Financial Stability Report

November 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 22 October 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

New Zealand's economy and financial system have benefited from the recovery in the global economy over the past year. The extreme conditions in financial markets during the crisis have abated and stronger activity in New Zealand's key trading partners has supported a modest rebound in economic activity. New Zealand's banks have strengthened their funding base over this period, leaving them better placed to meet future credit demand and support economic growth. Bank asset quality also remains strong despite an increase in non-performing loans following the recession.

However, New Zealand's economic recovery has been tepid to date, with more recent indicators suggesting the pace of recovery has slowed. Households and businesses have restrained spending in an effort to reduce debt levels, lowering the current account deficit. Strong export commodity prices have also helped to reduce the current account deficit, but a sustained rebalancing of economic activity toward the tradables sector will be difficult to achieve with the New Zealand dollar remaining at relatively high levels.

Despite strong commodity prices, prospects for export-led growth in New Zealand and adjustment of the country's external position may also be hampered by a fairly soft global growth outlook. With economic growth recently losing momentum in some advanced economies, interest rates have fallen and additional quantitative easing measures have been announced in the US aimed at bolstering the recovery.

Some countries are facing exchange rates that are not helping in the reduction of their external imbalances. Many developed economies are continuing to adjust to excess leverage on household, business and financial sector balance sheets built up prior to the financial crisis. Growth in these countries is likely to remain sluggish for a significant period of time while efforts are made to restore balance sheets to healthier settings.

Financial markets have continued to question the sustainability of the fiscal positions of some economies, particularly within Europe. In response, many developed countries are now removing fiscal stimulus at a time of continued economic weakness to return fiscal positions to more sustainable levels. The withdrawal of fiscal stimulus is further dampening the pace of recovery in these economies.

In contrast, Australia and emerging Asia have continued to grow strongly despite the weak recovery of the major developed economies. Concerns in some of these economies have turned to trying to tame overheated domestic asset prices. In particular, Chinese property prices have shown spectacular growth over the past year, largely driven by growth in domestic lending. A slowdown in China could materially affect New Zealand, particularly if New Zealand's export prices fall. Over the medium term, emerging Asia faces challenges sustaining an export-led growth strategy. In this regard, policymakers in the region are likely to face external pressure for greater exchange rate adjustment and increased efforts to boost domestic demand.

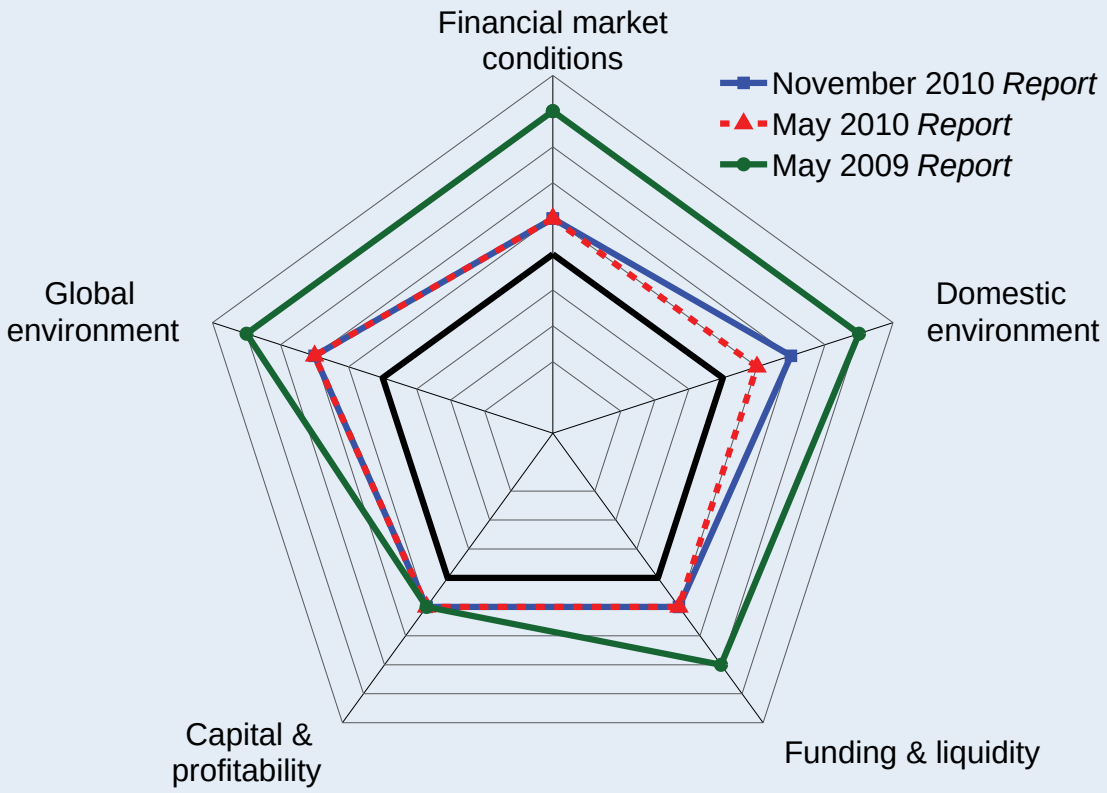
The New Zealand banking system withstood the financial crisis well but the heavy reliance on short-term wholesale funding from international markets was exposed as a key vulnerability, both for the banking system and the economy more generally. Since the crisis, however, and consistent with the prudential liquidity policy introduced in April this year, banks have substantially increased the proportion of retail and long-term wholesale funding on their balance sheets. Locally incorporated banks now comfortably meet regulatory requirements for core funding. International term funding markets have generally remained accessible to New

Zealand banks. However, conditions have been difficult at times, particularly earlier in the year when concerns over the sovereign debt positions of peripheral European economies led to a broader disruption of debt markets. Notwithstanding these sovereign debt concerns, funding market conditions have generally improved, allowing the Reserve Bank to discontinue the offering of term funds through its regular Tuesday open market operation, the last remaining emergency liquidity facility introduced during the financial crisis.

After increasing steadily from the middle of 2007, non-performing loans in the banking system now appear to be approaching a plateau. Bank profitability is also improving. However, a further weakening in the recovery has the potential to generate further loan losses in the banking system. House sales have stalled for the past six months, and there are signs of prices falling again. Were this to be accompanied by renewed weakness in the labour market, some mortgage borrowers would find themselves in a position of financial stress. Furthermore, the banking sector remains heavily exposed to developments in the agricultural sector. Strong increases in commodity prices over the past year have boosted the cash flow position of many farms. Nevertheless, agricultural land values have been falling and farm sales volumes are very low. Any material drop in commodity prices could expose relatively indebted farms in the sector to significant stress.

Figure 1.1

Financial stability cobweb



Source: RBNZ.

Note: The black band represents a 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.

In contrast to the general resilience of the banking sector, sections of the non-bank deposit-taking (NBDT) sector have experienced continued difficulties over the past six months. Three finance companies have failed since our May *Report*, the most notable being South Canterbury Finance, which went into receivership on 31 August owing $1.6 billion to depositors. These finance companies were covered by the retail deposit guarantee scheme, which has limited the wider fallout of the failures. The original term of the scheme expired on 12 October. Seven NBDTs have registered for the more stringent extension to the scheme, which will run until the end of next year.

The NBDTs that failed over the past two years were generally those with heavy exposure to the property development sector, a sector that saw high rates of losses in the economic downturn. The firms that remain in the industry have reduced their exposures to property development, thus providing a foundation for recovery and industry consolidation.

Another driver of industry consolidation will be the new regulatory requirements for NBDTs, most of which will be in place by year-end, although the full licensing framework is still under development. A further regulatory development has been the passing into law of the Insurance (Prudential Supervision) Act. This gives the Reserve Bank responsibility for prudentially regulating and supervising licensed insurers.

Meanwhile, further progress has been made in international forums to improve the broader regulation of the international financial system. The Basel Committee on Banking Supervision has announced a range of measures to strengthen existing bank capital and liquidity requirements. The new framework, known as 'Basel III', is likely to be adopted by the G20 leaders at their upcoming meeting in South Korea. The Reserve Bank generally supports the new prudential standards but intends to assess fully their potential impact on the financial system before initiating any changes to the New Zealand supervisory framework.

The financial stability 'cobweb' provides a visual summary of the outlook for the New Zealand financial system, and reflects broadly unchanged financial stability risks since the May *Report* (figure 1.1).

While financial markets have recovered somewhat from the sovereign debt crisis in April-May, the global economy has struggled to recover from the recession. Chapter 2 discusses the risks that deleveraging and constrained fiscal conditions pose to the global economy.

A slowing in the momentum of the domestic recovery, along with weakness in the housing market, is reflected in an outward shift in the 'domestic environment' dimension of the cobweb. This deterioration in the outlook has been tempered to some extent by moves on the part of households and businesses to reduce debt levels, reducing New Zealand's current account deficit (chapter 3).

Chapter 4 discusses the capacity of the capital and funding buffers of New Zealand's banking system to absorb the risks identified in the top three dimensions of the cobweb. Non-performing loans and profitability have stabilised over recent months, as reflected by an unchanged rating for 'capital and profitability'. There have been ongoing improvements in the funding position of the New Zealand banking system, as indicated by material improvements in the core funding ratio. Nevertheless, funding markets remain somewhat fragile, as indicated by the 'funding and liquidity' dimension still sitting slightly above normal.

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 produce a *Financial Stability Report* twice a year. 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* discuss the financial system's progress in recovering from the effects of the global financial crisis and domestic recession. The Bank continues to closely monitor lending conditions in New Zealand to ensure credit continues to flow to creditworthy borrowers.

The Reserve Bank implemented the prudential liquidity policy to reduce the funding vulnerability of the banking system. All banks have retained comfortable buffers over these requirements since they were introduced on 1 April (chapter 4).

Payment and settlement systems have continued to function satisfactorily. To promote financial system efficiency, the Reserve Bank has agreed a Memorandum of Understanding with NZX to maintain separate securities settlement systems but to allow full interoperability so that securities can freely move between the two depositories (chapter 5).

The Reserve Bank continues to monitor international efforts to strengthen financial sector regulation. The Basel Committee on Banking Supervision has announced a range of new measures to strengthen bank capital and liquidity requirements. The Reserve Bank is supportive of some of these changes, and will look to adopt them where they would contribute to the soundness and efficiency of the New Zealand financial system (chapter 6).

Meanwhile, work is continuing on the implementation of a regulatory regime for non-bank deposit takers. Liquidity regulations, capital ratio requirements, governance requirements and limits on related party exposures are all due to come into force on 1 December. These new requirements will also help to promote financial system soundness and efficiency by helping to ensure more resilient institutions and sounder lending practices. In addition, the Insurance (Prudential Supervision) Act passed into law in April, giving the Reserve Bank power to prudentially regulate and supervise licensed insurers (chapter 6).

2 The international environment and financial markets

Aided in large part by unprecedented monetary and fiscal stimulus, the global economy has continued to recover over the past year. However, the recovery is losing momentum in many developed economies as private sector deleveraging continues and fiscal stimulus is withdrawn. Financial markets have reflected that loss of momentum, as well as continuing to question the sustainability of the fiscal positions of some economies, particularly on the periphery of Europe.

In contrast, recovery is stronger in the economies of emerging Asia and Australia, and concern in these economies is increasingly focused on overheating in domestic asset markets, with policymakers in a number of countries taking steps to dampen property markets. In particular, Chinese property markets have shown spectacular growth over the past year, creating concern that a substantial correction is possible. Recent policy actions appear to have had some success in restraining growth.

New Zealand banks have continued to obtain funding on favourable terms in global markets despite volatile sovereign debt markets. Local financial markets also appear to be functioning well, although spreads remain elevated relative to pre-crisis levels and further disruption due to global financial market volatility remains a risk.

The global economic recovery is uneven and soft...

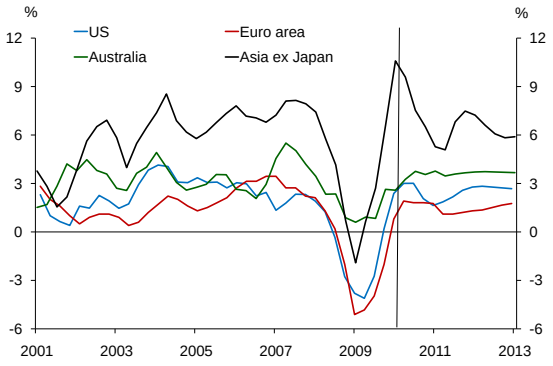
Global economic activity is recovering, supported by unprecedented fiscal and monetary stimulus and emergency measures to stabilise financial systems. However, the recovery remains uneven with economic growth relatively stronger in Asia and other emerging economies than in advanced economies, which are struggling to overcome the financial excesses that preceded the recent crisis (figure 2.1). Despite the improvement in economic activity over the past six months, near-term economic indicators suggest that the pace of growth is moderating in the US and in Europe, raising concerns about the sustainability of the recovery. With the effects of previous fiscal stimulus in these economies now waning, high unemployment, weak balance sheets, tight credit conditions, and subdued asset markets are dampening the recovery in private sector demand.

...as is often the case following a financial crisis.

In the US, concerns of a 'double dip' in activity have seen the Federal Reserve engage in another round of quantitative easing to support the economy. The weak rebound in private demand in advanced economies thus far is consistent with historical experience of recovery after a financial crisis. It is typical for consumption and investment to remain subdued for an extended period as households and businesses attempt to reduce debt in the face of lower wealth and lenders apply generally tighter lending standards while replenishing their capital buffers.[1]

[1] For more on creditless recoveries, see Reinhart, C and K Rogoff, (2009) "The Aftermath of Financial Crises", NBER *Working Paper*, No. 14656.

Figure 2.1
RBNZ forecasts for trading partner real GDP growth
(annual percent change)



Source: RBNZ.

Private demand needs to grow, particularly in emerging markets.

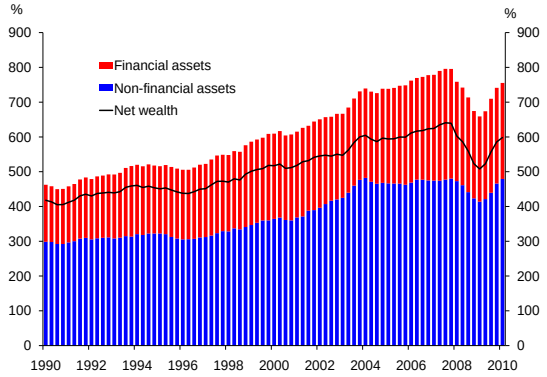
The world economy faces significant challenges if it is to achieve a sustainable and healthy recovery over the medium term. In its latest *World Economic Outlook*, the IMF notes that a healthy recovery rests on two delicate rebalancing acts: a rebalancing between public and private sector spending (internal rebalancing), and a rebalancing in demand across countries (external rebalancing). In terms of internal rebalancing, medium-term fiscal consolidation remains an urgent priority for many advanced countries to reduce public debt-to-GDP ratios to sustainable levels. The timing of fiscal consolidation represents a delicate trade-off in the current environment as a premature withdrawal of public support could undermine the fragile recovery. However, delaying consolidation would compound the fiscal contraction that would eventually be required, and add to future fiscal pressures arising from ageing populations.

In regards to external rebalancing, demand for imports from advanced economies is likely to grow at lower rates than pre-crisis. Countries running current account surpluses, including many emerging economies, may therefore need to rely more on domestic sources of demand if they are to maintain pre-crisis growth rates. Economies in emerging Asia currently have a relatively positive outlook reflecting stronger fundamentals and low levels of public and private debt. Economic activity in the region is already above pre-crisis levels and the drivers of growth have moved beyond the immediate re-stocking of inventories towards consumption and investment. Strong activity in China is underpinning growth in the region (including Australia and New Zealand) through its demand for exports and the flow-through to buoyant commodity prices.

The Australian economy and banking system remain strong.

In Australia, significant fiscal stimulus bolstered the economic recovery. While public support measures are now ending, the growth outlook remains robust. Historically high terms of trade and expected strong demand from Asia for energy and mineral resources are driving further capital investment in the mining sector. With unemployment trending lower, household incomes are improving and balance sheets generally remain sound, supported by the steady improvement in house prices over the past 18 months (figure 2.2).

Figure 2.2
Australian household assets and net wealth
(percent of household disposable income)

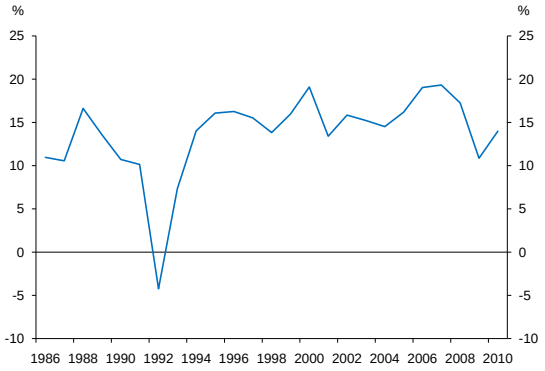


Source: Reserve Bank of Australia.

The banking system in Australia remains strong with the latest half-yearly results showing profitability among the major banks returning to pre-crisis levels. Banks have been able to lift interest income to offset higher funding costs and, consistent with the general improvement in the economy, loan losses have begun to decline. Banks' rates of return on equity have risen from 11 percent in the 2009 financial year to 14 percent in 2010 – approaching the average levels achieved since the mid-1990s (figure 2.3).

Figure 2.3

Major Australian banks' return on equity



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

Furthermore – and similar to developments in New Zealand – the funding position of the Australian banking system has continued to improve with greater reliance on long-term wholesale funding and retail deposits,[2] and with increased holdings of liquid assets.

There is a risk the global recovery will falter...

The influence of global economic developments on the New Zealand economy will be closely linked to growth in Australia and emerging Asia, and the impact on commodity prices. Nevertheless, a material weakening in growth in advanced economies could have a significant indirect impact on New Zealand by affecting general economic and financial market confidence. Fiscal and monetary authorities in advanced economies now have less headroom, if any, to cushion a further weakening in growth or to backstop their financial systems. While additional quantitative easing measures are being used to help stimulate economic growth, their effectiveness remains uncertain.

The immediate outlook for emerging Asia and Australia is more positive. However, policymakers in the region have become increasingly concerned about overheating in some sectors of their economies, particularly real estate markets. These pressures are being exacerbated by the continued strong inflow of capital into the region, which in itself reflects the relatively successful economic recovery in comparison to other advanced economies. On some measures, property prices in the region, including Australia, appear stretched, carrying the risk of a sharp correction and a slowdown in economic growth. Policymakers have responded to these risks in a variety of ways, including interest rate rises, unwinding temporary support measures that were introduced during the crisis, and deploying a range of macro-prudential policy measures to dampen property markets directly. In China, policymakers appear to have had some initial success in cooling the property market. In Australia, property prices have stabilised recently, coinciding with the end of subsidies for first-time home buyers. However, a sharp slowdown in Asia, particularly in China, would have significant repercussions given that it is currently the main engine of global growth.

...and ongoing imbalances may continue to create tension.

Over the medium term, emerging Asia faces challenges sustaining an export-led growth strategy in the face of weak external demand. In this regard, currencies in the region are likely to face upward pressure given the weak domestic recovery in advanced economies. Japanese policymakers have recently intervened in foreign exchange markets to stem the sharp appreciation in the yen and have outlined new measures for comprehensive monetary easing to support economic recovery. The US Federal Reserve's intent to maintain very loose monetary policy could result in unwanted appreciation in other free-floating currencies and prompt a range of compensating strategies from countries to safeguard their own economic recovery. Some of these strategies may create distortions and, if actions in this area escalate, could weaken the overall outlook for global trade.

Sovereign balance sheet concerns have contributed to market volatility.

