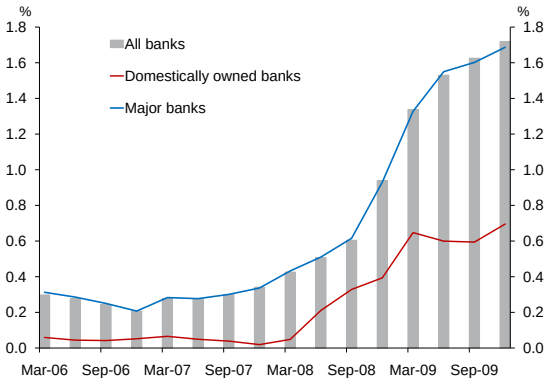


Note: Numbers in brackets refer to the total asset holdings of the sector. The Reserve Bank has not yet formally assumed responsibility for the regulation and supervision of the insurance sector.

Figure 4.2

New Zealand bank non-performing loans by type of institution

(percent of lending)



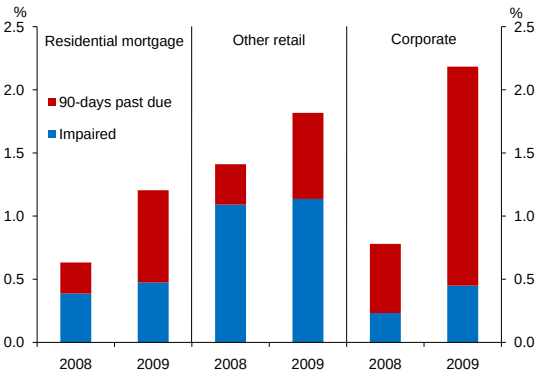
Source: General Disclosure Statements (GDS), RBNZ calculations.

Note: Domestically owned banks comprise Kiwibank Ltd, the Southland Building Society (SBS) and TSB Bank Ltd. Major banks comprise branches of the Australian parent banks and their locally incorporated subsidiaries.

Figure 4.3

Major bank non-performing loans by type of lending

(percent of sector lending)



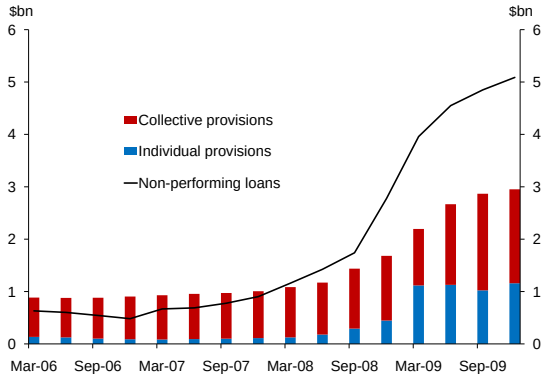
Source: GDS, RBNZ calculations.

Note: Data are for either the September or December quarter depending on the reporting cycle of each individual bank.

Banks report that the biggest areas of deterioration in the asset quality of their corporate loan books have been lending to the agricultural and commercial property sectors. The level of impairment for residential mortgages, which comprise just over half of bank lending, has also increased, reflecting the combination of falling house prices and rising unemployment.

Banks have continued to increase their level of provisioning for loan losses given the increases in non-performing loans (figure 4.4).

Figure 4.4
New Zealand bank provisioning



Source: GDS, RBNZ calculations.

...but loan losses appear to be close to a peak.

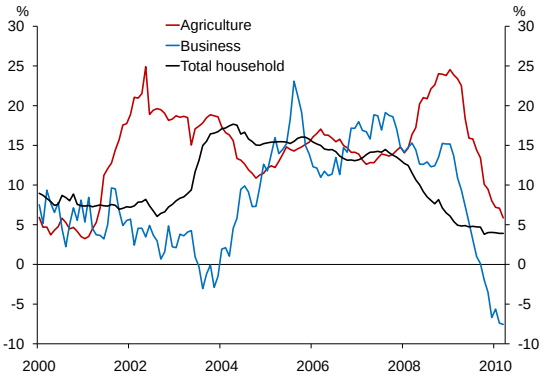
In a normal economic cycle, loan losses lag behind the improvement in economic activity. However, most of the key drivers of loan losses have been improving since the middle of 2009. In particular, as discussed in chapter 3, the outlook for the dairy sector has been improving and increases in Fonterra's forecast dairy payout will help to alleviate some of the strains in this sector. In addition, labour market conditions appear to be stabilising, which will limit the increase in non-performing residential loans.

Banks report that their level of 'watchlist loans' – those loans that banks identify as having a greater risk of impairment – has declined over the first few months of 2010. Provided the economic recovery continues, it is likely that non-performing loans will peak around the middle of this year.

Bank sector lending growth has declined...

Annual lending growth from the bank sector has fallen from just over 15 percent in mid-2007 to 1.3 percent by March 2010. As discussed in chapter 3, business lending has shown a particularly pronounced fall (figure 4.5).

Figure 4.5
New Zealand bank lending by sector
(annual percent change)



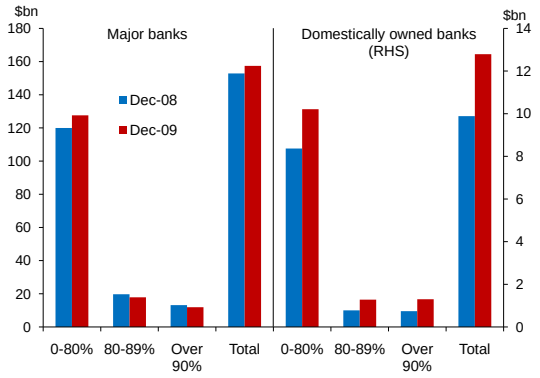
Source: SSR.

In part, this slowing in lending growth is likely to be a cyclical response to weak demand conditions in the economy. Nevertheless, there has been some tightening in lending conditions, with surveys of both borrowers and lenders reporting that credit is more difficult to obtain than has been the case in recent years (see chapter 3). In addition, banks have generally passed on higher retail and wholesale funding costs, which has constrained credit demand.

One indication of tightening lending standards has been a contraction in the share of loan balances outstanding with loan-to-value ratios (LVRs) of greater than 80 percent for major banks (figure 4.6, overleaf). In contrast, domestically owned banks have generally expanded their share of high-LVR lending, although much of this expansion represents loans made under the government guaranteed Welcome Home Loans scheme. In part, the decline in high LVR lending for the major banks has been caused by low rates of new loan growth, with new loans generally having higher LVRs than existing loans. The domestically owned banks have experienced greater loan growth over the past year.

Figure 4.6

New Zealand bank residential mortgage lending by LVR



Source: GDS, RBNZ calculations.

...but should begin to recover over the latter part of this year.

Based on the usual lags after a recovery in economic activity, lending growth would be expected to begin to recover later in 2010. A resumption in business credit growth will be important for the durability of the economic recovery. Banks appear to have the capacity to meet a pick-up in loan demand in light of a general improvement in wholesale funding conditions and a favourable outlook for banking system profits. However, credit growth prior to the recession appears to have been unsustainably high and we do not expect a resumption of the previous growth rates. In addition, borrowing costs relative to the Reserve Bank's policy rate are likely to be higher for the foreseeable future as banks pass on higher funding costs to households and firms. All else equal, for any given level of the OCR that prevailed before the crisis, credit demand is likely to be lower in the current environment.

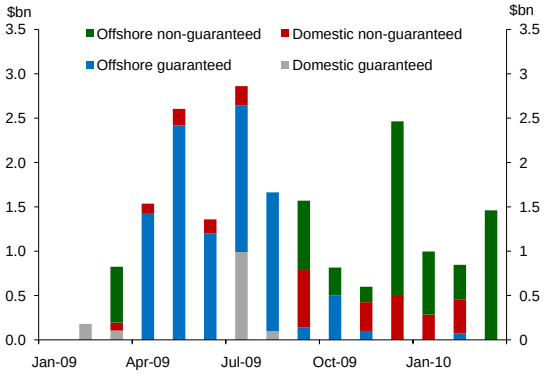
Wholesale market funding conditions have improved...

New Zealand banks' access to external wholesale funding has continued to improve, although recent events in Greece may prompt renewed concerns about the functioning of global funding markets. Pressures were initially alleviated by the introduction of the Crown wholesale guarantee scheme in November 2008, and since the third quarter of 2009 New Zealand banks have been increasingly able to issue wholesale debt without government guarantee (figure 4.7). Recently, several banks have been able to issue significant quantities of debt at terms of seven years. With funding markets returning to more normal levels of functioning, the wholesale guarantee scheme has not been used since February, and the scheme was discontinued on 30 April 2010 with no disruption to funding markets.

The retail deposit guarantee scheme has been extended until the end of 2011 and remains open for banks to access. However, the Reserve Bank expects banks to have little need or incentive to use the extended scheme, given the costs involved and the more general improvement in the outlook for the banking sector.

Figure 4.7

New Zealand banks' monthly bond issuance



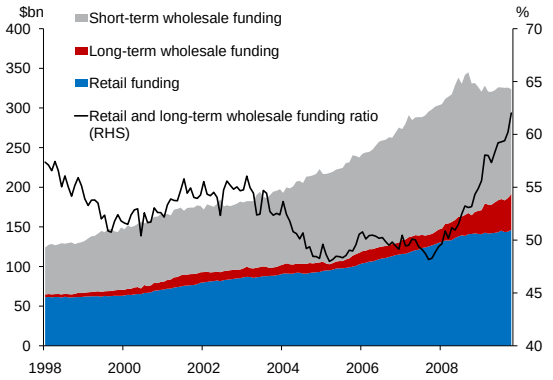
Source: The Treasury.

...allowing banks to extend the tenor of their funding.

The improvement in wholesale market conditions has allowed banks to issue a greater share of longer-term wholesale funding (figure 4.8) and to extend the overall tenor of this long-term funding. While funding market disruptions during the financial crisis have created an incentive for the banks to ensure a more stable funding base, these incentives are being reinforced by rating agencies and bank shareholders, and by the Reserve Bank's recently introduced prudential liquidity policy. The prudential liquidity policy requires the banks to obtain a minimum share of funding from more stable sources – namely retail deposits or longer-term wholesale funding. Communication with the banks indicates that they are compliant with the first phase of this policy. As noted in chapter 6, requirements for public reporting of liquidity ratios are currently under consideration.

Figure 4.8

Sources of bank funding



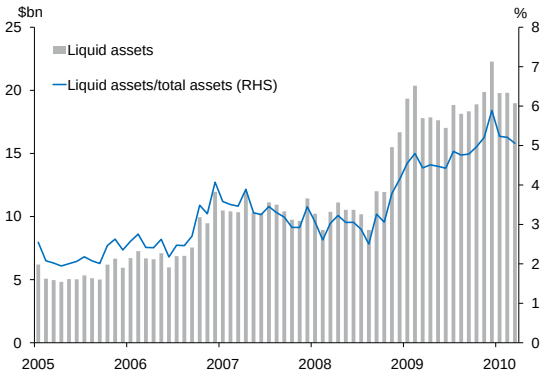
Source: SSR.

Note: Short-term wholesale funding is approximated by funding with less than 1 year to rate reset. The ratio shown in the chart is the ratio of retail and long-term wholesale funding to loans and advances based on SSR data. This will be lower than the core funding ratio based on new data that will be collected from banks under the prudential liquidity policy.

In addition to requiring a greater share of core funding, the liquidity policy also requires minimum levels of liquid assets to be held against short-term liabilities. Over the course of the crisis banks have increased their holdings of traditional liquid assets. The Bank has also begun removing and consolidating some of the temporary emergency liquidity facilities put in place during the crisis. For example, the Term Auction Facility – where banks used collateral such as residential mortgage-backed securities, registered bank bills and government securities to borrow funds from the Reserve Bank for 3, 6 and 12 months – was removed in October 2009, with the last loan maturing on 29 April of this year. Over the coming months the Bank will continue to review the temporary facilities initiated during the crisis, and make adjustments as conditions warrant.

Figure 4.9

New Zealand banks' liquid assets



Source: SSR.

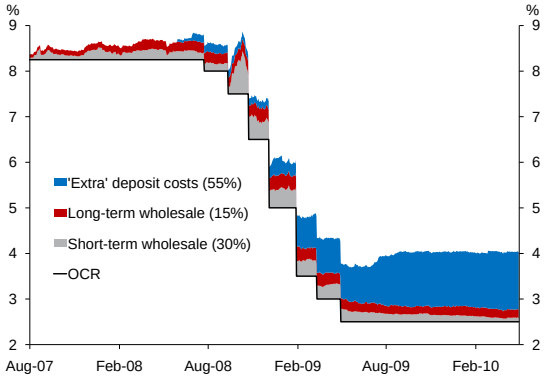
Note: Liquid assets are defined here as currency, government securities, and claims on the Reserve Bank. This is a narrower definition than the one that will be used in the Reserve Bank's prudential liquidity policy.

Funding costs for banks have remained elevated.

Despite the greater ease with which banks are now able to access funding markets, the cost of funds relative to the OCR or 90-day bank bill rate has remained higher than pre-crisis levels (figure 4.10). The higher cost of securing retail and wholesale funding is discussed further in box D and box E respectively.

Figure 4.10

Indicative marginal bank funding costs relative to the OCR



Source: RBNZ estimates.

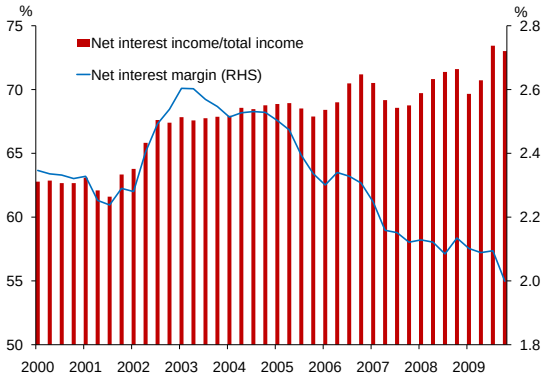
Note: The estimate assumes that banks are raising funds in approximate proportion to the existing structure of their liabilities. Weights assumed are shown in brackets. The composition of funding at any point in time will vary from these weights.

