### **Financial Stability Report**

#### November 2005

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#### 1 Summary and assessment

New Zealand has experienced an extended period of economic expansion. Growth in household and business incomes, low unemployment, and rising values for most asset classes, have resulted in a favourable environment for the New Zealand financial system.

Global influences have also been generally supportive. Prices for New Zealand's principal exports have been at historic highs. And in an environment of stable international financial conditions, large amounts of global capital have been looking for good investment destinations. The New Zealand economy's cyclical strength, and hence attractive returns, has created a set of conditions that have provided New Zealand banks with ready access to relatively low-cost funding in international markets.

Conditions as favourable as they have been over the past two to three years, however, cannot be expected to be sustained over the medium term. The Bank's near-term economic outlook, as set out in the September *Monetary Policy Statement*, is for an orderly slowing of economic activity. But we also need to consider where the risks might lie

In New Zealand imbalances have accumulated. The current account deficit – the amount by which our expenditure exceeds our income – has widened to a level that is not sustainable. The counterpart to the strength of spending has been increasing indebtedness, mainly among households. Much of the borrowing has been against houses, and house prices have become inflated relative to household incomes. There has also been a strong run-up in

farm debt, and rural land prices are looking stretched. These developments increase our financial vulnerability.

There is also the ever-present possibility of 'shocks', which could accentuate an adjustment to these imbalances. The unknown, but potentially very serious, consequences of a flu pandemic would be a case in point.

Adjustment to these imbalances could test the resilience of the financial system. For example, an increase in the risk premium charged by international markets in providing capital to New Zealand would result in higher domestic fixed-term interest rates. And at some stage the exchange rate will weaken. Financial markets appear capable of managing these adjustments, but strains may appear in some firms and households.

Higher interest costs, a slowing economy, and softer asset markets could cause strains for the most indebted, for example, among the one-in-ten of mortgaged households whose outgoings to service debt and other housing-related fixed commitments claim 50 per cent or more of their disposable income. A slower rate of economic growth than in recent years, and softer asset markets, would also make for less favourable credit conditions for lending institutions.

Overall, we assess the lending institutions – comprising banks and a large number of smaller non-bank lenders – to be well-placed to weather a period of higher lending risk. However, at the same time, institutions that have competed and grown rapidly in higher-risk lending markets during the last few years of benign conditions, will increasingly be tested. There is also a more general risk that, as growth

opportunities in lending markets slow, lenders will be induced to take greater lending risk, to maintain or grow market share.

The following chapters expand on these assessments within the framework outlined in Box 1.

Han Bell 1

Alan Bollard

Governor

#### Box 1

#### The financial system and financial stability

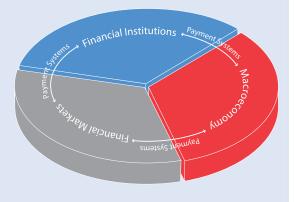
One of the Reserve Bank's key roles is to promote financial stability. The information provided in the regular publication of the *Financial Stability Report* is one means by which the Reserve Bank does this.

Financial stability is the product of interactions amongst the macro economy and the financial system. The financial system comprises financial institutions, financial markets, and the payment systems which provide the networks that enable transactions to occur. These institutions and processes underpin the functioning of any modern economy – through the role they play in facilitating the allocation of capital, and as well as the exchange of goods and services.

Figure 1.1 illustrates the financial system and provides the organising framework for the *Financial Stability Report*. In this report, Chapter 2 surveys the current economic and financial environment for signs of emerging imbalances and possible economic shocks that could manifest in financial instability. Chapter 3 reviews the fixed interest and foreign exchange markets, with a particular focus

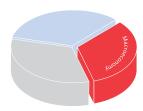
on their resilience should there be adjustments to the pricing of risk. Chapter 4 similarly considers the resilience of New Zealand's financial institutions. The final chapter reports on financial sector policy issues and developments. Periodically, we propose to include an additional chapter on the payments system.<sup>1</sup>

Figure 1.1
Financial stability: Linkages between key components



A description of the payments system can be found in the May 2005 Financial Stability Report.

# 2 The economic and financial environment



Both the global and New Zealand economies have performed strongly over the last year, but economic stresses have grown and the New Zealand financial system faces a more uncertain environment in the near term. Corporate sector balance sheets appear to be on a solid footing, although a slowing economy and the high exchange rate present risks. The rapid increase in debt levels has left the household sector more vulnerable both to rising interest rates and to potential external shocks.

# 2.1 Recent developments in the international environment

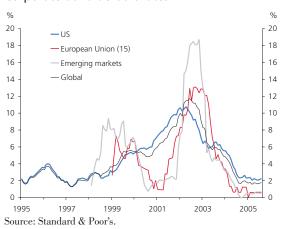
#### Solid global performance over recent years

Recent developments in the world economy have supported a favourable environment for global financial systems. Low inflation and low nominal interest rates have been central to the sustained global growth since 2003.

In the corporate sectors of many economies, restructuring and cost-cutting following the downturn early in the decade, coupled with continuing economic expansion, have underpinned robust profitability and a strengthening of balance sheets. This in turn provides a cushion to weather any near-term adjustments to a less favourable environment. Consequently, corporate credit quality remains strong. Global default rates on corporate debt are close to historical lows (figure 2.1). However, the cost of corporate borrowing relative to risk-free government bonds has increased at longer maturities, but remains low at shorter maturities, indicating that the credit cycle may be at a turning point, and borrowers may face less favourable credit conditions.

Rising house prices have increased household wealth. However, households have also increased debt levels and hence are more vulnerable to adverse events. Consequently, households have a smaller cushion against near-term vulnerabilities, especially as the housing equity position

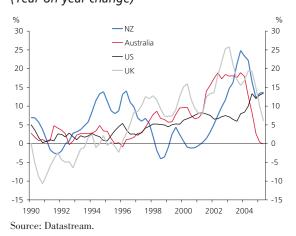
Figure 2.1
Corporate bond default rates



could unwind if house prices fall. There are signs that the household sector credit cycle has peaked, and some downward pressures on house prices are emerging, notably in Australia and the UK (figure 2.2, overleaf). In the UK, banks have reported an increase in delinquent loans, albeit from very low levels. Similarly, housing loan arrears have registered a slight pick-up in Australia.

At the same time, inflation pressures may be increasing, largely reflecting higher oil prices. If higher inflation turns out to be persistent and requires continued monetary tightening, a key question for financial stability will be how much strain that will place on debt servicing burdens, as the

Figure 2.2
Global house prices
(Year-on-year change)



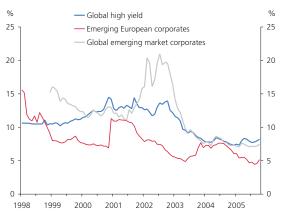
result of both higher interest costs and slower growth in incomes from which to meet them. Financial markets and analysts are anticipating further monetary policy tightening in some key economies. For example, the US Federal Reserve has lifted interest rates by three percentage points since June last year, and analysts expect to see further increases over the coming months.

### Low interest rates have led to a search for vield

Low global interest rates during the last few years have led investors to seek out higher rates of return, while accepting a higher level of risk in the process. The 'search for yield' is reflected across a broad range of asset classes: in credit markets, an increased appetite for high-yield bonds (figure 2.3); among governments, a push into issuance of long-term securities; in equities, dividend-yielding stocks have become increasingly sought after; and in foreign exchange, demand has grown for high-yielding currencies, including the New Zealand and Australian dollars. Low perceived volatility in financial markets has supported a drive into riskier asset classes. It is questionable whether investors are being adequately compensated for the risk they bear in all these markets. A reassessment of risk would place downward – and possibly abrupt – pressure on some asset prices.

The search for yield has manifested itself in New Zealand in the form of record issuance of Uridashi and Eurokiwi bonds. (These are New Zealand dollar-denominated securities issued by offshore borrowers to offshore investors.) Through

Figure 2.3
Bond yields in emerging markets



Source: Merrill Lynch, Bloomberg.

global financial market linkages, the upsurge in issuance of these bonds has underpinned growth in competitively priced fixed rate mortgage lending to New Zealand households. An unwinding of the search for yield, as monetary policy tightens in key international economies, would lower international demand for these New Zealand dollar bonds and the associated interest rate benefit for New Zealand borrowers.<sup>2</sup>

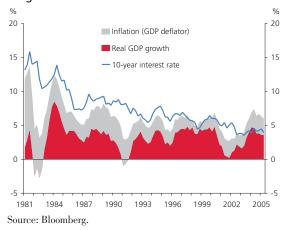
### But global external imbalances have been growing and risks may be mispriced

During the recent period of global economic growth, external imbalances have also grown, and one risk to financial stability is a disorderly adjustment of global external imbalances. Asian economies have large current account surpluses, while the US has a current account deficit of around 6 per cent of GDP. That this configuration represents an imbalance, rather than an efficient and sustainable flow of capital to where it generates best returns, is suggested by contemporaneously and abnormally low interest rates in the US; rates that have been below the US rate of growth in nominal GDP for some time (figure 2.4).

Many commentators argue that these conditions cannot persist indefinitely. To the extent that investor willingness to fund global imbalances today causes policy inertia, it

Box 3, chapter 3, elaborates on the potential implications of a curtailment in the issuance of Eurokiwi and Uridashi bonds. Also see the "An update of Eurokiwi and Uridashi bonds", by David Drage, Anella Munro and Cath Sleeman, Reserve Bank of New Zealand Bulletin, Vol. 68. No. 3.

Figure 2.4
US growth and interest rate conundrum



may raise the likelihood of a sharp adjustment involving a reallocation of assets away from US dollar-denominated assets at some point in the future.

A correction of global imbalances could take place in a number of ways, and the speed, magnitude, and orderliness of the adjustment may have different implications for financial stability.

Under one scenario, growth could be lower than expected. If growth slows, bond yields could stay low, and the search for yield would continue, supporting generally favourable financial market prices. But slower growth could also involve a rise in credit problems, relating to the overaccumulation of debt – concentrated in, but not limited to, the household sector. Under this scenario, balance sheets would weaken, but global imbalances would correct over time.

A second scenario would be that yields correct through a greater-than-anticipated tightening of monetary policy, or a major adverse credit event that provokes a reassessment of credit risk. Accompanying declines in asset prices could erode consumer confidence and reduce personal consumption. Under this scenario, external imbalances would also correct.

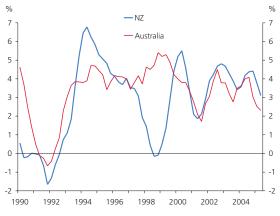
Either way, the adjustments involved could cause financial strains. And should the risks identified above combine in unexpected ways, or be more pronounced or abrupt, we could see a sharp and disruptive correction in global financial imbalances, which would test the resilience of financial systems. These scenarios range from higher-

probability and orderly adjustments, through to lowerprobability but costly and disruptive adjustments.

#### 2.2 Australia

New Zealand's financial system is exposed to Australian macro-financial conditions, through trade, institutions, and investor perceptions. Our economic cycles are also linked (figure 2.5). Direct linkages between the two countries mean that even if a shock does not directly impact on both countries, a shock to economic conditions in one country is usually felt in the other.

Figure 2.5
Real GDP growth
(Annual average percentage change)

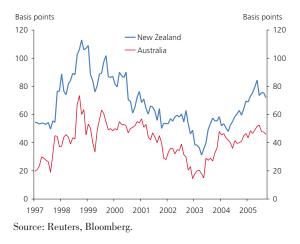


Source: Datastream.

There are also financial channels. For example, a reassessment of risk pricing in Australia could be transmitted to New Zealand via the application of Australian parent banks' credit policies to their New Zealand subsidiaries. Also, the margin between riskless government bonds and interest rate swaps (the 'swap spread') in each country has been closely correlated, indicating that changes in perceived risk in Australia and New Zealand have tended to move in tandem.<sup>3</sup> Global investors attach a higher risk premium to New Zealand, which probably reflects relative size, level of external debt, and other criteria used by investors to assess country risk (figure 2.6, overleaf).

See chapter 3 for an explanation of an interest rate swap. In this context, the quoted swap rate is the cost of funding over a fixed term for banks and other highly rated financial institutions.

Figure 2.6
Ten-year swap spreads over government bonds



At present, developments in the Australian economic and financial environment largely reflect broader global developments: household debt exposure and corporate resilience. In the Australian corporate sector, export commodity prices remain strong, debt servicing ratios are comfortable, and the share market has been strong, with relatively low levels of volatility.

With respect to households, a recent softening of the housing market has moderated Reserve Bank of Australia concerns about a more disruptive eventual correction at some point in the future. Slower consumption growth suggests that households are consolidating their balance sheets, while slowing house price inflation (and deflation in some states) has been associated with slower credit growth. Nonetheless, Australian households remain highly leveraged by historical standards, and thus are more exposed to any deterioration in the economic and financial environment than they were previously.

# 2.3 New Zealand's external position

### The current account deficit raises questions about future adjustment

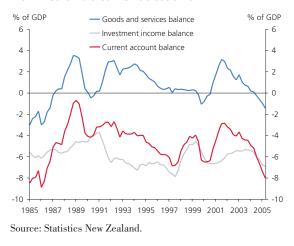
New Zealand's current account deficit – the gap between New Zealand's aggregate income and expenditure – has widened to 8 per cent of GDP (figure 2.7). This external imbalance is largely a reflection of the strength of domestic spending over the last few years. Private sector consumption

has grown rapidly, supported by strong growth in household borrowing. The resulting demand for funding has been aided by the global search for yield, as overseas investors have been attracted by New Zealand's relatively high interest rates. This has helped to keep longer-term interest rates lower than they would have been otherwise.