Since the May *Report*, concerns over the sustainability of the global economic recovery and slow progress in tackling the legacy problems from the financial crisis have created ongoing nervousness and volatility in financial markets.

In particular, some countries in the euro area face mutually reinforcing pressures on their real economy, sovereign balance sheet and financial system. Concerns over sovereign balance sheets and funding risks intensified during the middle of the year and quickly spread across

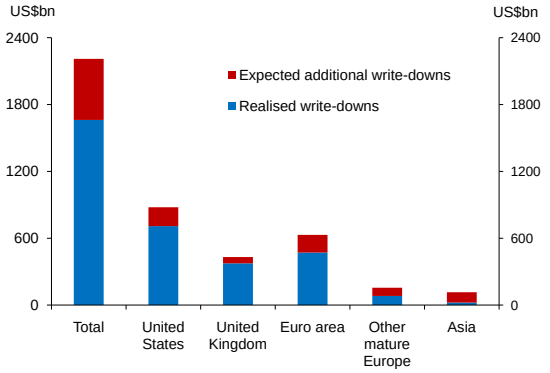
[2] **See graph 36 in the Reserve Bank of Australia September 2010** *Financial Stability Review* **http://www.rba.gov.au/publications/fsr/index.html**

global financial markets. The health of some European banks was also called into question after revelations of significant balance sheet exposure to sovereign debts of peripheral countries.

As the financial market turmoil persisted and conditions in the euro area worsened, European authorities swiftly stepped in to offer support. The European Union and the IMF announced in late May a joint rescue package for Greece – the country that was hardest hit by the sovereign crisis – by providing loans at well below prevailing market rates. The European Central Bank also provided support by offering to purchase sovereign debt in the secondary market.

These efforts, together with the publication of the results of stress tests on European banks, have provided temporary relief to market sentiment. However, given the relatively slow progress in addressing rising sovereign debt, concerns are likely to persist for some time. Sovereign credit default swap spreads of some peripheral euro area countries remain at elevated levels, reflecting concerns over the ability of vulnerable governments to backstop their banking systems, finance their fiscal deficits and implement credible fiscal consolidation plans.

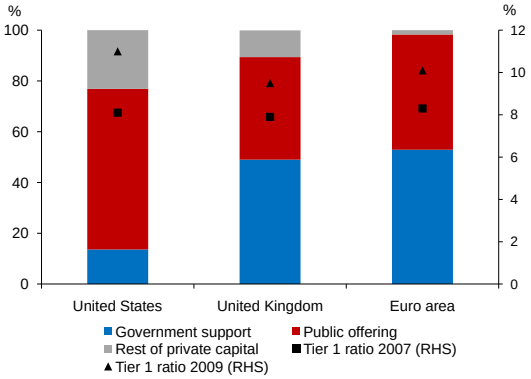
Figure 2.4
Realised and expected write-downs by region, 2007-2010



Source: IMF October *Global Financial Stability Report*.
Note: Realised write-downs cover the period 2007Q2 to 2010Q2. Expected additional write-downs cover the period 2010Q3 to 2010Q4. Asia includes Hong Kong SAR, Japan, Singapore, Australia and New Zealand.

Bank recapitalisation is occurring gradually. The IMF's latest estimates of total bank write-downs between 2007 and 2010 stand at US$2.2 trillion (down slightly from US$2.3 trillion in April) of which approximately three quarters has been realised (figure 2.4). While Tier 1 capital ratios have been steadily improving, around half of the bank recapitalisation in Europe and the UK has been undertaken directly by government (figure 2.5).

Figure 2.5
Sources of capital raised by banks and Tier 1 capital ratios



Source: IMF October *Global Financial Stability Report*.

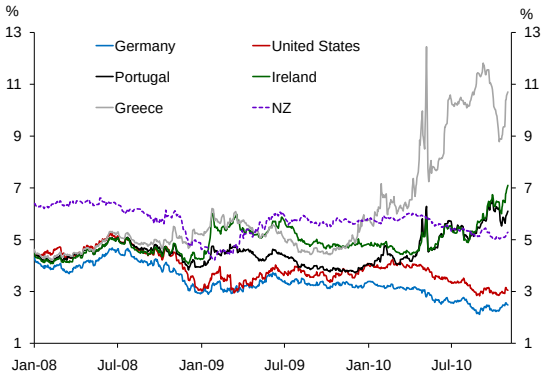
Debt refinancing also remains an issue, with banks in the euro area, in particular, facing substantial rollover requirements in international capital markets. Refinancing risks are compounded by increasing sovereign funding requirements and a tendency for investor portfolio allocation to shift towards the better performing economies in emerging Asia.

Yields have fallen in less vulnerable markets...

Long-term interest rates have fallen sharply in the major advanced economies of the US, UK and Germany since the last *Report* (figure 2.6). To some extent, lower long-term interest rates reflect the global bond markets' distinction between vulnerable and 'safe-haven' destinations and an excess of global savings relative to investment. Growing expectations that central banks will maintain very easy monetary policy for longer than previously anticipated, together with deflation risks in the US given the weak economic outlook, have also been contributing factors. Recently the US Federal Reserve announced a further round of quantitative easing measures, in which it intends to incrementally purchase US$600 billion of longer-term government securities by June 2011.

Figure 2.6

Ten-year government bond yields for selected countries



Source: Bloomberg.

The combination of weak labour and housing markets represents an emerging rigidity in the US economy. It is estimated that over 25 percent of mortgages are in a negative equity position and that there are significant regional disparities in the share of these so-called 'underwater mortgages'.[3] Households with negative equity mortgages face greater constraints in selling their property to migrate to more prosperous areas, which is inhibiting labour market adjustment. The IMF estimates that the impact from the regional disparities in labour and housing markets could have raised the national structural unemployment rate by between 1 and $1^{3}/_{4}$ percentage points between 2007 and 2009.[4]

House repossessions in the US reached a record high in September but foreclosures have been interrupted more recently by widespread irregularities in the paperwork associated with this process. This has sparked a nationwide investigation. Until this issue is resolved, it could serve to accentuate uncertainties around the medium-term path of house prices in the US.

...including New Zealand.

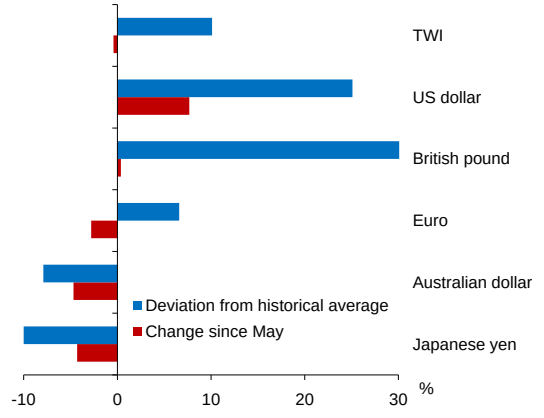
Reflecting New Zealand's relatively low level of public indebtedness and market confidence in the Government's fiscal consolidation objectives, yields on New Zealand government bonds have tended to follow US yields lower during this period. Lower domestic interest rates have also reflected weaker local economic data, prompting investors to scale back expectations of rate increases from the RBNZ. Unlike developments in the US, the market still expects the RBNZ to continue to normalise monetary policy, albeit at a slower pace than previously, reflecting New Zealand's close linkages to the stronger economies in Asia and Australia.

The New Zealand TWI has been stable despite large swings in bilateral exchange rates.

The New Zealand dollar (NZD) has remained broadly stable on a trade-weighted basis over the past six months, though there have been large offsetting movements in the underlying bilateral NZD exchange rates, particularly against the US dollar, Japanese yen and Australian dollar (figure 2.7). The sharp rise in investor risk aversion during the peak of the euro area sovereign debt crisis in the middle of the year led to a significant wave of safe-haven demand, pushing the US dollar and Japanese yen markedly higher against other currencies, including the NZD. Since then, the US dollar has weakened over concerns about the US economic recovery and expectations of further monetary easing by the Federal Reserve. Against the Australian dollar, the NZD has fallen significantly, as diverging economic data point to a widening growth gap between the two countries.

Figure 2.7

NZD TWI and bilateral exchange rates



Source: RBNZ.

Note: The historical average for the euro is for the period January 1999 to September 2010. For all others the average is for the period January 1980 to September 2010.

[3] For example, the IMF notes that 70 percent of all mortgaged properties were underwater in Nevada at the end of 2010Q1, while this figure was less than 10 percent in New York.

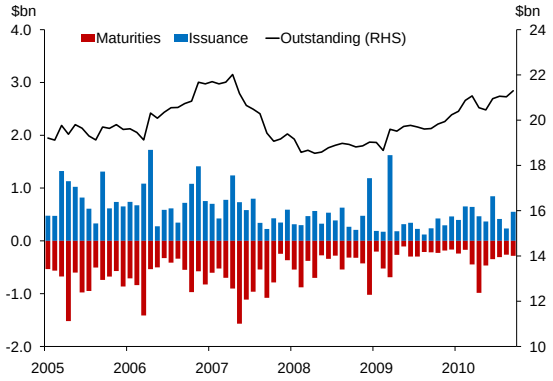
[4] For further details, see www.imf.org/external/pubs/ft/scr/2010/cr10248.pdf

Local and offshore debt issuance is flowing well.

Despite turbulence in global debt markets, local corporates have successfully raised funds recently (figure 2.8). Access to wholesale funding markets continues to improve steadily for both corporates and New Zealand banks, and the RBNZ is withdrawing the last of its liquidity support facilities introduced during the peak of the financial crisis.

Figure 2.8

Market sources of funding for New Zealand firms



Source: Bloomberg, Reuters.

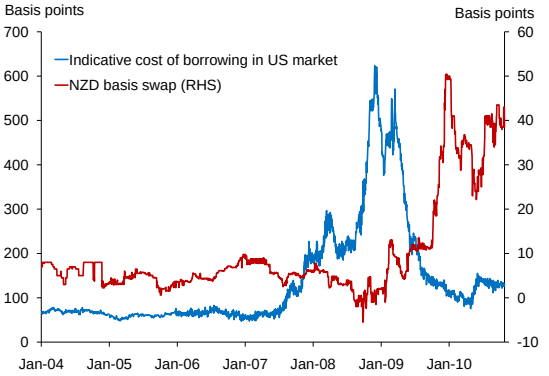
Note: Market sources of funding are commercial paper plus corporate bonds. Commercial paper is domestic non-financial issuance only. Corporate bonds include identified domestic and offshore non-financial issuance.

Bank funding costs remain elevated...

In the New Zealand dollar inter-bank money markets, short-term wholesale funding conditions appear to have broadly returned to normal, with LIBOR-OIS spreads (a measure of banks' funding costs for short-term wholesale debt) stabilising near pre-crisis levels. However, retail and long-term wholesale funding costs remain elevated and considerably higher than before the financial crisis. Competition among banks for retail deposits remains intense and this is reflected in the large spread between deposit rates and the OCR (see chapter 4).

Figure 2.9

Indicative long-term wholesale funding costs for New Zealand banks



Source: Bloomberg.

Note: The cost of long-term borrowing in US markets is estimated using the spread between 5-year bonds issued by an AA rated financial institution and the 5-year US government bond rate.

. . . and hedging foreign currency debt has become more expensive.

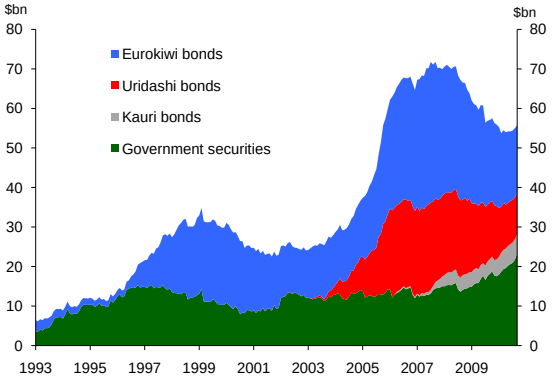
One recent driver of elevated long-term wholesale funding costs has been increases in basis swap spreads – the cost for banks to use hedges to convert foreign currency financing into New Zealand dollar financing (figure 2.9).[5] These elevated spreads partly reflect the greater quantity of offshore term funding being undertaken by New Zealand banks. Elevated basis swap spreads also reflect a subdued supply of New Zealand dollar long-term wholesale issuance by swap counterparties. In particular, issuance of Eurokiwi and Uridashi bonds, which is a key source of New Zealand dollar term funding, has been weak in recent months. In this regard, competition from Australia in attracting issuance by supra-nationals could be a factor. Issuance of Australian dollar-denominated bonds has risen to record levels recently, partly in response to investors' strong appetite for highly rated fixed income securities and issuers' preference for the larger and more liquid Australian dollar market. The slow pace of new New Zealand dollar issuance and ongoing bond maturities have seen the total value of Uridashi and Eurokiwi bonds outstanding continue to track lower (figure 2.10).

[5] For further discussion see box E in the May 2010 *Report*.

The New Zealand Government has been successfully raising funds in the debt markets to finance its fiscal deficit, although the cost of borrowing (relative to swap rates) has edged up in recent months. To some extent, higher borrowing costs reflect a degree of market saturation given the significant amount of borrowing the Government has to do to fill its funding gap, as well as a degree of illiquidity in the New Zealand government bond market. Nevertheless, there has been a steady increase in the value of New Zealand government bonds held by non-residents over the past 12 months (figure 2.10).

Figure 2.10

Non-resident holdings of selected New Zealand dollar fixed-income securities



Source: RBNZ, Reuters, Bloomberg.
Note: Uridashis, Eurokiwis and Kauris are New Zealand dollar securities issued by foreign issuers.

3 New Zealand's economy

The New Zealand economy has continued to recover, although a range of indicators suggests a recent loss of momentum. In part, the slow recovery is due to desirable moves on the part of households and businesses to reduce debt levels. Increased caution in the private sector has contributed to a narrowing of New Zealand's current account deficit.

Nevertheless, a stall in the recovery could lead to stress in some sectors of the economy, particularly given vulnerabilities created by strong borrowing over the past decade. A further weakening in trading conditions could cause financial stress for parts of the business sector that have seen only limited recovery after the recession. The Canterbury earthquake may cause financial stress for some businesses, but is also expected to boost the beleaguered construction industry.

The recovery in the housing market has been particularly slow, and sales activity has weakened in the past six months. Further price declines would put some households under pressure, particularly if the labour market is slow to recover. Commercial property and agricultural land is also trading very thinly and prices have been falling. In the agriculture sector, increasing commodity prices over the past year have boosted the cash flow position of many farmers. The New Zealand banking system remains well positioned to work with any customers under stress.

3.1 External financing vulnerabilities

New Zealand's high level of debt remains a key vulnerability...

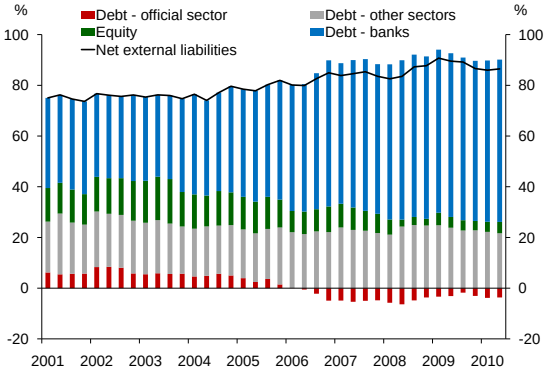
As discussed in detail in previous *Reports*, New Zealand's external debt remains high by international standards, reflecting a prolonged period of low national savings relative to investment. High external debt exposes New Zealand to adverse shifts in global financial market sentiment (see chapter 2).

The large external financing requirement has been predominantly funded via the banking system (figure 3.1). As discussed in previous *Reports*, because a large portion of this foreign borrowing is either denominated in New Zealand dollars or hedged, the currency risks associated with this external borrowing are low. In addition, the banking system has recently been increasing the tenor of its foreign borrowing (see chapter 4), helping to moderate its vulnerability to external funding markets.

Figure 3.1

Composition of net external liabilities

(percent of GDP)



Source: Statistics New Zealand.

Note: Official sector includes general government and the Reserve Bank.

...although there are some signs of changed borrowing behaviour.

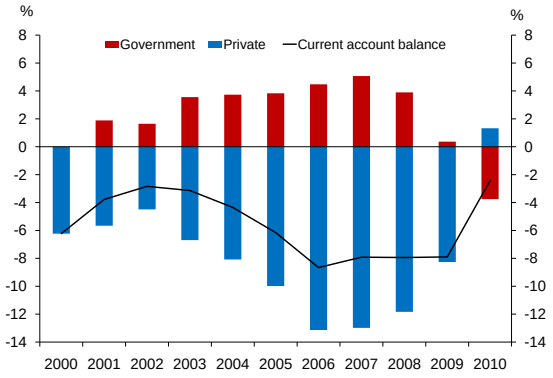
The current account deficit has reduced markedly over the past 18 months, driven by an improvement in private sector savings relative to investment (figure 3.2). The fall in the private sector's contribution to the current account deficit has been associated with muted credit demand in the New

Zealand economy and has been assisted by a boost in export income from higher export commodity prices. Increased caution in the private sector has been partly offset by lower government saving reflected in increased public sector borrowing.

Figure 3.2

Sectoral contributions to the current account

(percent of GDP, March years)



Source: Statistics New Zealand, The Treasury.

Note: The contribution of each sector to the current account is sectoral gross saving minus sectoral investment. The contribution of government to the current account is net lending from the System of National Accounts' general government sector accounts, while private net saving is derived residually from the current account. The government contribution for 2010 has been estimated by The Treasury using more recent fiscal and economic data.

The decline in the private sector contribution to the current account deficit has been primarily driven by a large fall in investment since the onset of the recession. Although New Zealand's net external liabilities have fallen slightly as a share of GDP through this period, further reductions will require a sustained shift to higher savings as investment recovers. Consistent with the recent performance of the economy, such a rebalancing would likely involve more muted domestic demand growth than New Zealand has experienced during previous recoveries. The adjustment process would be enhanced by growth in external sector incomes but that support could be undermined if the global economic recovery falters or if the exchange rate remains at relatively high levels.

A savings working group appointed by the Government is considering the role of the government in promoting higher savings. Policy directions being considered include fiscal consolidation (discussed below), changes to tax policy, changes to the KiwiSaver scheme, and the introduction of compulsory savings.

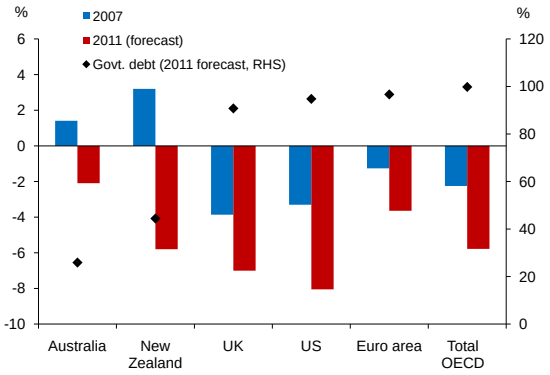
Government debt is modest compared to other economies...

New Zealand entered the recession with a strong fiscal position relative to most OECD economies. However, similar to other OECD economies, the government accounts have recently deteriorated, although government debt is forecast to remain relatively low in New Zealand (figure 3.3). *Budget 2010* outlines an intention to return to fiscal surplus by 2016, although support programmes and rebuilding of infrastructure following the Canterbury earthquake may delay this somewhat (see box B).

Figure 3.3

Structural fiscal balance and government debt in selected economies

(percent of GDP)



Source: OECD *Economic Outlook*, The Treasury.

...but gradual fiscal consolidation is appropriate.

The high level of private sector debt in the New Zealand economy increases the need for fiscal consolidation. Like most countries, New Zealand will face increased demands on government spending over the next few decades associated with an ageing population. Fiscal consolidation in coming years will therefore be an important step to reduce the risk of a burgeoning government debt. Consolidation will also help to contain upward pressure on interest rates as the economic recovery continues.