Banks have generally responded to the increased funding costs by increasing their own lending rates relative to benchmark rates. However, the average net interest margin earned by New Zealand banks has declined slightly over the past year (figure 4.11).

Preliminary indications from more timely information on bank margins collected by the Reserve Bank suggest margins have begun to stabilise more recently, and it seems unlikely the trend decline apparent in figure 4.11 will continue in the near term.[3] Net interest margins fell steadily from around 2003 as domestic loan markets became increasingly competitive. Loan growth through this period was extremely rapid, and in concert with a focus on containing non-interest related costs, banks were able to accommodate declining margins and still lift aggregate profits. This will likely be more difficult in the current environment.

Figure 4.11

New Zealand banks' net interest income margins *(annual totals)*



Source: GDS, RBNZ calculations.

Note: Net interest margin is defined as the ratio of net interest income to average income-earning assets.

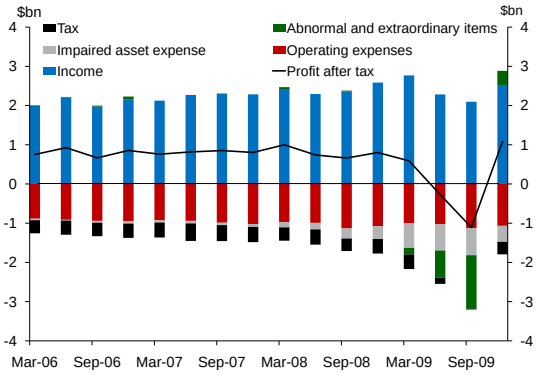
Profitability is showing some signs of improving...

Net interest income for the banking sector remained fairly steady over 2009, with volatility in trading income and fair value adjustments driving some variance in headline income figures (figure 4.12). At the same time, provisioning for loan losses lowered profits. Reported profits were particularly low in the June and September quarters of 2009, as some banks provisioned for costs associated with their court cases with the IRD over structured finance transactions.

However, bank sector profits improved materially in the fourth quarter of 2009. Part of this is due to a reversal of previous tax provisions following an out-of-court settlement between a number of banks and the IRD. Nevertheless, profit excluding extraordinary items has also improved materially, reflecting decreased rates of new provisioning for loan losses.

Figure 4.12

New Zealand bank revenue and expenses



Source: GDS, RBNZ calculations.

The short-term outlook for profitability will largely depend on the extent of any further provisioning for loan losses. With the credit loss cycle now likely to be near its peak, it is likely that bank profitability will continue to improve over 2010.

(continued on p.36)

[3] Figure 4.11 also accentuates the decline in net interest margins at the end of 2009 as it is constructed on an annual total basis. This can mask any turning point or stabilisation in margins during 2009.

Box D

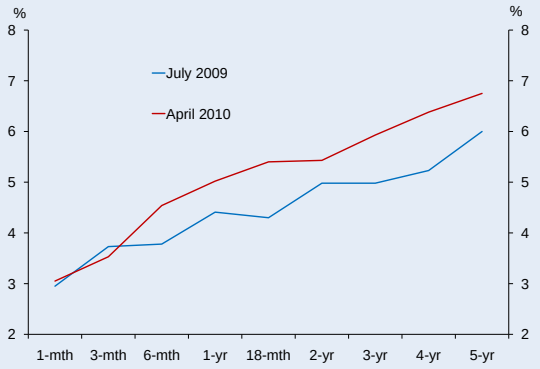
Retail funding costs

One of the drivers of rising bank funding costs has been an increasing premium for securing retail deposits. Funding difficulties during the global financial crisis, along with rating agency pressure to raise the share of retail funding, have contributed to greater demand for retail deposits over the past two years. As a result, there has been a competitive scramble to secure retail deposits and bidding up of deposit rates (figure D1). The supply of retail deposits is limited, with growth dependent on the extent and relative attractiveness of alternative savings instruments and the broader multiplier effect of credit growth in the economy as loans get redeposited after transactions.

Figure D1

New Zealand retail term deposit curve

(average of five largest retail banks)



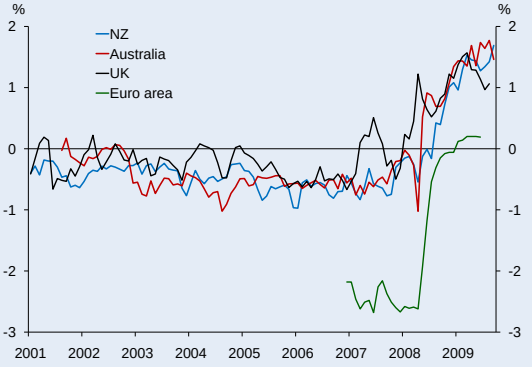
Source: Interest.co.nz.
Note: Advertised rates only for a $10,000 deposit.

Rising spreads on retail deposits have also been seen in other countries over the past 12 to 18 months (figure D2). For example, spreads on Australian and UK term deposits have largely matched New Zealand spreads, while European retail spreads have increased by a similar amount.

Looking forward, the recently introduced liquidity policy will ensure that a greater proportion of bank funding is raised from either retail or longer-term wholesale sources. As the international experience suggests, even in the absence of this policy, banks would likely have increased the share of such funding. A new discipline exerted by both regulators and the market on banks has also been reinforced by an internal resolve on the part of banks themselves to stabilise their funding base in light of their experience during the financial crisis when some sources of funding on which they had relied heavily – such as short-term US commercial paper – were disrupted.

Figure D2

International retail funding spreads

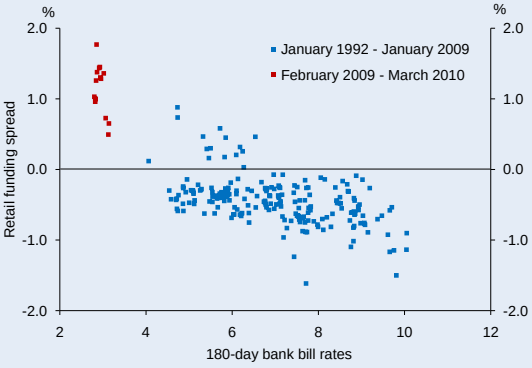


Source: Interest.co.nz, Reserve Bank of Australia, Bank of England, IMF.
Note: See data sheet for details.

An additional factor driving retail funding spreads has been the very low level of interest rates, which has made it more difficult than usual to attract retail funding. The spread on retail deposits typically becomes more positive when wholesale interest rates are low (figure D3).

Figure D3

Wholesale interest rates and retail funding spreads



Source: RBNZ.
Note: The retail funding spread is the difference between 6-month term deposit rates and 180-day bank bill rates.

As policy interest rates return towards historically normal levels, it is likely that the spreads on term deposits will contract somewhat. However, greater pressure to hold retail deposits is likely to ensure that retail deposit spreads will remain higher than in the past.

Box E

Wholesale funding costs

New Zealand banks raise a large proportion of their funding in offshore wholesale markets. Prior to the global financial crisis, much of this wholesale funding was sourced from short-term (less than one year) money markets as opposed to long-term bond markets. Primarily, this was because money markets provided a cheaper source of funding than bond markets. The refinancing risk and other vulnerabilities arising from such funding have been raised in previous *Reports* and are not discussed here.[4]

The cost of raising wholesale debt (as a spread over benchmark rates like swap rates), can be broken down into two major components: the cost of issuing US dollar debt in US markets, and the 'basis swap' spread – the cost of transforming foreign currency funding into NZD to eliminate the currency risk.

Prior to August 2007, the cost of funding in the shorter-term money markets for a typical large New Zealand bank was around 5 basis points below the relevant money market benchmark. The overall cost of such funding when converted to NZD was about equal to the New Zealand money market rate.

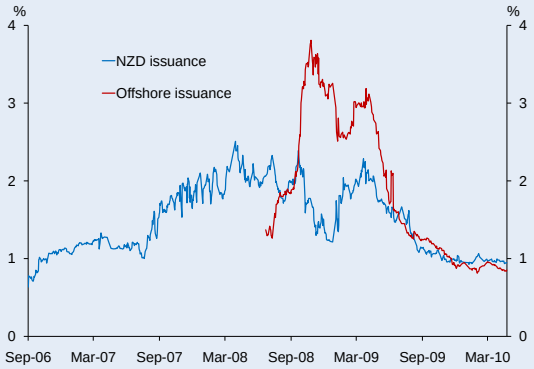
Previously, the banks undertook very little funding in the long-term bond markets. When they did so, the term to maturity was typically around two to three years. The cost of funding was in the region of 15 basis points higher than the swap market at that tenor. When converted to NZD the cost was about 25 basis points above the New Zealand money market rate.

However, the cost of term funding has increased sharply since mid-2007, peaking in March 2009, reflecting the significantly higher risk premium demanded by investors for providing funding to the New Zealand banking system (figure E1). Spreads have since narrowed, but remain elevated relative to pre-crisis levels.[5]

Figure E1

Yields on New Zealand bank bonds in term wholesale markets

(spread to government bonds)



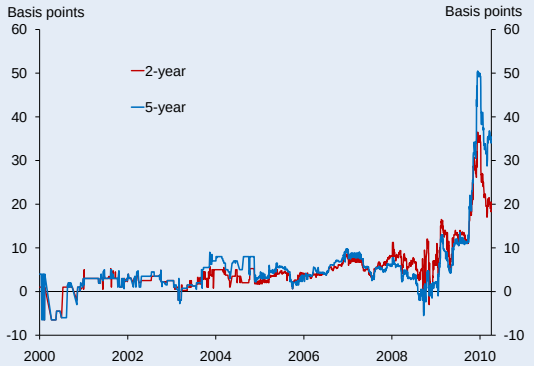
Source: Bloomberg, RBNZ calculations.

Note: Bank bond yields are an average of secondary market yields on bonds issued by New Zealand banks in either New Zealand or offshore markets.

In addition to higher risk premiums, New Zealand institutions have faced higher basis swap spreads. The basis swap spread is driven by the mismatch between offshore issuers of New Zealand dollar denominated debt and the demand of the New Zealand financial system to convert offshore funding into NZD. Reduced issuance of Uridashi and Eurokiwi bonds by foreign borrowers, along with increased issuance of foreign currency debt by New Zealand banks, have seen basis swap spreads widen over the past six months. While these spreads have narrowed somewhat recently, they have not returned to the levels that prevailed before the crisis (figure E2).

Figure E2

New Zealand basis swap spreads



Source: Bloomberg.

[4] **See, for example, box 2 pp 13-15, *Financial Stability Report* May 2005, Reserve Bank of New Zealand.**

[5] **The chart plots wholesale funding costs relative to government bond yields. This significantly understates the degree of increase in term wholesale spreads relative to swap rates. For example, the spread between New Zealand 10-year swap rates and government bond yields has contracted from around 100 basis points prior to the crisis to near zero currently.**

Taken together, the elevated risk premiums and higher basis swap spreads have meant that the overall cost of term funding for New Zealand banks remains high relative to immediate pre-crisis levels. An indicative breakdown of the composition of these higher funding costs is shown in table E1.

It seems unlikely that term funding costs will return to pre-crisis levels in the near term. Furthermore, as discussed above, banks are looking to reduce their reliance on short-term wholesale funding by shifting to longer term wholesale funding. These factors mean that overall bank funding spreads will likely remain substantially higher than pre-crisis levels.

Table E1

Composition of bank wholesale funding costs

	Typical 2000-2007 (basis points)	Indicative current (basis points)
Short-term wholesale funding		
90-day USD funding relative to LIBOR	-5	0
Currency swap	5	15
NZD cost relative to 90-day bank bill	0	15
Long-term wholesale funding		
2–3 year USD funding relative to swap	15	110
Currency swap	10	35
NZD cost relative to 90-day bank bill	25	145

Note: Indicative funding costs are based on recent issuance by a number of banks.

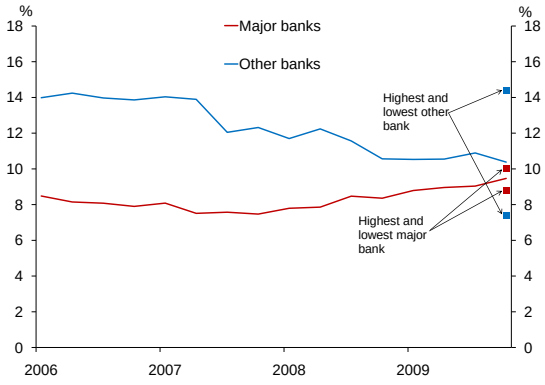
...but may not return to the levels experienced pre-crisis.

Over the past decade the New Zealand banking system has been relatively profitable by international standards. However, there are a number of factors that may contribute to lower rates of profitability than experienced in the past. Credit growth is likely to remain somewhat lower over coming years than has been experienced in recent years. In addition, funding costs are expected to remain higher than they have been in the past. The extent to which banks will be able to recoup these higher costs through higher lending rates will be determined by the level of competition in the market, but some continued pressure on margins is likely.

Capital positions remain strong.

New Zealand banks have maintained capital ratios at a high enough level to offset significant unexpected losses. Despite reduced profitability over 2009, the major banks were able to lift aggregate Tier 1 capital ratios above 9 percent by the end of 2009 (figure 4.13). Tier 1 capital ratios for other banks have declined somewhat over recent years, although most remain at very high levels, and above the levels of the largest four banks. Recently, Kiwibank has issued hybrid capital which has boosted its Tier 1 ratio.

Figure 4.13
New Zealand bank Tier 1 capital ratios
(locally incorporated banks)



Source: GDS, RBNZ calculations.
Note: Other banks comprise Rabobank New Zealand Ltd, Kiwibank Ltd, SBS, TSB Bank Ltd and Bank of Baroda (New Zealand) Limited. High-low comparison excludes banks under $500 million in assets.