Current account deficits at these levels attract the interest of international investors who will focus on the underlying drivers of the deficit and its sustainability. The attitudes of investors are particularly important for New Zealand, where net foreign liabilities are greater than 80 per cent of GDP, one of the highest ratios in the world. The cost of servicing these growing external obligations eventually causes international investors to question whether they are being adequately compensated for the risks they are bearing.

Figure 2.7

New Zealand's current account



The size of the current account deficit signals the need for some rebalancing of the New Zealand economy in the near future. If risks are reassessed, and the international appetite for New Zealand investments wanes, we would expect to see a combination of a lower exchange rate, that promotes net export growth, and higher interest rates (increased risk premium), which slow domestic spending and reduce import demand.

Similar interest rate and exchange rate movements occurred in 1997–1998 and 1999–2000 (figure 2.8), following the last occasion when the current account had widened to near current levels. During those adjustment periods, there was a marked fall in the exchange rate, but

Figure 2.8 Exchange rate and interest rate adjustments



the New Zealand financial system coped with few ill effects, although some parts of the real economy came under pressure.

#### Rebalancing may not be painless

The floating exchange rate gives the New Zealand economy a great deal of flexibility in dealing with external savings and investment imbalances. However, exchange rate adjustments can be more rapid than anticipated, and can overshoot what would be justified by the underlying conditions. Large adjustments mean changing circumstances across the economy, and hence the potential for financial strain on those most exposed, either because of the sector they are in or because of their individual balance sheet and income positions.

A potential aggravating factor at present is that the external trade balance is negative at a time when export prices have been exceptionally favourable. If world prices for New Zealand's export commodities fall, the New Zealand dollar exchange rate may fall further and faster than expected. Another possibility is that more of the adjustment may have to occur in the domestic economy through interest rates, at least for a period.

An adjustment such as this would not be painless, and some borrowers may find themselves in testing circumstances (as discussed in the following sections on the household and corporate sectors). However, it is unlikely that the adjustment would become disorderly to the point that it placed serious

strains on the wider financial system.<sup>4</sup> Indeed, our best assessment of future economic developments at the time of the September 2005 *Monetary Policy Statement* was for a cooling in growth from the current period of relative strength, to more modest growth (of around 2 per cent in annual average terms) over the next few years.

#### 2.4 Household sector

The New Zealand housing market has remained strong, in contrast to the marked slowdown in the UK and Australian housing markets. Mortgage interest rates have appeared attractive to New Zealand households, partly because of recent price competition in fixed rate lending. But it appears that many borrowers have viewed mortgage rates as 'cheap', based on expectations of capital gains extrapolated from recent house price inflation. This assessment could change quickly if interest rates rise further, or if sale prices start to fall short of expectations.

Compared to the G7 countries, New Zealand household wealth is heavily concentrated in housing (figure 2.9, overleaf).<sup>5</sup> This means that wealth is less diversified, and households are more exposed to a downturn in the housing market

#### Household sector is further stretched

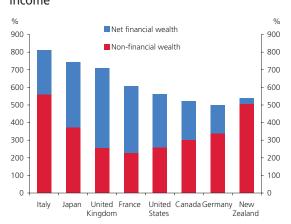
Financial conditions in the household sector remain stretched, and more so than at the time of the May *Financial Stability Report*. Growth in debt has outstripped growth in income, and the debt servicing cost ratio has increased. Also, since then, some factors have become less favourable: higher fuel prices have cut further into disposable income; and while many households with mortgages have locked in their borrowing rates for periods of a year or more, as these rates come up for a reset, the new rates will be higher than they were two years ago (figure 2.10, overleaf).

See also chapter 5, October 2004 Financial Stability Report, for a discussion of a 'stress testing' exercise, where bank balance sheets were subjected to simulated shocks to test the banking sector's resilience to situations where the financial system is under pressure.

Cross-country comparisons such as these should be taken as illustrative only, as there are differences across countries in data collection, definitions, and methodology.

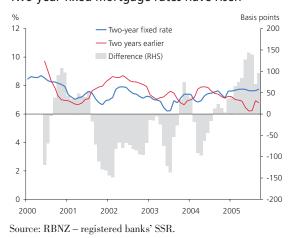
Figure 2.9

Household net wealth compared to disposable income



Latest data are 2004 for New Zealand, US and Canada; 2003 for Japan, UK and Germany; 2002 for France and Italy. Source: OECD, RBNZ.

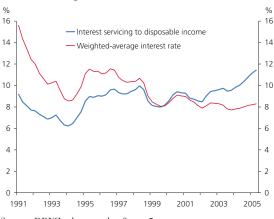
Figure 2.10
Two-year fixed mortgage rates have risen



Debt servicing costs, relative to disposable income, remain at unprecedented levels (figure 2.11), even though interest rates are still below historical averages. The level of debt to income is similar to that of the UK and Australia, but in those countries there are signs that lower growth in spending and heightened savings are already under way.

Figure 2.11

Debt servicing costs



Source: RBNZ – key graphs, figure 5.

### And the aggregate data hide a lot – some households are vulnerable

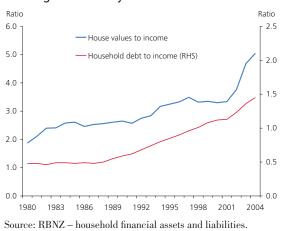
House prices have risen substantially relative to income in the last few years (figure 2.12). This means that recent buyers have taken on higher levels of debt than in the past (in the absence of a shift in behaviour such as 'trading down' to lower quality or smaller houses). The same will be true for future buyers, in the absence of a downward adjustment in house prices, a shift to lower quality housing, or a deferral of purchase.

The aggregate data on household indebtedness hide a lot: only about a third of households have a mortgage, and some households will be much more indebted than the average. Household Economic Survey (HES) data suggest that average housing costs (which include interest, principal repayments, and local authority rates) for homeowners with a mortgage are around 25–30 per cent of disposable income. But as many as one–in–ten borrowers are devoting more than 50 per cent of disposable income to payments on their own home.<sup>6</sup>

Those households with the largest loans and highest debt repayments, relative to income, will be more sensitive to changes in mortgage rates. These are also likely to be recent buyers, who have not built up as much equity in their homes. Those with investment properties will also be sensitive to interest rates or an economic slowdown, as initial interest payments alone can be up to 100 per cent of expected net rental income.

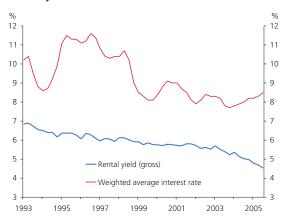
It is important to note the survey excludes debt associated with investment properties.

Figure 2.12
Housing affordability



Recently, yields on rental properties have fallen noticeably, while the cost of funding these investments has risen (figure 2.13). This means that larger capital gains, that is, ever-rising house prices, are required in order to break even. In the last few years, this requirement has been generally borne out. But further capital gains are uncertain, with a growing recognition that property values are stretched. The Auckland apartment market, for example, is showing signs of weakness as construction continues, net immigration falls, and excess supply comes onto the market. Given the negative gap between rental yields and borrowing rates, even a period of flat house prices could be costly for some investors.

Figure 2.13 Rental yields



Source: Real Estate Institute of New Zealand (REINZ), Ministry of Housing, RBNZ.

#### 2.4 Corporate sector

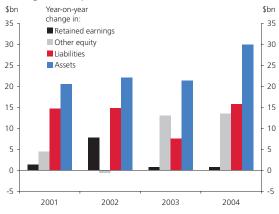
#### Balance sheets robust

The business environment over the last six months has been generally favourable for the non-financial corporate sector.<sup>7</sup> Reported profits have been good and most sectors' balance sheets are robust. However, there are signs that the favourable conditions over recent years are coming to an end, and the economy may be facing headwinds. A number of companies have begun to signal profit downgrades, business confidence is slipping, and the equity market and general economic forecasts imply that corporates will need to adjust to these changing economic circumstances.

Overall, balance sheets suggest that the corporate sector is well placed to deal with a general slowing in economic activity.

Balance sheet growth in recent years has been funded more by equity than debt (figure 2.14).8 Since 2003, growth in shareholders' funds has exceeded growth in liabilities, thereby increasing reserves that are available to absorb adverse economic adjustments.

Figure 2.14
Change in corporate balance sheets



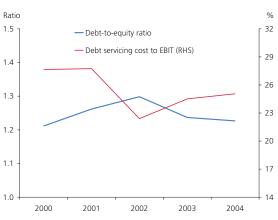
Source: Statistics New Zealand.

Banks and non-bank financial institutions are covered in chapter 4.

<sup>&#</sup>x27;Retained earnings' capture changes in reported profit and 'other equity' measures changes in equity due to capital raisings (and revaluations that are not recorded in profit). Combined, retained earnings and other equity account for the year-on-year change in shareholders' funds. This information is from the Annual Enterprise Survey, and covers all Australian and New Zealand Standard Industrial Classification (ANZSIC) sectors excluding finance and insurance, government administration and defence, education, and health and community services.

Correspondingly, the debt-to-equity ratio has been trending down. Debt servicing costs relative to earnings before interest and tax (EBIT) have been trending lower (figure 2.15) but have risen from a 2002 low as interest rates have risen. Rising interest rates will see debt-servicing ratios rise, although with a lag to the extent that firms have hedged their interest rate risk. Both ratios indicate overall financial strength in the corporate sector, although, as for households, within the aggregate there will be a range of situations.

Figure 2.15
Corporate sector indicators



Source: Statistics New Zealand Annual Enterprise Survey, and RBNZ calculations.

#### But profits are expected to weaken

Looking ahead, a slowing economy can be expected to result in some downward pressure on corporate profits, and this is already being factored into businesses' expectations (figure 2.16). A growing number of listed companies, while reporting on profits over the last six months, have commented that they expect a slowdown in profit growth. Consistent with this, share prices in recent weeks have come off their peaks (figure 2.17).

Given their starting position, we do not expect significant stresses in the corporate sector overall, although some sectors are more exposed than others. In a slowing economy corporates may seek to defer investment, and where higher costs cannot be passed to consumers, shed costs. This could result in job losses in some sectors, and may place affected households under pressure.

Figure 2.16
Business profit expectations

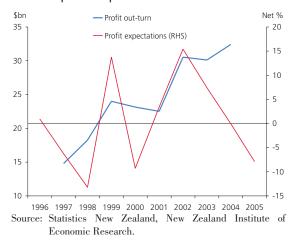
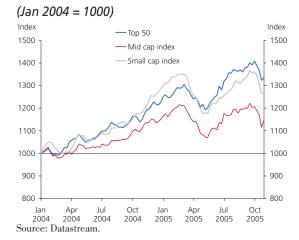


Figure 2.17 New Zealand sharemarket indices



### Some sectors will be more vulnerable to a downturn than others

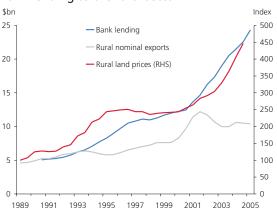
The rural and property sectors have been particularly buoyant during the recent economic expansion. Lending classified by banks as agriculture-related, and to the property and business services sectors, as a share of banks' total business lending, has increased from roughly half four years ago, to nearly two-thirds today.

Bank lending to the rural sector has increased rapidly since 2001, as have rural land prices (figure 2.18). Rural income peaked at that time, but has since fallen somewhat. Rates of increase in land prices and debt are unlikely to continue without commensurate growth in underlying income streams.

Debt expansion over recent years has increased the rural sector's vulnerability to the twin effects of potential rising

interest costs and possible weakening in the world prices of New Zealand's commodity exports. While exchange rate depreciation could be expected to buffer the latter, experience indicates that the lags can be material. A three-pronged pinch on farm incomes, from rising interest costs, falling global commodity prices, and an exchange rate that remains high for longer than expected, cannot be ruled out.

Figure 2.18
Bank lending to the rural sector



Source: Statistics New Zealand, Quotable Value Ltd, RBNZ – table C5.

On average, world prices for New Zealand's export commodities appear to have turned down from recent peaks (figure 2.19), while the horticulture, pipfruit, forestry, and fishing sectors have been facing unfavourable prices for some time. Forestry is facing competition from South American and Russian producers, and log prices are

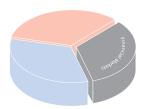
Figure 2.19
Export commodity prices (Weighted average)



depressed. Horticulture is facing competition from low-cost producers in China, South America, and South Africa, and there is apple and pear oversupply in Europe. Additionally, most sectors are feeling the impact of rising fuel costs on profitability. The fishing industry is particularly impacted by fuel costs, with diesel now comprising up to 40 per cent of vessel operating costs.

Firms in the property investment, development, and construction sector have also enjoyed strong growth during the past year or two. But historically this has been a highly cyclical sector. While non-residential building consents remain firm and significant infrastructure projects have commenced or are planned, there are signs of adjustment starting to appear in residential building, with consent numbers recently trending downwards.

#### 3 New Zealand's financial markets



Financial markets provide a direct channel by which savings can be made available to borrowers. The core role of financial markets is to establish appropriate prices at which market participants are willing to exchange financial instruments. The market can be said to be functioning well when there is steady trade amongst well-informed buyers (investors) and sellers (borrowers) at prices which align risk and return.

Assessed against standard indicators of market depth (ie, liquidity and extent of participation), volatility and bid-offer spreads, the New Zealand dollar (NZD) foreign exchange and fixed interest markets have functioned well since the May Financial Stability Report.