Box B

Financial stability implications of the Canterbury earthquake

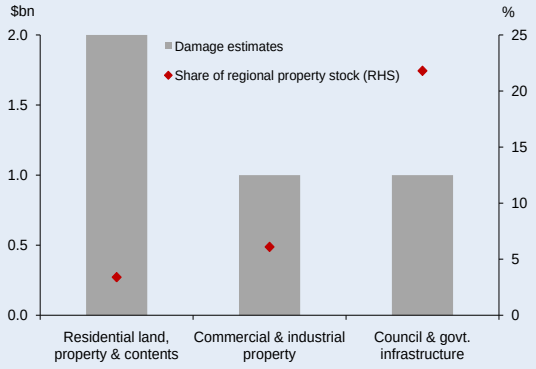
The earthquake that struck the Canterbury region in the early hours on 4 September caused significant damage to buildings and infrastructure. The earthquake has and will continue to have a number of financial and economic impacts. This box discusses the major channels through which the earthquake will affect the outlook for financial stability in New Zealand.

From a financial stability perspective, the most important aspects of the earthquake are the financial effects on those that ultimately have to bear the costs of damages, and the effect that any loss of trade due to business disruption has on business finances. The earthquake will also have a material effect on measured activity in the economy, which was discussed in more detail in box A of the September *Monetary Policy Statement*.

The Treasury's initial estimate of the value of damage is $4 billion. The Reserve Bank estimates that approximately half of this damage is to residential property, with the rest split between commercial and industrial property, and council and government infrastructure (figure B1).

Figure B1

Damage estimates



Source: Quotable Value Ltd, RBNZ estimates.

Note: Estimates of the value of commercial and residential property in the Christchurch City, Selwyn District and Waimakariri District territorial local authorities (TLAs) were obtained on special request from Quotable Value Limited. Estimates of the value of council property in these TLAs were obtained from council annual reports.

The vast majority of losses to residential, commercial and industrial property will be covered by insurance. The Earthquake Commission (EQC), a government-owned Crown entity, covers the first $100,000 of damage to residential structures, $20,000 of household contents, and damage to residential land subject to certain conditions. The EQC estimates that total claims will be at the upper end of a $1-2 billion range. The EQC will cover the first $1.5 billion of claims and reinsurance contracts that cover catastrophic losses will cover the balance. Before the Canterbury earthquake the EQC had reserves of $5.6 billion, held in a combination of New Zealand government bonds and foreign equities, to cover possible claims. Given the rarity of events of this magnitude, the EQC will still retain a comfortable buffer to meet future disaster claims after paying out for this earthquake.

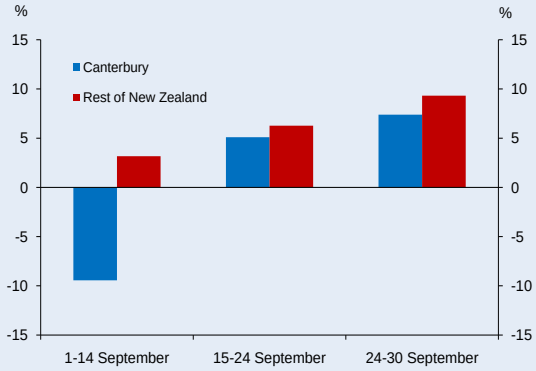
Private insurance companies provide cover for damages in excess of EQC coverage on residential properties, as well as for damage to non-residential property and for business disruption. The Insurance Council of New Zealand estimates a total claim cost of $1.5 billion. However, most New Zealand insurance companies have elected to reinsure most of the risk of natural disasters, so the total cost to New Zealand insurance companies is likely to be relatively small. Longer term, however, it is likely that there will be some upward pressure on reinsurance premiums as reinsurers seek to recoup losses, which would be expected to flow through into the prices of insurance policies.

The earthquake will have a moderate effect on the Crown accounts. The cost will be composed of the cost of EQC claims, the cost of reconstructing infrastructure and public buildings, and costs related to various support packages that were instituted in the aftermath of the earthquake. The total cost will be material, but not especially large in the context of natural disasters in other parts of the world. However, this does come at a time when the fiscal position is already stretched as a result of the domestic recession. At the margin, this gives the Government a little less room for fiscal manoeuvre, and may necessitate a slightly tighter fiscal position in the future.

Since the majority of households and businesses have insurance cover, lending institutions should be relatively unaffected by the damage to buildings associated with the earthquake. There may be a few isolated cases in which insurance cover has been allowed to lapse, which may expose households and lending institutions to a risk of loss. There is also likely to be ongoing disruption to some business activity as a result of the earthquake.

Figures from Paymark Limited show that the value of retail transactions processed through their EFTPOS systems was down 9 percent in the Canterbury region for the first two weeks of September, compared to a 3 percent increase for the rest of the country (figure B2). Sales volumes returned to more normal levels by the end of September, reflecting the fact that most businesses were able to resume trade promptly. However, a minority of firms were more severely affected and may face financial distress as a result. This will particularly be the case for firms that were already facing difficulty. Some businesses will have had insurance to cover losses arising from business disruption. However, in some cases policies may not cover the specific circumstances facing businesses, or the degree of coverage may not be sufficient. As a result, there is likely to be a small but measurable increase in loan impairments.

Figure B2
Paymark electronic transaction values following the Canterbury Earthquake
(annual percent change)



Source: Paymark Limited.

The Canterbury property market will be disrupted in the short term. There have been some settlement difficulties due to the non-availability of insurance in the immediate aftermath of the earthquake, while difficulties obtaining land information memorandum (LIM) reports have disrupted transactions. Figures from the Real Estate Institute show that the number of house sales in the Canterbury/Westland region was down 37 percent in the September month. Transactions are likely to remain subdued for some time due to uncertainty over the extent of damage, and this could have some effect on property values. There could also be a longer-term effect on property valuations, particularly in areas hard hit by the earthquake, as prospective buyers reassess the value of property in certain areas. Where this is accompanied with household financial stress – for instance if jobs are lost as a result of the earthquake – there could be some effect on mortgage delinquencies.

On balance the financial stability effects of the earthquake are likely to be relatively minor. New Zealand remains somewhat susceptible to natural disasters, but the Canterbury earthquake has highlighted that we are well placed to deal with the fallout. Buildings in New Zealand have been designed with earthquake risk in mind, so the overall level of damage was much lower than in countries with less stringent building codes that have suffered similarly sized tremors. In addition, the existence of the EQC, along with comprehensive reinsurance arrangements, minimised the local economic impact of the earthquake. Finally, local financial institutions, including the Reserve Bank, have put in place plans to ensure business continuity in the event of disaster. These procedures worked well, with payment and settlement systems continuing to function, and all of the major banks able to promptly reopen branches to meet the financial needs of their customers.

3.2 Sectoral credit risks

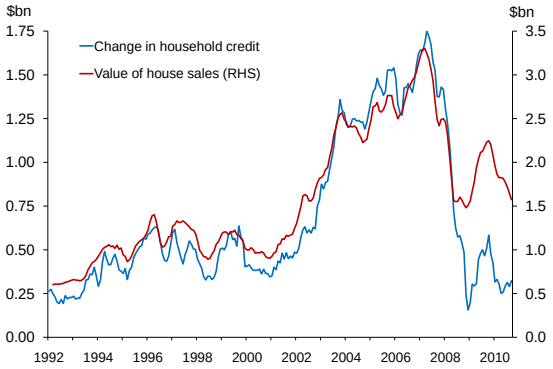
The household sector continues to consolidate, but remains vulnerable...

As discussed in previous *Reports*, the household sector has faced significant headwinds over the past two years, including declining labour income and house prices. This has contributed to a much more cautious approach to borrowing in the sector (figure 3.4).

Figure 3.4

House sales and change in household credit

(three-month averages)

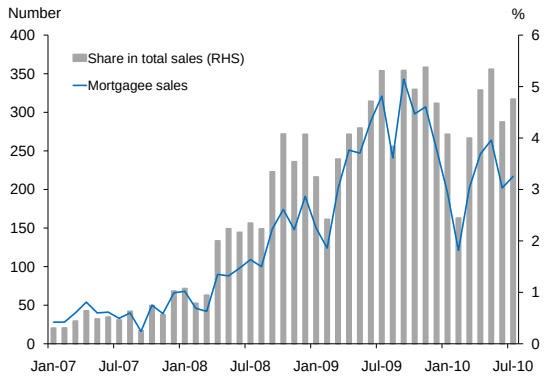


Source: REINZ, RBNZ.

In spite of recent progress reducing debt, strong borrowing over the past decade has left some households vulnerable. Underscoring this point, measures of financial stress have remained elevated over the past six months. For example, mortgagee sales as a portion of overall sales are higher than in recent years (figure 3.5), although they remain modest compared to those in some other countries.

Figure 3.5

Mortgagee sales



Source: Terralink, REINZ.

Note: The data shown in the chart capture 'formal' mortgagee sales. Lenders generally avoid using formal mortgagee sales where possible, so the number of forced sales is likely to be higher than shown.

...as interest rates return to more normal settings...

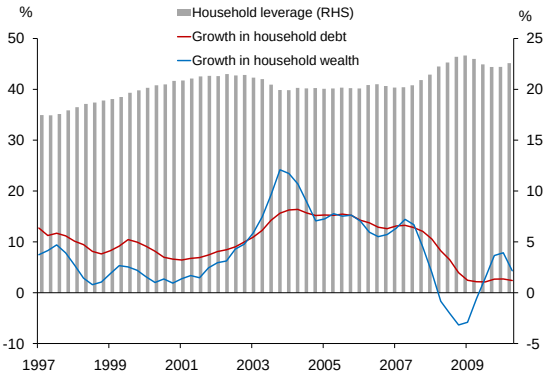
The decline in interest rates since 2008 has provided considerable relief to the sector and has allowed some borrowers to reduce debt by using interest savings to pay off principal. However, the effective mortgage rate has increased recently, and is expected to rise further over coming years.

Any increase in interest rates will make it more difficult for households to continue to reduce their debt burden. According to the 2009 *Household Economic Survey*, about 15 percent of mortgage holders are particularly vulnerable, with housing costs exceeding 40 percent of their gross income. The portion of households on variable interest rate mortgages has increased over the past few years, meaning that increases in interest rates will feed through to debt servicing costs more quickly.

A robust recovery in the labour market will be important to support a smooth and sustained consolidation of household debt, as interest rates return to more normal levels. Although labour market data have been volatile in recent quarters, employment appears to be growing modestly and unemployment has fallen from its peak.

Figure 3.6

Household leverage



Source: RBNZ.

Note: 'Leverage' is the ratio of household debt to gross household wealth. Debt and wealth growth are annual growth rates.

...and there is a possibility of further declines in house prices.

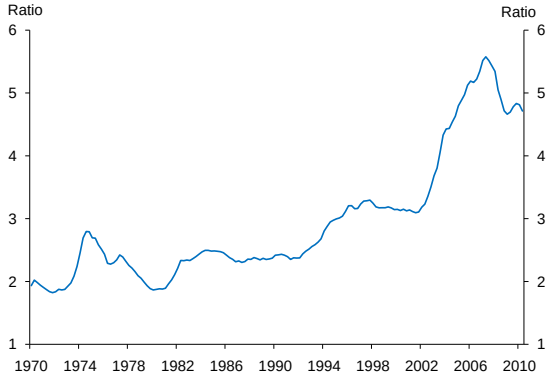
Some households are also vulnerable to further house price declines, particularly given that household leverage is at elevated levels (figure 3.6). Activity in the housing market has weakened considerably over the past year. Low net

migration, a slow recovery in house building and uncertainty about market-clearing price levels have all contributed to muted housing activity. In this environment, house prices could decline further.

To date, house price adjustment has been modest, with prices falling by only 5 percent since their peak. Consequently, house prices remain high relative to income (figure 3.7). Low rental yields from investment property also suggest over-valuation, particularly in light of recent changes to the tax treatment of property investment. Against the backdrop of rising interest rates, a more significant adjustment is possible over the coming years, particularly if the labour market were to weaken.

Figure 3.7

House price to income ratio



Source: Quotable Value Ltd, RBNZ, Statistics New Zealand.
Note: Average house prices are the value of housing divided by the number of dwellings. Average disposable income is total disposable income divided by the number of households.

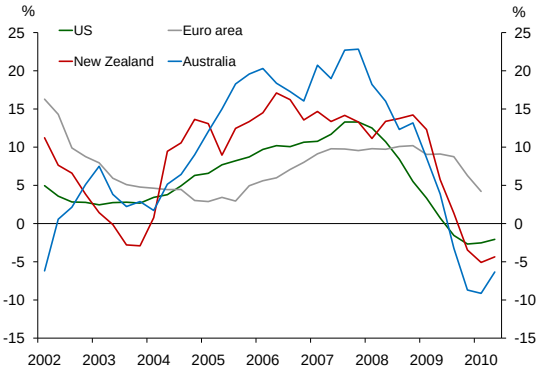
Business conditions are gradually improving...

Businesses in New Zealand significantly increased their debt over the past decade, supported by strong corporate earnings, rising asset prices and high levels of investment. Since the onset of the financial crisis, businesses have responded to a difficult operating environment by cutting back on investment and reducing debt finance. These trends have also been observed in other countries, based on a comparison of broadly similar measures of debt (figure 3.8).

Figure 3.8

Business debt in selected countries

(annual percent change)

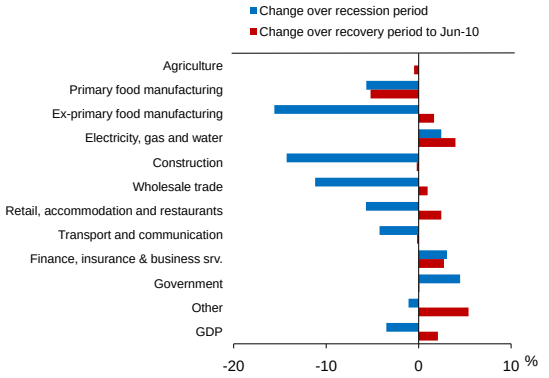


Source: RBNZ, Statistics New Zealand, Reserve Bank of Australia, Office for National Statistics, US Federal Reserve, Haver Analytics.
Notes: Business debt is loans from financial institutions plus non-bank debt securities. For New Zealand, non-bank sources of finance are estimated using 'other sector' debt from the International Investment Position data, after subtracting related party borrowing. Business debt includes the agricultural sector.

Business conditions appear to be improving, but economic activity in many industries remains well below levels observed before the recession (figure 3.9). Survey measures of business confidence and profitability are consistent with economic recovery, although expectations have been pared back significantly in recent months.

Figure 3.9

Components of production GDP

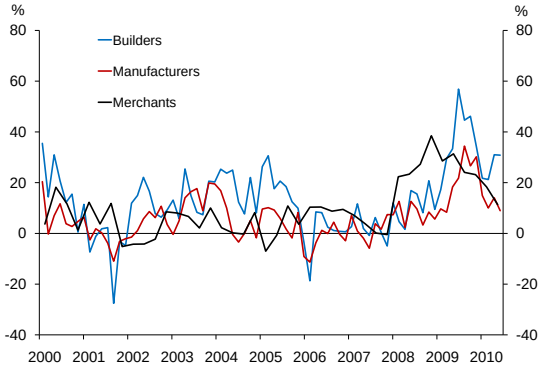


Source: Statistics New Zealand.
Note: The recession period is from the cyclical peak in GDP in 2007Q4 to the trough in 2009Q1. The recovery period is from the trough to 2010Q2. 'Other' includes fishing, forestry and mining, government administration and defence, personal and community services, and unallocated and balancing items.

...but some firms could experience financial difficulties.

The subdued operating conditions could cause financial difficulties for some firms. The number of firms reporting a higher incidence of overdue debtors has moderated since the recession ended but remains high, especially in the building sector (figure 3.10).

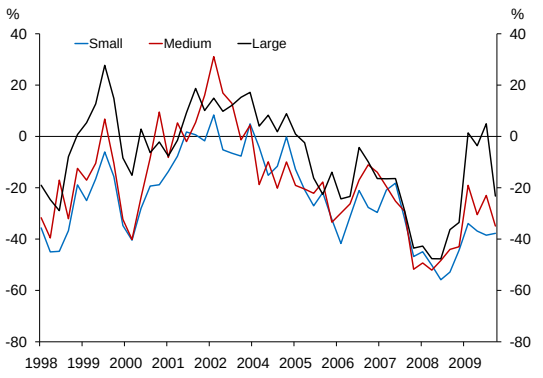
Figure 3.10
Businesses reporting overdue debtors
(net percentage)



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.

Many of the industries that have not experienced a material recovery tend to include a high proportion of small- to medium-sized enterprises. These firms could be particularly vulnerable, especially as they have been the most affected by tighter bank lending conditions (see chapter 4), and have reported weaker profitability than larger firms (figure 3.11). Disruptions to trading activity caused by the Canterbury earthquake may also cause short-term difficulties for some firms in the Canterbury region (see box B).

Figure 3.11
Profitability by firm size
(net percentage)



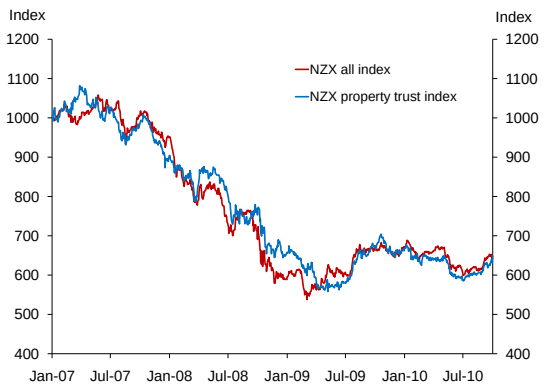
Source: NZIER *QSBO*.
Note: The data shown in the figure were supplied to the RBNZ by NZIER, on special request.

Vacancy rates for commercial property have been increasing...

The lagged effects of a weak domestic economy have softened demand for commercial property. Vacancy rates for older office buildings in particular have increased, due to a subdued outlook for employment and the recent completion of a number of new office buildings. Prospects for industrial and retail property have been more encouraging but continued recovery will depend on the pace of recovery in the manufacturing and household sectors, respectively.

According to the latest Quotable Value data, commercial property prices have fallen by around 10 percent from their peak at the end of 2008. Although prices have stabilised in the past six months, reports suggest that there have been very few recent sales of larger commercial properties, and this has created uncertainty about market clearing prices. There has been greater liquidity in the market for smaller commercial properties, allowing some property trusts to reduce gearing through property sales. The share prices of listed property trusts have remained broadly stable over the past year, after falling significantly from their peaks in 2007 (figure 3.12).

Figure 3.12
Share prices of listed property trusts
(January 2007 = 1000)



Source: Datastream.

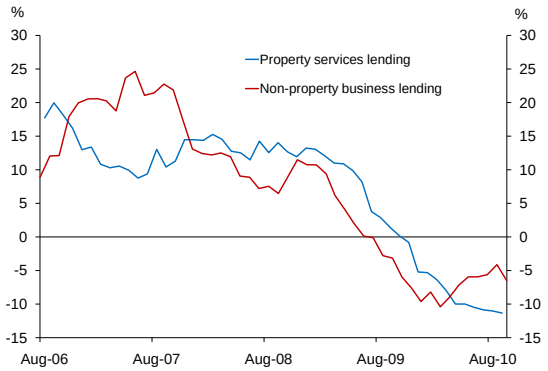
…and falling valuations may cause financial difficulties for some property owners.