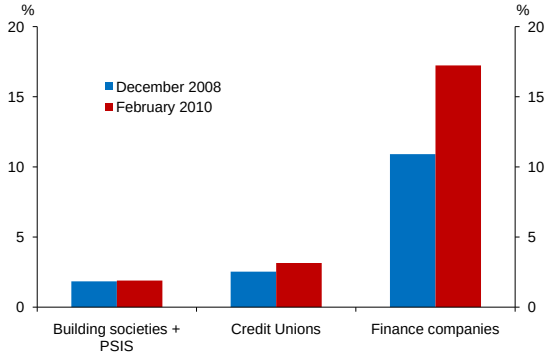
The Australian parents of the major New Zealand banks have been able to issue significant new equity to boost their own Tier 1 capital ratios, and have also been able to maintain strong rates of profitability. This gives greater comfort that they would be able to provide support to their New Zealand subsidiaries if necessary. One caveat to this is that recent geographical expansion by some of the Australian parent banks could increase the risk of global financial problems spilling over into the Australasian banking system some time in the future.

4.2 Non-bank deposit-taking sector

Savings institutions have proved resilient...

The non-bank deposit-taking (NBDT) sector comprises a number of different institutional types (figure 4.1), with the outlook varying considerably across these different groupings. Savings institutions, which comprise building societies, credit unions and the PSIS, have generally weathered the crisis well. This largely reflects the lower risk profile of their lending, and generally more stable funding sources. While asset quality has deteriorated for this sector, losses have remained relatively contained (figure 4.14).

Figure 4.14
Non-performing loans of NBDTs covered by the Crown deposit guarantee
(percent of lending)



Source: The Treasury.

...but the outlook for some finance companies remains challenging.

Loan losses have continued to rise for the finance company sector. This has been driven in particular by lending to the property development sector, while those finance companies focused on equipment finance, small- and medium-sized

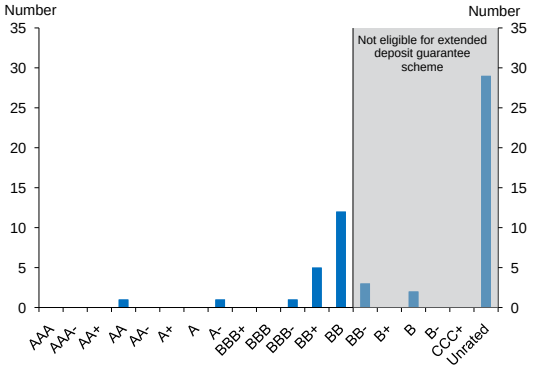
enterprise lending, and consumer lending have experienced much lower levels of impairments.[6] Investor confidence has been negatively affected by a series of failures in the sector, particularly of firms heavily exposed to property lending. As a result some non-bank deposit takers (NBDTs) have struggled to retain or attract funding, and liquidity positions for a number of institutions have deteriorated.

The Crown retail deposit guarantee scheme has provided short-term certainty for investors, and has allowed time for institutions to rebuild investor confidence. The original term of the scheme will expire on 12 October 2010. While the scheme has been extended until the end of 2011, more stringent qualifying requirements and increased fees will apply.

The extended scheme requires a minimum credit rating of BB for participation. Most NBDTs covered by the original scheme that have applied for a credit rating have obtained at least the BB minimum. However, NBDTs with less than $20 million of deposits, which are exempt from the regulatory credit rating requirement, have mostly elected not to obtain a credit rating and thus are ineligible for the extended scheme. As at 30 April 2010, four institutions had been accepted into the extended scheme.

A large share of funding for the NBDT sector falls due prior to the expiry of the original Crown guarantee. Some institutions have loyal investor bases and are not expected to use the guarantee in the future (even though they are eligible). But other institutions, particularly finance companies that are unable to utilise the extension, may encounter difficulties if investor confidence is not rebuilt in the coming months.

Figure 4.15
Credit ratings of NBDTs in the current retail deposit guarantee scheme



Source: RBNZ.

A regulatory regime for NBDTs is being introduced.

The Reserve Bank has assumed responsibility for the regulation of NBDTs, and a new regulatory regime is being introduced.[7] The latest stage of this new regime required deposit-taking institutions to obtain a credit rating by 1 March 2010.[8] Requirements on capital levels and restrictions on related party exposures are expected to be introduced by the end of 2010, while liquidity requirements are likely to be introduced in 2011 (see chapter 6).

Many NBDTs are relatively well capitalised, and a number of institutions have taken useful steps to boost capital levels over recent months. Nevertheless, some institutions have further work to do over the next year to boost capital levels to meet these new prudential requirements. Liquidity in the deposit-taking finance company sector has been very low, partly reflecting the difficulty some firms have had in retaining deposits. Credit unions and building societies have generally maintained higher levels of liquid assets.

6 Non-deposit-taking finance companies have also experienced difficulties. This sector funds its activities from non-public sources and/or their own shareholder capital and is not therefore part of the new regulatory regime for NBDTs. Nevertheless, non-deposit-taking finance companies account for more than 40 percent of the assets of the broader non-bank lending sector. A greater share of lending from non-deposit-taking finance companies is related to housing and consumer finance, relative to deposit-taking finance companies whose lending is concentrated on the business sector.

7 While the Reserve Bank now regulates non-bank deposit-taking institutions, supervision remains the responsibility of the trustees of individual institutions.

8 Some institutions have been granted an exemption from the credit rating requirement. See chapter 6 for further details.

Further consolidation is expected in the industry.

The expiry of the original deposit guarantee scheme, and the introduction of a more stringent regulatory regime, are likely to act as a catalyst for further consolidation within the industry.

Inevitably, some of the weaker institutions within the current scheme may struggle to retain funding. In addition, some institutions may find that their existing business models are no longer viable once the more stringent regulatory settings are taken into account. This may prompt changes to funding structures for some institutions.

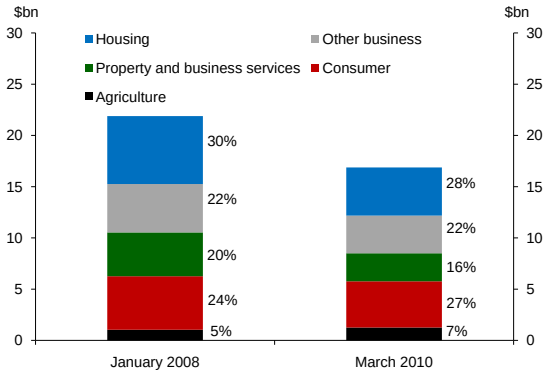
A number of institutions in moratoria have also encountered further difficulties that have led to restructuring or receivership in the past six months. These, and any further similar events create a pool of assets for sale that may be acquired by stronger non-bank lenders. Ultimately, those deposit-taking institutions that remain beyond the extended Crown guarantee period are likely to be better capitalised and have better risk and liquidity management practices than those that have failed in recent times. A strong non-bank financial sector of some form is an important component of a dynamic and efficient financial sector, particularly through its financing of activities in which banks have not traditionally been involved. The Capital Markets Taskforce report has suggested a range of relevant policy options for fostering and deepening capital markets, including some that could naturally complement (or replace parts of) the current non-bank deposit-taking sector.[9]

Lending from the non-bank sector continues to fall.

Even with the government guarantee in place, retail funding of NBDTs has steadily fallen. While this has been partly due to difficulties in the finance company sector, increased competition from banks for retail funding has exacerbated funding difficulties. Reflecting this falling funding pool and the weak economic environment, aggregate non-bank lending (including lending from non-deposit-taking finance companies) has fallen by 23 percent since the start of 2008.

Figure 4.16

New Zealand non-bank lending to residents by sector



Source: SSR.

Note: Lending data excludes historical data for an institution that became a registered bank during 2009, as well as an institution which was previously classified as a bank entering the non-bank sector. Data includes non-deposit-taking finance companies.

The past few years have illustrated that the business model employed by some finance companies of using retail deposits to fund property development was unsustainable. New business models will need to be developed to provide funding to viable projects in this sector, most likely involving a greater share of equity finance. In the meantime, an absence of lenders may be creating some difficulty in securing funding for the property development sector.

[9] The report and the government response is available from the Ministry of Economic Development (MED) website (www.med.govt.nz).

4.3 Insurance

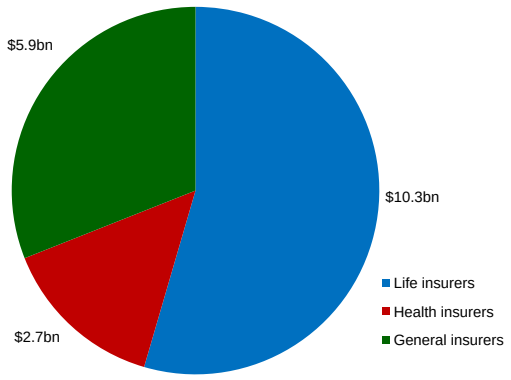
To date the insurance industry in New Zealand has been subject to limited government regulation, with self-regulation playing an important role. The Insurance (Prudential Supervision) Bill currently before Parliament will empower the Reserve Bank to prudentially regulate and supervise licensed insurers (see Chapter 6). This legislation will bring New Zealand into line with its international counterparts, consistent with the needs of the New Zealand market.

New Zealand's insurance sector has many institutions…

New Zealand's insurance industry comprises around 160 insurers, of which about 40 are life insurers.[10] There are a small number of health providers and a significant number of general insurers in this diverse sector. The majority are locally incorporated companies, and the overseas branches are mostly from Australia and the US.

In 2007 the New Zealand insurance industry had about $19 billion of assets with 55 percent being held by the life insurance sub-sector. General and health insurers made up the balance at 31 percent and 14 percent respectively (figure 4.17). Each insurance sub-sector is characterised by a small number of large insurers and a larger number of much smaller providers.

Figure 4.17
New Zealand insurance sector by asset size



Source: MED.

[10] Comprehensive information on the insurance sector is not currently available. The Insurance Council of New Zealand and the Investment Savings and Insurance Association do provide information but for their specific members only. The Reserve Bank will be collecting more detailed and comprehensive information in its role as prudential regulator of the sector as a whole.

…and poses little systemic risk for the New Zealand financial system.

The degree of systemic risk posed by an individual financial institution or sector is influenced by several factors including its size, interconnectedness, substitutability and the speed of loss transmission to third parties. The nature of the New Zealand insurance industry means that institutional failure in this sector is not expected to pose material systemic risk for the following reasons:

- The relatively small size of most insurance institutions and the overall sector limits the potential direct impact and contagion effect that a failure would have upon the financial system and macroeconomy (in contrast to the major implications that weakness in the banking sector could have).
- The financial linkages between New Zealand insurers are significantly less than in the banking sector, which limits contagion risk.
- It is more likely that financial distress or failure would develop slowly in this sector, so there may be time to mitigate any potential financial impact.

The impact of the global financial crisis on insurance sectors around the world was generally quite limited. However, American International Group's (AIG) experience provided an example of solvency issues arising from non-core derivatives activities which were poorly understood and managed. We are not aware of any examples of insurers in New Zealand engaging in such non-core derivatives activities.

The insurance business model is different to banking….

Insurance is characterised by up-front premium payments to cover normal business costs and subsequent claims, which are valued on an actuarial basis. Insurers' returns on investment assets go towards meeting their future liabilities and these investment returns are exposed to the volatility of financial markets.

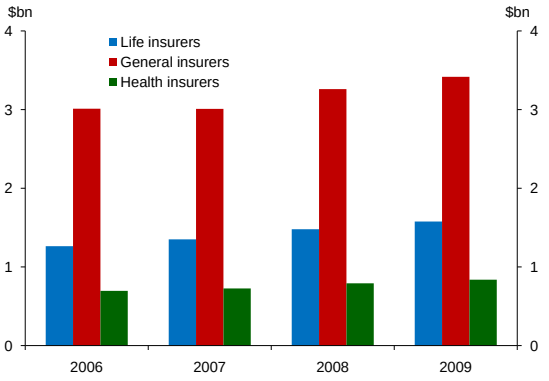
…with steady growth in premium income.

Relatively weak economic conditions generally have limited impact on an insurers' profitability. This is because a large proportion of insurance taken up is not discretionary, even in a downturn. This is borne out by the reasonably resilient trend of premium income for all insurance sub-sectors throughout the financial crisis and into 2009 (figure 4.18).

Consistent growth in premium income will help to protect insurers' profitability. However, any future volatility of investment markets can potentially affect insurers' capital strength, although in general the New Zealand insurance sector has a relatively conservative investment allocation. Apart from AIG, the ratings of insurers operating in New Zealand have been generally stable.

Figure 4.18

Gross written premiums by sector



Source: Annual reports of the Investment Savings and Insurance Association, the Insurance Council of New Zealand and the Health Funds Association.

Note: Information presented represents only the members of each association and not the insurance sub-sector or industry as a whole. Financial periods may not fully correspond.

5 Payment systems

New Zealand's core payment systems – the Reserve Bank's Exchange Settlement Account System (ESAS) and the Continuous Linked Settlement (CLS) system – continue to function satisfactorily. Volumes transacted through ESAS have started to pick up over recent months, while the CLS system has witnessed continued growth in settlement activity over the past year. Globally, there is an increased focus on the role that payment and settlement infrastructure can play in better managing systemic risk.

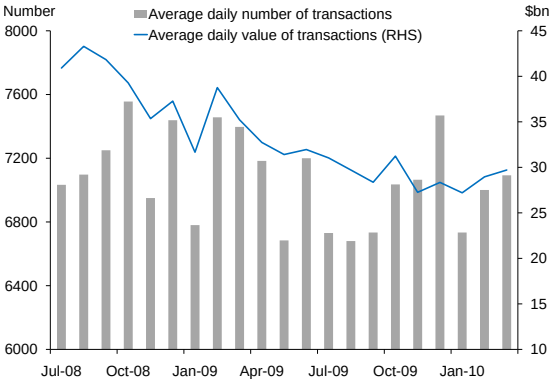
Payment systems continue to function satisfactorily.

The various New Zealand payment systems have generally continued to operate without incident in recent months. At the heart of the overall payments infrastructure are the two systems for high value payments: the Reserve Bank's ESAS and the CLS system used internationally to settle foreign exchange trades (table 5.1).