At the same time, there are questions about whether the price of the NZD and longer-term NZD interest rates are well aligned with the underlying fundamentals and risks. As discussed in the preceding chapter, the strength of the NZD, and downward pressure on long-term NZD interest rates in financial markets, have been key factors behind the emergence of substantial macroeconomic imbalances. Correction of these imbalances can be expected to involve adjustments to global and domestic interest rates and exchange rates. Such adjustments, particularly if combined with other destabilising shocks – like a flu pandemic for example – could cause heightened uncertainty that inhibits trading, and causes disruption, in the financial markets. While we assess such scenarios to have a low probability, the present configuration of imbalances and risks does create a potential for the resilience of financial markets to be tested.

# 3.1 The foreign exchange market Turnover has been up, contributing to greater market liquidity

The latest triennial survey data published by the Bank for International Settlements (BIS)<sup>9</sup> indicates substantially increased New Zealand dollar turnover in 2004 compared with 2001 (table 3.1). The Reserve Bank's own regular monitoring of local dealers indicates high trading volumes have continued throughout 2005. Much of the increase in trading activity can be traced back to recent large-scale offshore investment in New Zealand dollar assets, as reflected in an upsurge in "Eurokiwi" and "Uridashi" bonds

by overseas institutions raising New Zealand dollar funding (see section 2.1 and box 3). These developments have significantly raised the profile of the New Zealand dollar in the international currency markets. With greater liquidity in the NZD market, local banks indicate that they have been prepared to take larger foreign exchange trading positions because of a greater ability to enter and exit them quickly and without much effect on the exchange rate (figure 3.1).

Consistent with improved liquidity, 'bid-offer' spreads have trended lower over the last year (figure 3.2).<sup>10</sup> Volatility in the New Zealand dollar exchange rate has also fallen since mid-2004, although this has been in line with other currencies (figure 3.3).

The full results from the BIS can viewed on the internet, at www.bis.org/publ/rpfx05.htm. Also see "Recent trends in foreign exchange turnover" by Nick Smyth, Reserve Bank of New Zealand *Bulletin*, Vol. 68, No. 3 for more detailed analysis of the survey results.

A bid-offer spread is the difference between the best sell price in the market (the 'offer') and the best buy price in the market (the 'bid') at a point in time. In this context, the 'cost' of trading refers to how far away from the market mid-rate (the mid point of the bid and offer rates) an investor can buy or sell New Zealand dollars.

Figure 3.1

Daily movement in NZD/USD per NZD 1 billion traded



Note: Daily movement in the NZD/USD exchange rate divided by the daily amount traded.

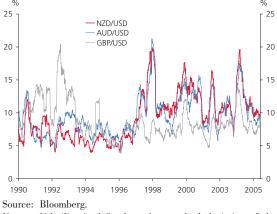
Figure 3.2
Bid-offer spreads in the NZD spot market



Note: These are the median and average bid-offer spreads taken at 5 minute intervals over the New Zealand trading day.

Source: Reuters.

Figure 3.3 Volatility in the NZD, AUD and British pound



Note: Volatility is defined as the standard deviation of the exchange rate's daily percentage change. Working days only. The series is a moving average of 60 days.

Another indicator of market liquidity is how far the exchange rate moves per unit of foreign exchange traded (figure 3.1). Whereas large volumes alone can just as well cause short-term mismatches between buyers and sellers, and hence exchange rate volatility, increased turnover combined with less price volatility points unambiguously to increased foreign exchange market depth.

#### With broad-based participation

The number of institutions actively dealing<sup>11</sup> the NZD in the local market dropped by one, from seven to six, on the merger of the ANZ Banking Group (New Zealand) Limited, and the National Bank of New Zealand Limited. However, this amounted more to a consolidation than a reduction in the level of participation in the local foreign exchange market.

Meanwhile, over the last year or two, a large number of offshore participants have become more active dealers of the New Zealand dollar. As has been the case for some time, the greatest proportion of trading in the New Zealand dollar occurs offshore, and this proportion has increased in the recent past (table 3.2).

New Zealand is not particularly unusual in that its currency is traded mostly in offshore markets. However, Australia-based institutions, which include the parents of New Zealand's large banks and who are in broadly the same time-zone, account for a significant proportion of New

Table 3.1
Global trading in the NZD by FX instrument

	200	4	2001		
Instrument	USD million	%	USD million	%	
Spot	5,534	22	1,635	15	
Forwards	1,755	7	846	8	
FX swaps	17,478	71	8,169	77	
Total	24,767	100	10,650	100	

Note: For example, 1 per cent of Australian dollar trading takes place in New Zealand, while 13 per cent of New Zealand dollar trading takes place in New Zealand.

Source: BIS 2004 triennial FX turnover survey.

That is, that are committed to quoting buy-sell prices at which they are willing to deal.

Zealand dollar trading. To the extent that Australia-based institutions provide timely access to a range of financial services to New Zealand customers, this makes for a 'local' market that is larger than that represented solely by those institutions dealing within New Zealand. However, it also

Table 3.2
Global trading in the NZD and AUD by trading centre

	NZI	)	AUD		
Trading centre	Daily average USD Million	%	Daily average USD Million	%	
London	1166	21	7835	20	
Asia	1136	21	7758	20	
Australia	1123	20	11360	29	
New York	914	17	8735	22	
New Zealand	718	13	430	1	
Other	478	9	3243	8	

Source: BIS 2004 triennial FX turnover survey.

underscores the exposure of the New Zealand dollar foreign exchange market to the Australian financial system.

During the past year a more active market in the New Zealand dollar/Australian dollar (NZD/AUD) cross-rate has emerged (figure 3.5, overleaf). While trading in the NZD is still concentrated overwhelmingly against the US dollar, the emergence of a direct NZD/AUD market has added some diversity to the New Zealand dollar market. Local banks report they are now dealing NZD/AUD more regularly to manage New Zealand dollar positions on days when the NZD/USD market is experiencing reduced liquidity.

### Despite higher liquidity now, the foreign exchange market could still be tested

The above indicators provide a basis for a degree of confidence in the NZD foreign exchange market having the depth and resilience that will be required to facilitate the kind of adjustment that New Zealand's large current account imbalance could require over coming quarters. However, that depth and resilience should not be overstated. At least

#### Box 2

#### Reserve Bank holds foreign exchange reserves: The foot-and-mouth disease hoax and the pandemic flu threat as case studies

In May 2005, there was a claimed deliberate release of the foot-and-mouth virus in New Zealand. The claim was officially disproved after 15 days. The Reserve Bank was heavily involved in the initial analysis of the threat and the subsequent release of information to the financial markets. The New Zealand dollar initially spiked lower on news of the threat, but quickly stabilised as markets down-weighted the risk of the threat proving to be other than a hoax. Nonetheless, the incident highlighted the vulnerability of New Zealand as a small open economy, exposed to movements in the world prices of its traded agriculture commodities. Should there have been an actual outbreak, a much larger and more sustained exchange rate reaction undoubtedly would have occurred.<sup>12</sup>

More recently, there has been concern about the potentially serious implications that an outbreak of a flu pandemic would have for the New Zealand economy. At a minimum, even if the outbreak did not spread to New Zealand, international trade and travel could be severely disrupted – by many times the disruption caused by the SARS virus in 2003. The economic impact could be more severe should an outbreak occur while New Zealand's current account deficit remains as large as it is at present. Financial markets would be under stress and their resilience tested. It is hoped that financial markets would continue to trade smoothly and price the New Zealand dollar and other New Zealand investments, thereby providing financial markets with liquidity, during what would likely be a period of market uncertainty (this uncertainty might extend to the creditworthiness of counterparties). However, this cannot be guaranteed.

The October 2004 Financial Stability Report reported the results of a stress test of the New Zealand financial system to a simulated outbreak of foot-and-mouth disease.

### The Reserve Bank holds foreign reserves as a precaution against currency crises<sup>13</sup>

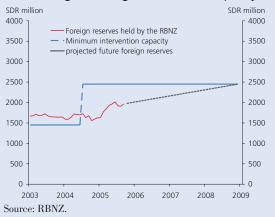
One element of the Bank's contingency preparedness for financial crises is to hold foreign exchange reserves. These are held to provide a capacity for the Bank to intervene in the foreign exchange market to avoid foreign exchange market dysfunction and preserve liquidity in, and hence the convertibility of, the New Zealand dollar. The objective would be to avoid an already disruptive and uncertain situation propagating, via the foreign exchange market, to the wider financial system, including domestic banks.

With by far the largest share of NZD trading taking place offshore (see table 3.2), and by institutions without a New Zealand customer that generates the underlying foreign exchange business, there would be some possibility of a sharp withdrawal of liquidity at a time of financial crisis, leading to foreign exchange market dysfunction. It would be important in this circumstance for the Bank to increase confidence in the financial system by committing to support a minimum level of trade flows and foreign exchange clearing.

In February 2004 the Minister of Finance approved an increase in the minimum level of foreign exchange reserves to be held by the Bank from NZD4 billion to NZD7 billion.<sup>14</sup> The Bank has been gradually building up the level of foreign exchange reserves in line with a timetable agreed with the Minister, which will see the new minimum level of holdings being reached in 2008 (figure 3.4).

Recently, the Bank has also increased its interaction and contact with foreign exchange market participants as the result of now transacting more of the Crown's foreign exchange business. Maintaining strong and active relationships with foreign exchange market participants enables the Bank to keep abreast of market conditions and

Figure 3.4 RBNZ foreign exchange intervention capacity



to maintain the capability to enter the foreign exchange market when required.

As with any 'insurance' policy, there is a cost in holding foreign exchange reserves, principally arising from the cost of the borrowings required to fund them. These borrowings are arranged by the Crown, with the proceeds on-lent to the Bank. The borrowing costs generally exceed the returns on the liquid and low-risk foreign exchange assets in which the Bank invests. Recently, however, the Crown has been able to raise foreign currencies at significantly lower interest rates, by first borrowing New Zealand dollars and swapping the proceeds into foreign currencies, rather than borrowing in foreign currencies directly. In effect the Crown, like the New Zealand banks, has been able to take advantage of the downward pressure on NZD fixed term interest rates stemming from the unusually strong global demand for New Zealand dollar investments – notably from Uridashi and Eurokiwi investors. As a result, the foreign reserves portfolio has recently been generating small net positive returns, rather than the more typical small net cost.

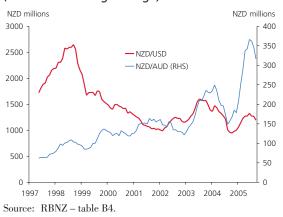
See "Foreign reserves for crisis management" by Michael Gordon, Reserve Bank of New Zealand Bulletin, Vol. 68, No. 1 for more detail on the Reserve Bank's foreign exchange intervention policy to calm disorderly markets.

The approved increase in the minimum level of foreign reserves was actually specified in terms of Special Drawing Rights (SDRs). The Minister of Finance approved an increase from SDR1.45 billion to SDR2.45 billion, at current exchange rates equating to an increase from around NZD4 billion to NZD7 billion.

Figure 3.5

Spot trading in the NZD/USD and NZD/AUD in New Zealand

#### (Six month moving average)



some, and possibly most, of the increased liquidity in the market during the last year or two will have been cyclical.

Much of the increased turnover can be traced back to large-scale investment flows into NZD investments that have been attracted by the recent large differential between NZD interest rates and some major currency interest rates (ie, the yen, the euro, and until recently the US dollar). New Zealand has been very much on the receiving end of the global search for yield discussed in chapter 2.

The differential between NZD and foreign interest rates has stemmed largely from the recent cyclical strength of the New Zealand economy. As the New Zealand economy slows, speculative investors can be expected to invest less or divest. There is also some risk that the change in market conditions could be quite sharp if it involves an abrupt re-pricing of NZD risk premiums.

Overlaying this possibility is an already known and very large amount of scheduled maturities of offshore investments in NZD denominated securities issued by offshore borrowers. Eurokiwi and Uridashi investments, which have reached unprecedented levels, could result in equally large-scale net maturities during the next two to three years. Depending on the level of reinvestment that occurs, which in turn will depend on market assessments of the risk associated with investing in the NZD at the time, those maturities could also test the depth and resilience of the NZD market. Possible

dynamics of the adjustment process and market implications are elaborated in box 3.

There is also the ever-present risk of shocks to the economy and, through the uncertainty they can cause, to financial markets. In May of this year, for example, a threatened release of foot-and-mouth disease (which subsequently proved to be a hoax) provided a stark reminder of this kind of possibility. At present, the possibility of a flu pandemic is being planned for as a distinct possibility.

This kind of event has the potential to cause serious stresses in financial markets, particularly in the case of a small, relatively heavily indebted economy like New Zealand. Moreover, New Zealand is very dependent on foreign capital intermediated through a concentrated banking sector. 15 They are the kind of event that the Reserve Bank prepares for in its crisis management planning, and has a range of legislative powers that could be drawn on to help maintain the operation of the financial system during a crisis. These crisis management tools include acting as lender of last resort to the financial system, the Bank's crisis management powers in respect of registered banks, and as holder of New Zealand's foreign exchange reserves, which provide the Bank with a capability to provide liquidity to the foreign exchange market in a crisis (see box 2).

#### 3.2 The fixed interest debt market

Interest rate swaps are the largest component of the fixed interest market, and the main instrument used for speculating on, and hedging against, interest rate movements. <sup>16</sup> The NZD interest rate swap market has grown rapidly in recent years to accommodate greater hedging activity associated with the increased proportion of mortgage lending being provided by banks at fixed – mostly two- to three-year – interest rates. Market participants indicate that the interest

The four largest banks in the New Zealand are all Australian-owned and collectively account for 85 per cent of the total assets of the New Zealand banking system (see chapter 4).