The property sector is relatively highly leveraged and accounts for around 40 percent of total business sector credit. Credit to the property sector continues to decline at annual rates of around 10 percent, in contrast to non-property business lending which has begun to stabilise (figure 3.13). With overall sales volumes low, tight credit supply is likely to have caused financial difficulties for some property owners. In other cases, property owners have successfully raised additional equity to bring their debt into line with current property valuations.

Figure 3.13

Property and non-property business lending

(annual percent change)



Source: RBNZ Standard Statistical Return (SSR).
Note: Includes both bank and non-bank lending.

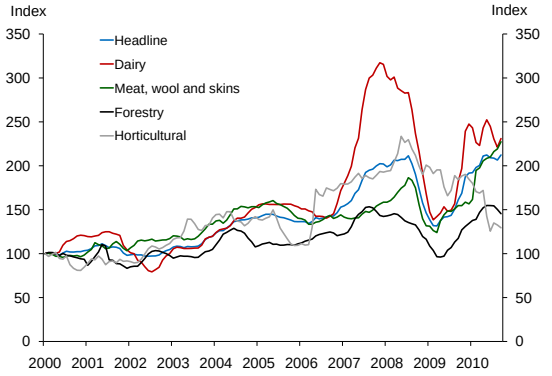
Conditions in the agriculture sector have generally improved…

Previous *Reports* have discussed the substantial rise in agricultural debt over recent years, particularly in the dairy sector. After a period of stress through 2009, improved export earnings and lower interest rates have helped to relieve cash flow pressures associated with servicing that debt. A key driver of improved prospects has been the rise in many commodity export prices throughout 2010 (figure 3.14).

Figure 3.14

Export commodity prices

(SDR terms, January 2000 = 100)

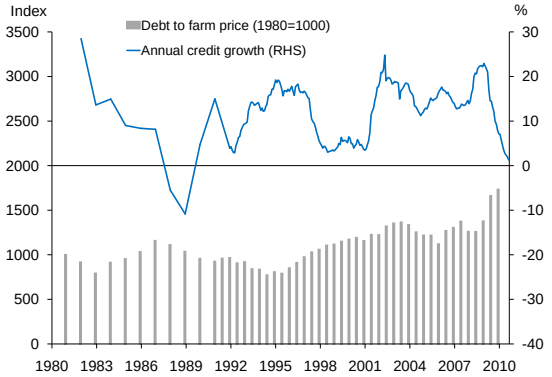


Source: ANZ.

Improved incomes have been used to pay down debt in the sector, with farms generally limiting investment to essential capital expenditure. Agricultural lending growth has continued to moderate over the past six months (figure 3.15). Banks are also approaching lending more cautiously and are generally demanding more equity from prospective farm owners.

Figure 3.15

Agricultural credit



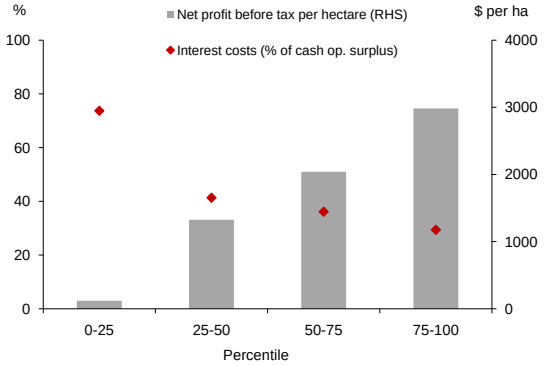
Source: RBNZ, Quotable Value Ltd, RBNZ calculations.

…but some farms with low profitability could experience difficulty…

Recent improvements in export earnings mean that most dairy farms are currently profitable. Fonterra has recently announced a payout of $6.10 per kilo of milk solids for the 2009/2010 year, with the payout for 2010/2011 forecast to rise to $6.60. The current payout is comfortably above the Ministry of Agriculture and Forestry's (MAF) estimated median farm break-even payout of $5.13.

However, there is a wide distribution of profitability across the dairy industry, with newer farms tending to have significantly lower profitability than established ones. In many cases low profitability is due to higher debt levels, and correspondingly higher debt servicing costs (figure 3.16). Many of these newer farms could be vulnerable to declining incomes or rising interest rates, particularly in light of evidence from the RBNZ's agricultural survey that an increasing proportion of farms now have variable interest rate loans.

Figure 3.16
Distribution of dairy farm cash operating surplus and interest costs in 2009/2010



Source: MAF.
Note: Farms grouped in quartiles by profitability. Figures are average values for farms in each quartile.

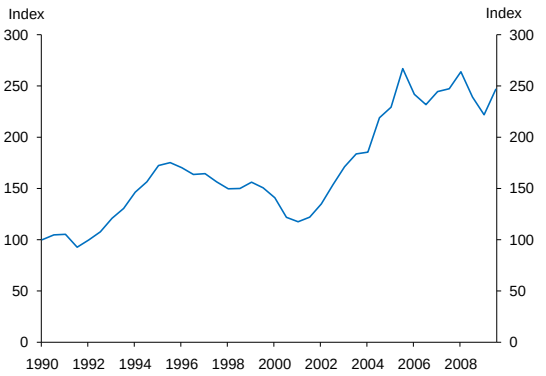
Some parts of the agriculture sector have not experienced the same improvement in profitability as the dairy sector. Following a decade of rapid expansion in production, prices paid to contract grape growers have recently fallen sharply, leading to a rise in non-performing loans. In spite of some improvements in global prices, drought conditions and increases in costs have also caused profitability to remain low in the sheep and beef sector. However, credit risks to the banking system are relatively contained as the viticulture sector accounts for only 0.5 percent of total bank lending, and leverage in the sheep and beef sector is low.

Those farms are particularly at risk as, in contrast to the household sector, the most leveraged farms generally also have high debt to income ratios.

Farm prices rose sharply until mid-2008, as market participants and banks were buoyed by strong increases in farm incomes. The 2008–2009 decline in incomes and tighter bank lending standards have reduced appetite for leveraged farm purchases. As a result, farm prices had fallen by around 15 percent from their peak by the end of 2009. Prices appear to have fallen further throughout 2010, although the current level of farm prices is highly uncertain given the extremely low volume of farms being sold.

Farm prices remain elevated relative to earnings (figure 3.17). While an upward trend in this ratio can be partly justified by the downward trend in interest rates over the last 20 years, it is likely that farm prices will need to fall further to see substantial buying interest rekindled. An ongoing overhang of delinquent farm loans tends to reinforce this view. However, banks appear to be working with their existing customers and looking for ways to put indebted farm enterprises on a more secure footing.

Figure 3.17
Farm prices relative to agricultural export earnings
(1990=100)



Source: Quotable Value Ltd, Statistics NZ.

...and high gearing exposes indebted farms to further declines in farm prices.

The distribution of debt in the agriculture sector is highly skewed, particularly in the dairy sector. Further farm price declines could push farms that took on debt to expand near the peak in land prices into a position of negative equity.

Recent changes to Fonterra's capital structure should reduce redemption risk.

Fonterra has recently announced changes to its capital structure, which were endorsed by a shareholder vote at the end of the 2009/2010 season. The changes allow farmers to now hold up to 100 percent of the value of their production

in additional 'dry' shares in Fonterra, which can be traded between Fonterra shareholders.[1] Interest in the shares has been strong, with 6 percent of Fonterra's shares on issue now constituting dry shares. The new structure should improve the stability of Fonterra's capital base, with farmers no longer able to sell shares back to Fonterra during periods of weak production, such as during a drought. Farms in need of cash can instead redeem their shares by selling to other shareholders. However, the liquidity of the market for dry shares during a drought period has yet to be tested.

[1] **A 'dry' share is a Fonterra share that is not backed by milk production. Previously farmers were only allowed to hold shares equal to the volume of their milk production.**

4 New Zealand's financial institutions

The New Zealand banking sector continues to perform well given a relatively weak macroeconomic environment. Despite disruptions to funding markets through the middle part of 2010, New Zealand banks have retained access to wholesale funding markets, albeit at elevated cost. Banks have lengthened the tenor of their funding and have had the flexibility to issue debt when conditions are judged most favourable. All banks are comfortably meeting the prudential liquidity requirements introduced on 1 April 2010.

Non-performing loans appear to be approaching a plateau, although further increases could be seen in some sectors into 2011. Bank profitability through 2010 to date has been substantially stronger than in 2009. Banks' capital positions remain strong.

Further adjustment has occurred in the non-bank sector since the last *Report*. Most notably South Canterbury Finance, previously one of the largest finance companies in New Zealand, went into receivership on 31 August. Further consolidation of the sector is expected over the next 12 months. It is likely that a wider variety of non-bank financing models will complement the smaller deposit-taking sector in the future.

With the Insurance (Prudential Supervision) Act passing into law in September, the Reserve Bank is now empowered to prudentially regulate and supervise insurers. The New Zealand insurance sector remains stable, with the Canterbury earthquake having a relatively minor effect on the financial position of the industry due to extensive reinsurance arrangements.

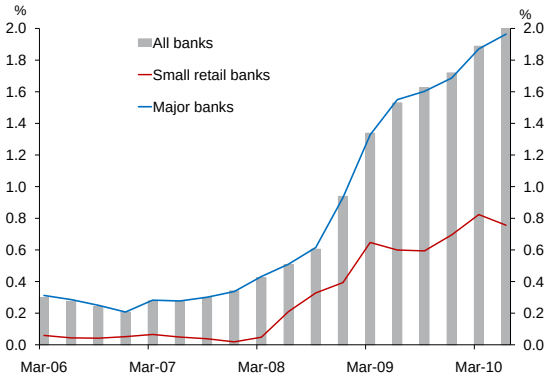
4.1 Banking sector

Bank asset quality remains cyclically weak…

Bank asset quality has weakened over the past few years reflecting the flow-on effects of the 2008/09 recession on the financial position of households and businesses. The aggregate level of non-performing loans increased from 0.3 percent of total bank lending in June 2007 to 2 percent of total bank lending in June 2010 (figure 4.1). Despite this increase, the level of non-performing loans remains much lower than in the 1990s recession and much lower than for banks in many other countries.

The increase in non-performing loans has been greater for the major banks than for the smaller retail banks which have relatively more exposure to the lower risk household sector. The overall deterioration in asset quality continues to be driven by weakness in the commercial property sector

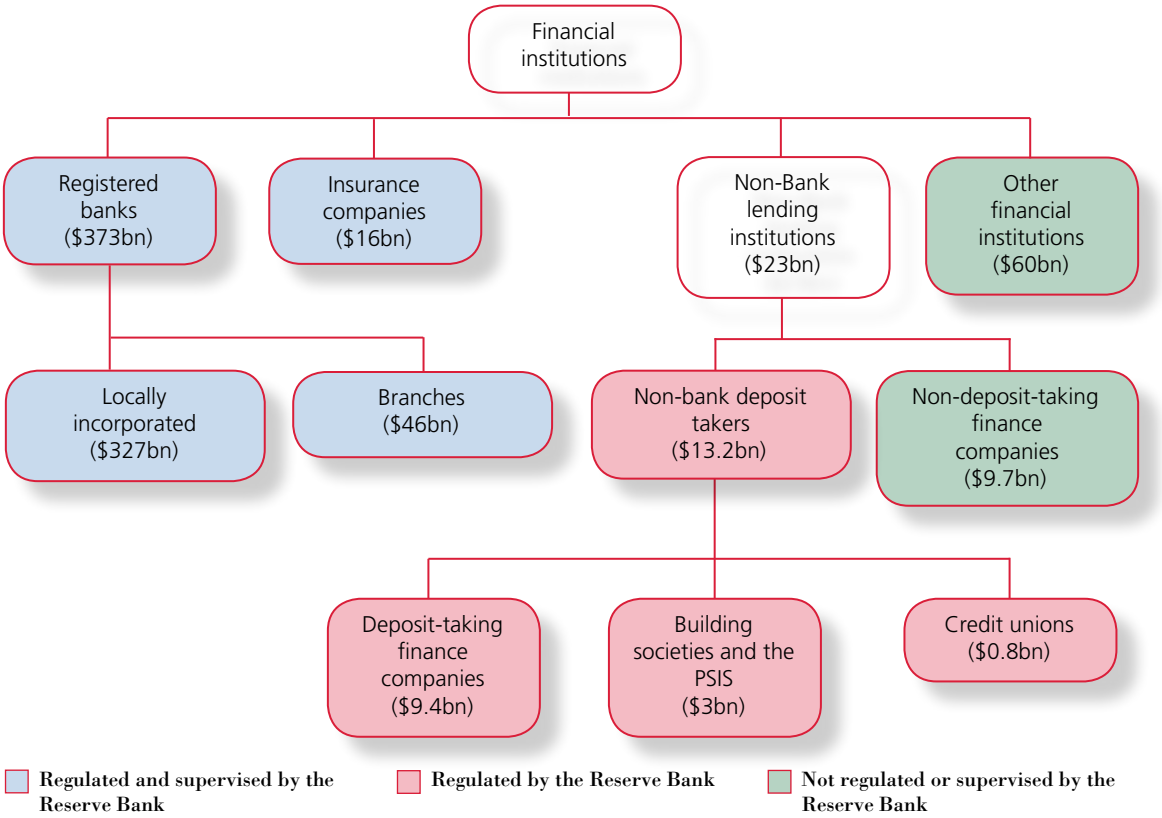
Figure 4.1
New Zealand non-performing loans by type of institution
(percent of lending)



Source: General Disclosure Statements (GDS).
Note: Small retail 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 4.2

Institutional structure of the New Zealand financial sector



Note: Numbers in brackets refer to the total holdings of the sector. Bank and non-bank lending institution data as at 30 June 2010 and insurance data as at 31 December 2008 from the Ministry of Economic Development. Other financial institutions include superannuation and other funds under management.

and stresses in the agriculture sector, particularly the dairy sector (figure 4.3).

...and improvement in problem loans will be slow.

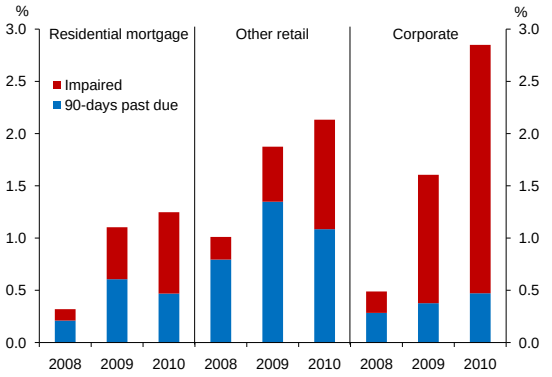
Improvements in asset quality will tend to lag the recovery in economic activity. Forward indicators of asset quality suggest that the level of non-performing loans is now near a plateau in some sectors, notably the household sector. However, modest increases in the aggregate rate of impairment are likely to continue into 2011. The effects of the Canterbury earthquake are also expected to have a modest impact on non-performing loans over the coming months (see box B, chapter 3).

Given the subdued nature of the economic recovery, the improvement in non-performing loans is likely to be slow and will be sensitive to conditions within individual sectors. A lengthy period of depressed activity and weak

Figure 4.3

Major bank non-performing loans by type of lending

(percent of sector lending)



Source: GDS.

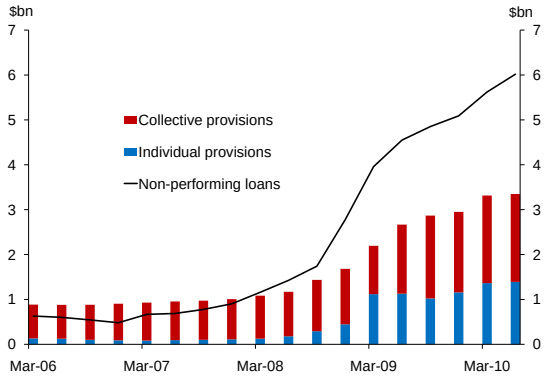
Note: Data are for either the March or June quarter depending on the reporting cycle of each bank. Corporate includes most business and agricultural lending.

cash flow has left many businesses, particularly small- and medium-sized businesses, vulnerable to renewed weakness in economic activity.

Banks have continued to increase their aggregate provisions as problem loans have increased. The rate of increase in provisions has slowed as increases in problem loans have moderated (figure 4.4). The level of provisions appears adequate given the current quality of assets.

Figure 4.4

New Zealand bank provisioning



Source: GDS.

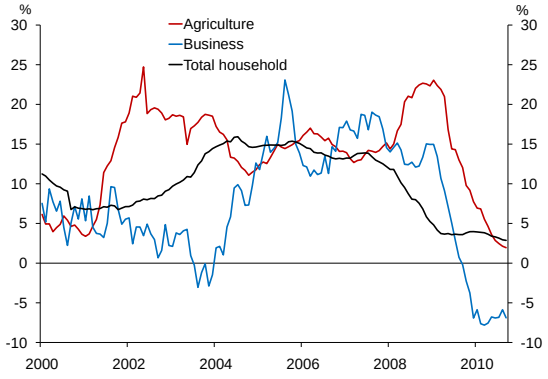
Lending growth has moderated further…

Bank lending has remained flat since the May *Report*. Annual lending growth has fallen from over 15 percent in 2007 to just 0.3 percent for the year to September 2010. The moderation in annual credit growth in the agriculture sector has been pronounced, falling from about 25 percent in 2009 to about 2 percent over the past year. Lending to households continues to grow at a modest annual rate of around 3 percent (figure 4.5).

Figure 4.5

Registered bank lending by sector

(annual percent change)



Source: SSR.

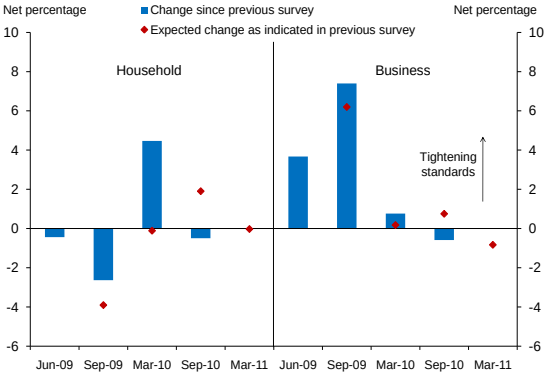
…and lending to business continues to decline.

Bank lending to business is particularly weak compared with previous economic cycles. The decline in New Zealand bank lending to business is being driven in large part by falls in lending for property and business services. Bank lending to non-property business has also fallen but appears to be stabilising.

Banks have tightened their lending conditions over the past two years in response to higher perceived credit risks given the weak economic environment (figure 4.6). While the Reserve Bank's credit conditions survey of banks indicates that terms and conditions for lending have remained broadly unchanged since March, they remain notably tight in the small- and medium-sized business sector and for agriculture. However, there are some signs that lending standards are easing in the corporate/institutional lending sector. Banks generally remain willing to lend to creditworthy businesses and should be well placed to do so, having incurred only modest loan losses through the recessionary period. It is important that the banks continue to lend to businesses on reasonable terms.

Figure 4.6

Change in New Zealand bank lending standards



Source: RBNZ credit conditions survey.

Note: Net percentage is the percentage of respondents reporting a tightening of lending standards over the past six months minus the percentage of respondents reporting a loosening of lending standards. Individual bank responses are weighted by market share.

The cost of borrowing for businesses is higher relative to the OCR than in the past, which is probably further contributing to the perceived tightening of credit conditions in the business sector. As discussed below, this at least partly reflects higher funding costs for banks. The higher cost of

credit, continued weakness in the domestic economy, and a reduced appetite for debt continue to drive weak demand for bank credit from businesses.