ESAS has operated well, with payments continuing to be settled in a timely fashion. The downward trend in the number and value of transactions settled in ESAS over much of last year has halted more recently (figure 5.1). The downward trend initially reflected a reduction in financial market activity during the period of extreme risk aversion immediately following the collapse of Lehman Brothers. Subsequently, the further decline in ESAS volumes coincided with a fall in foreign exchange activity, largely as a result of banks securing longer-term funding in foreign currencies (which requires less frequent swap transactions to convert it into NZD). More recently, foreign exchange activity has stabilised.

Higher aggregate settlement cash balances and lower total transaction values in recent months have meant that overall liquidity levels have not been a barrier to the prompt settlement of transactions.

Figure 5.1
ESAS transactions



Source: RBNZ.

The availability of ESAS/Austraclear has been very high (figure 5.2).[1] The software upgrades implemented to address the operational problems evident in late 2008 and early 2009 appear to have been successful and there have been only a few isolated instances of less than full availability since those upgrades were applied.

Meanwhile, there has been continuing growth in settlement activity within the CLS system. The total value and volume of settlements in CLS declined significantly following the collapse of Lehman Brothers, but have since

[1] **Austraclear is a securities settlement system operated by the Reserve Bank that is technically linked to ESAS. ESAS and Austraclear availability are reported together because of the close links between the two systems and because that is the way that the system operator reports.**

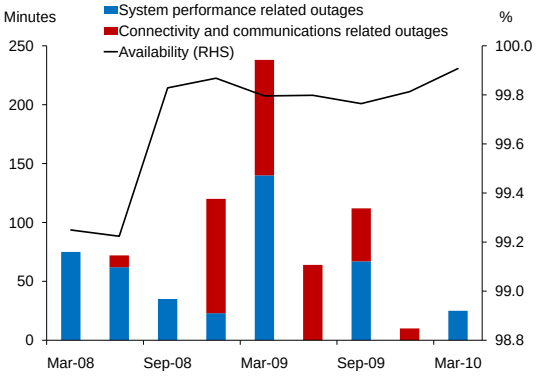
Table 5.1

New Zealand payment and settlement systems

System	Description	Owner/operator
High value		
Exchange Settlement Account System (ESAS)	Provides real time gross settlement of interbank transactions across the exchange settlement accounts held with the Reserve Bank.	RBNZ.
Continuous Linked Settlement (CLS)	Provides payment versus payment settlement of foreign exchange transactions.	CLS Bank International.
Retail (Systems that primarily process payments made by individuals and small businesses)		
Interchange and Settlement Limited (ISL)	Used to interchange cheques, direct debits and credits, automatic payments, ATM settlement transactions, internet banking, and telephone banking. Settlement positions are advised to participants who arrange inter-bank settlement through Austraclear on a bilateral net basis at the end of the banking day.	Interchange and Settlement Limited, a limited liability company collectively owned by eight registered banks.
Paymark Limited (formerly Electronic Transaction Services Limited, ETSL)	Provides a network for the interchange of point of sale debit, credit, charge and proprietary card transactions.	Paymark Limited, a company owned by the four major registered banks.
EFTPOS NZ Limited	Provides a network for the interchange of point of sale card transactions.	EFTPOS NZ Limited, a company owned by ANZ National Bank.
Securities settlement		
Austraclear	Allows members to settle fixed-interest and equity transactions and make cash transfers. Inter-bank payments occur directly in ESAS.	RBNZ.
Fully Automated Screen Trading and Electronic Registration System (FASTER)	Used by brokers who are members of NZX to clear, settle and register equity trades. Low volumes of short-term corporate paper and bonds are also traded and settled through the system. (This system is to be replaced in the near future by new arrangements including a central counterparty.)	NZX Limited.
System infrastructure		
SWIFT	Provides secure global financial messaging services.	Society for Worldwide Financial Telecommunication, a co-operative owned by more than 8300 financial institutions.

Figure 5.2

ESAS/Austraclear availability



Source: RBNZ.

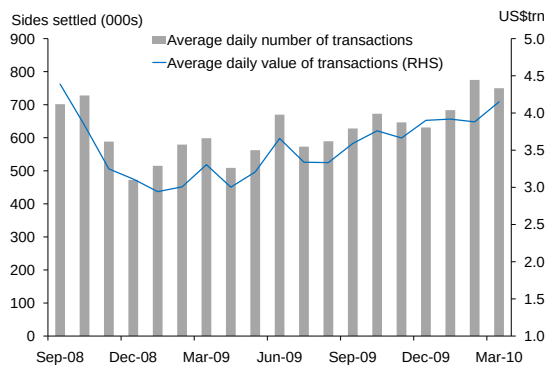
Note: Availability is the percentage of core business hours that the system was fully available to all users over the 12 months to the current period.

grown steadily. In February the daily transaction volume was the highest on record and on 16 February the CLS system handled its highest ever one day volume of transactions (figure 5.3). Although transaction volumes eased slightly in March, they remained high. Despite these large volumes the system has continued to consistently achieve 100 percent settlement completion.

The CLS system is an important part of the overall New Zealand payment landscape as it is used to settle around 60 percent of the value of obligations of New Zealand banks arising from foreign exchange transactions. While transactions involving New Zealand banks make up only a small proportion of the transactions settled by the CLS system, it is important for the management of foreign exchange settlement risk by New Zealand banks that the system continues to operate normally, even in the face of the very large demands being placed on it.

Figure 5.3

CLS transactions



Source: CLS Bank.

Global focus on payment systems to better manage risk…

International discussions about how to make the financial system more resilient following the global financial crisis have included consideration of the role that payment and settlement systems could play in better managing systemic risk. In particular, there has been a focus on the clearing and settlement arrangements for over-the-counter (OTC) credit derivatives. The complex and idiosyncratic nature of these products can make it difficult for financial institutions trading them to accurately identify and manage their risk exposures with their trade counterparties. This problem has prompted suggestions that these products would be best cleared through central counterparties (CCPs).[2] Financial institutions would then only need to monitor their exposures to the CCP, not to a potentially wide range of other institutions.

As well as this centralisation of risk management, CCPs can provide other significant advantages to participants in financial markets, including a potential reduction in systemic risk and the facilitation of multilateral netting.

However, the centralisation that can deliver these benefits also carries with it potential disadvantages. The CCP will be vital for the functioning of the markets that it serves, and therefore potentially for the financial system more generally. Risk will tend to be concentrated in the one entity, the failure of which could severely disrupt financial markets, forcing the authorities to support the CCP. Consequently the internal risk management policies and procedures of a CCP and the CCP's ability to absorb losses are very important.

…is likely to see revised international standards.

The Committee on Payment and Settlement Systems and the Technical Committee of the International Organisation of Securities Commissions have announced a comprehensive review of the international standards for financial market infrastructures. This has been necessitated by the need for robust clearing and settlement arrangements and a particular need to ensure that CCPs can manage the risks associated with the clearing of derivative products.

[2] See, for example, chapter 3 of the IMF's April 2010 *GFSR*, "Optimizing the effectiveness of OTC derivative central counterparties", for further discussion.

Draft revised standards are not expected to be released until early next year. However, there does seem to be a growing international consensus that CCPs should plan to be able to withstand 'extreme but plausible' conditions in financial markets. These include rapid reductions in market liquidity, and the failure of multiple participants.

The development of New Zealand's payment and settlement systems is ongoing.

Domestically, the final report of the Capital Market Development Taskforce, published in December 2009, noted that clearing and settlement arrangements for any traded financial products need to be efficient and operate in a safe and sound manner. These broad efficiency and soundness considerations led the taskforce to recommend that NZX Limited and the Reserve Bank, as the main operators of settlement systems in New Zealand, should work together to improve New Zealand's national clearing and settlement systems, including the development of a CCP. Before the taskforce report was released publicly the Bank and NZX announced they were already discussing clearing and settlement systems. Those discussions are ongoing.

Meanwhile, NZX is continuing to work on developing new arrangements for the settlement of trades on NZX markets. The arrangements include a CCP which will be used to settle a broad range of products, including equities and futures and options which will be traded on NZX's planned derivatives exchange.

Work is also under way to investigate how to make more use of the existing international infrastructure. A specific proposal that is of direct interest for New Zealand is the establishment of additional settlement sessions in the CLS system. Banks in this country transact significant amounts in NZD/USD swaps for same day settlement. Those transactions are currently settled via correspondent banking arrangements rather than in the CLS system because of the timing of the existing settlement window. An additional session that allowed those transactions to be settled within CLS could materially reduce the foreign exchange settlement risks faced by New Zealand banks.

6 Recent developments in financial sector regulation

Global efforts to strengthen financial regulation have continued to gather pace in the six months since the last *Report*. The Basel Committee on Banking Supervision (BCBS) has developed concrete proposals to address micro-prudential shortcomings, while new macro-prudential tools designed to reduce both the procyclicality of the financial system and the risk from systemically important financial institutions are also being discussed.

To date, the Reserve Bank's efforts to enhance the resilience of New Zealand's financial system have focused on developing a new liquidity regime for banks, given the very real rollover risk associated with banks' reliance on short-term funding during the crisis. The Bank is, however, considering all aspects of the global regulatory discussion and will look to change standards where doing so is appropriate for the New Zealand financial system.

At the same time, development of the Bank's new prudential regime for non-bank deposit-takers continues, covering liquidity requirements, capital and related party regulations, and mandatory credit ratings. The Bank will also soon assume responsibility for the regulation and supervision of the insurance sector and work is ongoing to develop the specific prudential requirements for that industry.

A review of the disclosure regime for registered banks is being undertaken with engagement from banks and other key stakeholders. The review is designed to examine the effectiveness of the current disclosure requirements in promoting market discipline, while reducing the compliance burden for banks.

In other domestic developments, a new regulatory body to oversee financial markets has recently been announced by the Government. The proposed Financial Markets Authority will not alter the Reserve Bank's current prudential regulatory and supervisory roles.

6.1 Global initiatives in financial regulation

The global reform agenda continues…

The global discussion on financial sector reform is progressing steadily. The G20 continues to drive the regulatory reform agenda, while much of the policy coordination and development is being undertaken by international bodies such as the Financial Stability Board (FSB) and the BCBS, with support from accounting standards setters (the International Accounting Standards Board (IASB) and the US Financial Accounting Standards Board (FASB)), and various national authorities.

The reform effort covers a number of dimensions, including addressing the role of the financial sector in amplifying credit cycles (procyclicality), improving the resilience of the financial system to economic and financial shocks, reducing the moral hazard problem arising from the perceptions of some banks being 'too big to fail', improving the coverage and allocation of regulatory responsibilities, and improving the ability of regulators to manage bank failures in an orderly fashion.

…with new proposals for capital and liquidity now on the table.

There is a broad consensus on what reforms to prudential standards should achieve – namely, a safer financial system that is still dynamic and innovative enough to support solid and sustainable economic growth. In this regard,

the BCBS published two consultative documents in late 2009 proposing significant changes to capital and liquidity management. There is a recognition of the need to improve micro-prudential standards with higher minimum levels of capital and liquidity relative to pre-crisis levels. Furthermore, there is greater attention to address so called 'macro-prudential' policy issues, focusing on the build up of risks to the system as a whole and potential impacts on the broader economy.

Changes to the capital regime focus on quality and risk coverage of capital...

In relation to capital requirements, the current three tiers of capital will be reduced to a two-tier system, with the predominant form of Tier 1 capital being common equity and retained earnings.[1] The use of innovative instruments, such as hybrid capital, will be phased out of Tier 1 capital and full disclosure of all elements of capital will be required. These changes will improve the quality, consistency and transparency of the capital base and ensure that banks are in a better position to absorb losses.

The risk coverage of the capital framework will be strengthened by requiring banks to hold more capital for risk exposures arising from derivatives, repurchase agreements, and securities financing activities. Requiring more capital against a wider range of risks will enhance the resilience of individual banks and reduce the risk of shocks being transmitted from one bank to another through derivative contracts and interbank financing.

To supplement the current Basel risk-weighted capital framework, the BCBS is proposing the use of a simple unweighted leverage ratio requirement. This leverage ratio would essentially set a limit on the overall degree of leverage a bank could employ, regardless of the type of assets and lending activities that a bank engages in. This is intended to provide a safeguard against attempts to avoid the risk-based capital requirements.

... and a new liquidity risk management framework is being proposed.

The BCBS has proposed a common international measurement framework for liquidity risk along with setting two new minimum regulatory standards for managing this risk: the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR). To comply with the minimum LCR, internationally active banks would need to ensure they hold enough assets of sufficient quality and liquidity to fund their operations for a 30-day period in the event of a bank-specific crisis or an impairment in funding markets. With the proposed NSFR, the intent is to enhance banks' resilience over longer-term horizons by ensuring they fund their activities from more stable sources.[2]

There are also proposals to address the 'too-big-to-fail' issue...

There is also a more extensive set of policy proposals being discussed in countries such as the UK and the US, which host large, complex and internationally active banks that are deemed systemically important for the global financial system. Some of the major banks in these countries received significant taxpayer support during the crisis to keep them afloat. The relevant policies here are aimed at reducing the moral hazard associated with these banks being demonstrably too big to fail and include:

- The establishment of supervisory colleges for internationally active banks to promote better information sharing across jurisdictions.
- Tougher regulatory requirements in the form of additional capital and liquidity buffers for systemically important institutions, limits on the size and scope of their operations, rules for executive compensation, and also direct taxation of large banks (either to recoup the use of taxpayer funds or to mitigate future taxpayer burden associated with the risk of subsequent banking failures).
- Improved resolution mechanisms (eg living wills) to mitigate the disruption caused by a future failure of a large financial institution.

[1] See BCBS (2009) "Strengthening the resilience of the banking sector", http://www.bis.org/publ/bcbs164.htm

[2] For more information on the definitions for the liquidity coverage ratio and net stable funding ratio, see BCBS (2009) "International framework for liquidity risk measurement, standards and monitoring", http://www.bis.org/publ/bcbs165.htm

…along with macro-prudential policies to address the procyclicality of the financial system.