An interest rate swap involves an agreement to swap, over a period of time, a series of fixed interest rate payments for a series of floating interest rate payments (or vice-versa). The fixed rate side of the swap contract is called the 'swap rate', and is often compared to fixed rates on debt securities such as government bonds and corporate bonds. See "A primer on derivatives markets" by Christian Hawkesby, Reserve Bank of New Zealand Bulletin, Vol. 62, No. 2 for more on interest rate swaps.

rate swap market has comfortably absorbed the substantially increased demand by banks for swap contracts required to enable them to turn the mostly floating rates they pay on their funding liabilities into fixed rates matched to their fixed rate mortgage assets.

Government bonds also have an important role in the fixed interest market, both as a pricing benchmark (though swap rates increasingly are playing that role) and as security that supports the secure and smooth operation of the payments system. Tight supply and demand conditions remain in the government bond market, as outlined in the May Financial Stability Report.

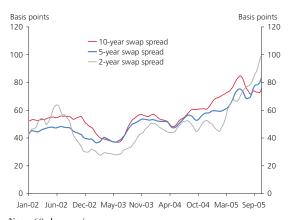
Structurally, the supply of government bonds has been limited due to the Crown running large fiscal surpluses, while demand from local banks for government bonds for payment system and prudential purposes has been At the same time, offshore demand for increasing. government bonds has been at cyclically high levels; part of the global search for yield that has seen significant offshore investment in New Zealand. Recently, yields on government bonds have fallen relative to interest rate swaps (a widening in 'swap spreads'). Historically, a widening of swap spreads has been interpreted as indicating an increased risk premium in interest rate swaps, but currently we assess that it also reflects tight liquidity conditions in the government bond market, for the same reasons as discussed in our May Financial Stability Report (figure 3.6).

Despite these tight conditions, the government bond market has generally continued to function reasonably well, with steady price-making from dealers and low price volatility. However, there have been instances of illiquidity in, and spikes in the market pricing of, specific bonds. In response to this, the Reserve Bank introduced a bond lending facility (BLF) in July 2005.

Under the BLF, market participants can exchange with the Reserve Bank, for a short period of time, a government bond that is readily available in the market for a specific government bond that is in short supply, but needed, for example, to settle a repurchase transaction. Use of the BLF

Figure 3.6

New Zealand swap spreads



Note: 60-day moving average. Source: RBNZ, Reuters, Bloomberg.

costs market participants 150 basis points for each day they exchange bonds with the Reserve Bank.<sup>17</sup>

The BLF has been used more often than the Bank or market participants had expected – on average around every third day (table 3.3). Although the BLF has been used mainly for small amounts of bonds, there have been some occasions when participants have needed to borrow large amounts to fulfil settlement obligations.

The BLF has been favourably received by the market. In the six months prior to its introduction, there had been an increasing incidence of transactions involving specific government bonds failing to settle, owing to an inability to deliver the government bond required (not an inability by

Table 3.3
Bond lending facility summary statistics (as at 9 November 2005)

Proportion of days used	45%
Average daily amount (when used)	68m
Highest daily amount	357m
Average weekly amount	163m
Highest weekly amount	820m

Source: RBNZ.

Bonds can also be exchanged for cash, although this has been less common. For more on the operational details of the BLF, see the *Bank's Operating Rules and Guidelines*, available at www.rbnz.govt.nz/finmarkets/liquiditymanag ement/0145254.html.

the other party to pay). This created a risk to the reputation of the New Zealand government bond market, and to liquidity being further undermined by an erosion of dealer confidence in an ability to transact.

Since the facility has become available, there have been no government bond transaction settlement failures (that the Bank is aware of). But overall the bond market remains tight, with the amount of bonds available for trading in the market limited. Against this background, the Bank is now undertaking a more comprehensive review of the nature and structure of the market operations that are undertaken for liquidity management and monetary policy purposes, with a view to ensuring that those operations leave maximum scope for government securities to be available for trading in the market. We expect to release details to the market of any proposed changes in the first quarter of 2006.

#### Box 3

### What might Eurokiwi and Uridashi maturities mean for financial stability?

Offshore New Zealand dollar bond issuance – mainly Eurokiwi and Uridashi bonds – has been especially strong over the past year. These bonds are mostly issued by internationally known overseas institutions (for example, the World Bank) to overseas investors (particularly in Europe and Japan). They facilitate the financing of New Zealand's current account deficit by providing New Zealand banks with a cost-effective mechanism for converting – or swapping, and thus hedging – their overseas borrowings, mostly in the USD market, into New Zealand dollars. Most of the Eurokiwi and Uridashi bond issues have had two-to-three-year maturities, and have been an important factor behind the relatively low fixed rate mortgages that New

Zealand banks have been able to offer (discussed further in chapter 4).

About \$NZ45 billion of these bonds is now outstanding. This is more than double the previous peak in 1999 (figure 3.7). Questions therefore arise about the nature of the adjustment that would take place if issuance was abruptly to dry up, and/or if the large amount scheduled to mature between 2006 and 2009 was not, at least in part, rolled over into new NZD issues.

The last period of substantial offshore NZD bond maturities (around 1999–2002) caused little disruption to the wider financial system. However, that in part has been because the decreased demand for NZDs from offshore investors occurred at the same time as demand for credit from New Zealand borrowers slowed (figure 3.8). While offshore NZD bond maturities doubtless contributed to

Figure 3.7

New Zealand dollar bond issuance in offshore markets

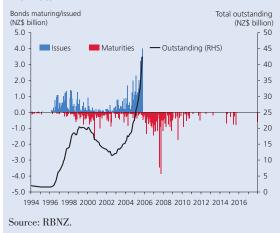
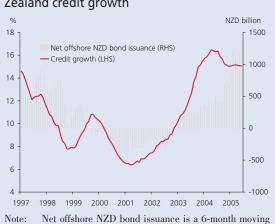


Figure 3.8

Net offshore NZD bond issuance and New
Zealand credit growth



Note: Net offshore NZD bond issuance is a 6-month moving average.

Source: RBNZ - table C2.

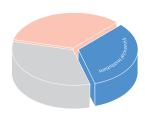
the substantial fall in the New Zealand dollar exchange rate over that time, other factors, in particular the impact of the Asian financial crisis and subsequent downturn in the New Zealand economy, were thought to be the main drivers.

This previous experience provides some basis for thinking that adjustment to a turnaround in the Eurokiwi and Uridashi issuance should again be facilitated in relatively orderly fashion by the financial markets. However, if issuance is sharply curtailed and there are large net maturities, then fixed interest rate lending (including mortgage lending) would become more expensive.

Alternatively, something could happen that independently curtails the demand for credit in New

Zealand. In the late 1990s, it was the recessionary effect of the Asian financial crisis, at the same time as two consecutive serious droughts. These events helped to remove upward pressure on interest rates, but were also reflected in a very substantial depreciation of the exchange rate. There is a risk in current circumstances that, with the current account deficit even larger than its peak in the 1990s, and the economy significantly more indebted, the exchange rate movement could be even sharper. An unusually large and rapid withdrawal of support for the NZD could be difficult for the market to digest, and create the potential for quite volatile movements in the exchange rate

#### 4 New Zealand's financial institutions



New Zealand's financial institutions remain similarly placed as at the time of the May 2005 Financial Stability Report, although there are some early signs of more testing times ahead.

Banks continue to report strong balance sheets, with satisfactory levels of capital, strong but moderating profits, and a very low level of impaired assets. This puts the banking system in a strong position going into a period of slower economic growth. Lending growth in the banking sector has continued at a brisk pace, although some signs of a slow–down in lending

appear to be emerging.

Lending growth remains faster in the non-bank financial institution (NBFI) sector, continuing the recent trend of increasing market share, particularly for finance companies. Here too, however, some slowing in lending growth appears to be occurring.

Some deterioration in banks' and NBFIs' loan asset quality can be expected as the economy slows. The banking sector is well placed to absorb a modest increase in impaired asset expenses. However, parts of the NBFI sector may have more cyclical exposure. For example, lending growth and potential risks in some market segments, such as property development financing, can fluctuate considerably with the economic cycle.

The managed fund and superannuation sectors have displayed little asset growth in recent years. In part, this reflects the relatively poor overseas investment performance in these sectors in the early part of the decade. However, it is also indicative of the low rate of household saving and the high share of household wealth invested in housing.

#### 4.1 The banking system

Table 4.1 outlines the three main categories for banks operating in New Zealand: the large banks (comprising the four Australian-owned multi-service banking groups); three smaller mainly New Zealand retail banks; and 'wholesale' banks (predominantly branches of major international banks providing specialist financial service).

#### Strong large-bank balance sheets

The four large Australian-owned banking groups collectively represent the core of the New Zealand banking system and account for around 85 per cent of its total assets. Each of these New Zealand banks currently has an AA- credit rating

from Standard & Poor's, which means that they have 'a very strong capacity to meet their financial commitments'. These ratings are based on the respective banks' sound financial profiles, and the assessed commitment of their Australian parent banks, which are also rated AA-.

Each of these banks has a capital ratio above 10 per cent, compared with the Basel and Reserve Bank regulatory minimum of 8 per cent (see figure 4.1).

#### Generally well-diversified lending risks

As full-service banks with nationwide representation, the large banks have generally well-diversified asset portfolios.

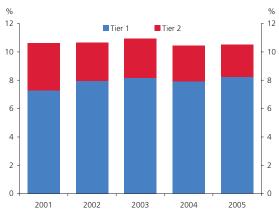
During the last few years, there has been a substantial reduction of risk concentration in large banks' corporate

Table 4.1
Registered banks in New Zealand

Large banks	Smaller New Zealand retail banks	Wholesale banks
ANZ National Bank Limited	Kiwibank Limited	ABN AMRO Bank NV*
ASB Bank Limited/ Commonwealth Bank of Australia*	St. George Bank New Zealand Limited	Citibank N A*
	TCD Deady Lineited	Deutsche Bank AG*
Bank of New Zealand	TSB Bank Limited	Kookmin Bank*
Westpac Banking Corporation**		Rabobank Nederland*/
		Rabobank New Zealand Limited
		The Bank of Tokyo-Mitsubishi, Limited*
		The Hongkong and Shanghai Banking Corporation Limited*

<sup>\*</sup> Incorporated outside New Zealand.

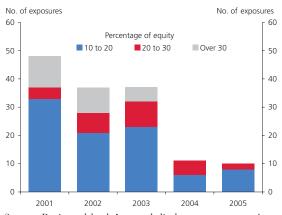
Figure 4.1 Large banks' average capital adequacy ratio



Source: Registered banks' general disclosure statements. As at 30 June.

loan portfolios. Figure 4.2 highlights the marked decline in the number of large exposures to individual corporate borrowers, measured relative to the lending bank's capital. This reduction has partly resulted from the merger of the ANZ Banking Group (New Zealand) Limited and The National Bank of New Zealand Limited, because of the merged bank's larger capital base. 18 However, there have

Figure 4.2
Large banks' large exposures to individual corporate borrowers



Source: Registered banks' general disclosure statements. As at  $30 \, \mathrm{June}$ .

also been reductions in exposure concentration for the other large banks as well. The credit quality of large corporate exposures is also relatively high, with over 90 per cent being to investment grade rated (BBB and above) borrowers. A similar significant reduction in concentration of exposure to banks has occurred since mid-2003.

An increase in the share of loan portfolios accounted for by residential mortgage lending, from 51 per cent in 2001 to 57 per cent in 2005, has resulted in increased exposure to the

<sup>\*\*</sup> Westpac Banking Corporation has agreed to incorporate in New Zealand, in accordance with the Reserve Bank's local incorporation policy.

The National Bank of New Zealand Ltd is not included in tables and figures from 2004, reflecting its acquisition by the ANZ Banking Group (New Zealand) Limited. From 2004, data labelled 'ANZ' is for the amalgamated entity ANZ National Bank Limited.

Table 4.2
Aggregate balance sheet of large banks

\$ billion	2001	2002	2003	2004	2005
Assets					
Financial investments	23	20	22	20	23
Residential mortgage loans	63	67	74	87	101
Other lending	61	67	74	76	76
Other assets	11	10	12	12	13
Total assets	159	164	183	195	212
Equity and liabilities					
Equity	10	11	12	16	17
Funding from parent banking groups	12	11	9	16	17
Other funding	129	132	150	154	171
Other liabilities	9	10	13	9	8
Total equity and liabilities	159	164	183	195	212

Source: Registered banks' general disclosure statements, as at 30 June.

household sector, and to residential real estate values (table 4.2). But offsetting the risk concentration inherent in this lending development are the varied sources of household income that service this debt.

As noted in chapter 2, there has also been rapid growth in lending to the agricultural sector, which has resulted in the share of loans outstanding to that sector increasing from 9.6 per cent in 2001, to 12 per cent in 2005. While a much smaller share of total lending than housing lending, farm lending is inherently less diversified, with borrowers' ability to service debt dependent on a narrow and volatile income stream.

#### Strong but moderating profits

Taking the four large banks together, post-tax profitability was steady in 2004 and 2005, generating slightly over 1 per cent return on average total assets, but was down on earlier years (figure 4.3, overleaf). The dip reflects both a narrowing of interest margins and higher costs. Also, going forward, tax expense can be expected to rise, as the result of new thin capitalisation rules that took effect from July 2005.<sup>19</sup>

The average cost-to-income ratio of the four large banks bottomed out at 45 per cent in 2003, but returned to

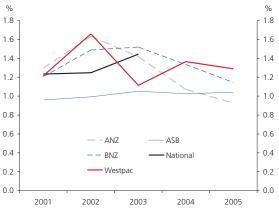
Table 4.3 Large banks' aggregate income statement

\$ million	2001	2002	2003	2004	2005
Net interest income	3303	3737	4291	4477	4694
Less impaired asset costs	-122	-168	-327	-459	-233
Net interest income					
after impaired asset	3182	3569	3964	4018	4462
costs					
Plus other income	2041	2017	2149	2161	2245
Less operating expenses	-2768	-2757	-2915	-3306	-3444
Profit before abnormals	2455	2829	3198	2873	3262
Plus/less abnormal items	-27	187	-1	7	-59
Profit before tax	2429	3016	3196	2881	3203
Less tax	-660	-756	-965	-913	-1047
Net profit after tax	1769	2260	2231	1968	2156

Source: Registered banks' general disclosure statements, year to  $30~\mathrm{June}$ .