Lending growth is expected to recover to modest levels…

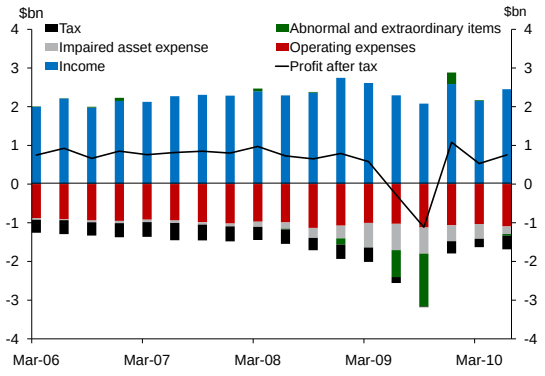
The usual lags between economic activity and lending growth suggest that bank lending might begin to recover around the end of 2010. However, the weak recovery in economic activity and the focus across sectors on reducing debt levels indicates that credit growth through the recovery might be more moderate than usual. A return to the unsustainably high growth rates prevalent before the recession is unlikely and undesirable. However, a return to modest rates of credit growth will be necessary to sustain economic recovery.

…and profitability has improved.

Bank profits improved markedly through the end of 2009. Earlier in 2009 profits were eroded by high loan loss allowances and provisioning for costs associated with the structured finance court cases lodged by the IRD. Profits rebounded in the fourth quarter of 2009, reflecting a decline in loan loss provisioning and as some of the provisions associated with the tax case were reversed following out of court settlements (figure 4.7). There were also positive revaluation effects on banks' trading books which boosted income.

Figure 4.7

Bank revenue and expenses



Source: GDS.

Profits have been fairly steady over 2010 so far, with provisioning for loan losses continuing to diminish, and some recent recovery in net interest margins. Recently announced third quarter results (not shown in Figure 4.7) have continued to show improvement.

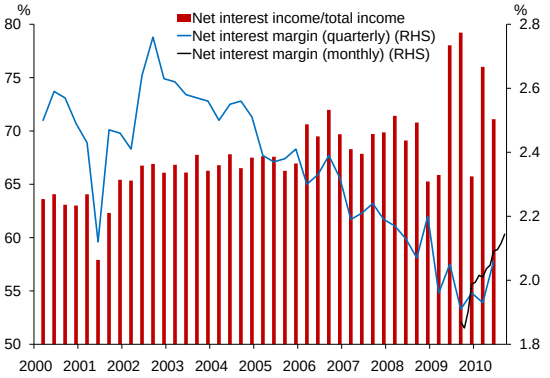
Net interest margins are stabilising.

The net interest margin earned by banks has trended down since 2003 (figure 4.8). This decline initially reflected an environment of high credit growth and competition in domestic loan markets in which banks were able to reduce interest margins while maintaining profitability through higher volumes. More recently the decline in the net interest margin has been due to the higher cost of funding facing the banks, which banks were not initially able to recoup through higher loan rates.

Figure 4.8

Retail banks' net interest income margins

(annualised)



Source: GDS, Net Interest Margin Survey.

Note: Net interest margin is defined as the ratio of net interest income to average income-earning assets. Retail banks are locally incorporated banks (including their banking groups where applicable) with a significant proportion of both assets and liabilities with the household sector as a counterparty. The ratio of net interest income to total income includes all registered banks.

The decline in New Zealand banks' net interest margin contrasts with the experience of the Australian banking system, where margins have been increasing since the middle of 2008. The Australian banks have been successful in recovering higher funding costs from their customers. Australian banks' greater exposure to the business sector (compared to New Zealand banks) may account for some of the increase in the Australian net interest margins, since business lending margins tend to move higher during periods of economic weakness.

Net interest margins for the New Zealand banking system have increased slightly over the course of 2010 as higher funding costs have been passed through more to borrowers.[1] The outlook for net interest margins will depend on how competitive conditions in the banking sector develop as lending growth resumes.

Banks have sufficient access to funding, albeit at higher cost…

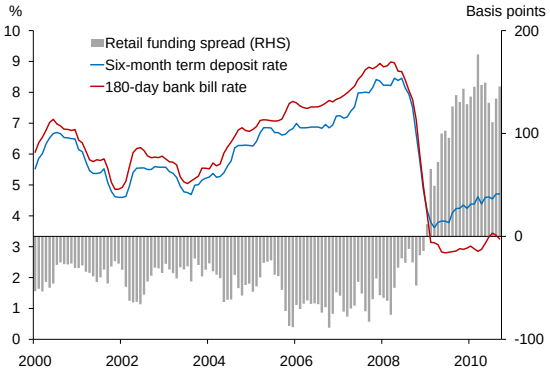
The cost of wholesale funding for New Zealand banks remains elevated and somewhat volatile (see chapter 2). Market conditions have fluctuated in response to sovereign debt concerns and sentiment has remained sensitive to macroeconomic developments. Despite disruptions, New Zealand banks have retained sufficient access to external wholesale funding markets, albeit at higher cost, benefiting from the generally positive view of Australasian banks held by international investors. However, the banks remain vulnerable to deterioration in market sentiment towards the Australasian region given the reliance of the New Zealand banks and their Australian parents on external wholesale funding.

Growth in retail deposit funding has been relatively flat since the last *Report*. Competition for retail deposits among banks increased during the financial crisis, as pressure from ratings agencies and new regulation further encouraged banks to increase their share of retail funding, bidding up deposit rates (figure 4.9). The spread between deposit rates and benchmark rates has narrowed slightly with the increases in the OCR in June and July not fully reflected in higher deposit rates. However, continued pressure from markets and from the core funding requirement to retain a solid retail funding base will likely see retail spreads remain at relatively high levels.

In June, BNZ initiated a covered bond programme. This is the first issue of covered bonds in New Zealand and further issues by New Zealand institutions are anticipated during the fourth quarter of 2010 and into 2011 as banks seek alternative sources of core funding. The Reserve Bank is currently developing policies related to covered bond issuance (see chapter 6).

Figure 4.9

New Zealand retail funding spread



Source: SSR.

Note: Retail funding spread is the difference between the average aggregate six-month term deposit rate and the 180-day bank bill rate.

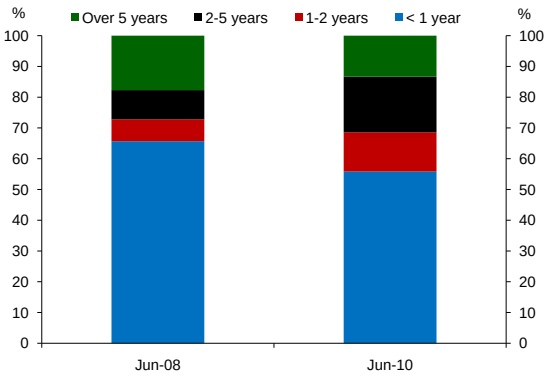
…allowing the tenor of funding to be extended…

Banks have lengthened the average maturity of their funding considerably over the past two years, reducing their reliance on short-term wholesale funding (figure 4.10). This has been in response to funding pressures experienced during the financial crisis, as well as pressure from bank stakeholders, rating agencies and Reserve Bank regulation. To some degree the lengthened maturity of New Zealand banks' wholesale funding has helped to insulate banks during recent volatile

Figure 4.10

Residual maturity of New Zealand banks' offshore funding

(share of offshore funding)



Source: Statistics New Zealand.

Note: Excludes a small amount of funding where maturity is unspecified.

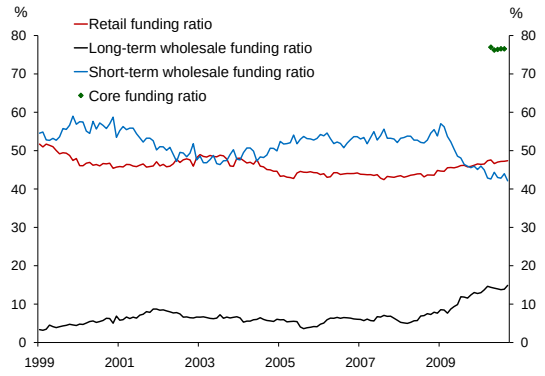
[1] The Reserve Bank has recently released new monthly data for the net interest margin. Further information can be found at http://www.rbnz.govt.nz/statistics/banksys/g5/specialnote.html

market conditions. This has reduced the volume of funds they have needed to rollover in short-term funding markets and allowed them to access debt markets when conditions and pricing are most favourable.

The Reserve Bank's prudential liquidity policy requires banks to obtain a minimum share of their total funding from stable sources – namely retail deposits or longer-term wholesale funding. All locally incorporated banks were compliant with the initial core funding ratio threshold when the policy came into force on 1 April 2010. Banks now hold comfortable buffers of core funding above the regulatory minimum of 65 percent (figure 4.11). The Bank plans to raise the minimum core funding ratio to 75 percent over the next two years. Recent data indicate that most banks are already operating near or well above this higher level.

Figure 4.11

Sources of bank funding



Source: SSR, RBNZ liquidity report.

Note: Short-term wholesale funding is approximated by funding with less than one year to rate reset. The retail, short- and long-term wholesale funding ratios are relative to loans and advances and are based on SSR data. The core funding ratio is derived from the new prudential liquidity reports for the four major banks.

…even as government support for bank funding expires.

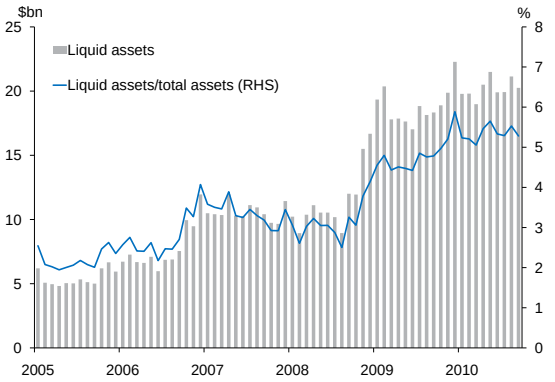
The New Zealand Government introduced the Crown wholesale guarantee scheme in November 2008 to help ensure ongoing access to funding markets during the period of financial market turmoil. The Crown retail deposit guarantee scheme was also introduced to support the retail funding bases of qualifying financial institutions. The improvement in wholesale funding markets over the past 18 months allowed banks to access term funding without guarantee and the wholesale guarantee scheme was discontinued on 30 April 2010 without disruption. The original retail deposit guarantee scheme expired on 12 October 2010. This scheme has been succeeded by an extended scheme through to the end of 2011. Due to their stable financial position, no banks have entered the extended scheme.

Banks' liquid asset positions are stable.

The prudential liquidity policy requires banks to hold a minimum level of liquid assets against their short-term liabilities and to report the difference relative to total funding (a mismatch ratio). Banks increased their holdings of liquid assets over the course of the financial crisis (figure 4.12) and at the introduction of the liquidity policy all banks held sufficient liquid assets to comfortably meet the minimum liquidity requirements (figure 4.13. overleaf).

Figure 4.12

Banks' liquid assets

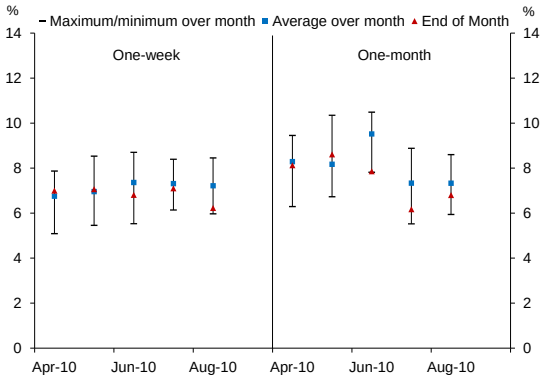


Source: SSR.

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 is used in the Reserve Bank's prudential liquidity policy.

Figure 4.13

New Zealand banks' liquidity mismatch ratios



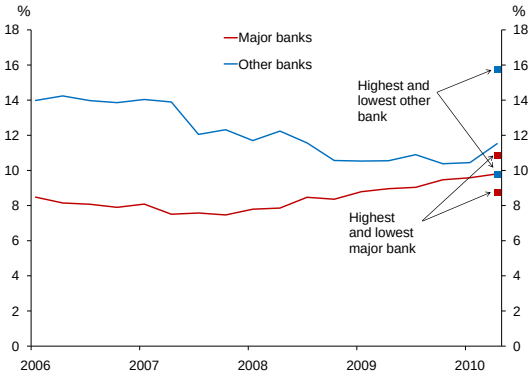
Source: RBNZ.

Note: The liquidity mismatch ratio is the ratio of primary liquid assets less funding and other contractual outflows due within one week or one month to total funding. The maximum and minimum are the maximum and minimum average across banks that occur over the month. The regulatory minimum is zero.

Figure 4.14

New Zealand bank Tier 1 capital ratios

(locally incorporated banks)



Source: GDS, RBNZ calculations.

Note: Percent of risk-weighted assets. 'Other' banks comprise Rabobank New Zealand Ltd, Kiwibank Ltd, Southland Building Society, TSB Bank Ltd and Bank of Baroda (New Zealand) Limited. High-low comparison excludes banks under $500 million in assets.

Capital positions remain strong.

New Zealand banks hold high levels of capital as a buffer against losses. Nearly all banks continue to maintain their total capital ratios in excess of 12 percent of risk-weighted assets.

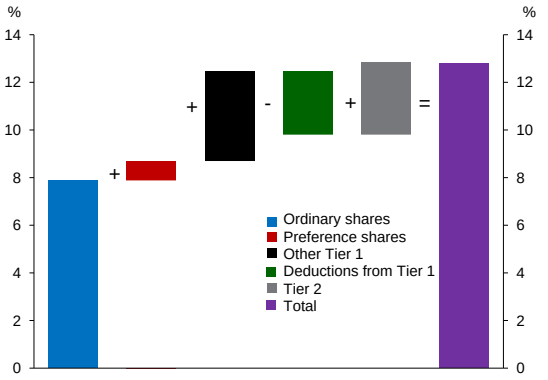
The quality of capital held by banks has been brought into sharp focus through the financial crisis as the capital held by many international financial institutions proved to be an insufficient buffer against losses. The new international standards announced recently by the Basel Committee on Banking Supervision focus on increasing the quality as well as the quantity of capital held by banks (see chapter 6). The capital held by New Zealand banks is of high quality, with limited reliance on the 'hybrid' debt instruments that proved to be ineffective loss-absorbers in the recent international crisis. The major banks have continued to gradually increase their Tier 1 capital ratios and a majority of all banks now hold Tier 1 capital ratios above 9 percent (figure 4.14). The ratio of ordinary share capital (the class of bank capital with the greatest capacity to absorb losses) to risk-weighted exposures exceeds 6 percent for all New Zealand banks (figure 4.15) – comfortably above the new international standards. New Zealand banks are generally well positioned to conform to the new capital requirements should these standards be adopted in New Zealand.

The Australian banks have also bolstered their capital positions over the past two years. We continue to expect that the Australian parents would be well placed to support their New Zealand subsidiaries by providing additional capital if the need arose. Additional support for Kiwibank has also been formalised recently as the New Zealand Government has extended a callable capital line to the locally owned bank through its parent, New Zealand Post.

Figure 4.15

Composition of major New Zealand banks' capital

(percent of risk weighted assets, as at June 2010)



Source: GDS, RBNZ calculations.

Note: Other Tier 1 capital includes retained earnings. Deductions from Tier 1 capital include goodwill, other intangible assets and other deductions.

4.2 Non-bank sector

Savings institutions remain in a stable position.

Savings institutions (comprising building societies, credit unions and the PSIS) have generally performed well through the global financial crisis. These institutions have remained well capitalised, and have maintained a stable funding base. While asset quality at these institutions has deteriorated, their lower risk profile of lending has kept loan impairments low. Despite the stable performance of savings institutions, regulatory changes coming into effect over the next year, along with greater competition for retail funding, may encourage a degree of reorganisation in the sector.

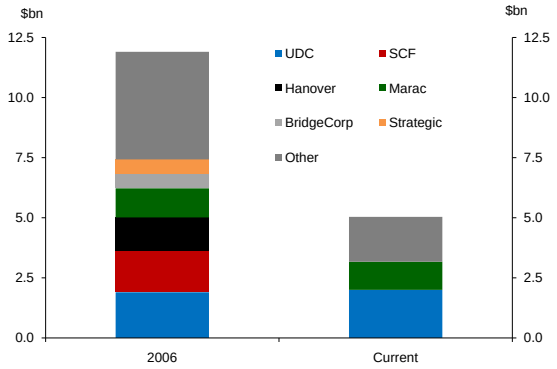
Conditions for finance companies remain challenging…

Funding to the finance company sector has continued to decline over the past 12 months as both deposit-taking and non-deposit-taking institutions have struggled to retain or attract new funding. Increased competition for retail funding from banks and other non-banks has also increased the funding pressures on finance companies. The liquidity positions of a number of finance companies have deteriorated further due to this lack of funding. Loan losses have also eroded the capital positions of many finance companies, particularly those with significant exposure to the property development sector.

Investor confidence has been negatively impacted by the failures of more finance companies over the past year, including Allied Nationwide Finance and South Canterbury Finance. The failure of South Canterbury Finance, one of the largest finance companies in New Zealand, on 31 August constituted one of the largest corporate failures in New Zealand commercial history. The effects of the failure on depositors were limited by the immediate payout by the Treasury under the Crown retail deposit guarantee scheme, leaving the Crown as the main remaining creditor. Over the past three years the deposit-taking finance company sector has shrunk dramatically (figure 4.16).

Figure 4.16

Deposit-taking finance companies by size of assets



Source: RBNZ.

Note: Excludes any finance companies operating under a moratorium arrangement or that are in receivership. The chart identifies specific finance companies with assets over $500 million only.

…and some further consolidation in the sector is expected.

The original Crown retail deposit guarantee scheme expired on 12 October. The scheme provided short-term certainty for investors and protected the funding base of non-bank deposit takers (NBDTs) through a period of significant adjustment. The extended retail deposit guarantee scheme is now in effect. Seven NBDTs have entered the extended scheme. The majority of NBDTs were either ineligible for or chose not to enter the extended scheme due to the more stringent qualification criteria and the increased fees for participation. Most NBDTs with deposits of less than $20 million, which are exempt from the regulatory credit rating requirement, chose not to obtain a credit rating and therefore did not meet the minimum credit rating requirement for the extended scheme.

Some NBDTs that are not part of the extended scheme have loyal customer bases and have not experienced significant difficulties in retaining funding thus far, nor are they expected to. Other institutions are facing more difficulties retaining or attracting new funding, particularly as confidence in the sector remains shaken by recent high profile failures.

The Reserve Bank is continuing to implement a regulatory regime for NBDTs. The next stage of this regime, which introduces requirements on capital levels, liquidity

regulations, governance requirements and restrictions on related party exposures, comes into force on 1 December 2010 (see chapter 6). While many NBDTs are well positioned with regard to the new requirements, the cost of becoming compliant could encourage further reorganisation within the sector. Some merger activity has been announced or already taken place over the past few months. In certain cases the mergers have seen the new entities enter (or contemplate entering) the bank sector. For example, Hastings Building Society has merged with SBS Bank. MARAC Finance Limited has also initiated plans to merge with two building societies with the intention of the merged entity applying for bank registration.

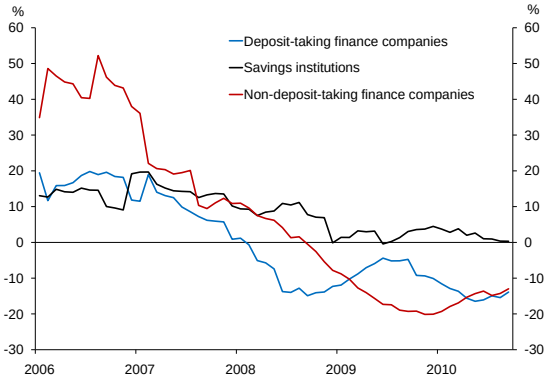
The longer-term outlook is more positive.