One of the lessons from the global financial crisis was that micro-prudential regulators did not pay sufficient attention to network externalities and that there were insufficient capital and liquidity buffers to guard against systemic losses in the banking system, resulting in broader social and economic costs. While many of the new proposals discussed above will improve micro-prudential regulation by increasing the quality, quantity and coverage of capital and liquidity relative to pre-crisis levels, there is also a need to address the inherent procyclicality of the financial system.

In particular, there is a recognition that bank behaviour can itself be a source of financial instability by amplifying the boom-bust nature of credit and asset cycles. For example, banks may increase leverage and credit during the good times when asset valuations are rising, and then exacerbate the eventual downturn through forced deleveraging and tightening of credit standards. In this regard, the BCBS is also proposing measures to ensure that banks build up additional buffers of capital during good times that can then be drawn down during periods of stress. This so-called countercyclical capital buffer would act as a surcharge that would be levied on banks when indicators suggest that system-wide credit risks are increasing and removed when conditions return to normal.

In addition, the IASB (the international standards setter) has proposed that accounting standards move to forward-looking provisioning based on expected loan losses (dynamic provisioning), rather than the current more backward-looking system for provisioning.

The potential impact of the new policies is being assessed, with implementation to occur over 2011-2012.

While these new policies will improve the resilience of the financial system, the cost of bank intermediation will inevitably increase and policymakers are aware of the need to ensure an appropriate balance between the costs and benefits. A Quantitative Impact Study (QIS) is currently being undertaken by mainly G20 countries, which will assess the cumulative impact of the capital and liquidity reforms. This is due to be completed in coming months. The results of the QIS will help inform the discussion on the suitability and calibration of the reforms. Specific proposals are expected by the end of 2010, with implementation to occur over 2011-12.

The Reserve Bank will adopt new rules where doing so is appropriate in the New Zealand context.

The Reserve Bank has made a submission to the BCBS outlining its general support for many of its proposals for new prudential standards. However, the Bank does not support the introduction of a leverage ratio. The submission also noted that complying with any new liquidity rules would be difficult for small countries without deep government debt markets (see box F). More generally, the Bank is mindful that a more complex set of rules could emerge from the regulatory reforms. Greater complexity would represent a risk, given that it has taken time for Basel II to be effectively implemented in some countries.

Similarly, some of the more far-reaching reforms on the too-big-to-fail issue, such as those covering executive compensation, bank levies and limits on the size and scope of bank operations, are considered to be of less relevance in the New Zealand context given that the behaviour of domestic banks differs markedly from some of the larger international banks. The Reserve Bank, however, supports the general principles of greater cross-border information sharing and improved crisis resolution strategies, and these principles are reflected in our existing Trans-Tasman banking policies and relationships.

The New Zealand banking system did not suffer a systemic crisis and this will also shape our approach to the broader global regulatory discussion. The Reserve Bank's approach to the implementation of the Basel II capital framework has been relatively conservative compared to other countries and stood up well under financial and economic pressures. For instance, the Reserve Bank's insistence on a 'through-the-cycle' (TTC) approach to measuring risk has meant that bank capital is relatively more stable over time and does not change materially with the ups and downs of the economic cycle. This TTC approach has been reflected primarily through

Box F

The Reserve Bank's response to the Basel consultations

The Reserve Bank has submitted comments to the Basel Committee, focusing primarily on areas where it considers that its own experience can provide valuable insight to the development of any new prudential requirements.

On the capital reforms, the Reserve Bank indicated that it supported the enhanced focus on common equity and retained earnings as the predominant form of Tier 1 capital. However, the Reserve Bank does not support the introduction of the proposed leverage ratio, since:

- The one-size-fits-all approach results in a poorly targeted methodology and would not be an appropriate measure for small, low-risk banks.
- The leverage ratio would undermine the value of existing risk-based measures.
- Recent experience in the New Zealand finance company sector suggests that the proposed measure could give a misleading picture of risk in some situations.

The submission also provided a number of technical observations on elements of the Basel II framework that can lead to procyclical outcomes.

With respect to the proposed liquidity framework, the Reserve Bank indicated that it supported the two common standards for liquidity risk and noted that they were broadly aligned with the standards recently introduced in New Zealand.

The Reserve Bank provided the following specific comments based on its own experience:

- The proposed definition of liquid assets may be too narrow for many smaller economies, due to insufficient local currency government debt and a lack of other local currency securities meeting the stringent criteria to be deemed highly liquid.
- In such cases, the eligibility of securities in domestic central bank operations needs to be given greater recognition as a contributor to their liquidity.
- More national discretion may therefore be required in the criteria for liquid assets as well as for certain other inputs such as run-off rates, so that they reflect country-specific factors.

The Reserve Bank has published its full responses on its website.[4] Final proposals are not expected from Basel until the end of 2010, with the aim of implementation by the end of 2012.

[4] http://www.rbnz.govt.nz/finstab/banking/

the requirement for the banks to adopt more conservative risk calibrations for housing.[3]

However, the crisis did reveal vulnerabilities in the banks' funding strategies, which relied disproportionately on offshore, short-term wholesale funding. This was highlighted in late 2008 and early 2009 when the banks had difficulty accessing international debt markets. The Reserve Bank's recent prudential liquidity policy, which took effect on 1 April 2010, seeks to address this vulnerability (see 6.3).

The Bank will continue to watch global developments and look to change standards where doing so is appropriate for the New Zealand financial system. In some areas, such as liquidity policy, domestic regulatory reform is occurring at a faster pace than global efforts. The Bank is also mindful that additional layers of regulation, while enhancing financial stability, may adversely impact the efficiency of the financial system and result in unintended consequences, including increased incentives for disintermediation. Future work will examine the nature of these trade-offs in the New Zealand context.

[3] For more details on the Reserve Bank's implementation of the Basel II capital framework see Hoskin K, and S Irvine (2009), "Quality of bank capital in New Zealand", Reserve Bank of New Zealand *Bulletin*, Vol. 72(3), September.

6.2 The interaction between financial regulation and macro-financial stability

The Bank is assessing the macroeconomic impacts of new prudential regulation...

A number of smaller open economies, including New Zealand, are considering whether prudential tools can be used to support macroeconomic stabilisation more directly – for instance, by dampening cycles in credit and asset prices. In this context, the term 'macro-financial stability' is applied to emphasise the interaction between financial stability and the macroeconomy (in particular, macro-imbalances such as excessive balance of payments deficits, asset price bubbles, and excessive leverage on private sector balance sheets).[5]

A key motivation for this more ambitious policy objective has been the difficulty that some small open economies have had in controlling domestic financial conditions in the face of abundant global liquidity or large swings in commodity prices and rapid exchange rate appreciation.

Large inflows of global capital into these economies have often fuelled asset market booms, exacerbating the economic cycle. In turn, monetary policy tightening to counter the stimulatory economic and financial market conditions has often resulted in undesirable pressure on the tradable sectors of the economy, due to excessive exchange rate appreciation as capital inflows respond to a widening in interest rate differentials.

...with some prudential tools potentially useful for broader macro-financial stabilisation.

A number of South East Asian and emerging market economies have employed a range of prudential tools, such as limits on loan-to-value ratios and lending ceilings, to influence credit and asset price cycles. These tools are now being examined more widely, though there are doubts as to whether these could be effective in more liberalised financial systems given the greater scope for evasion and disintermediation. The Reserve Bank is examining the scope for adopting additional capital requirements along the lines of the BCBS's counter-cyclical capital buffer. However, it is too early to say whether, in the New Zealand context, this would have any material influence during the upswing of the cycle by directly dampening credit growth.

New Zealand's core funding ratio could have some macro-stabilisation properties.

The minimum core funding ratio (CFR) requirement in the new prudential liquidity policy, described below, could play a useful macro-stabilisation role. While the CFR is primarily a micro-prudential tool aimed at increasing New Zealand banks' resilience to funding and liquidity shocks of the sort experienced in 2008-2009, it could act to dampen credit growth during an economic boom. By requiring banks to fund a significant portion of loans from 'core' funding sources, it will limit the ability of banks to resort to cheaper short-term offshore funding markets to support rapid credit expansion. The shift to longer-term funding will tend to increase lending rates for any given policy rate. The magnitude of this impact is uncertain and will depend on a number of factors, such as the difference in spreads between short- and long-term wholesale funding and how those funding spreads change through the cycle.

A possible extension of this policy would be to consider periodic adjustments to the CFR. Thus, in a credit-based housing boom, the minimum CFR requirement could be raised, and then reduced to normal again once credit and housing pressures eased. However, the Reserve Bank will need to monitor experience under the current CFR requirement and gain further understanding of its impact on the credit cycle before considering the merits of using it in this fashion. Any new policies, such as time-varying capital requirements or minimum CFR levels, would be subject to a thorough consultation process before being introduced.

[5] See Spencer, G (2010), "The Reserve Bank and macro-financial stability", Reserve Bank of New Zealand *Bulletin*, forthcoming.

[6] The new requirements apply to the subsidiaries of large Australian banks and locally owned banks in New Zealand. The Reserve Bank is continuing to work on the appropriate treatment of other registered banks, including branches of overseas banks.

6.3 Liquidity policy for registered banks

A new liquidity policy is now in place…

The Reserve Bank published its final liquidity policy for registered banks in October 2009. The new quantitative requirements took effect on 1 April 2010, following a transitional period to allow banks to develop the necessary systems to monitor and report against the requirements.[6]

Initially, the Reserve Bank will be monitoring compliance through monthly private reports from the banks. The information gathered through this process will help to inform the Reserve Bank's assessment of the appropriate phasing for future increases in the minimum CFR.

The banks are required to disclose any breaches of the policy, and the nature of that breach, in their General Disclosure Statements. The requirements for wider public disclosure of liquidity measures will be considered after the Reserve Bank's disclosure review (discussed below).

…requiring banks to make ongoing changes to their funding…

The key features of the liquidity policy include the requirement for banks to meet a one-week and one-month mismatch ratio of zero percent, and a CFR of 65 percent.[7] The mismatch ratios are consistent with the liquidity coverage ratio requirement in the BCBS proposals (see 6.1), and require banks to maintain sufficient cash and liquid assets to meet their short-term funding requirements. Likewise, the CFR is broadly consistent with the net stable funding ratio, and requires banks to (initially) fund 65 percent of loans from either retail deposits or long-term wholesale funding (maturities of greater than 1 year). The Reserve Bank expects to increase the minimum CFR requirement to 70 percent and 75 percent over two further stages following an assessment of the initial impact of the new requirements, with full implementation completed by mid-2012. However, it will keep this plan under review in the light of funding market conditions and banks' experience in complying with the initial requirement.

To meet future increases in core funding, banks will have to adjust their funding profiles. The Reserve Bank is conscious that there is a limit to the extent that retail deposits can grow to meet these requirements. As such, banks are likely to need to target additional long-term wholesale funding, either through existing markets, or through new funding opportunities.

…which may prompt the development of new financial products.

One new funding opportunity might be the development of covered bond programmes.[8] The Reserve Bank has had informal discussions with a number of banks regarding the possibility of accessing this type of funding. The covered bond market is well developed in many European countries, with a number of jurisdictions having a legislative framework to support such instruments. While no such framework currently exists in New Zealand, there are no regulatory impediments to banks developing structures independently. The Reserve Bank supports the development of this instrument and is currently working on the development of a specific policy on covered bonds. This will go out for public consultation over the coming months.

6.4 Non-bank deposit taker prudential regime

In September 2008, the Reserve Bank of New Zealand Amendment Act (the Act) conferred responsibilities on the Reserve Bank as the prudential regulator of the non-bank deposit-taking (NBDT) sector. Since then, the Reserve Bank has been working to develop the new regulatory framework for NBDTs. Previous *Reports* have outlined proposed requirements in various areas including capital adequacy, related party lending, credit ratings, governance and risk management. The following sections outline the latest developments in prudential regulation of NBDTs.

[7] For further details see: Hoskin, K, I Nield and J Richardson (2009), "The Reserve Bank's new liquidity policy for banks", Reserve Bank of New Zealand *Bulletin*, Vol 72(4), December.

[8] Covered bonds are debt securities backed by the cash flows of mortgages or other loans. They differ from standard bonds in that investors have specific recourse to the assets that secure ('cover') the bonds in the event of default.

The Reserve Bank has consulted with stakeholders on liquidity requirements for NBDTs.

On 2 February 2010, the Reserve Bank published a consultation paper on policy options for liquidity requirements for the NBDT sector. Currently, only some trust deeds contain liquidity standards, and for those that do, there is limited consistency in approach across the industry. However, the Reserve Bank recognises that the problems experienced in the NBDT sector in recent years were primarily related to asset quality, rather than liquidity mismanagement. Reflecting this, the Bank consulted on a wide spectrum of options, including maintaining the status quo, an industry-wide measurement framework with enhanced trust deed requirements, and prescribed quantitative requirements.

The Reserve Bank expects the policy to be finalised by mid-2010, with any new regulations likely to be implemented during 2011, following an appropriate transition period.

NBDTs are now required to hold a credit rating.

The May 2009 *Report* discussed the introduction of a regulatory requirement for all NBDTs to hold a credit rating obtained from a rating agency approved by the Reserve Bank.[9] This requirement came into force on 1 March 2010. As at the time of writing 29 companies were holding a credit rating consistent with the requirement. A list of current ratings can be found on the Reserve Bank's website.[10]

Credit ratings help investors and depositors to assess risks associated with investing in a particular organisation and to make comparisons of competing investment opportunities. As a result, they can play an important role in increasing investor awareness.[11]

In developing the policy, the Reserve Bank was mindful of the wide variety of firms operating in the sector, both in terms of the nature of the business that they undertake, and the size of the organisation. The Bank has therefore sought to mitigate the burden of regulation by targeting only those parts of the sector for which the benefits associated with the new requirements are likely to exceed the cost of complying. As a result, there are a number of criteria through which an NBDT can apply to be exempt from the requirement. These relate to:

- institutions with a total balance sheet below the minimum threshold of $20 million;
- institutions operating under moratorium;
- institutions operating in receivership or liquidation; and
- other company specific circumstances.[12]

Capital and related party regulations are being finalised.