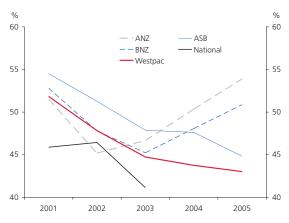
The potential impact on large banks of the 'thin capitalisation' rules has been noted in earlier *Financial Stability Reports*.

Figure 4.3 Large banks' net profit after tax as a percentage of total assets



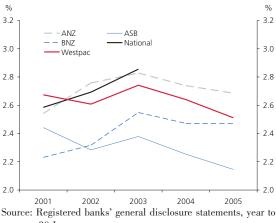
Source: Registered banks' general disclosure statements, year to 30 June

Figure 4.4 Large banks' cost-to-income ratios



Source: Registered banks' general disclosure statements, year to

Figure 4.5 Large banks' overall interest margins



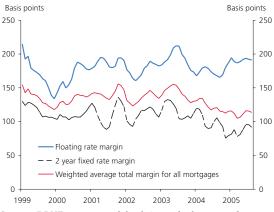
30 June.

50 per cent in 2004 and 2005. Individual banks are showing diverging trends in cost measures as they are in different stages of the investment cycle (figure 4.4). Some of the costs reflect upgrades to banks' retail branch networks and customer service channels. One-time restructuring and integration costs have impacted on ANZ National Bank's costs and profitability.

#### Intense competition squeezes margins

Large banks' net interest margins have come under pressure as competition has intensified, particularly in the residential mortgage lending market, but also to some degree in other lending markets and for retail deposits (figure 4.5). Across the four banks, aggregate net interest margins on lending have fallen by 20 basis points over the last two years, to 2.45 per cent in June 2005.

Figure 4.6 Registered banks' interest margins on fixed and floating residential mortgage lending



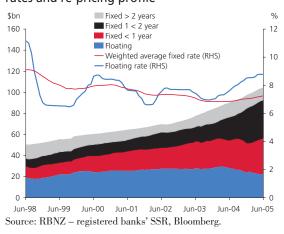
Source: RBNZ - registered banks' standard statistical returns

Within these developments, margin compression has been greatest for fixed interest rate residential mortgage lending, with banks having fought most for market share in this particular market segment. Combined with banks' access to low-cost international fixed rate funding sources (as discussed in chapter 3), very competitively priced lending has been available. Partly as a consequence, residential lending growth - and hence banks' income from residential mortgage lending – has continued strongly.

Banks' interest margins on floating rate mortgage lending have been relatively unaffected by the competition for mortgage market share. The gap between margins on fixed and floating rate loans has widened significantly (figure 4.6) with the outcome being a fall in the proportion of floating rate loans outstanding to less than 25 per cent of all mortgage loans.

The interest rate re-pricing profile of fixed rate mortgages has also been changing, with the proportion of fixed rate mortgages with one to two years to re-pricing date having increased from 29 per cent to 46 per cent in the last two years (figure 4.7).

Figure 4.7
Registered banks' residential mortgage interest rates and re-pricing profile



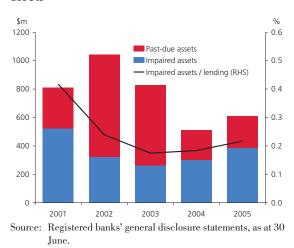
#### And an uptick in problem loans

Overall the large banks' loan assets remain very sound by historical and international standards, but with some indications of a slight weakening over the last two years. Impaired assets – those for which full recovery is subject to some doubt – have increased, albeit marginally (figure 4.8). However, past due assets – those for which payments are in arrears, but full recovery is not in doubt – have remained relatively low. The latter suggests that any further increase in the level of impaired assets arising from loans already on the balance sheet should be moderate.

However, the recent introduction of new higher-risk lending products, for example, 'low doc' and '100 per cent' loans, could result in increased loan losses going forward.<sup>20</sup> Current indications are that banks are making these products

Provisions for loan losses have increased significantly over the last three years, largely as the result of the adoption of parent group general provisioning policies. Provisions for loan losses currently cover existing impaired and past-due loan assets comfortably. However, the introduction of International Financial Reporting Standards (IFRS) in 2005/2006 could result in lower provisioning levels in the future.<sup>21</sup> This could be at a time when the risks embodied in banks' balance sheets will, if anything, be increasing as the economy slows.

Figure 4.8
Large banks' impaired and past-due loan assets



#### Similarly placed Australian parents

The Australian banking system, like New Zealand's, continues to be profitable, with sound asset quality and adequate capital. However, as in New Zealand, a softening economic cycle, and a likely weakening in credit conditions, could pose greater challenges in the period ahead than during the past decade.

available quite selectively, and at an interest margin for the additional risk built into the lending rate. There is a chance that a continued drive by banks for market share, as credit growth slows, will result in erosion of these risk mitigants. Some evidence of that occurring has been apparent in Australia.

<sup>&#</sup>x27;Low-doc' lending is where borrowers do not need to provide independent verification of income, and '100 per cent loans' are where the bank does not require a deposit contribution to fund a house purchase, and instead will advance the full amount of the purchase price.

IFRS are expected to result in lower levels of provisions, to be established on an 'incurred loss' basis, which will preclude establishing provisions for unknown, but contingent risks.

Across most indicators, the current position of the Australian parent banks maps quite closely to their New Zealand subsidiaries (table 4.4). Capital adequacy ratios are all at or above 9.75 per cent. Asset growth was 7 per cent for the year to June 2005, compared with 8.7 per cent for the large New Zealand banks over the same period. Within their Australian banking business, the major Australian banks have an average of 55 per cent of their total lending to housing – similar to the share in New Zealand.

Asset quality has also been similar between the Australian parents and the New Zealand banks, but appears likely to have reached a turning point for the current business cycle in both countries. Impaired assets as a share of the major Australian bank's total group lending at mid-2005 was 0.33 per cent, compared with 0.22 per cent for the large New Zealand banks.

One notable difference is in the contribution of earnings from funds management. In Australia this has been a significant and growing source of banks' revenue, but less so in New Zealand. This is consistent with the funds management sector overall having grown faster in Australia than in New Zealand.

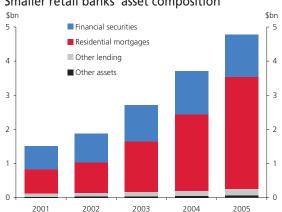
The average post-tax return on assets for the consolidated Australian banking groups for the latest 12 months is just above 1 per cent; very much in line with the average for New Zealand's large banks. Two of the Australian parent bank groups have recently announced results for the year to September 2005, reporting profitability and performance indicators that are largely unchanged from the period to March 2005.

#### Smaller retail banks gaining a foothold

TSB Bank Ltd (TSB), Kiwibank Ltd, and St George Bank New Zealand Ltd (trading as Superbank) are the three small retail banks operating in New Zealand. Selected financial indicators are shown in table 4.5. Each of these banks specialises in residential mortgage lending and is primarily funded from retail deposits. These banks have been playing a significant role in the retail banking market by adding to competition and product innovation. Although small relative to the banking sector overall, with assets of only 2 per cent of the system total, they have increased their share of banks' residential mortgage loans outstanding from just over 1 per cent in June 2002 to over 3 per cent in June 2005.

The assets of these smaller banks – whose loan portfolios are 95 per cent composed of residential mortgage loans – collectively have been increasing by an average of 33 per cent per annum during the past four years, (figure 4.9).

Figure 4.9
Smaller retail banks' asset composition



Source: Registered banks' general disclosure statements, as at 30 June.

Table 4.4

Australian parent banks: selected financial indicators

<u> </u>				
	ANZ	CBA	NAB	Westpac
Report dated	31-Mar-05	30-Jun-05	31-Mar-05	31-Mar-05
Total assets (\$A billion)	278	329	403	254
Net profit after tax (\$A million) (12-month periods)	2,894	3,991	3,546	2,691
Return on average assets (%)	1.10	1.26	0.85	1.09
Return on equity after tax (%)	16.4	15.7	12.1	16.5
Cost/income ratio (%)	48.0	54.4	55.2	50.5
Interest margin (%)	2.41	2.45	2.24	2.38
Impaired assets/total lending (%)	0.34	0.18	0.45	0.36
Total capital adequacy ratio (%)	10.3	9.8	11.4	10.0
Credit rating (Standard & Poor's)	AA-	AA-	AA-	AA-

Source: Banks' published results for the global consolidated bank.

Table 4.5
Smaller retail banks' selected financial indicators

	2001	2002	2003	2004	2005
Total assets (\$ billion)	1.5	1.9	2.7	3.7	4.8
Total lending (\$ billion)	0.8	1.0	1.6	2.4	3.5
Net profit after tax (\$ million)	17	9	8	9	22
Impaired assets/ total lending (%)	0.16	0.03	0.07	0.00	0.01
Return on assets (%)	1.22	0.55	0.37	0.30	0.51
Cost/ income ratio (%)	48.2	77.9	84.5	82.7	77.3
Interest rate margin (%)	3.18	2.98	2.98	2.67	2.55
Capital ratio (%)	15.1	22.3	17.4	16.4	14.3

Source: Registered banks' general disclosure statements, for the year ended 30 June.

Such rapid growth may not be sustainable in the future, with slower lending growth having already been apparent in 2004 and 2005.

Nonetheless, these banks are securing a foothold, albeit small to date, in the retail banking market. TSB has broadened its footprint outside the Taranaki region for both its deposit base and loan portfolio, mainly but not only through its 'direct banking' products. Kiwibank now has a well-established national presence, and reported its first full-year profit, of \$7.2m, for the year to June 2005.

The preponderance of residential mortgages in these banks' loan portfolios has contributed to exceptionally high asset quality over recent years, with impaired assets representing only 0.01 per cent of lending in June 2005, compared with the average for the large banks of 0.22 per cent. Several factors may make it difficult for these banks to maintain such high loan asset quality, including moves by some into new, higher-risk business markets, such as the small and medium-sized business sector and 'low-doc' loans. In addition, the majority of the loans on the books of the two newer banks have been written during a period of relatively strong economic growth and their loan portfolios are relatively 'unseasoned'. That is, their loan books don't have a mix of more 'mature' loans with an established credit

history to balance out the new lending. New loans will have a high-loan-to-valuation ratio and are inherently more risky if there is a shock to borrowers' ability to service the debt.

However, each of these smaller banks also has a capital ratio significantly higher than those for the large banks. These reflect their small size, less risk diversification, the start-up phase of the business, as well as possibly less access to shareholder support (although Kiwibank remains guaranteed by its shareholder, New Zealand Post Limited). At June 2005, these banks had capital ratios ranging between 13 and 15 per cent.

### And continued breadth of global bank participation in New Zealand

The remaining seven registered banks in New Zealand are branches of global institutions, four headquartered in Europe, two in Asia, and one in the United States. Although we loosely describe these banks as 'wholesale', there is considerable diversity in their target markets and business models in New Zealand. The target niches include investment banking, corporate and commercial lending and trade finance, and rural lending as well as retail banking (though only minimal branch networks are in place).

Table 4.6
Wholesale banks' selected financial indicators

	2001	2002	2003	2004	2005
Total assets (\$ billion)	32	29	27	27	29
Total lending (\$ billion)	12	11	10	10	11
Net profit after tax (\$ million)	148	314	440	447	502
Return on assets (%)	0.53	1.04	1.55	1.66	1.67
Impaired assets/total lending (%)	2.09	1.93	3.27	0.30	0.19

Source: Registered banks' general disclosure statements, for the year ended 30 June.

Recent profitability measures for these banks appear strong, but mask a broad range of performance. Deutsche Bank New Zealand, which primarily is carrying out investment banking-type business with related parties, accounts for 47 per cent of the assets of this wholesale bank category and dominates the performance measures, generating 85 per cent of its aggregate in the year to June 2005. Improved aggregate financial performance for the wholesale banks has been matched, over the last two years, by significantly better asset quality to levels comparable with the large banks.

The financial standing and condition of these banks in New Zealand is inseparable from the bank of which they are a branch. Each currently is a significant international bank of good standing, with six of the seven being ranked in the world's largest 25 banks in terms of asset size and capital.<sup>22</sup> These global banks are all well capitalised with capital ratios ranging from 11 per cent to 14 per cent.

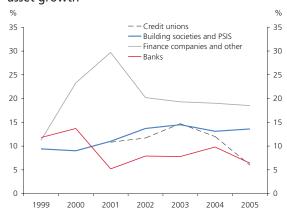
#### 4.2 Non-bank lending institutions

The non-bank lenders, while grouped together in this report, comprise a wide range of institutions differentiated in several ways; by size, ownership, funding sources, and types of lending risk. Box 4 provides further information and illustrates the funding and lending sources of these institutions.

Most categories of non-bank lending institution have continued to grow faster than the banks and as a result their market share of lending institutions', including banks', assets has grown from under 5 per cent in 2000 to nearly 7 per cent at mid-2005.