A strong non-bank sector is an important part of a sound and efficient financial system, particularly given the role of the sector in financing activities that banks traditionally have not been involved with. The consolidation in the non-bank sector over the past three years has sifted out most of the weaker institutions. The majority of the institutions remaining in the sector are those with stronger capital positions and better risk and liquidity management practices. These institutions generally also have only moderate exposure to the property development sector. Non-bank deposit-taking institutions are expected to continue to have a role in the financial system, alongside the banks and non-deposit-taking lending institutions, albeit a diminished one over the next few years.

Non-bank lending has continued to decline.

Reflecting the steady decline in funding to the NBDT sector and continuing weak economic conditions, aggregate lending from the non-bank sector has fallen 25 percent since January 2008. The decline in lending has been concentrated in the finance company sector (figure 4.17).

Figure 4.17
Non-bank lending by institutional sector
(annual percent change)



Source: Non-Bank Lending Institution 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.

As the sector consolidates over coming years, lending is expected to recover. Already there are signs of some stronger deposit-taking finance companies beginning to expand their loan books. However, the composition of lending from the NBDT sector has materially changed. The NBDT sector's exposure to the property development sector is likely to remain greatly reduced as the sector has shrunk and as the model of retail funding for high risk exposures has been proven to be unsustainable. The banking sector has also demonstrated a reduced appetite for property development lending. It appears the funding of viable projects in the property development sector will require new funding models better suited to the financing of higher risk projects. For example, a number of private equity-based funding vehicles have been launched over recent months with the intention of financing both new and existing property development projects. It is important that potential investors in proposed investments are aware of the nature of the risks to which they are exposing themselves and undertake adequate due diligence when making investment decisions.

4.3 Insurance sector[2]

The Insurance (Prudential Supervision) Act passed into law on 7 September 2010 empowering the Reserve Bank to prudentially regulate and supervise licensed insurers. The Reserve Bank is in the process of implementing a structure and processes for assessing licence applications and supervising licensed insurers under the new regime (see chapter 6 for time frames in relation to the Act).

In general, the New Zealand insurance sector appears to be stable with the annual reports of major insurers showing improved financial results. Their focus appears to be on strengthening their balance sheets in the wake of the global financial crisis. Key components of this strategy appear to be a trend towards tighter underwriting of insurance risks and an emphasis on cost control.

General feedback from New Zealand's non-life insurance sector indicates that the majority of claim costs from the Canterbury earthquake will be covered by reinsurance arrangements (see box B, chapter 3). New Zealand insurers use offshore reinsurers and the global reinsurance market is currently in a strong capital position. Reinsurance pricing has been very competitive with a trend of falling premiums. However, reinsurance pricing tends to rise in regions that have recently experienced a disaster, as in Chile where insurers are being charged higher reinsurance premiums at renewal following their February 2010 earthquake. It is likely that there will be a similar impact on New Zealand reinsurance pricing following the Canterbury earthquake.

Short-term challenges for insurers include the impacts from changes to taxation on life insurance business from 1 July, as well as claims from the Canterbury earthquake and late-September severe weather. New solvency standards for the life, non-life and captive insurance sectors are being introduced through the Insurance (Prudential Supervision) Act. From mid-2012, reporting related to these standards will give the Reserve Bank information that will allow a more intensive approach to insurance sector oversight.

[2] **See the May 2010 *Report* for an overview of the size and composition of the New Zealand insurance sector.**

5 Payment and settlement systems

Key payment systems in New Zealand have continued to operate satisfactorily in recent months. However, there was an outage for most of one day for the new NZCDC settlement system. There have been recent changes to New Zealand's financial system infrastructure. Included in these is the establishment of Payments New Zealand Limited which has assumed responsibility for managing payment system rules. Meanwhile, the Reserve Bank and NZX have reached a Memorandum of Understanding to retain separate securities settlement systems, but to allow full interoperability so that securities can move freely between the two depositories.

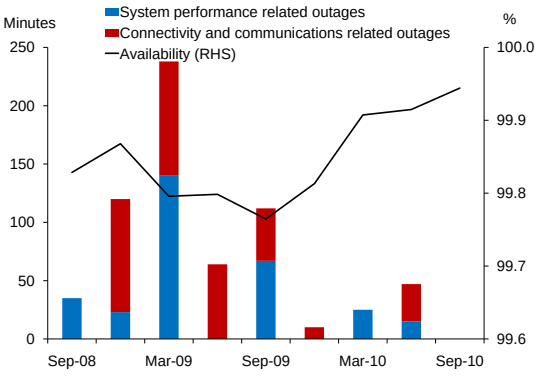
Payment and settlement systems have continued to function satisfactorily.

It is important for the ongoing stability of the financial system that the clearing and settlement infrastructure can handle the demands placed on it, allowing payments to be made and financial market transactions to be settled, even in periods of severe stress. Operationally, the various payment and settlement systems (including the systems for processing smaller value payments such as cheques, electronic debits and credits, and EFTPOS transactions) have experienced few problems (see table 5.1 for a summary of payment and settlement systems operating in New Zealand). Key systems have processed payments effectively and have exhibited a high degree of availability in recent months.

The Exchange Settlement Account System (ESAS) is at the heart of the New Zealand payment system as it is the system through which inter-bank settlement occurs. The overall availability of the ESAS/NZClear system has improved in 2010 with no repeat of the outages affecting the system early last year that were discussed in previous *Reports* (figure 5.1).[1]

Figure 5.1

ESAS/NZClear availability and outages



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.

The new NZCDC settlement system (for settling trades on NZX markets) suffered an outage for most of one day due to a hardware failure. Settlement of the transactions due to be settled on the day of the outage was still completed, but later than usual.

In terms of the volume of transactions processed, the two large value inter-bank systems (ESAS and the CLS system[2]) have experienced contrasting trends in recent months.

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

[2] The CLS (Continuous Linked Settlement) system is an international system used to settle foreign exchange trades in 17 major currencies.

Table 5.1

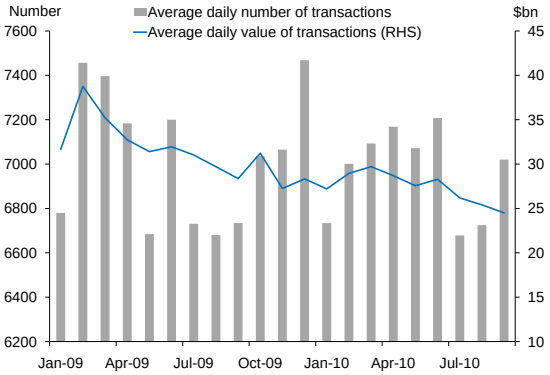
New Zealand payment and settlement systems

System	Description	Owner/operator
High value		
Exchange Settlement Account System (ESAS)*	Provides real time gross settlement of inter-bank transactions across the exchange settlement accounts held with the Reserve Bank.	RBNZ.
Continuous Linked Settlement (CLS)*	Global system that 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 NZClear 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		
NZClear (formerly Austraclear)	Allows members to settle fixed interest and equity transactions and make cash transfers. Inter-bank payments occur directly in ESAS.	RBNZ.
NZCDC Settlement System*	Used to clear and settle trades on NZX markets. The system includes a central counterparty and securities depository.	New Zealand Clearing and Depository Corporation Limited (a wholly owned subsidiary of 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.

* **Denotes systems declared to be designated settlement systems under the Reserve Bank of New Zealand Act 1989.**

Over 2010, the average number of transactions settled in ESAS each day has remained below the levels experienced over 2008/09 (figure 5.2). There has also been a continuing downward trend in the average daily value of transactions settled. This trend largely reflects subdued trading of the New Zealand dollar in foreign exchange markets.

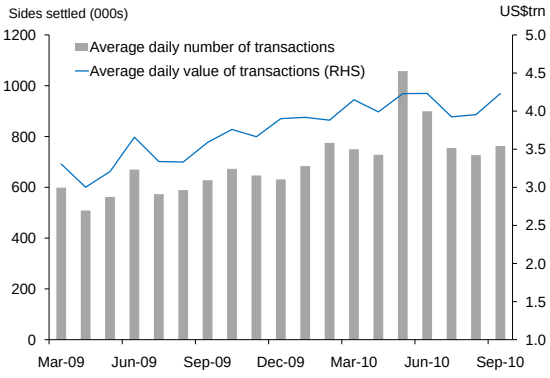
Figure 5.2
ESAS transactions



Source: RBNZ.

Conversely, trading activity in other currencies in international markets soared in May as these markets experienced a volatile period with market participants reacting to uncertainty about sovereign debt levels. As a result, there was a significant increase in the number of foreign exchange transactions submitted for settlement in the CLS system (figure 5.3).

Figure 5.3
Global CLS transactions



Source: CLS Bank International.

It is important for the management of foreign exchange settlement risk by New Zealand banks that the CLS system continues to operate normally even in the face of these very large demands placed on it. This has continued to be the case. CLS Bank International, the operator of the CLS system, monitors transaction flows and upgrades the system as required to ensure that it is technically capable of handling the volume of trades submitted for settlement. Despite the record numbers of transactions, all trades submitted for settlement during the period of peak demand were consistently settled within standard timeframes.

There have been changes to New Zealand's financial system infrastructure.

There have recently been two significant changes to New Zealand's financial system infrastructure. The first change has been the establishment of Payments New Zealand Limited (PNZ). This entity has assumed responsibility from the New Zealand Bankers' Association for managing current payment system rules relating to the clearing and settlement of four types of payments: paper-based instruments (predominantly cheques), bulk direct entry electronic transactions (direct credits, direct debits and automatic payments), EFTPOS transactions and high value transactions.

PNZ was established to ensure that there are objective and publicly disclosed criteria for participation in the clearing and settlement of each of the four payment types with the criteria permitting fair and open access. All participants should also have a role in the ongoing administration and development of the rules relating to the types of payments that they can clear and settle.

In respect of ensuring fair and open access, a major development has been the resolution of a long standing issue relating to access fees. Previous proposals required new entrants to the retail payment system to pay existing participants a fee, including a portion intended to reimburse existing participants for the costs incurred establishing necessary connections with the new entrant. This fee could have been substantial and could have provided a barrier to entry. However, it has now been agreed that a new entrant will not be required to reimburse interconnection costs provided six months notice is given of the intention to participate in the retail payment system. The Reserve Bank will watch developments in this regard with interest, in particular, that the costs involved in accessing the payment system are reasonable for new participants.

Complementary to the establishment of PNZ, work has continued on the implementation of the settlement before interchange (SBI) arrangements. SBI aims to eliminate inter-participant settlement risk in the retail payment system by having transactions settled at the same time that payment details are exchanged. The introduction of SBI will help alleviate concerns that existing participants may have about the risks associated with the entry of a new participant into the retail payment system. The SBI arrangements are expected to be implemented between August and October 2011.

The second change has been the introduction of new arrangements for the settlement of trades on NZX markets involving equities, debt securities and derivatives on NZX's new derivatives market. The NZCDC settlement system is operated by New Zealand Clearing and Depository Corporation Limited, a wholly owned subsidiary of NZX Limited. The new arrangements comprise a central counterparty, central securities depository, electronic systems for participants to deliver instructions to both these entities and an electronic interface with registries to enable securities and other products to be transferred to and from the depository.

The Reserve Bank and NZX have agreed a Memorandum of Understanding.

With the advent of the new NZCDC system, there was a need for NZX and RBNZ to assess how NZCDC and NZClear would interact to best serve the market. The Capital Market Development Taskforce in December 2009 encouraged the Bank and NZX to work together to provide a clearing and settlements infrastructure for New Zealand that would be efficient and facilitate the development of New Zealand capital markets. On 11 October the Bank and NZX announced they had agreed a Memorandum of Understanding whereby the two systems will remain separate but with full interoperability, thus allowing free movement of securities between the two systems. In accordance with the policy change noted below, the Bank will provide a backup liquidity facility to NZCDC and a joint industry advisory council will be established. With regard to the provision of backup liquidity, the Reserve Bank has made an explicit policy change that gives such access to important financial market infrastructures that meet certain criteria.

The global financial crisis underlined the importance of efficient and robust settlement systems and the adverse systemic effects that could result from their failure in a crisis. Major international agencies such as the IMF and the Bank for International Settlements have emphasised the need for central banks to oversee the financial market infrastructure and to support key settlement systems in times of stress. In this context the Reserve Bank has extended access to its overnight secured liquidity facilities to financial market infrastructures that can demonstrate:

1. an ability to safely conduct business with the Reserve Bank in wholesale financial markets; and
2. a positive contribution to the overall soundness and efficiency of the financial system and the functioning of domestic financial markets.

The designation of a settlement system under Part 5C of the Reserve Bank of New Zealand Act 1989 will be taken as evidence that the applicant positively contributes to the soundness and efficiency of the financial system.

6 Recent developments in financial sector regulation

International efforts to strengthen financial regulation have continued, with the Basel Committee on Banking Supervision announcing a range of measures to strengthen bank capital requirements. Minimum capital requirements are set to increase, with a greater share of this capital to come from high quality sources. In addition, a countercyclical capital buffer has been proposed for periods of excessive credit growth. The Reserve Bank generally supports these new capital requirements, and, subject to a full analysis of their likely impact, is likely to adopt many of them, perhaps with some modifications for the New Zealand context.

The Bank is continuing its work programme on macro-prudential tools to assist the promotion of financial system stability. It is expected that any tools would be used relatively infrequently, with the choice of tool likely to be contingent on the specific conditions being faced.

The Bank is continuing to develop the prudential regime for the non-bank deposit-taking sector. New regulatory requirements for capital, liquidity, governance and related party lending are set to come into force on 1 December. A consultation paper on further regulatory requirements for the sector was released in October.

The Insurance (Prudential Supervision) Act passed into law in September, giving the Reserve Bank power to prudentially regulate and supervise licensed insurers.

6.1 International bank capital reforms (Basel III)

On 12 September, the oversight body of the Basel Committee on Banking Supervision (BCBS) announced a range of measures to strengthen existing bank capital requirements, building on agreements reached in July. These measures have been informally dubbed 'Basel III'. The new standards include a strengthening of the definition of regulatory capital, an increase in minimum requirements and the introduction of new buffers to assist banks to withstand economic and financial stress.

The minimum requirement for common equity, the purest form of loss-absorbing capital, will be raised from

Table 6.1
New capital ratio requirements and buffers
(as a percentage of risk-weighted assets)

	Common equity	Tier 1 capital	Total capital
Existing minimum ratios	2.0%[1]	4.0%	8.0%
New minimum ratios	4.5%	6.0%	8.0%
Conservation buffer	2.5%	2.5%	2.5%
New minimum ratio plus conservation buffer	7.0%	8.5%	10.5%
Counter-cyclical buffer range	0 - 2.5%		

[1] **This requirement is not applied in New Zealand. However all locally incorporated New Zealand banks are well above this requirement at present.**

2 to 4.5 percent of risk-weighted assets while the total minimum Tier 1 capital requirement will increase from 4 to 6 percent. The minimum total capital requirement remains at 8 percent but a conservation buffer of 2.5 percent of common equity will also be introduced. Banks will be able to draw on the conservation buffer during periods of stress but would face increasing restrictions on earnings distributions as the conservation buffer is depleted.

National authorities will also have the discretion to apply a counter-cyclical buffer in a range of 0–2.5 percent of common equity or other fully loss absorbing capital during periods of excessive credit growth. The purpose would be to help protect the financial system during the subsequent downturn. The counter-cyclical buffer, when in effect, would be an extension of the conservation buffer.

The proposed new capital requirements will be phased in with the minimum common equity requirement of 4.5 percent fully in place by January 2015, and the 2.5 percent capital conservation buffer to be phased in over 2016–2019. However, countries in a position to do so may meet the requirements ahead of this schedule. The BCBS also notes that systemically important banks should have additional loss-absorbing capacity beyond the minimum standards and work is continuing on this issue. A Swiss Government commission, for example, has already recommended that the two largest Swiss banks be required to hold total capital equivalent to 19 percent of risk-weighted assets, reflecting their systemic importance.

The new capital requirements are to be supplemented by a non-risk based leverage ratio initially calibrated at 3 percent for Tier 1 capital. This will be trialled over 2013–2017 with any final adjustments to be made in 2017. The leverage ratio is intended to serve as a backstop to the risk-based measures.

The new measures will strengthen bank capital buffers, which in some countries proved inadequate during the global financial crisis. There has, however, been much international debate about the economic costs and benefits of the higher capital standards.[2] While holding more capital should help to reduce the probability and severity of banking crises, thereby enhancing economic welfare, opinions differ on the likely size of this benefit for any given increase in the capital ratio. In terms of the costs of holding more capital, the debate hinges partly on the degree to which banks will face additional funding costs in moving to a higher share of equity capital relative to debt. Those cautioning against the new standards suggest that the cost of raising additional equity could materially increase the cost of credit, crowding out some economic activity. However, proponents of the new standards emphasise that raising more equity should, over time, create a more stable and resilient financial system helping to lower the risk premium that banks face when raising new debt or equity. The long transition period proposed for the new standards may also help reduce pressures on the cost of raising bank equity by giving time for the supply of equity capital to adjust to the new environment.

The Reserve Bank generally supports the strengthening of international capital standards. New Zealand is not compelled to incorporate the new global capital standards into its requirements for its banks, but the Reserve Bank believes there is a strong case to consider many of the proposed standards. All New Zealand banks already meet the proposed new common equity, Tier 1 and total minimum capital ratio requirements. Most banks would also currently meet the conservation buffer in addition to the minimum capital requirements. While this suggests that meeting the new standards would not involve a material cost or upheaval for the banking system, the Reserve Bank plans to fully assess the potential impact of the new standards before reaching a final decision in this area.

The Reserve Bank has already noted that it does not support the introduction of the proposed leverage ratio. The Bank believes the one-size-fits-all approach is poorly targeted and can give a misleading picture of risk in some situations. It would also undermine the value of the existing risk-based approach to the calculation of required capital. If properly applied, the risk-based approach should render

[2] For a flavour of this debate see, for example, Cecchetti, S (2010), "Strengthening the financial system: comparing costs and benefits", remarks prepared for the Korea-Financial Stability Board Financial Reform Conference, Bank for International Settlements, 3 September; and Institute of International Finance (June 2010), "Interim Report on the Cumulative Impact on the Global Economy of Proposed Changes in the Banking Regulatory Framework", available at: http://www.iif.com/

a leverage ratio unnecessary. The Bank believes that a continued emphasis on improving risk-based models for the calculation of capital using a clearly defined through-the-cycle approach to the measurement of risk is appropriate.

In addition to improving the quality of the capital base, the BCBS has also strengthened the rules for the calculation of risk-weighted assets to ensure that all material risks are captured. Capital requirements for trading book exposures as well as for complex securitisations and exposures to off-balance sheet vehicles have been substantially increased. Before and during the crisis, many of these risks were not adequately covered by the risk-based capital regime. While these changes will not have a major effect on New Zealand's banks, given limited trading book exposures and securitisation activity, they should serve to further improve global capital standards.

The BCBS has also proposed a minimum liquidity standard to make banks more resilient to short-term disruptions to funding markets as well as longer-term structural liquidity mismatches in bank balance sheets. The proposed standards are very similar in intent to those provided by the Reserve Bank's prudential liquidity policy for banks introduced in April. However, certain aspects of the new standards are not suitable for adoption in New Zealand. This includes the requirement that government securities comprise the bulk of high quality liquid assets held by banks as New Zealand does not have a sufficient volume of government debt on issue. The proposed net stable funding ratio is similar to New Zealand's core funding ratio, though somewhat stricter than the current calibration of our core funding ratio (even once the core funding requirement rises to 75 percent as planned).

6.2 Macro-prudential work programme

The Reserve Bank is continuing its work programme on macro-prudential instruments assessing whether particular tools might have a role to play in contributing to broader financial stability. Our work to date has led to a number of preliminary conclusions.