The proposed capital and related party regulations have been referred to in previous *Reports*. The Reserve Bank has been working to finalise the regulations since the original consultation was undertaken. As part of this work, it published an exposure draft of the regulations in February 2010 to seek views on any issues that might arise from the application of the proposed regulations at a technical level.

The regulations are expected to be promulgated around the middle of the year, and to come into force by the end of 2010. It is proposed that the governance requirements (contained in section 157L of the Act) will be brought into force at the same time as the regulations.

Further legislation will also be required.

Once in force, the developments described above will implement all the new regulations introduced in September 2008. This was the first of two planned legislative changes that will be required to introduce the new regulatory regime for NBDTs in its entirety.

The Reserve Bank is currently undertaking the development work that will support the introduction of

[9] As at May 2010, the following ratings agencies have been approved by the Reserve Bank: Standard and Poor's Ratings Services, Moody's Investor Service and Fitch Ratings.

[10] http://www.rbnz.govt.nz/finstab/nbdt/creditratings/3905820.html

[11] See Widdowson, D and A Wood (2008), "A user's guide to credit ratings", Reserve Bank of New Zealand *Bulletin*, Volume 71, No. 3.

[12] Full details of the reasons for company specific exemptions can be found on the Reserve Bank's website at http://www.rbnz.govt.nz/finstab/nbdt/creditratings/3912781.html

a second Bill to complete the legislative framework. In particular, this will introduce a requirement for all NBDTs to be licensed by the Reserve Bank, together with fit and proper person requirements and change of ownership regulations. It will also include a resolution framework for dealing with NBDT distress and failure.

The majority of these modifications were approved by Cabinet in 2007. However, given the passage of time and the addition of some new powers for the Reserve Bank, Cabinet will be asked to re-confirm the earlier Cabinet approvals and support the additional powers proposed for the Reserve Bank. Further public consultation will also be undertaken primarily in regard to a change of ownership provision in the licensing regime and the options for fit and proper assessment. The second Bill is expected to be introduced to Parliament by the end of 2010.

6.5 Insurance regime

The Reserve Bank will soon regulate and supervise the insurance sector.

The Insurance (Prudential Supervision) Bill (IPSB) was introduced to Parliament in October 2009 and is currently before the Finance and Expenditure Committee. Subject to parliamentary timetables, enactment of the IPSB is anticipated to be late in the third quarter of 2010.

The IPSB will empower the Reserve Bank to be both regulator and supervisor of licensed insurers in New Zealand, including overseas insurers that undertake insurance business in New Zealand. All insurers wishing to conduct insurance business in New Zealand are required to be licensed. To be licensed an insurer must satisfy the Bank in a number of areas, including maintaining solvency as defined by the regulatory standards, and having and complying with a risk management programme that is satisfactory to the Reserve Bank.

Licensed insurers will also have to comply with a number of other requirements, including:

- Obtaining and publishing a financial strength rating.
- Preparing an annual financial condition report and annual and six-monthly financial statements.
- For life insurers, maintaining at least one statutory fund for the purpose of meeting the life insurance liabilities.

Solvency standards are being developed for life and non-life insurers. The standards define the basis on which risk-based capital and solvency requirements are calculated for each insurer, and requirements for regulatory reporting of these positions.

A more detailed description of the framework and the Reserve Bank's role will be provided in a future report, once the IPSB is fully enacted.

6.6 Bank disclosure review

Market discipline is an integral element of the prudential regime…

The prudential regulatory framework in New Zealand has an emphasis on promoting market discipline. This is facilitated by the open and transparent disclosure regime that was first introduced in 1995. Under the existing regime, banks are required to publish quarterly a Key Information Summary providing a high-level overview of the bank's financial condition; a General Disclosure Statement containing detailed financial information on all aspects of the bank's business including its conditions of registration and compliance with prudential requirements; and a Supplemental Disclosure Statement containing details of any guarantees or overseas interests.

…but banks' disclosures need to be reviewed.

While the existing regime has evolved over time to reflect changes in circumstances, the Reserve Bank considers that a more fundamental review is appropriate to reflect a number of factors including developments in accounting standards and the rising compliance burden on banks. In light of these factors the Reserve Bank is reviewing prudential disclosure requirements with a view to better matching the needs of key stakeholders and reducing compliance burdens where possible.

The Reserve Bank has been engaging with banks and other key stakeholders including analysts, consumer groups, journalists, the Retirement Commission and the Banking Ombudsman. It expects to conduct a public consultation by the end of July, with any changes made by the end of the year.

6.7 Other developments in the domestic regulatory landscape

On 28 April 2010 the Government announced the creation of a new regulatory body to oversee financial markets. The new authority (to be called the Financial Markets Authority) will combine the existing Securities Commission with certain functions currently undertaken by MED and the NZX. Its responsibilities are expected to include activities that relate to fund raising and market conduct, oversight of financial service providers and the NZX, and the existing responsibilities of the Government Actuary (which will be disestablished). The Government intends for the new body to be up and running by February 2011.

These changes are not expected to have any implications for the Reserve Bank in carrying out its existing role as the prudential supervisor of registered banks and NBDTs, nor its forthcoming responsibilities as the prudential supervisor of the insurance industry. The Reserve Bank will continue to operate as a full-service central bank with responsibilities for implementing monetary policy, financial system oversight, financial markets activities, clearing and settlement services, banking system liquidity management and oversight, and currency provision.

Graphical appendix[1]

International

Figure A1a

Real GDP growth

(annual percent change)

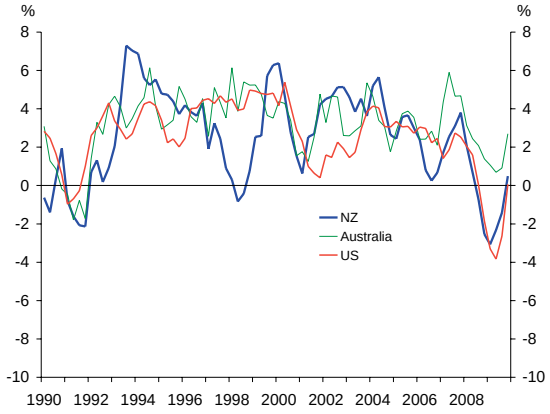


Figure A1b

Real GDP growth

(annual percent change)

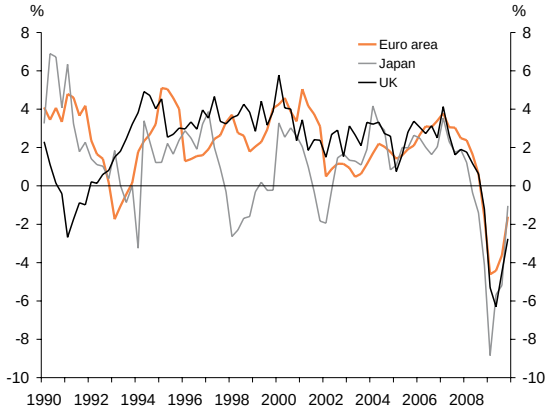


Figure A2a

Current account balance

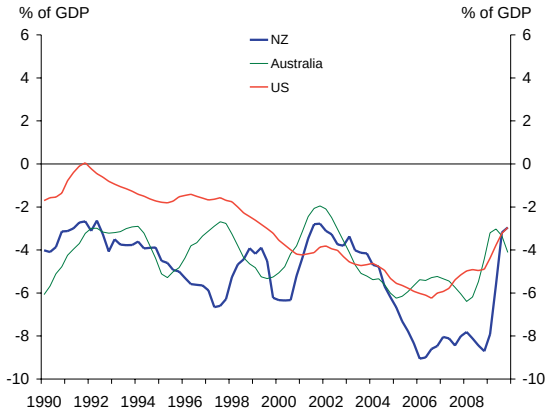


Figure A2b

Current account balance

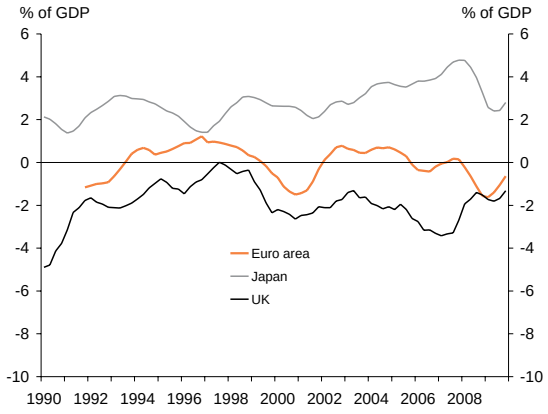


Figure A3

Trade-weighted exchange rate indices

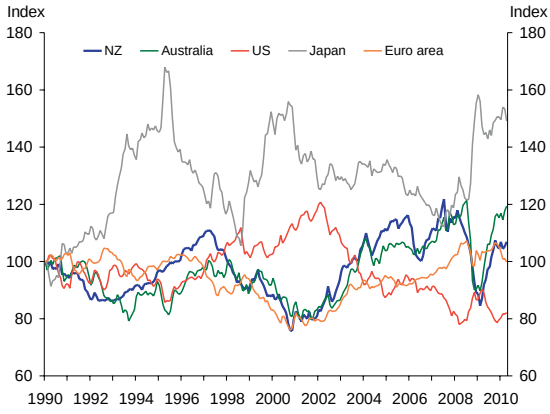
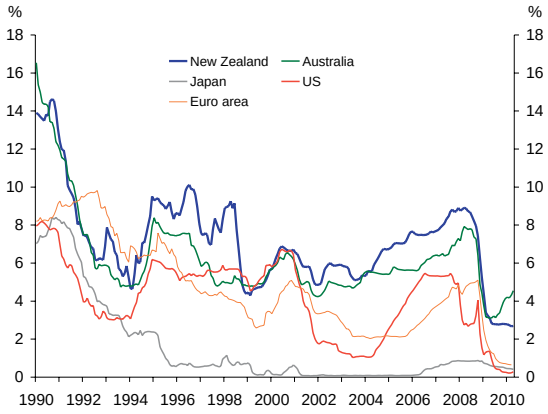


Figure A4

Short-term interest rates



[1] The data contained in this appendix were finalised on 23 April 2010. Definitions and sources are listed on pages 63-64.

Asset prices

Figure A5

Equity market indices

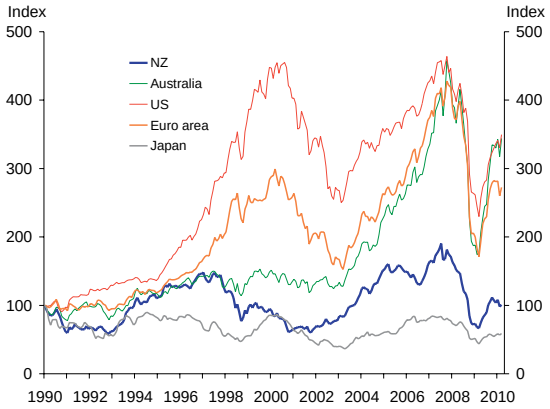
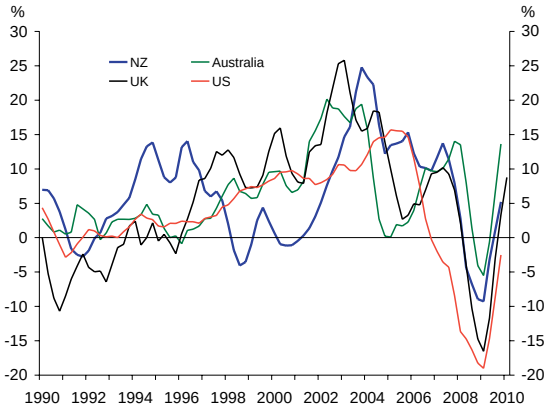


Figure A6

House price inflation

(annual percent change)



New Zealand

Figure A7

Household debt and servicing costs

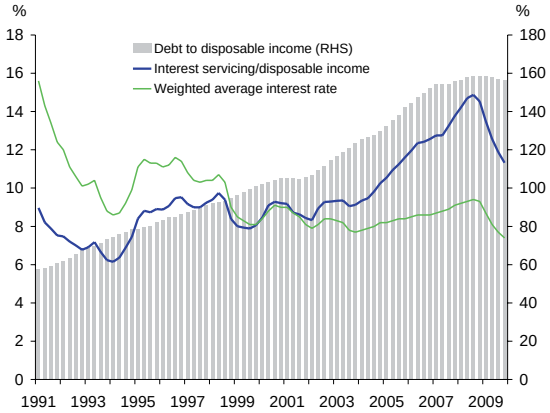


Figure A8

Household assets and liabilities

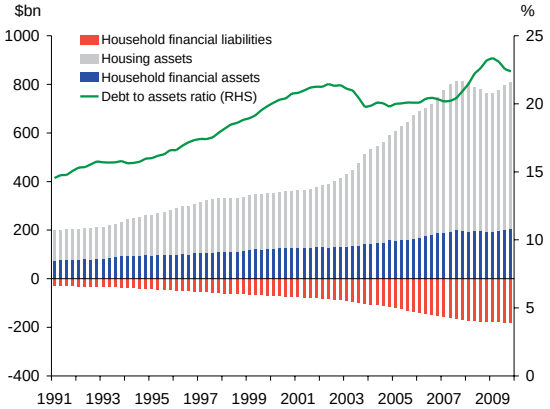


Figure A9

Property price inflation

(annual percent change)