Amongst these lenders, growth by finance companies has continued to outstrip the building societies and credit unions (figure 4.10). Nonetheless building societies and the Public Service Investment Society (PSIS) have also recorded double-digit growth, while the credit union balance sheet growth has slowed. Within the finance company sector, locally-owned companies have expanded more rapidly than those that are foreign-owned, and have increased their share of the NBFI market for each of household deposits (figure 4.11), household lending (figure 4.12) and business/ property lending (figure 4.14, overleaf).

Figure 4.10 Non-bank lending institutions' annual rates of asset growth



Source: RBNZ-NBFI SSR and annual NBFI surveys, Registrar of Friendly Societies and Credit Unions, RBNZ estimates. Data are at end December except for 2005 which is end June. Assets securitised by some finance companies and building societies are included.

Figure 4.11 Market share of non-bank household deposits

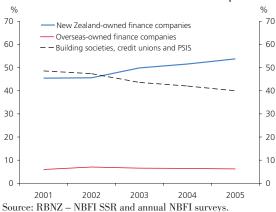
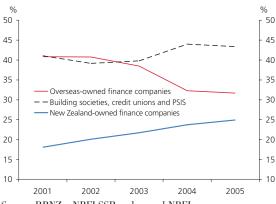


Figure 4.12 Market share of non-bank household lending



Source: RBNZ - NBFI SSR and annual NBFI surveys.

<sup>&</sup>lt;sup>22</sup> The Banker Magazine, July 2005.

#### Box 4

#### Non-bank lending institutions

New Zealand's non-bank lending institutions consist of building societies, the Public Service Investment Society (PSIS), finance companies, and credit unions. These non-bank lenders represent a small proportion of economy-wide lending activity, but nevertheless they play a significant role in the financial system and community, particularly in the household and small businesses sectors.

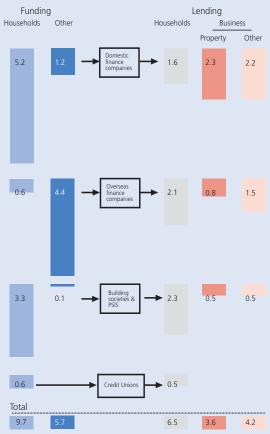
The nature of business performed by building societies and the PSIS is broadly similar. They focus on residential mortgage finance and are largely funded by retail deposits. However, they can, and do, undertake some business sector lending.

Finance companies are a more diverse group, lending to a range of sectors, including property development and investment, corporates in the agricultural and other primary sectors and financial and insurance institutions. Their product set includes leasing and other forms of asset-backed finance for vehicles, plant, machinery and other equipment. Business lending represents the majority of their activities. For the purpose of this chapter, a distinction is made between New Zealand-owned and foreign-owned finance companies. New Zealand-owned finance companies raise most of their funding from New Zealand households whereas overseas-owned finance companies raise more wholesale funding.

Credit unions focus on the household sector. They advance personal loans and residential mortgages, which are financed by deposits from their members.

The following diagram illustrates the relative proportions of New Zealand dollar funding sources and lending activities of the non-bank lending institutions.

Figure 4.13
Funding sources and lending activities



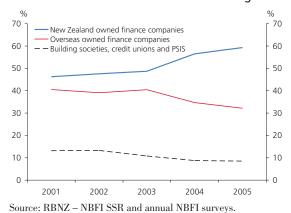
Notes

- Figures shown are NZD lending and funding as at 30 June 2005.
- All finance companies operate within New Zealand.
   Domestic and overseas refers to the domicile where ownership rests, where domestic relates to New Zealand.

Source: RBNZ – NBFI SSR, Registrar of Friendly Societies and Credit Unions, RBNZ Estimates.

Figure 4.14

Market share of non-bank business lending



### Current profitability is strong, driven by lending growth

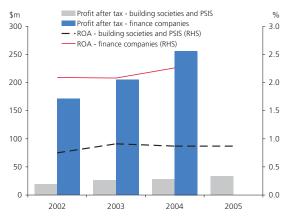
Strong lending growth, particularly amongst finance companies, have been reflected in correspondingly strong profit growth (figure 4.15).

Finance company interest margins have fallen quite sharply since 2000, while building society interest margins have remained broadly stable.

Revenues in the NBFI sector have been growing at a faster rate than costs. This is natural during a growth phase, but can also be indicative of rising operational risk as management and other resources required for monitoring risks become stretched and may not keep pace with the increasing complexity of the business environment.

Figure 4.15

Non-bank lending institution profitability



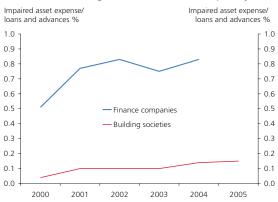
Source: KPMG financial institutions' performance surveys.

#### Potential risks are present in the NBFI sector...

Rapid expansion in lending often presents potential risks. Amongst the NBFI lenders, there are early signs that credit quality may be deteriorating, as might be expected following a period of strong economic expansion. Finance companies' loan book provisioning coverage of impaired assets also declined slightly during 2004.

Figure 4.16

Non-bank lending institutions' credit quality



Source: KPMG financial institutions' performance surveys.

### ...and property risk may be one of the higher risk areas

Finance companies have significant exposure to the higherrisk areas of the market, such as property development lending. This exposure grew rapidly in the four years to December 2004, but by September 2005 annualised growth was under 10 per cent and property loans outstanding fell slightly in the latest quarter.

It is also important to understand the interconnectedness of companies within a group, ownership structures, and parental support, where appropriate. Finance companies can be used to raise funds which are on-lent to other entities within a company group. This can create significant credit exposures to the parent company or other group subsidiaries. Parental support may be available to guarantee a finance company that is part of a group, but there may be limitations to such support.

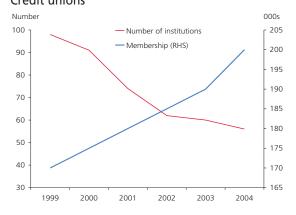
An emerging development which has the potential to be helpful to investors in NBFIs is a growing number of rating and similar agencies for non-bank financial institutions, including New Zealand-based agencies. However, at this formative stage, the usefulness of these ratings to investors may be limited by the different approaches, notations, and scales being used. Scrutiny by rating organisations and market-based discipline as a result of ratings can certainly make a positive contribution to the New Zealand financial system. But for the full benefit of this development to be realised, increased consistency and comparability of ratings may be needed (see box 5).

#### Credit unions

Credit unions focus on lending for personal consumption and are financed by smaller deposits from their members. There has been a reduction in number of credit unions in the industry, from 98 in 1999 to approximately 50 in 2005, primarily as a result of the closure of some credit unions and consolidation of others.

However, membership numbers are continuing to increase, from 179,000 in 2000, and 188,000 in 2003, to around 205,000 in 2005.

Figure 4.17 Credit unions



Source: Registrar of Friendly Societies and Credit Unions, RBNZ estimates. Year-ended March.

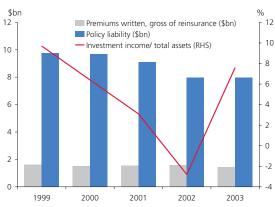
## 4.3 Insurance and funds management

### The life and non-life sectors have different outlooks

From 1999 to 2003, life insurance premium income demonstrated a slowly declining trend. Policy liabilities have decreased at a greater rate than premium income over the same period, but in 2003 policy liabilities stabilised to a similar level as in 2002. This was partly attributable to the shift away from capital intensive products, such as endowment assurance, to other products including all forms of term-life insurance and disability insurance, which, in general, have no savings element. The change in product mix has been partly caused by consumer-led demand to separate insurance from savings needs. Investment income earnings declined sharply a few years ago, but in 2003 returned to a level not seen since 1999 (figure 4.18).

The recent share price performance of listed insurance companies operating in New Zealand has improved against the international benchmark index (figure 4.19, overleaf).

Figure 4.18
Life insurance – financial trends



Source: Ministry of Economic Development.

Standard & Poor's<sup>23</sup> has expressed some reservations about the outlook for the New Zealand life insurance industry, as the market is seen as very competitive. Underwriting performance will be driven by companies' abilities to operate efficiently and better manage risk insurance claims. There is also a low level of investment into life insurance vehicles in

Standard & Poor's Asia-Pacific Insurance Outlook 2005– 2006.

#### Box 5

### Increasing incidence of credit ratings in NBFI sector

#### What are credit ratings?

The purpose of credit ratings is to provide an indication of risk and credit standing to assist investors and other market participants. Credit ratings are typically arrived at by considering several aspects of a company's business including its financial position, the nature and risk characteristics of the business, size, access to additional capital if needed, and many other factors. Credit ratings are also a potentially important means of facilitating market scrutiny of financial institutions, which can encourage sound risk management and financial disciplines.

In New Zealand, banks and general insurance companies are required to be rated. Other non-bank financial institutions may obtain ratings at their own initiative and in some cases rating institutions provide the market with unsolicited ratings.

#### Recent trends

More finance companies and building societies are either seeking credit ratings, or other similar indicators, or rating organisations are also providing more unsolicited ratings based on published information. A small number of finance companies are currently rated by a long-standing international agency.

This trend may be helpful to investors, providing them with greater information to assess the financial strength of financial intermediaries. However, the usefulness of ratings much depends on the quality of the ratings and the methodologies on which they are based. We welcome

the establishment of organisations that can provide good quality ratings, but for ratings to be useful to investors the rating organisation needs to have a reputation and track record for providing consistently robust assessments.

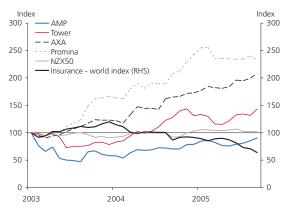
It is important that users of ratings clearly understand the meaning of the ratings being given. Currently, there are several different providers of ratings who use a range of rating methodologies. The rating notations being used also differ between agencies and across the different categories of financial instrument they assess. Accordingly, interpreting ratings and making comparisons between ratings from different rating institutions requires some care.

For example, the Standard & Poor's long-term issuer credit ratings scale has eight broad classifications from AAA to CC and four other classifications, each with a different meaning. The following extract from Standard & Poor's definitions illustrates the difference in risk characteristics between issuers with a long-term credit rating of AA and B:

- AA: The obligor has very strong capacity to meet its financial commitments. It differs from the highestrated obligors only to a small degree.
- B: An obligor rated 'B' is more vulnerable than the obligors rated 'BB', but the obligor currently has the capacity to meet its financial commitments. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitments.

Each agency will typically have its own rating scale and the meanings of ratings within those scales may be different between agencies.

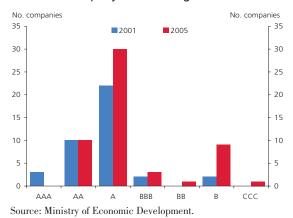
Figure 4.19
Share prices of listed life companies



Source: Bloomberg. Note world index is the Morgan Stanley capital index for insurers.

New Zealand. In contrast, the non-life insurance industry is seen as being reasonably positive. Underwriting profitability is expected to be broadly sound and low industry expense levels are continuing.

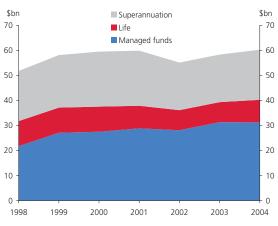
Figure 4.20 Insurance company credit ratings



There is a New Zealand legislative requirement that all insurers providing property insurance must be rated by an approved rating agency. The majority of New Zealand insurance companies are currently rated at investment grade or better. Since 2001, more insurance companies have

obtained a rating but the average credit rating has declined slightly and there are currently no insurance companies rated at AAA, compared to three in 2001. The increase in category B ratings is partly attributable to the establishment by some finance companies of some new insurance companies who provide consumer credit and property cover.

Figure 4.21 Funds under management



Source: RBNZ - annual managed funds survey.

Funds under management have not grown significantly over the last six years. Households contribute around 90 per cent of total funds under management, which since 1998 have grown 16 per cent, compared to a 50 per cent growth in deposits at banks and NBFIs. Managed funds have increased, but life insurance and superannuation funds have remained static over the period. The strength of the NZD has affected these growth rates with one third of total funds invested offshore. Nonetheless ten years ago total funds under management exceeded total household deposits, yet are now only 80 per cent of total deposits.

# 5 Recent developments in financial regulation

The importance of a sound and efficient financial sector is reflected in the attention officials are giving financial sector regulation at the moment, both in terms of banking policy development and wider non-bank regulatory reviews. The motivation for this work includes a desire to improve compliance with international standards and codes, trans-Tasman developments, and to ensure that the regulatory framework best supports the financial system in performing its key roles. It follows an assessment, in early 2005, that concluded that although New Zealand's financial system functions well in the main, some aspects of financial regulation could be improved.

Several key themes run through the recent developments in financial regulation. One is the need to bolster prudential standards beyond the banking sector. Closely related is the need for the public to get the necessary information from financial institutions to make appropriate investment decisions. The trans-Tasman nature of the banking system, combined with the crucial role it plays in the everyday functioning of the economy, means there are opportunities to capture synergies across regulation and regulators. Finally, there is a desire to improve New Zealand's financial crisis management capabilities.

## 5.1 Banking regulation and supervision

The Bank has made progress in a number of areas since the last *Financial Stability Report*. Much of this work is in some way a response to the international nature of the banking and finance sector. In the case of capital requirements, the main impetus has come from the need to keep up with international standards and best practice as promulgated by the Basel Committee on Banking Supervision. For the outsourcing policy and the work of the Trans-Tasman Council on Banking Supervision, the driver has been the strong connection between the Australian and New Zealand banking systems.