The Bank believes that the proper role for macro-prudential tools would be the promotion of financial system stability. In contemplating the use of particular tools, we would therefore need to be satisfied of the need for additional measures to improve financial stability. This is likely to require evidence of financial imbalances in the economy, such as stretched asset prices, household or business sector balance sheets and/or excessive credit growth.

While a large number of macro-prudential tools are under discussion internationally, we believe there are a relatively small number of tools that could have a role to play in New Zealand in the future. These include adjustments to the core funding ratio, the use of counter-cyclical capital requirements (broadly along the lines of the Basel III proposals), adjustments to capital risk weights for particular sectors and measures targeted specifically at the housing market (such as restrictions on loan-to-value ratios).

In principle, macro-prudential instruments may help to promote financial stability in two ways. Instruments such as capital or funding requirements can help to build financial system resilience by increasing financial buffers available to financial institutions to absorb shocks. Some macro-prudential tools may also directly influence the credit cycle (generally through their effect on the price or availability of credit) thereby helping to dampen the build-up of financial system risk due to excessive credit growth.

However, considerable caution is needed in respect of the effectiveness of macro-prudential tools, especially their capacity to directly influence the credit cycle. Most tools have not been used widely in other countries and there is considerable debate about how well they might work. The Bank's analysis suggests that the effectiveness of some tools in constraining credit growth could vary considerably depending on global financial market conditions. For example, raising capital or core funding requirements may be of limited effectiveness in constraining credit growth in an environment in which the cost of capital or funding was cheap. However, use of such tools could still be appropriate to build the future resilience of the financial system. Clarifying what various macro-prudential tools may be able to achieve in different circumstances is an important focus of our work in this area.

The Bank would envisage a 'horses for courses' approach to the use of macro-prudential tools. Some tools may be best suited to managing generalised credit growth whereas

others may be appropriate for dealing with imbalances affecting particular sectors. In this regard it appears unlikely that it will ever be feasible to devise fixed policy rules for the various macro-prudential instruments. Rather, it will be a matter of selecting the right policy instrument for the right occasion.

Another finding from our work is that the use of some tools could result in significant economic distortions and other costs, including financial disintermediation. This would not necessarily render them ineffective but suggests that a careful cost and benefit analysis would be required before deploying them. Some tools might need to be applied more widely than just the banking system to be effective.

There are likely to be limits on what particular tools can achieve. For example, risk weights on different types of bank lending are primarily designed with a prudential objective: to ensure banks are sufficiently capitalised to handle possible losses even in a serious downturn. Up to a point, increasing risk weights during a boom for a particular sector to restrain lending growth would help to meet that prudential objective. However, as noted above, increasing risk weights and capital standards are only likely to have an incremental impact on lending spreads. Moreover, trying to shift risk weights substantially or permanently away from reasonable estimates of credit risk would distort the original purposes of the risk-based capital framework and simply result in the lending occurring outside the banking system. Thus if it was seen as desirable to promote one sort of lending over another on an ongoing basis, it would be better to look for other ways of doing so.

Overall, we believe that if New Zealand were to deploy macro-prudential instruments in the future, their use is likely to be best limited to periods of exceptional financial imbalances, such as unusually strong credit growth and asset prices. This appears to be broadly in line with the intention of the Basel III proposal for counter-cyclical capital requirements, which the BCBS envisage might be applied infrequently in most jurisdictions, perhaps just once every ten to twenty years. Other matters, including governance arrangements for macro-prudential instruments would still need to be considered.

6.3 Non-bank deposit taker prudential framework

Liquidity regulations

Liquidity regulations for the non-bank deposit-taking (NBDT) sector were promulgated in October 2010 and require that an NBDT's trust deed includes one or more quantitative liquidity requirements. These quantitative liquidity requirements must take into account the liquidity of the NBDT and any borrowing group that the NBDT is part of and must be appropriate to the NBDT's business as well as that of the borrowing group if present. Liquidity regulations will come into force on 1 December 2010.

The Reserve Bank consulted on options for liquidity requirements in February 2010 and these options were outlined in the May *Report*. The options ranged in the level of prescription from only requiring liquidity requirements be contained in trust deeds to prescribing quantitative liquidity requirements for NBDTs. Submissions received from the consultation generally supported the Reserve Bank's assessment of liquidity risk in the NBDT sector, of the inclusion of liquidity requirements in trust deeds, and for these liquidity requirements to take into account the liquidity of any borrowing group that an NBDT is part of. Submissions favoured less prescriptive options due to the costs associated with higher levels of prescription.

The Reserve Bank recognises the costs associated with higher levels of prescription compared with the benefits and therefore sets out a flexible approach to setting liquidity requirements in the regulations. NBDTs and trustees will be required to determine the appropriate quantitative liquidity requirements for each NBDT trust deed.

The Reserve Bank has released non-binding guidelines to help the sector develop quantitative liquidity requirements that are appropriate for an NBDT, and therefore meet their obligations under the regulations. The guidelines outline the matters that an NBDT and trustee should consider in setting quantitative liquidity requirements.

Commencement of prudential requirements

The timing of the commencement of liquidity regulations for NBDTs coincides with that for capital ratio requirements, governance requirements, and limits on related party

exposures, which will all come into force on 1 December 2010. These requirements, along with risk management programme requirements, which came into force on 1 September 2009 and credit rating requirements in force since 1 March 2010, will complete the suite of prudential requirements currently proposed under the auspices of Part 5D of the Reserve Bank Act. That leaves the second Bill as more or less the last plank of the NBDT prudential framework still to be implemented (see below).

NBDT disclosure requirements

Once prudential requirements for the NBDT sector come into force, formal disclosure requirements are required to reinforce market discipline around the prudential requirements. The Reserve Bank is currently working with the Ministry of Economic Development to develop specific disclosure requirements. These will include requirements in relation to the risk management programme and credit ratings requirement which are already in force. Disclosure requirements are expected to be in place in early 2011.

Second Bill progress

A consultation paper on the remaining regulatory requirements for NBDTs was released by the Reserve Bank in October 2010. This proposes rules around licensing, fit and proper requirements for senior office holders, change of ownership requirements, and powers for the Reserve Bank for use in managing a distressed or failing institution. These matters are expected to be covered in legislation in 2011.

6.4 Covered bonds

There has been one issue of covered bonds by a New Zealand bank and a number of other banks are exploring the possibility of issuing covered bonds. Covered bonds allow banks to issue collateralised bonds that carry a higher credit rating than that attached to the issuer, thus facilitating term issuance at lower cost. The Reserve Bank generally supports issuance of covered bonds, as covered bonds can provide an additional source of long-term funding and potential stability benefits through diversification of funding. However, since the issuance of covered bonds creates a prior claim over some of the assets of the bank, they have the potential to increase the risk profile of other bank liabilities. The consultation paper on covered bonds released in October 2010 proposes a regulatory framework to support the development of the market. Proposals include introducing a legislative framework to provide additional certainty to investors and maximum limits on issuance. In addition, the Reserve Bank has indicated that new disclosure requirements will be introduced to highlight the dilution of other creditors and depositors. The precise nature of these requirements will be considered following the completion of the bank disclosure review.

The Reserve Bank expects to introduce formal limits on covered bond issuance by the end of 2010. The implementation of any legislative changes will take longer due to the nature of the process. Any required legislation would likely be introduced to Parliament in 2011.

6.5 Bank disclosure review

The Reserve Bank undertook a fundamental review of disclosure requirements earlier this year. The primary objective of the review was to reduce compliance costs associated with the current disclosure statement, while at the same time better matching the needs of the key stakeholders.

In August 2010 the Reserve Bank released a consultation paper that proposed changes to the bank disclosure regime. The main proposed changes include:

- removing duplications or inconsistencies between the Reserve Bank disclosure regime and New Zealand International Financial Reporting Standards;
- changing the half-year financial statements from being prepared on an annual basis to be on an interim reporting basis; and
- reducing disclosure requirements for off-quarter reporting, including removing the key information summary.

The proposed changes are likely to result in a significant reduction in the Reserve Bank's disclosure requirements. The Reserve Bank expects to publish the outcome of the review by the end of the year. The changes will take effect for the disclosure period ended 31 March 2011.

6.6 Insurance regime

The Insurance (Prudential Supervision) Act 2010 passed into law on 7 September 2010. The legislation establishes a framework of prudential regulation and supervision, including a licensing regime, for insurers carrying out business in New Zealand. All insurance providers, including life, health and general insurance, will have to be licensed by the Reserve Bank.

The new regime includes three main phases. The first phase involves notification by existing insurers of their intention regarding continuing insurance business in New Zealand. This notification is required by 5 January 2011. The second phase requires that all insurers conducting insurance business in New Zealand be licensed from 18 months after enactment while existing insurers (ie, insurers already conducting insurance business in New Zealand before enactment) may apply for a provisional licence. The third phase requires that by three years after enactment all insurers carrying out insurance business in New Zealand must be fully licensed. The provisional licence regime ends at this point.

The Reserve Bank will be making guidelines available on its website in relation to the Act and its requirements.

6.7 Financial Markets Authority

The legislation to create the new Financial Markets Authority (FMA) was introduced into the House on 14 September 2010 and is expected to be passed early next year. The Bill sets out the objective and functions of the new regulator which will replace the Securities Commission and take on certain functions of NZX Limited and the Ministry of Economic Development, including those of the Government Actuary. A new function of the FMA is the independent oversight of the auditing profession.

The establishment of the FMA, and the jurisdiction it will have, reinforces the 'twin-peaks' approach to the regulation of the financial system in New Zealand. The Reserve Bank has responsibility for prudential regulation of the *financial institutions* in its charge. These institutions comprise registered banks, non-bank deposit takers and insurance companies. In contrast, most of the focus of the FMA will be on the regulation of *securities*, including those issued by some institutions prudentially regulated by the Reserve Bank.

Notwithstanding the differing roles of the two agencies, the Reserve Bank expects to maintain close contact with the FMA, including for the purposes of exchanging information about emerging risks and mutual concerns in financial markets.

Graphical appendix[1]

International

Figure A1a

Real GDP growth

(annual percent change)

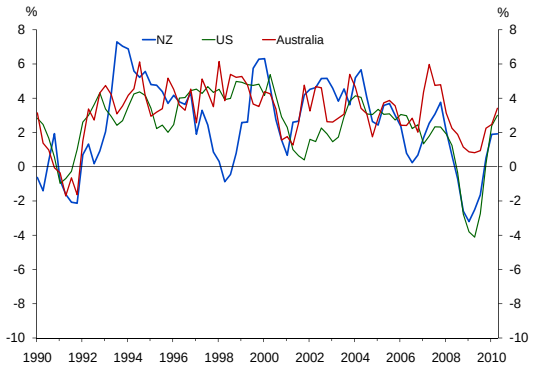


Figure A1b

Real GDP growth

(annual percent change)

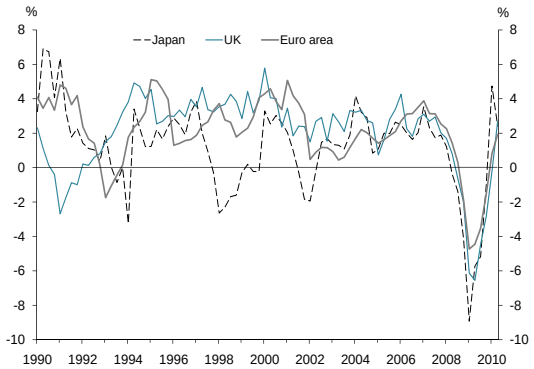


Figure A2a

Current account balance

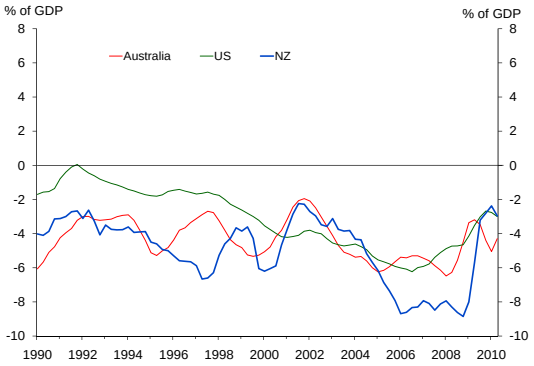


Figure A2b

Current account balance

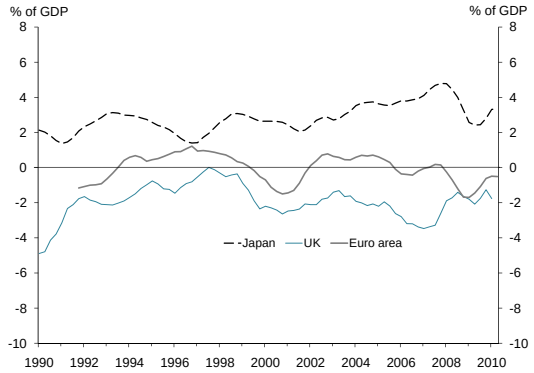


Figure A3

Trade-weighted exchange rate indices

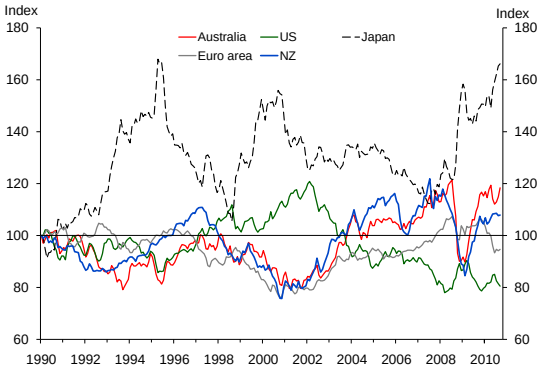
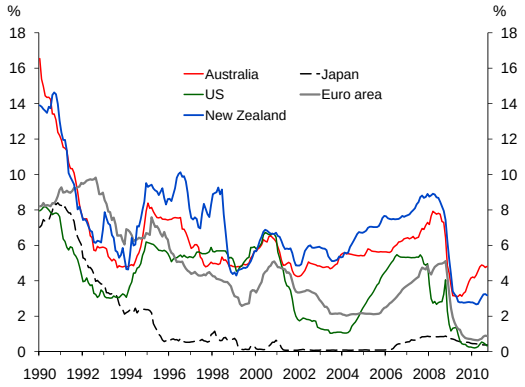


Figure A4

Short-term interest rates



[1] The data contained in this appendix were finalised on 22 October 2010. Definitions and sources are listed on pages 53-54.

Asset prices

Figure A5

Equity market indices

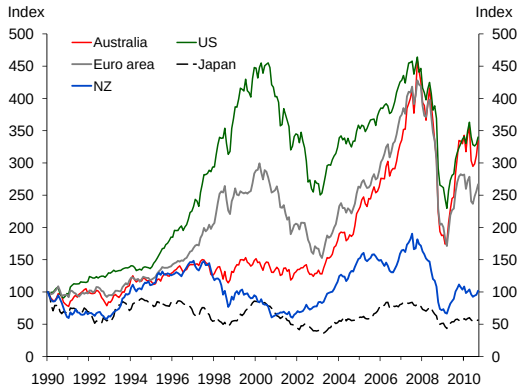
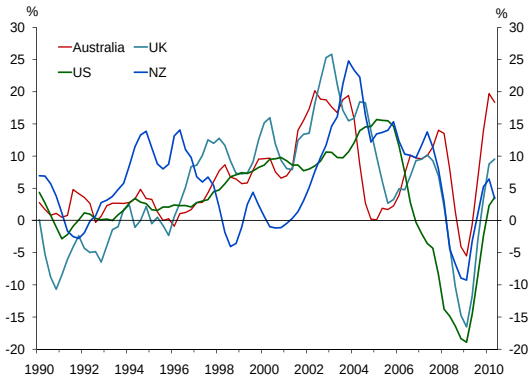


Figure A6

House price inflation

(annual percent change)



New Zealand

Figure A7

Household debt and servicing costs

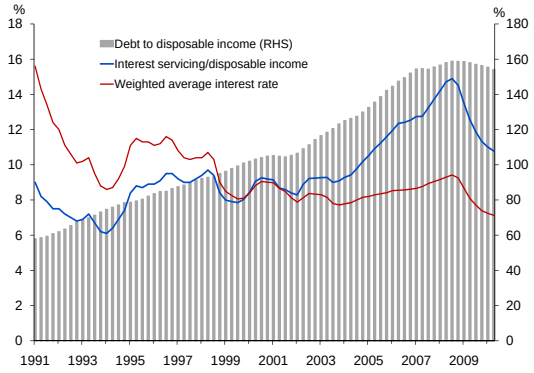


Figure A8

Household assets and liabilities

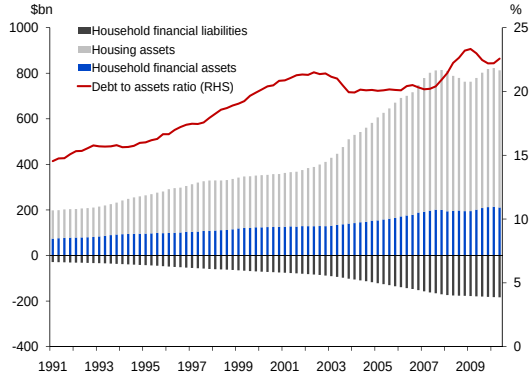


Figure A9

Property price inflation

(annual percent change)