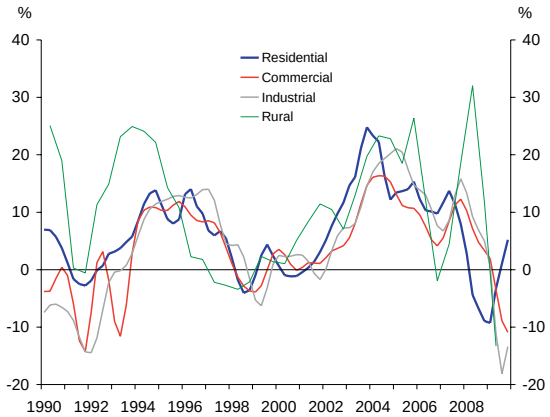


Figure A10

Government debt

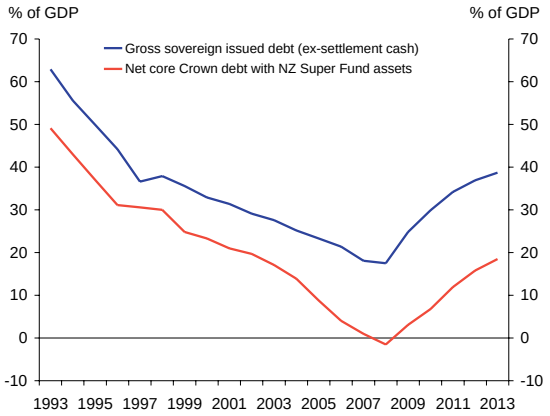


Figure A11

Government bonds on issue and turnover

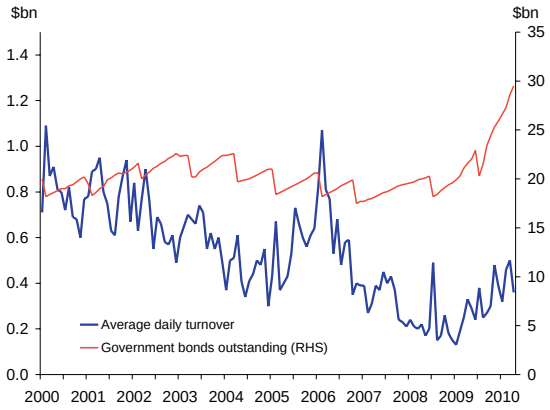


Figure A12

Ten-year government bond spreads

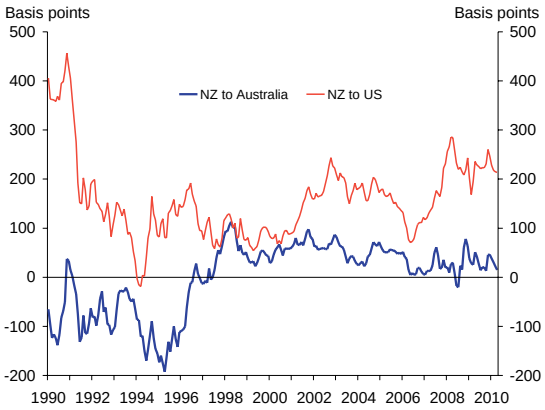


Figure A13

Yields on New Zealand government securities

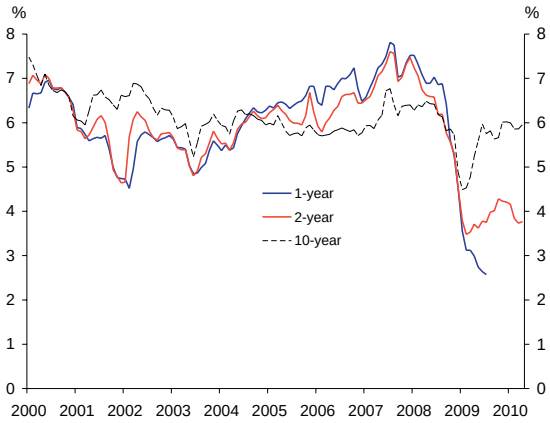


Figure A14

Non-resident holdings of New Zealand government securities

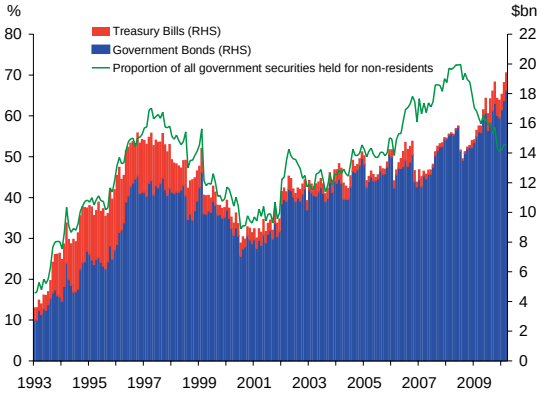


Figure A15

NZD/USD turnover in domestic markets

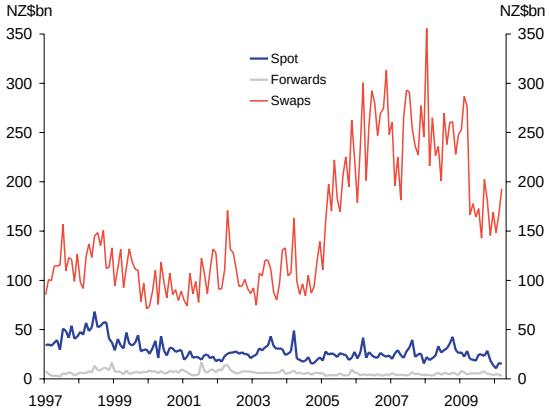


Figure A16

NZD/USD and implied volatility

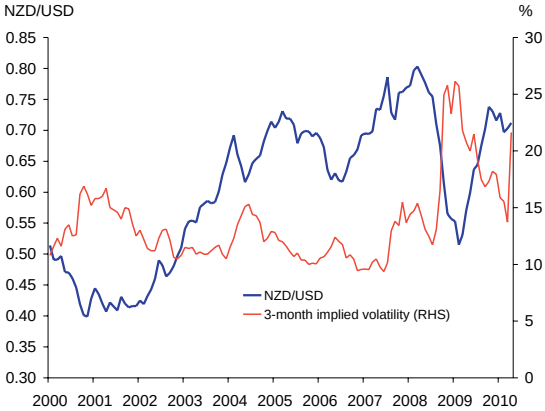


Figure A17

OCR, estimated business lending rate and effective mortgage rate

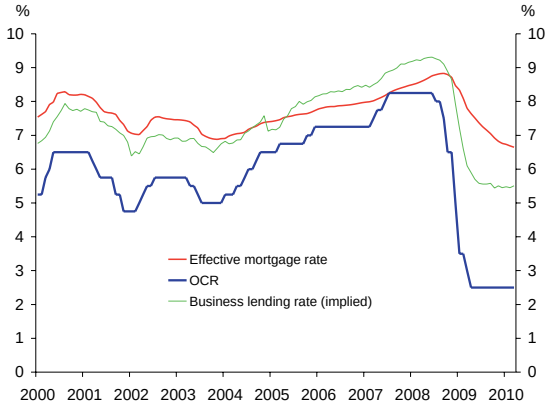


Figure A18

Equity market capitalisation

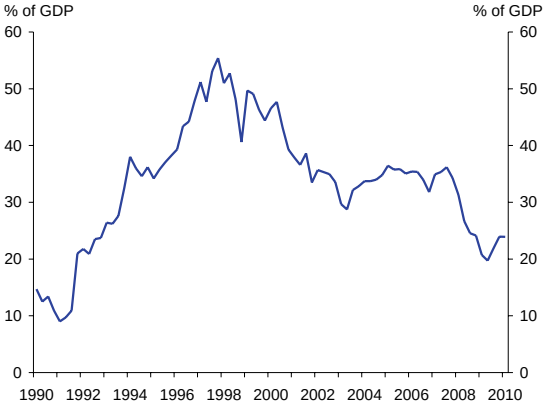
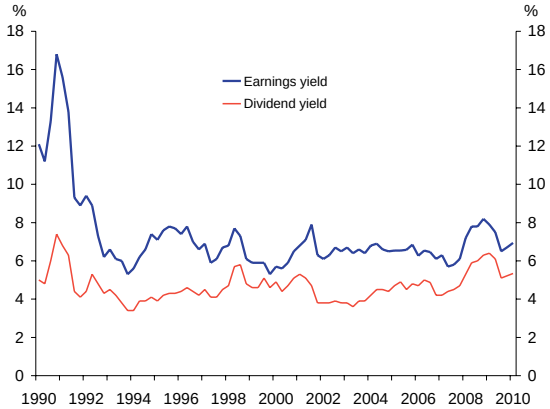


Figure A19

Earnings and dividend yields



Banking sector indicators

Figure A20

System-wide capital adequacy ratios

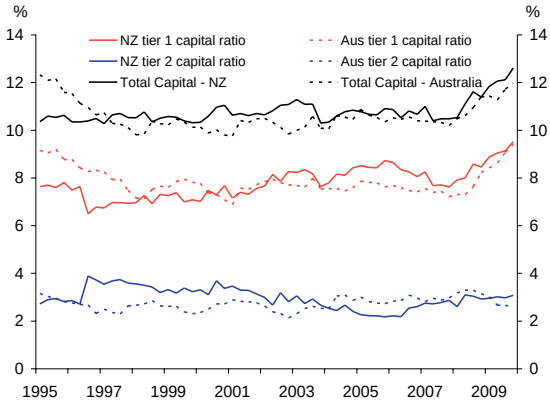


Figure A21

Asset quality

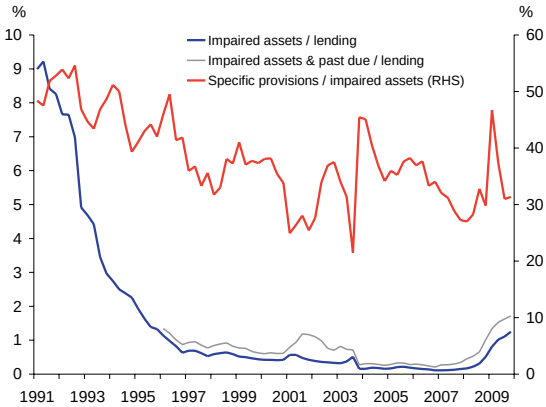


Figure A22

Return on assets

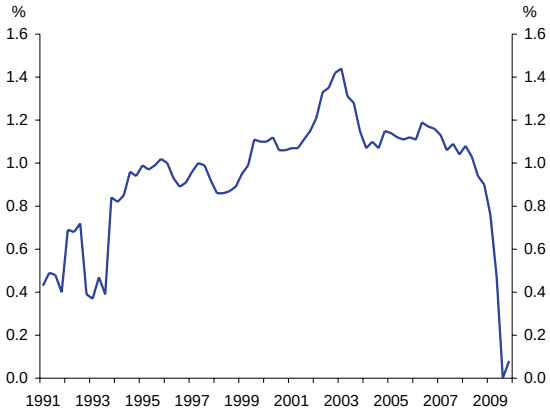


Figure A23

Operating costs to income

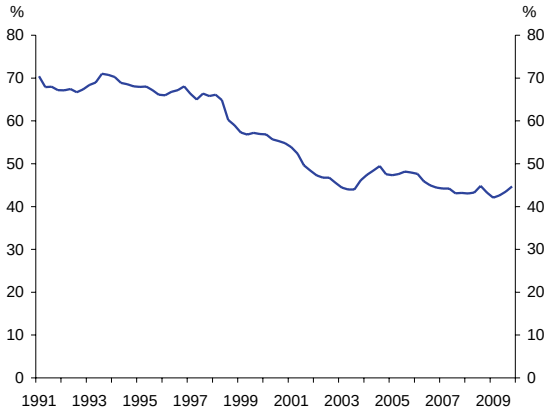


Figure A24

Interest margin

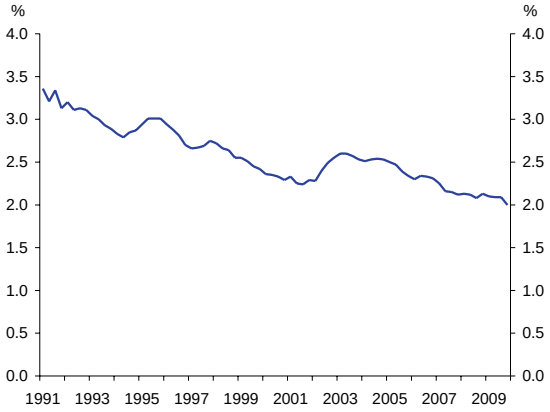


Figure A25

Registered bank offshore funding

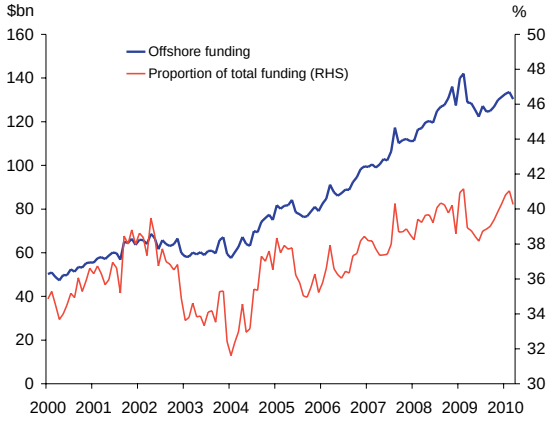


Figure A26

Bank asset composition

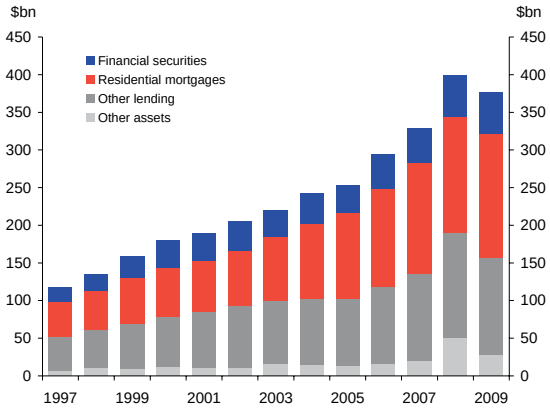


Figure A27

Bank funding composition

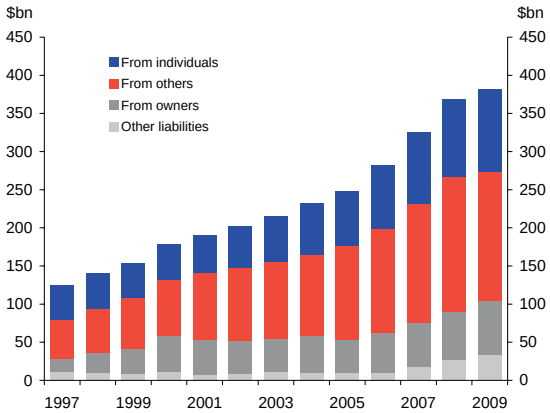


Figure A28

Bank asset growth

(annual percent change)