#### Outsourcing

Outsourcing is the use by a firm of another service provider (either a related or independent company) to perform business functions that would normally be undertaken by the firm itself. Outsourcing by banks has increased rapidly in the past decade as communication and information technology has evolved and improved. In New Zealand, a lot of bank outsourcing has been to parent banks in Australia.

For some time now, the Bank has been developing a policy on outsourcing. The outsourcing policy is designed to achieve the purposes set out in section 68 of the Reserve Bank of New Zealand Act, that is, to promote the maintenance of a sound and efficient financial system, and to avoid significant damage to the financial system that could result from the failure of a registered bank. While no bank is 'too big to fail', some banks comprise such a large share of the banking market that they may be difficult to close, and should have the ability to continue to operate some basic functions (such as payment and settlement systems).

Although bank failures and service provider failures are relatively low-probability events, they are also high cost events, and it would be imprudent to assume that they will never happen. The outsourcing policy aims to provide safeguards to the stability of the New Zealand banking system against the possibility of high-impact failures.

Review of the regulation and performance of New Zealand's major financing institutions available at www. rbnz.govt.nz/finstab/banking/supervision/1498932.html

The outsourcing policy does not ban outsourcing. Rather, it requires a large bank's directors to have the legal and practical ability to control and execute any outsourced functions to ensure that the bank has the ability to continue to provide core services, in the event that one of its service providers fails or becomes dysfunctional, or if the bank itself fails.

Under the Bank's draft policy, directors will need to satisfy themselves and the Reserve Bank that the policy's required outcomes are met. For this purpose the Reserve Bank will focus most on any outsourcing arrangements for functions needed for the continuity of liquidity provision and circulation.

The Reserve Bank will engage with banks over any shortfalls in potential compliance over coming months.

#### Trans-Tasman Council on Banking Supervision

In June this year, the Trans-Tasman Council on Banking Supervision submitted its report to respective Ministers on legislative changes required to ensure the Reserve Bank of New Zealand and Australian Prudential Regulation Authority (APRA) can support each other in the performance of their current regulatory responsibilities at least regulatory cost. Ministers are considering the recommendations made in the report.

#### Bank capital requirements

The ability to set capital requirements is one of the Reserve Bank's key regulatory tools, as it is for bank regulators the world over. And like many other regulators, the Bank is currently updating its capital rules to be consistent with the new international framework for capital requirements known as Basel II.<sup>25</sup>

The Basel II framework differs from its predecessor in that it allows for more sophisticated methods of assessing the risks that a bank must hold capital against.<sup>26</sup> The Reserve Bank will require locally incorporated banks to

apply its Basel II capital adequacy rules in New Zealand from January 2008. As the majority of banks in New Zealand are parts of banking groups with operations in a number of countries, the interaction of group and local bank capital adequacy rules will be particularly important. The successful implementation of Basel II in New Zealand will require liaising with the relevant foreign supervisors to ensure the smooth implementation of Basel II for such banks. In particular, the Reserve Bank is working closely with APRA. As described in the May 2005 *Financial Stability Report*, the Bank and APRA have signed a terms of engagement to facilitate cooperation on Basel II.<sup>27</sup>

#### Bank and financial crisis management

Fortunately, a regulator's ability to manage a crisis is rarely tested. However, this does not derogate from the need to be prepared, and work continues on developing the Bank's capacity to manage a bank crisis. The preparation involves developing the Bank's range of options available to it in the event of bank failure, and, importantly, building the capacity of Bank staff to quickly assess the appropriate course of action.

To help build staff capacity, and look for ways to improve the systems and processes intended to assist decisionmakers, the Bank has run internal workshops on crisis management including a crisis simulation exercise. Other simulation exercises are planned.

# 5.2 Financial sector reviews:Enhanced prudentialregulation and information

A fundamental assessment and reinvigoration of financial sector regulation is taking the form of a number of reviews involving a number of government agencies. This section, prepared in consultation with other agencies, provides an update on where the reviews are at and outlines some of the work yet to be done.

The framework is known as Basel II because it is the second framework for setting regulatory capital developed and issued by the Basel Committee on Banking Supervision.

See "Basel II: A New Capital Framework", Reserve Bank of New Zealand Bulletin, September 2005, Vol 68 No. 3, for a thorough explanation of Basel II and the Bank's approach to implementing it.

The terms of engagement can be viewed at www.rbnz. govt.nz/finstab/banking/regulation/1497871.html.

# Review of financial products and financial providers

In May this year, the Government announced a review of the regulation of a number of non-bank financial products, services, and providers. The review, led by the Ministry of Economic Development (MED), but also involving officials from the Bank, The Treasury, Ministry of Consumer Affairs, and the Securities Commission, is wide-ranging. It involves an assessment of the regulation of:

- superannuation schemes;
- insurance (health, life, and general);
- offerings of securities and collective investment schemes (unit trusts, group managed funds, participatory securities, contributory mortgages); and
- non-bank financial institutions (friendly societies, credit unions, building societies, industrial and provident societies, finance companies).

The first stage of the review was completed in July when the review group presented its preliminary views to the Minister of Commerce in the report "Stage One: Framework, Problem Identification and General Directions for Reform".<sup>28</sup>

The paper recommended a number of changes that should help strengthen the financial sector, improve the effectiveness of regulation, reduce compliance burden, and provide a better basis for public confidence in the financial system. The Minister of Commerce agreed to the interim recommendations, which foreshadowed some increase in prudential regulation of non-bank deposit-taking institutions, and some forms of insurance and superannuation. These changes would also assist in bringing New Zealand closer into line with international standards and codes, and provide a basis for closer coordination with Australia in some areas where appropriate for NZ conditions. Officials will also, separately, consider which agency should be the prudential regulator and supervisor.

Officials have begun developing draft options for reform, in conjunction with advisory groups made up of key industry participants. Following consultation, policy proposals will be

developed and sent to Cabinet in late 2006, with legislation planned to be passed in 2008.

#### Anti-money laundering regulations

New Zealand is a member of the Financial Action Task Force (FATF), which means it is obligated to comply with FATF guidelines intended to reduce the occurrence of money laundering and the financing of terrorism.<sup>29</sup> In 2003, New Zealand underwent a FATF assessment in which a number of areas were identified where New Zealand's measures to counter money laundering and the financing of terrorism fell short of FATF recommendations.<sup>30</sup>

The Ministry of Justice is leading the work necessary to achieve compliance, a large part of which comprises the review of the Financial Transactions Reporting Act 1996 (FTRA). In August, the Ministry of Justice issued a discussion document detailing possible amendments to the FTRA.<sup>31</sup> The amendments are mostly around ensuring financial and designated non-financial businesses and professions have the systems necessary to verify the identity of their customers and the nature of their customers' business, identify and report suspicious transactions, and maintain sufficient records in the event that a transaction needs investigating.

The discussion paper also advised the financial sector that compliance with the FATF recommendations would involve the implementation of a comprehensive monitoring framework to ensure all financial institutions meet antimoney laundering/countering the financing of terrorism (AML/CFT) standards. The Ministry of Justice is currently analysing submissions on the discussion document, and is intending to report to Cabinet mid to late 2006.

FATF is an international intergovernmental body. It promotes national and international policies and legislation to combat money laundering and terrorist financing.

The International Monetary Fund's Report – "New Zealand: Report on Observations of Standards and Codes, FATF Recommendations for Anti-Money Laundering and Combating the Financing of Terrorism (ROSC)" can be viewed at www.justice.govt.nz/fatf/index.html. This report evaluates New Zealand against the FATF anti-money laundering and terrorist financing recommendations.

The discussion document detailing possible amendments to the FTRA, "Money Laundering and New Zealand's Compliance with FATF Recommendations", can be viewed at www.justice.govt.nz/fatf/index.html.

The report and other information on the review including the terms of reference can be found at www.med.govt.nz/buslt/bus\_pol/financial-products/

#### Review of financial intermediaries

The Financial Intermediaries Taskforce final report entitled Confidence, Change and Opportunity was publicly released in August 2005.<sup>32</sup>

The Taskforce recommended a regulatory framework under which industry bodies ('approved professional bodies') and the Government (through legislation and government entities such as a Minister and a regulator) will set standards, rules, and obligations for financial intermediaries, and will carry out dispute resolution and disciplinary functions.

Cabinet agreement will be sought to the proposed 'coregulatory framework', such that approved professional bodies and a government regulator would work together to regulate financial intermediaries. The purpose of this agreement is to give certainty to industry that there will be approved professional bodies and to identify the regulator, in order to enable officials to work with any potential approved professional bodies and the regulator in designing the regime.

If Cabinet approves the general co-regulatory framework, MED will carry out the detailed design work on the Taskforce proposals. It is anticipated that a discussion paper will be released in the first half of 2006, with implementation of legislation in 2007/2008.

#### The review of the Financial Reporting Act

MED is currently performing a review of the Financial Reporting Act. Issues being considered include the scope of the Act's application (ie, 'who should be required to report'), the institutional arrangements for financial reporting, enforcement mechanisms, and auditing standards.

As a result of the review so far, the Government has decided not to require large, non-public companies to file their financial reports with the Registrar of Companies. This decision relates only to companies that are not issuers of securities to the public. The overall picture from submissions on a discussion paper put out last year was that such information would be of very limited use to potential users.

The Government will consider other issues covered by the review over coming months.

The Taskforce defines financial intermediaries as those who market financial products or provide financial advice (that is, advice about financial products or investment or savings decisions and choices) to members of the public.

# Graphical appendix<sup>33</sup>

#### International

Figure A1a

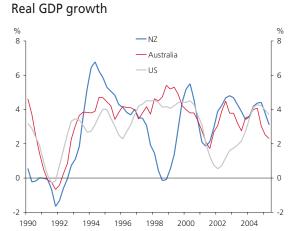


Figure A1b Real GDP growth

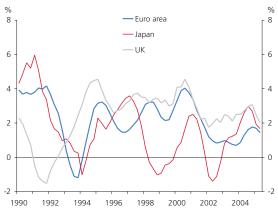


Figure A2a
Current account balance

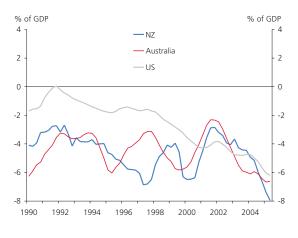


Figure A2b Current account balance

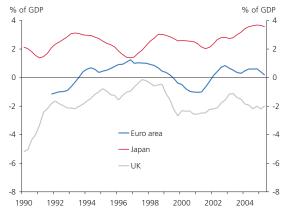


Figure A3
Trade-weighted exchange rate indices

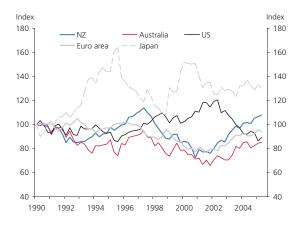
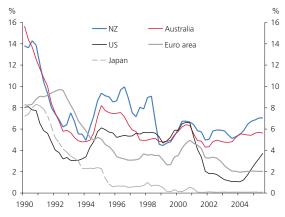


Figure A4
Short-term interest rates



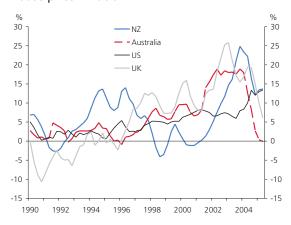
Definitions and sources are listed on pages 47-48.

### Asset prices

Figure A5
Equity market indices

Index Index 500 500 -NZ Australia -US 400 400 – Europe Japan 300 300 200 200 100 1992 2002 1990 1994 1996 1998 2000

Figure A6
House price inflation



#### **New Zealand**

Figure A7 Household debt and servicing costs

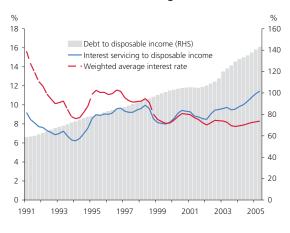


Figure A8 Household assets and liabilities

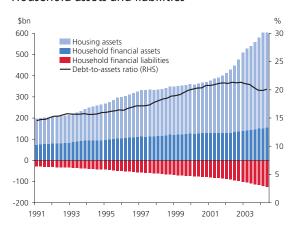


Figure A9
Property price inflation

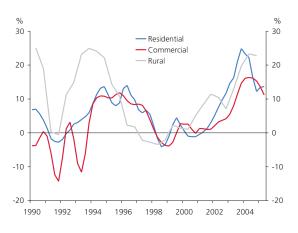
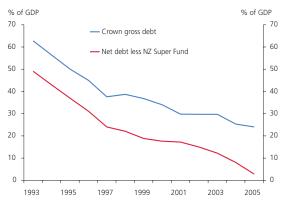


Figure A10
Government debt



#### New Zealand financial markets

Figure A11
Government bonds on issue and turnover

\$bn 1.5 25 20 1.0 15 10 0.5 Average daily turnover Government bonds outstanding (RHS) 2000 2001 2002 2003 2004 2005

Figure A13 NZD/USD turnover in domestic markets

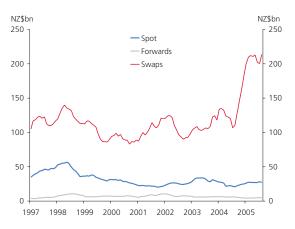


Figure A15 Equity market capitalisation to GDP

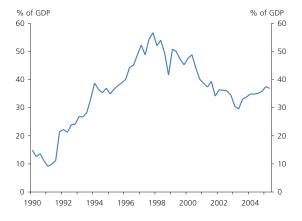


Figure A12
Ten-year government bond spreads

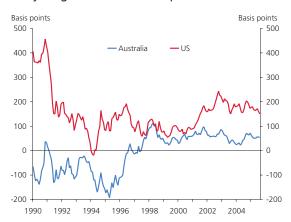


Figure A14 NZD/USD and implied volatility

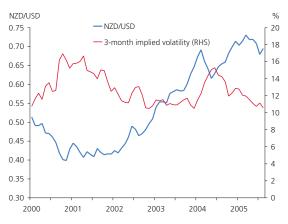
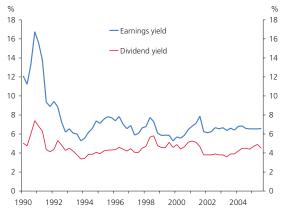


Figure A16
Earnings and dividend yields



## New Zealand financial system assets and liabilities

Table A1
Financial system liabilities

\$billion	1990	1995	2000	2001	2002	2003	2004
Banks							
Households	28	37	41	45	49	52	56
Other residents	25	30	55	59	63	72	74
Non-residents	11	22	56	64	64	64	77
Other liabilities	14	14	28	22	29	34	35
Total	78	103	180	190	205	221	242
Other deposit-taking institutions							
Households	2	3	5	6	7	8	10
Other residents	3	2	2	2	2	2	3
Other funding and liabilities	1	1	2	3	5	6	5
Total	6	6	9	11	14	16	18
Funds under management							
Household assets	25	41	56	56	50	52	53
Other sector assets	2	1	4	4	5	6	7
Total	27	42	60	60	55	58	60
Total financial system liabilities	111	151	249	261	274	295	320

As at 31 December. Source: RBNZ surveys and registered banks' general disclosure statements.