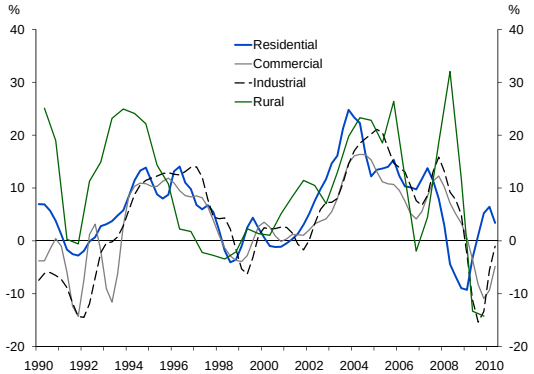


Figure A10

Government debt

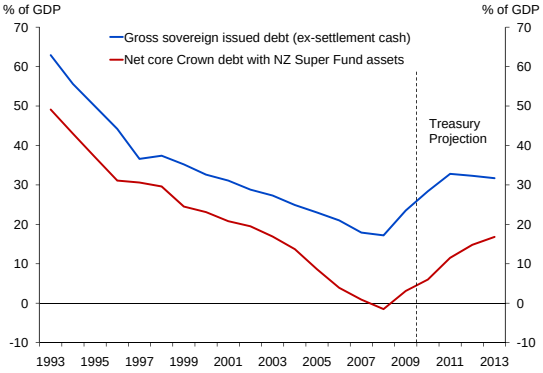


Figure A11

Government bonds on issue and turnover

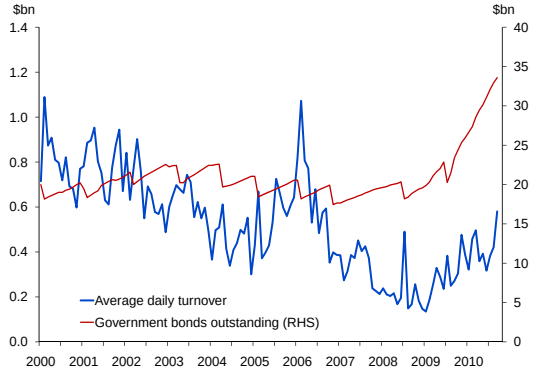


Figure A12

Ten-year government bond spreads

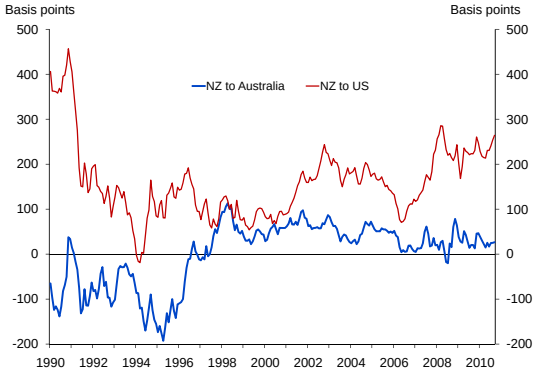


Figure A13

Yields on New Zealand government securities

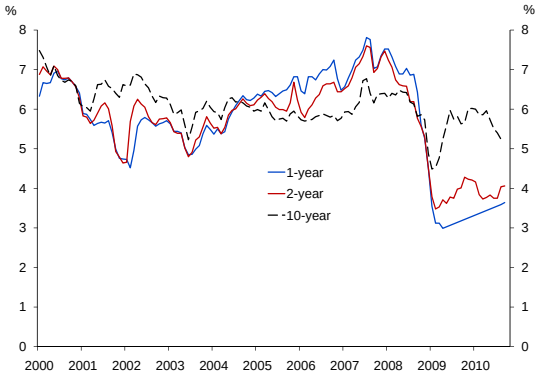


Figure A14

Non-resident holdings of New Zealand government securities

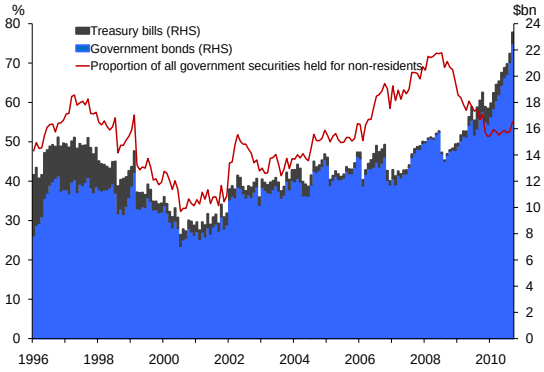


Figure A15

NZD/USD turnover in domestic markets

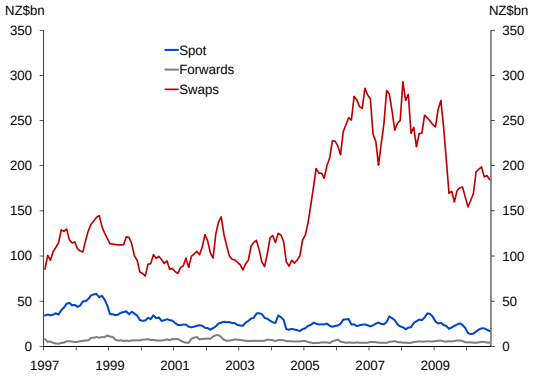


Figure A16

NZD/USD and implied volatility

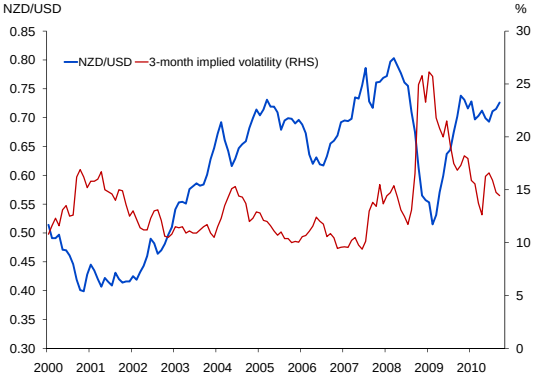


Figure A17

OCR, estimated business lending rate and effective mortgage rate

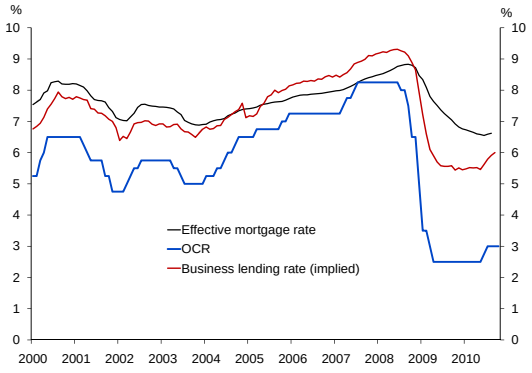


Figure A18

Equity market capitalisation

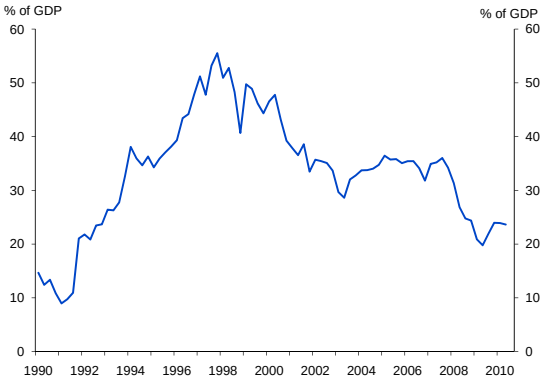
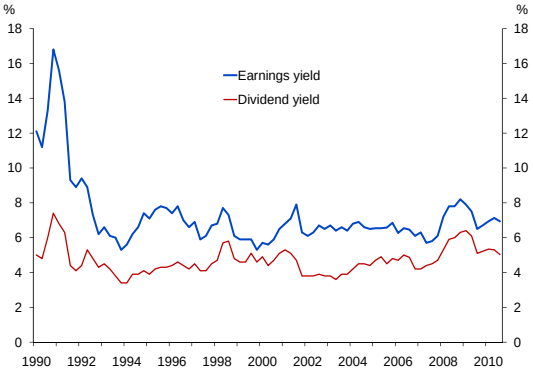


Figure A19

Earnings and dividend yields



Banking sector indicators

Figure A20

System-wide capital adequacy ratios

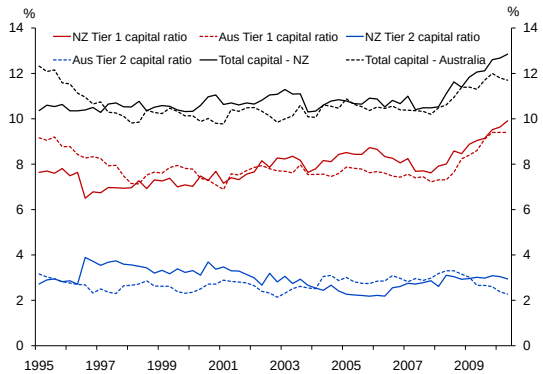


Figure A21

Asset quality

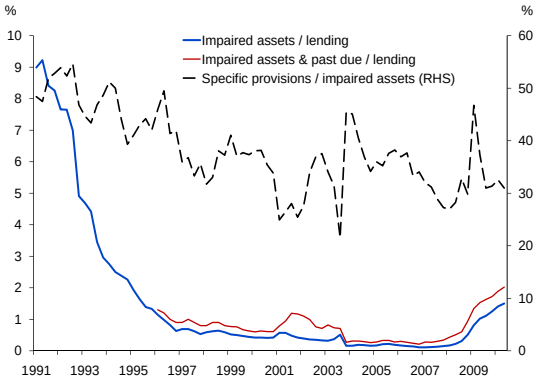


Figure A22

Return on assets

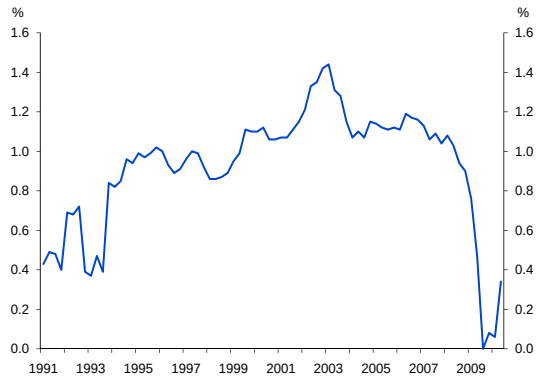


Figure A23

Operating costs to income

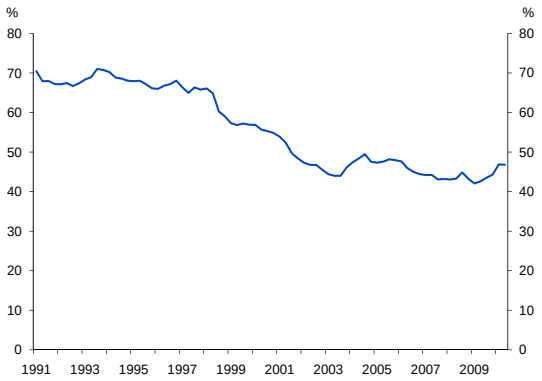


Figure A24

Interest margin

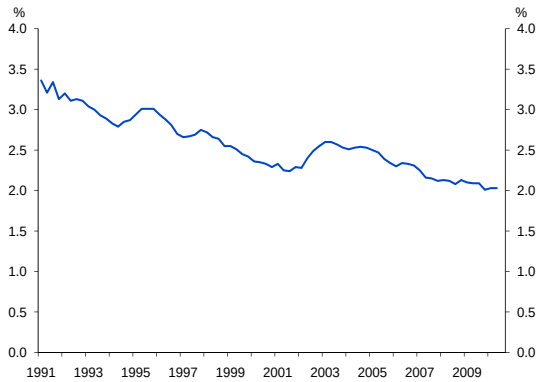


Figure A25

Registered bank offshore funding

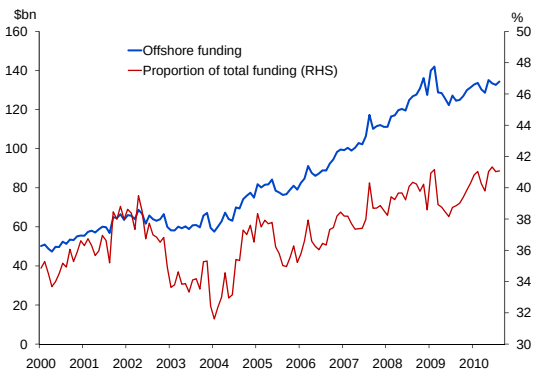


Figure A26

Bank asset composition

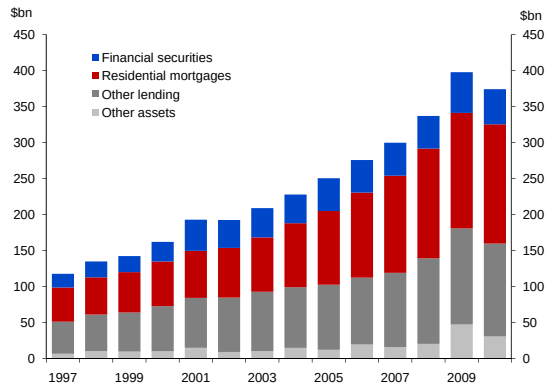


Figure A27

Bank funding composition

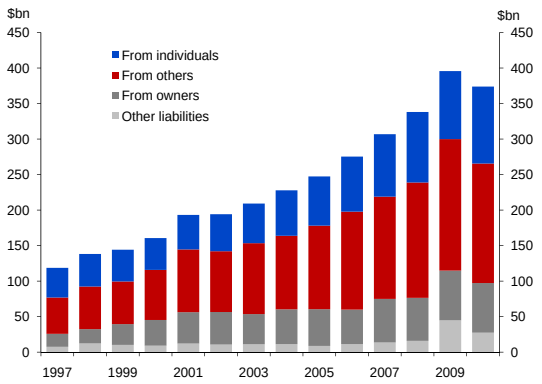


Figure A28

Bank asset growth

(annual percent change)

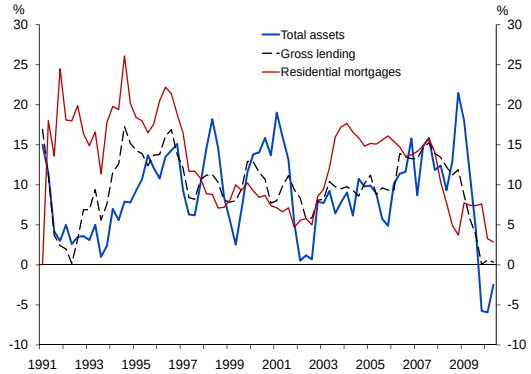
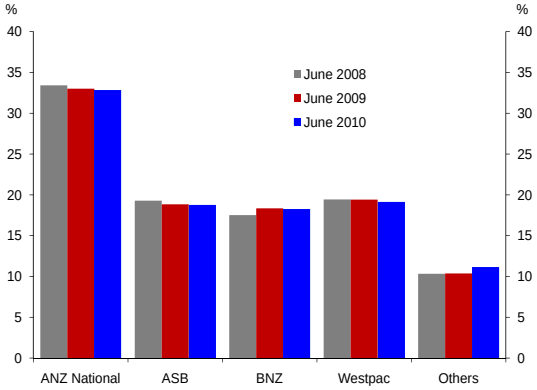


Figure A29

Bank market share



New Zealand financial system assets and liabilities

Table A1

Financial system liabilities

As at 31 December $bn	1990	1995	2000	2006	2007	2008	2009	2010*
Banks								
Households	24	32	41	70	79	90	93	93
Other residents	29	35	54	88	97	112	100	95
Non-residents	11	22	56	100	111	128	132	134
Other liabilities and equity	14	14	29	36	42	70	52	51
Total	78	103	180	294	329	400	377	373
Other non-bank lending institutions								
Households	2	3	5	12	12	9	9	9
Other residents	3	2	4	14	16	14	12	11
Other liabilities and equity	1	1	1	4	4	4	4	3
Total	6	6	10	30	32	27	24	23
Funds under management								
Household assets	26	42	56	64	65	55	61	61
Other sector assets	1	1	5	7	8	7	7	7
Total	27	43	61	71	72	62	68	68
Total financial system liabilities	111	152	252	396	433	489	469	464

Table A2

Financial system assets

As at 31 December $bn	1990	1995	2000	2006	2007	2008	2009	2010*
Banks								
Households	20	42	67	135	153	163	170	172
Other residents	36	45	74	115	130	154	139	134
General government	8	6	7	3	4	5	14	15
Non-residents	2	2	17	13	15	15	17	13
Other assets	12	8	16	27	27	62	38	39
Total	78	103	180	294	329	400	377	373
Other non-bank lending institutions								
Households	2	3	5	14	15	12	10	10
Other residents	3	2	4	12	13	12	11	10
Other assets	1	1	1	4	4	4	3	3
Total	6	6	10	30	32	27	24	23
Funds under management								
Domestic fixed interest	na	na	28	27	27	28	27	28
Domestic equities	na	na	7	9	9	6	7	7
Domestic other	na	na	4	5	5	4	4	4
Overseas investments	na	na	22	30	31	24	30	29
Total	27	43	61	71	72	62	68	68
Total financial system assets	111	152	252	396	433	489	469	464

*** As at 30 June 2010.**

Source: RBNZ surveys and registered banks' GDS.

Note: General insurance companies not surveyed. Property syndication included in 'domestic other' funds under management. Minor values for RMBS not included. Totals and sub-totals may not add due to rounding.

Table A3

New Zealand registered banks

Registered bank's name[1]	Market share[2]	Credit ratings			Ultimate parent	Country of parent
		S&P	Moody's	Fitch		
Australia and New Zealand Banking Group Limited (B)	2.4	AA	Aa1	AA-	Australia and New Zealand Banking Group Limited	Australia
ANZ National Bank Limited	30.4	AA	Aa2	AA-	Australia and New Zealand Banking Group Limited	Australia
Commonwealth Bank of Australia (B)	1.7	AA	Aa1	AA	Commonwealth Bank of Australia	Australia
ASB Bank Limited	17.0	AA	Aa2	-	Commonwealth Bank of Australia	Australia
Bank of New Zealand	18.2	AA	Aa2	-	National Australia Bank	Australia
Bank of Baroda (New Zealand) Limited	0.0	-	-	BBB-	Bank of Baroda	India
Citibank N A (B)	0.7	A+	A1	A+	Citigroup Inc.	USA
Deutsche Bank Aktiengesellschaft (B)	0.7	A+	Aa3	AA-	Deutsche Bank Aktiengesellschaft	Germany
JPMorgan Chase Bank, N.A. (B)	0.1	AA-	Aa1	AA-	JPMorgan Chase & Co	USA
Kiwibank Limited	3.3	AA-	-	-	New Zealand Post Limited	New Zealand
Kookmin Bank (B)	0.1	A	A1	-	Kookmin Bank	South Korea
Rabobank Nederland (B)	0.4	AAA	Aaa	AA+	Rabobank Nederland	Netherlands
Rabobank New Zealand Limited	2.0	AAA	-	-	Rabobank Nederland	Netherlands
Southland Building Society	0.7	-	-	BBB	Southland Building Society	New Zealand
The Bank of Tokyo-Mitsubishi, Ltd (B)	0.5	A+	Aa2	A	Mitsubishi UFJ Financial Group Inc.	Japan
The Hongkong and Shanghai Banking Corporation Limited (B)	1.4	AA	Aa1	AA	HSBC Holdings PLC	UK
TSB Bank Limited	1.2	BBB+	-	-	TSB Community Trust	New Zealand
Westpac Banking Corporation (B)	4.3	AA	Aa1	AA	Westpac Banking Corporation	Australia
Westpac New Zealand Limited	14.8	AA	Aa2	AA	Westpac Banking Corporation	Australia

[1] **Banks marked (B) operate in New Zealand as branches of overseas incorporated banks. All other banks are incorporated in New Zealand.**

[2] **Registered bank's assets as a proportion of the total assets of the banking system, as at 30 June 2010.**

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 Jun-09	$m Jun-10	Growth[1] % pa	$m Jun-09	$m Jun-10	Growth[1] % pa	$m Jun-09	$m Jun-10	Growth[1] % pa	$m Jun-09	$m Jun-10	Growth[1] % pa
NZD funding												
NZ resident households	-	0	n.a.	6,029	5,459	-9%	2,656	2,753	4%	8,686	8,212	-5%
Other funding[2]	3,951	2,265	-43%	2,970	2,380	-20%	196	237	21%	7,117	4,882	-31%
Non-residents	5,248	4,845	-8%	273	271	-1%	73	70	-4%	5,594	5,186	-7%
Total NZD funding	9,200	7,110	-23%	9,272	8,110	-13%	2,926	3,060	5%	21,397	18,280	-15%
Foreign currency funding	446	615	38%	278	114	-59%	-	-	..	725	729	1%
Other liabilities	202	339	68%	218	257	18%	42	40	-6%	462	637	38%
Capital and reserves	923	680	-26%	759	713	-6%	333	350	5%	2,015	1,744	-13%
Total liabilities	10,771	8,744	-19%	10,528	9,195	-13%	3,301	3,450	5%	24,599	21,389	-13%
NZD lending to residents												
Farm lending	123	101	-18%	1,010	972	-4%	97	87	-10%	1,231	1,159	-6%
Business lending	2,919	2,322	-20%	4,885	3,859	-21%	492	450	-9%	8,295	6,632	-20%
Housing lending	2,624	1,913	-27%	1,051	844	-20%	1,716	1,845	8%	5,391	4,602	-15%
Consumer lending	2,819	2,515	-11%	1,531	1,515	-1%	385	369	-4%	4,735	4,399	-7%
Total NZD loans by sector	8,485	6,851	-19%	8,477	7,190	-15%	2,690	2,751	2%	19,652	16,792	-15%
Foreign currency loans	152	39	-74%	553	558	1%	-	-	..	704	598	-15%
All other loans and assets[3]	2,133	1,854	-13%	1,498	1,446	-3%	611	700	14%	4,171	4,000	-6%
Total assets	10,771	8,744	-19%	10,528	9,195	-13%	3,301	3,450	5%	24,599	21,389	-13%
Memo item: Lending to non-residents	190	37	n.a.	737	738	-6%	3	10	197%	931	742	-20%

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 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 between May 2009 and July 2010. *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 30 June. *GDS*.
27	Bank funding composition	As at 31 March or 30 June. *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*.