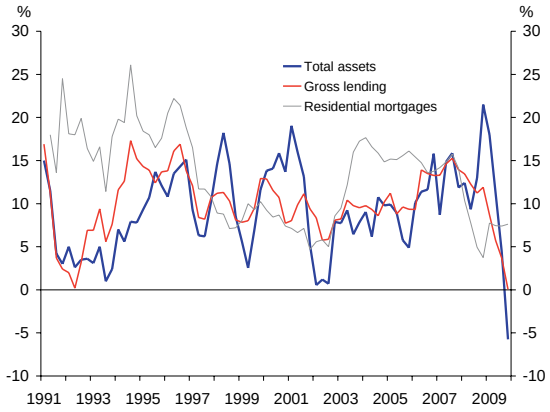
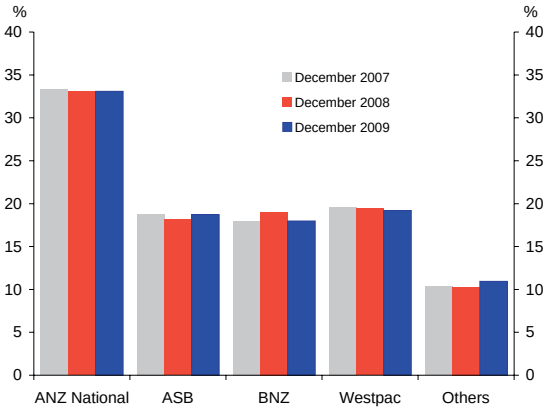


Figure A29

Bank market share



New Zealand financial system assets and liabilities

Table A1

Financial system liabilities

As at 31 December $bn	1990	1995	2000	2005	2006	2007	2008	2009
Banks								
Households	24	32	41	61	70	79	90	93
Other residents	29	35	55	90	86	96	111	101
Non-residents	11	22	56	79	100	111	128	132
Other liabilities	14	14	28	24	35	43	71	51
Total	78	103	180	254	294	329	400	377
Other non-bank lending institutions								
Households	2	3	5	12	12	12	9	9
Other residents	3	2	3	7	7	8	7	8
Other funding and liabilities	1	1	2	8	11	12	11	8
Total	6	6	10	26	30	31	27	24
Funds under management								
Household assets	26	42	56	57	65	65	56	63
Other sector assets	1	1	5	6	7	7	8	6
Total	27	43	61	64	71	73	63	69
Total financial system liabilities	111	152	251	344	395	433	490	470

Table A2

Financial system assets

As at 31 December $bn	1990	1995	2000	2005	2006	2007	2008	2009
Banks								
Households	20	42	66	119	135	153	163	170
Other residents	36	45	72	101	113	127	147	135
General government	8	6	7	6	3	4	5	14
Non-residents	2	2	17	12	14	15	16	16
Other assets	12	8	18	15	29	30	68	42
Total	78	103	180	254	294	329	400	377
Other non-bank lending institutions								
Households	2	3	5	12	14	15	12	10
Other residents	3	2	4	12	13	14	13	11
Other assets	1	1	1	2	3	3	3	3
Total	6	6	10	26	30	31	27	24
Funds under management								
Domestic fixed interest	na	na	28	26	28	29	29	28
Domestic equities	na	na	7	8	9	9	6	7
Domestic other	na	na	4	4	4	4	4	3
Overseas investments	na	na	22	26	30	31	24	30
Total	27	43	61	64	71	73	63	69
Total financial system assets	111	152	251	344	395	433	490	470

Source: RBNZ surveys and registered banks' GDS.
Note: General insurance assets and liabilities are not included. Totals and sub-totals may not add due to rounding.

Table A3

New Zealand registered banks

Registered bank's name	Market share[1]	Credit ratings[2]			Ultimate parent[3]	Country of parent
		S&P	Moody's	Fitch		
Australia and New Zealand Banking Group Limited (B)	2.5	AA	Aa1	AA-	Australia and New Zealand Banking Group Limited	Australia
ANZ National Bank Limited	30.6	AA	Aa2	AA-	Australia and New Zealand Banking Group Limited	Australia
Commonwealth Bank of Australia (B)	1.5	AA	Aa1	AA	Commonwealth Bank of Australia	Australia
ASB Bank Limited	17.2	AA	Aa2	-	Commonwealth Bank of Australia	Australia
Bank of New Zealand	18.0	AA	Aa2	-	National Australia Bank	Australia
Bank of Baroda (New Zealand) Limited	0.0	-	-	BBB-	Bank of Baroda	India
Citibank N A (B)	0.9	A+	A1	A+	Citigroup Inc.	USA
Deutsche Bank Aktiengesellschaft (B)	0.8	A+	Aa3	AA-	Deutsche Bank Aktiengesellschaft	Germany
JPMorgan Chase Bank, N.A. (B)	0.0	AA-	Aa1	AA-	JPMorgan Chase & Co	USA
Kiwibank Limited	3.2	AA-	-	-	New Zealand Post Limited	New Zealand
Kookmin Bank (B)	0.1	A	A1	-	Kookmin Bank	South Korea
Rabobank Nederland (B)	0.6	AAA	Aaa	AA+	Rabobank Nederland	Netherlands
Rabobank New Zealand Limited	1.8	AAA	-	-	Rabobank Nederland	Netherlands
Southland Building Society	0.7	-	-	BBB	Southland Building Society	New Zealand
The Bank of Tokyo- Mitsubishi Ltd (B)	0.4	A+	Aa2	A	Mitsubishi UFJ Financial Group Inc.	Japan
The Hongkong and Shanghai Banking Corporation Limited (B)	1.3	AA	Aa1	AA	HSBC Holdings PLC	UK
TSB Bank Limited	1.1	BBB+	-	-	TSB Community Trust	New Zealand
Westpac Banking Corporation (B)	4.5	AA	Aa1	AA	Westpac Banking Corporation	Australia
Westpac New Zealand Limited	14.7	AA	Aa2	AA	Westpac Banking Corporation	Australia

1 Registered banks' assets as a proportion of the total assets of the banking system, as at 31 December 2009.
2 Current credit rating at data cut off.
3 Banks marked (B) operate in New Zealand as branches of overseas incorporated banks. All other banks are incorporated in New Zealand.

Table A4

Selected non-bank lending institutions' (NBLI) assets and liabilities

	Non-deposit-taking finance companies			Deposit-taking finance companies			Savings institutions			Total NBLIs		
	$m Dec-08	$m Dec-09	Growth[1] % pa	$m Dec-08	$m Dec-09	Growth[1] % pa	$m Dec-08	$m Dec-09	Growth[1] % pa	$m Dec-08	$m Dec-09	Growth[1] % pa
NZD Funding												
NZ resident households	-	0	n.a.	5,908	5,411	-8%	2,653	2,719	2%	8,561	8,130	-5%
Other funding[2]	3,463	2,540	-27%	3,078	2,725	-11%	235	190	-19%	6,775	5,455	-19%
Non-residents	5,852	5,270	-10%	281	272	-3%	72	71	-2%	6,205	5,612	-10%
Total NZD funding	9,315	7,810	-16%	9,267	8,408	-9%	2,960	2,980	1%	21,542	19,198	-11%
Foreign currency funding	359	524	46%	270	221	-18%	-	-	..	630	746	18%
Other liabilities	286	317	11%	251	262	4%	50	39	-22%	587	618	5%
Capital and reserves	961	868	-10%	1,061	801	-24%	341	349	3%	2,363	2,018	-15%
Total liabilities	10,922	9,520	-13%	10,849	9,692	-11%	3,351	3,368	1%	25,122	22,580	-10%
NZD lending to residents												
Farm lending	128	117	-8%	969	1,084	12%	104	89	-15%	1,200	1,290	7%
Business lending	2,501	2,489	0%	4,984	4,224	-15%	491	440	-10%	7,976	7,154	-10%
Housing lending	3,134	2,144	-32%	1,073	872	-19%	1,650	1,785	8%	5,858	4,801	-18%
Consumer lending	3,110	2,669	-14%	1,615	1,515	-6%	393	388	-1%	5,118	4,573	-11%
Total NZD loans by sector	8,873	7,420	-16%	8,640	7,695	-11%	2,638	2,702	2%	20,152	17,817	-12%
Foreign currency loans	10	24	133%	543	550	1%	-	-	..	553	573	4%
All other loans and assets[3]	2,038	2,077	2%	1,666	1,447	-13%	713	666	-6%	4,416	4,189	-5%
Total assets	10,922	9,520	-13%	10,849	9,692	-11%	3,351	3,368	1%	25,122	22,580	-10%
Memo item: Lending to non-residents	-	41	n.a.	849	743	-12%	4	12	188%	853	795	-7%

Source: RBNZ – NBLI SSR. Includes NBLIs with total assets (including securitised lending) exceeding $100m at relevant dates. Totals may not add due to rounding.

Notes:

1. Percentage growth calculations are affected by entry and exit of respondents to the NBLI survey.

2. Counterpart funding to securitised loans is included here.

3. Includes, inter alia, claims on banks and NZD non-resident lending.

Savings institutions include building societies & credit unions with assets exceeding $100m at relevant dates, and PSIS Limited.

Asset values for firms in receivership may not be updated to fully reflect market conditions (eg, recovery estimates will largely not be reflected in recorded value).

In this sense, given events over the past two years, the survey is currently likely to understate the rate at which the non-bank deposit-taking finance company sector is shrinking.

Notes to the graphical appendix

The appendix contains a suite of charts that appear regularly in the *Financial Stability Report*. The charts provide an overview of developments in a set of key economic and financial indicators. Definitions and sources (in italics) are noted below. The data for the charts in this *Report*, including those in the graphical appendix, are available on the Reserve Bank website.

1	Real GDP growth	Annual percentage change in real GDP. *Datastream*.
2	Current account balance	Current account balance as a percentage of GDP, four-quarter total. *Datastream*.
3	Trade-weighted exchange rate indices	Trade-weighted indices, January 1990 = 100. *Bank of England*.
4	Short-term interest rates	Yields on 90-day bank bills. *Reuters*.
5	Equity market indices	Morgan Stanley Capital Indices, January 1990 = 100. *Datastream*.
6	House price inflation	Annual percentage change in national house price indices. *Datastream*, *Quotable Value Ltd.*
7	Household debt and servicing costs	Household debt excludes student loans. Household disposable income is gross before deduction of interest paid and consumption of fixed capital, and is interpolated from March-year data from *Statistics New Zealand*, with *RBNZ* forecasts. The weighted average interest rate is obtained from *SSR* data for residential mortgages and RBNZ calculations for consumer interest rates.
8	Household assets and liabilities	Housing assets are the aggregate private sector residential dwelling value. Data is from *Quotable Value Ltd* from 1995, with *RBNZ* estimates based on the House Price Index for prior years. Household financial assets are as published annually by *RBNZ*, with aggregate quarterly figures interpolated prior to 1995, based on component estimates from then. Household liabilities are from *RBNZ* series as for figure A7.
9	Property price inflation	Annual percentage change in property price indices. Commercial and industrial property prices are interpolated from semi-annual figures. *Quotable Value Ltd.*
10	Government debt	Net core Crown Debt is debt attributable to core Crown activities and excludes Crown entities and state-owned enterprises. Forecasts are from 2010 onwards and are taken from the Half-year Economic and Fiscal Update. *The Treasury*.
11	Government bonds on issue and turnover	Total government securities on issue and New Zealand government bond turnover survey. *RBNZ.*
12	Ten-year government bond spreads	Yield on 10-year benchmark New Zealand government bonds, less yield on US and Australian equivalents. *RBNZ*.
13	Yields on New Zealand government securities	One-year series discontinued July 2009. *Reuters*, *RBNZ*.
14	Non-resident holdings of New Zealand government securities	*RBNZ*.
15	NZD/USD turnover in domestic markets	Monthly totals. *RBNZ survey.*
16	NZD/USD and implied volatility	Standard deviation used to price three-month NZD/USD options. *Bloomberg*.

17	OCR, estimated business lending rate, and effective mortgage rate	The effective residential mortgage interest rate is item E5.10 from the registered bank aggregate SSR. The estimated business lending rate is determined residually using information from the SSR for total registered bank NZD lending rates, effective residential mortgage rates, and estimates of consumer and interbank rates. It does not include the effects of hedging activity such as interest rate swaps. *RBNZ.*
18	Equity market capitalisation	Total market capitalisation of the 50 largest companies listed on New Zealand Stock Exchange, as a percentage of annual nominal GDP. Latest GDP value is estimated. *Datastream*.
19	Earnings and dividend yields	Earnings and dividend yield figures are those of companies covered by First New Zealand Capital and Credit Suisse and includes almost all of the firms in the NZX50 index. The figures are expressed as a percentage of the total market capitalisation of these companies. *First New Zealand Capital*.
20	System-wide capital adequacy ratios	Capital as a percentage of risk-weighted assets for all locally incorporated banks. *Registered banks' general disclosure statements* (*GDS), Reserve Bank of Australia.*
21	Asset quality	Impaired assets plus past due as a percentage of total lending; specific provisions as a percentage of impaired assets; for all registered banks. *GDS.*
22	Return on assets	Net profits after tax and extraordinary items, as a percentage of average total assets, four-quarter average, for all registered banks. *GDS*.
23	Operating costs to income	Operating expenses as a percentage of total income, four-quarter average, for all registered banks. *GDS*.
24	Interest margin	Net interest income as a percentage of average interest-earning assets, four-quarter average, for all registered banks. *GDS*.
25	Registered bank offshore funding	*RBNZ*.
26	Bank asset composition	As at 31 December. *GDS*.
27	Bank funding composition	As at 30 September or 31 December. *GDS*.
28	Bank asset growth	Year-on-year change in total assets of all registered banks. Gross lending before provisions. *GDS*.
29	Bank market share	Bank assets as a percentage of total assets of registered banks. *GDS*.