Table A2 Financial system assets

\$billion	1990	1995	2000	2001	2002	2003	2004
Banks							
Households	20	42	66	71	77	89	103
Other residents	36	45	72	77	78	79	90
General government	8	6	7	6	8	8	6
Non-residents	2	2	17	24	29	27	27
Other assets	12	8	18	12	13	18	16
Total	78	103	180	190	205	221	242
Other deposit-taking institutions							
Households	2	3	4	4	6	7	7
Other residents	3	2	4	5	6	7	8
Other assets	1	1	1	2	2	2	3
Total	6	6	9	11	14	16	18
Funds under management							
Domestic fixed interest	na	na	27	26	25	24	24
Domestic equities	na	na	7	7	6	8	8
Domestic other	na	na	4	4	4	4	5
Overseas investments	na	na	22	23	20	22	23
Total	27	42	60	60	55	58	60
Total financial system assets	111	151	249	261	274	295	320

As at 31 December. Source: RBNZ surveys and registered banks' general disclosure statements.

Table A3 New Zealand registered banks as at 30 June 2005

Registered bank's name	Market share (1)	Credit rat	ings		Ultimate parent	Country of parent
		S&P	Moody's	Fitch		
ABN AMRO Bank NV	0.5	AA-	Aa3	AA-	branch (2)	Netherlands
ANZ National Bank Limited	33.3	AA-	Aa3	-	ANZ Banking Group Limited	Australia
Commonwealth Bank of Australia	1.2	AA-	Aa3	AA	branch (2)	Australia
ASB Bank Limited	15.9	AA-	Aa3	-	Commonwealth Bank of Australia	Australia
Bank of New Zealand	17.5	AA-	-	-	National Australia Bank	Australia
Citibank N A	0.9	AA	Aa1	AA+	Citigroup Inc.	USA
Deutsche Bank AG	5.5	AA-	Aa3	AA-	branch (2)	Germany
Kiwibank Limited	0.8	AA-	-	-	New Zealand Post	New Zealand
Kookmin Bank	0.1	BBB+	АЗ	-	branch (2)	South Korea
St. George Bank New Zealand Limited (3)	0.2	BBB-	-	-	St. George Bank Limited	Australia
Rabobank Nederland	0.3	AAA	Aaa	AA+	branch (2)	Netherlands
Rabobank New Zealand Limited	1.6	AAA	-	-	Rabobank Nederland	Netherlands
The Bank of Tokyo- Mitsubishi, Ltd	0.1	А	A1	-	branch (2)	Japan
The Hongkong and Shanghai Banking Corporation Limited	2.6	A+	Aa3	AA	HSBC Holdings	UK
TSB Bank Limited	1.0	BBB-	-	-	Taranaki Community Trust	New Zealand
Westpac Banking Corporation	18.6	AA-	Aa3	AA-	branch (2)	Australia

<sup>(1)</sup> Registered banks' assets as a proportion of the total assets of the banking system, as at 30 June 2005.

Source: Registered banks' general disclosure statements.

<sup>(2)</sup> The New Zealand registration is for a branch of the ultimate parent.
(3) A joint venture with Foodstuffs NZ Ltd, but controlled by St George Bank Ltd.

Table A4
Selected NBFI assets and liabilities

\$m Dec-04 NZD funding NZ resident households 568 other funding 1129			6.55			1	palialing societies alla i ala	)		IOTAL INDITIS	
nt households ding	\$m	Share (%)	\$m	\$m	Share (%)	\$m	\$m	Share (%)	\$m	\$m	(%)
rt households ding	Jun-05	Jun-05	Dec-04	Jun-05	Jun-05	Dec-04	Jun-05	Jun-05	Dec-04	Jun-05	Jun-05
ouseholds 1											
	602	7	4544	5203	57	3190	3329	36	8302	9135	100
	1104	49	1106	1129	20	7	<sub>∞</sub>	0	2242	2241	100
non-residents 2865	3301	96	69	70	2	72	80	2	3006	3451	100
Total NZD funding 4563	2002	34	5719	6402	43	3270	3417	23	13551	14826	100
Foreign currency funding 218	221	72	64	87	28	0	0	0	282	308	100
Other liabilities 576	263	47	187	218	39	29	82	14	822	263	100
Capital and reserves 75	80	9	877	952	72	267	285	22	1219	1317	100
Total liabilities 5431	5571	33	6847	7659	45	3595	3784	22	15873	17014	100
NZD lending											
Farm lending	10	<del></del>	328	371	45	440	444	54	781	825	100
Business lending 2193	2210	32	3685	4113	09	550	564	∞	6428	6887	100
Housing lending	182	∞	22	18	<b>—</b>	2090	2186	95	2270	2386	100
Consumer lending 1834	1888	51	1442	1611	44	181	184	2	3457	3683	100
Total NZD loans by sector 4197	4291	31	5477	6113	44	3261	3377	25	12936	13781	100
Foreign currency loans 121	185	69	64	82	31	0	0	0	186	267	100
All other loans and assets 1113	1095	37	1305	1463	49	334	407	14	2752	2966	100
Total assets 5431	5571	33	6847	7659	45	3595	3784	22	15873	17014	100

Source: RBNZ - NBFI SSR. Includes NBFI's with total assets exceeding \$100 million. Totals may not add due to rounding.

### Banking sector indicators

Figure A17
Capital adequacy ratios

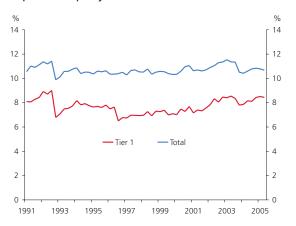


Figure A18 Asset quality

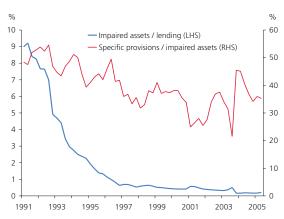


Figure A19

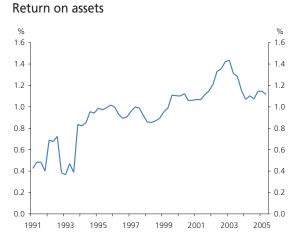


Figure A20
Operating costs to income



Figure A21
Aggregate lending margins

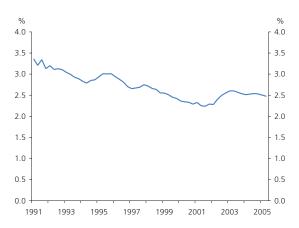


Figure A22 S&P credit ratings for registered banks

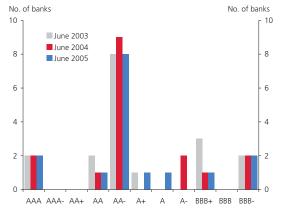


Figure A23
Bank asset composition

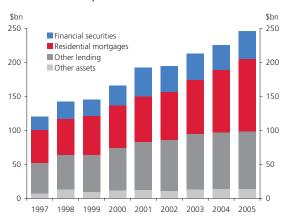


Figure A24
Bank funding composition

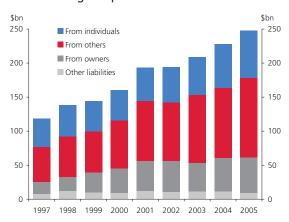


Figure A25 Bank asset growth

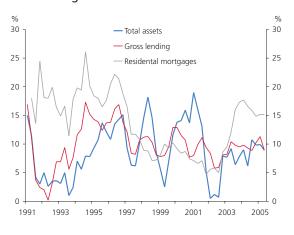
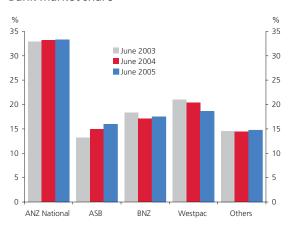


Figure A26
Bank market share



#### Non bank financial institutions

Figure A27 NBFI asset composition

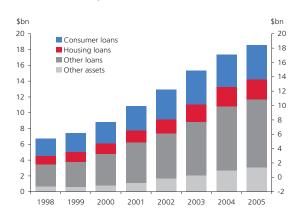
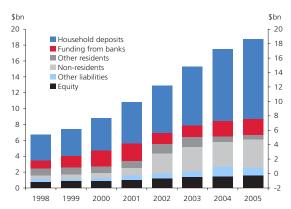


Figure A28

NBFI funding composition



# Notes to the graphical appendix

The appendix contains a suite of charts that will appear regularly in the *Financial Stability Report*. They 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 average percentage change in real GDP. Datastream.
2	Balance of payments	Current account balance as a percentage of GDP, four-quarter total. <i>Datastream</i> .
3	Trade-weighted exchange rate indices	Trade-weighted indices, 31 March 1990 = 100. Bank of England.
4	Short-term interest rates	Yields on 90-day bank bills. Datastream.
5	Equity indices	Morgan Stanley Capital Indices, 31 March 1990 = 100. Datastream.
6	House price inflation	Year-on-year change in national house price indices. <i>Datastream</i> .
7	Household debt	Household debt excludes student loans. Household disposable income is gross before deduction of interest paid, and is interpolated from March year data from <i>Statistics New Zealand</i> , with <i>RBNZ</i> 2005 and 2006 forecasts. Weighted average interest rate is published <i>RBNZ</i> residential mortgage rate data with an estimate for consumer loan interest rates.
8	Household assets and liabilities	Housing assets are aggregate private sector residential dwelling value. Data are from Quotable Value Ltd from 1995, with RBNZ estimates based on the HPI for prior years. Household financial assets are as published annually by <i>RBNZ</i> , with aggregate quarterly figures interpolated prior to 1995, based on component estimates from then. Household liabilities are from <i>RBNZ</i> series as for figure A7.
9	Property prices	Year-on-year change in property price indices. Commercial and rural property prices are interpolated from semi-annual figures. <i>Quotable Value Ltd.</i>
10	Government debt	The Treasury.
11	Government bonds issued and turnover	<i>RBNZ</i> : total government securities on issue (D1) and New Zealand government bond turnover survey (D9).
12	Ten-year government bond spreads	Yield on ten-year benchmark New Zealand government bond, less yield on US and Australian equivalents. <i>RBNZ</i> .
13	NZD/USD turnover in domestic markets	RBNZ survey.
14	NZD/USD and implied volatility	Standard deviation used to price three-month NZD/USD options. UBS Warburg, RBNZ.
15	Equity market capitalisation to GDP	Total market capitalisation of firms listed on New Zealand Stock Exchange, as a percentage of annual nominal GDP. <i>Datastream</i> .
16	Earnings and dividend yields	Earnings and dividends as a percentage of total market capitalisation. <i>First New Zealand Capital</i> .
17	Capital adequacy ratios	Tier 1 and Tier 2 capital as a percentage of risk-weighted assets, for all locally incorporated banks. <i>General Disclosure Statements</i> ( <i>GDS</i> ).
18	Asset quality	Impaired assets as a percentage of total lending; specific provisions as a percentage of impaired assets; for all registered banks. <i>GDS</i> .

19	Return on assets	Net profits after tax and extraordinary items, as a percentage of average total assets, four-quarter average, for all registered banks. <i>GDS</i> .
20	Operating costs to income	Operating expenses as a percentage of total income, four-quarter average, for all registered banks. <i>GDS</i> .
21	Lending margins	Net interest income as a percentage of average interest earning assets, four-quarter average, for all registered banks. <i>GDS</i> .
22	Credit ratings	Standard & Poor's credit ratings on New Zealand dollar long-term senior unsecured obligations in New Zealand. <i>GDS</i> .
23	Bank asset composition	As at 30 June. GDS.
24	Bank funding composition	As at either 31 March or 30 June. GDS.
25	Asset growth	Year-on-year change in total assets of all registered banks. Gross lending is before provisions. <i>GDS</i> .
26	Market share	Bank assets as a percentage of total assets of registered banks. June 2003 share for ANZ National Bank is the combined shares of ANZ Bank and National Bank. <i>GDS</i> .
27	NBFI asset composition	RBNZ Annual Statistical Return and NBFI SSR as at December 31, 2005 data as at June 30.
28	NBFI funding composition	RBNZ Annual Statistical Return and NBFI SSR as at December 31, 2005 data as at June 30.