ARTICLES

Recent developments in New Zealand's financial stability

Michael Gordon, Leslie Hull, and Clive Thorp[1]
Financial Stability Department

This article assesses the current state of, and threats to, financial stability in New Zealand. It does this against a backdrop of continued softness in global growth and in corporate credit quality abroad. It concludes that New Zealand's financial sector has remained resilient despite continued global economic weakness, and there do not appear to be any immediate concerns for financial stability locally. Banks are well capitalised, with sound asset quality and strong parent banks, and corporate credit quality remains satisfactory. New Zealand household leverage is high by the standards of many countries, though not by comparison with some of the more advanced economies of the OECD. While household gearing and debt servicing payments have remained stable, highly indebted households are vulnerable to interest rate volatility.

1 Introduction

This article discusses recent developments in international and domestic markets, and the implications of these developments for financial stability in New Zealand. Last year's review of financial stability developments occurred at a particularly fragile point in the economic cycle, and there were serious concerns about financial sector stability in some regions.[2] Since then, market sentiment has noticeably improved, although this new-found confidence has only recently been borne out in macroeconomic indicators. Market participants expect an eventual recovery in growth, spurred by interest rates at historic lows in many countries, and the recent downward correction in the US dollar.

Despite signs of cyclical improvements, many structural issues continue to present risks around the world. These include:

- high levels of corporate debt, particularly in the US;
- US pension plan under-funding;
- accounting and regulatory issues for US mortgage financing agencies;
- fragile German and Asian banking sectors; and,
- global savings/investment imbalances.

External shocks may impact on New Zealand's real economy and financial sector through either interdependence or contagion. Interdependence is the propagation of shocks through linkages such as international trade and foreign ownership of firms. Contagion is the propagation of shocks over and above what can be explained by inter-linkages, and can be associated with changes in investor risk aversion. New Zealand is a small open economy with many inter-linkages, including foreign ownership of the banking sector, exposures within the banking system to connected parties, trade links with other countries, and foreign company involvement in our economy.[3] It is for these main reasons that we monitor and report on economic and financial developments in other parts of the world.

Despite these inter-linkages, New Zealand has been sheltered from many of the imbalances seen elsewhere. Banks in New Zealand are well capitalised, and while sharemarket declines have affected pension fund returns, New Zealand corporates are not facing material under-funding. The main structural risks revolve around continuing reliance on foreign capital, particularly in the household and agricultural sectors. The rise in indebtedness in these sectors continues to outpace income growth, and this trend is unlikely to be sustainable over a long period of time.

1 We would like to thank Ian Harrison, Geof Mortlock, Adrian Orr, and Ian Woolford for helpful comments.

2 See Gereben, Hull, and Woolford (2002).

3 See Woolford (2001) for a more detailed discussion of these linkages.

Like many other countries, New Zealand has seen strong growth in house prices over the past year. However, in contrast to other countries, a significant proportion of the growth can be explained by fundamentals, such as strong migration and income growth.

New Zealand has not only weathered the global downturn, it has experienced strong GDP growth in recent years. Looking ahead, New Zealand's growth is expected to slow over the next year, which could weaken balance sheets in the corporate sector, including the banking sector. More broadly, interest and exchange rate risks to indebted sectors and the economy as a whole remain a key component of the financial stability picture. In an environment of strong economic growth and low interest rates, debt servicing has remained fairly stable, despite higher indebtedness. However, should interest rates rise materially at a later stage in the economic cycle, debt servicing could become more problematic for highly indebted entities. Further strengthening of the New Zealand dollar may lead to a widening of the current account deficit, further increasing our already-large external debt position.

While these are potential vulnerabilities, they should be seen in the context of sound macroeconomic policies, low public debt, strong incentives for prudent risk management, and a floating exchange rate to cushion against external shocks. These positive factors have played a significant role in New Zealand's financial system remaining in good health despite continuing global weakness.

2 Global market developments

In monitoring global developments from a financial stability perspective, it is useful to distinguish between cyclical and structural issues. Cyclical pressures correspond to shocks and can be expected to correct themselves over time – generally in an orderly manner. Structural issues tend to build up over time and result in heightened vulnerability in the face of cyclical pressures. Structural imbalances often correct themselves in a disorderly manner, disrupting financial markets and, depending on the nature of the imbalance, causing very large economic losses. We monitor both cyclical and structural pressures in New Zealand and around the world in order to identify potential macro-financial stability risks to New Zealand.

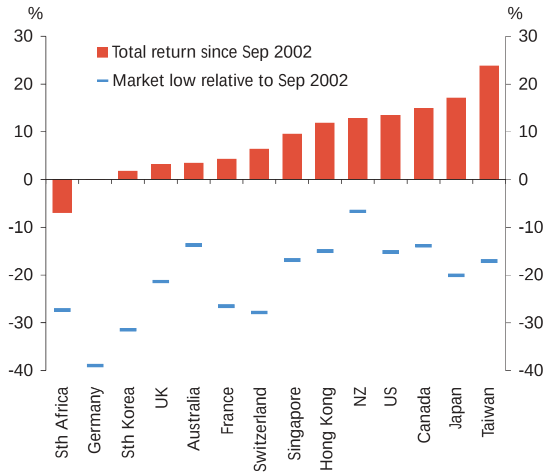
2.1 Cyclical issues

The high degree of integration in world markets means that the cyclical aspects of New Zealand's exchange rate, interest rates and equity prices are strongly influenced by what happens overseas, particularly in the US, Australia and Asia. This directly affects the cost and availability of funding from offshore, which New Zealand requires to meet its ongoing current account deficits. In addition, global market conditions both reflect and influence the underlying real activity of the world economy, which drives demand for New Zealand's exports and the financial condition of exporter firms.

Global economic developments

Recent trends in world financial markets reflect a perception of improved economic growth prospects. Equity markets in most countries are higher than they were a year ago, although they have been highly variable during this time (figure 1). In October last year, many equity indices plunged to new lows for the current economic cycle, and interest rates also fell sharply. At the time, the confidence about a recovery that was apparent in the first half of 2002 had evaporated, as economic growth indicators weakened and

Figure 1
Global equity market performance since September 2002



Source: Bloomberg.

corporate profits fell short of somewhat optimistic forecasts. Since then, equities have made a strong recovery on renewed hopes that the worst is over, and that the monetary and fiscal stimulus over the last two years will be enough to kick-start growth.

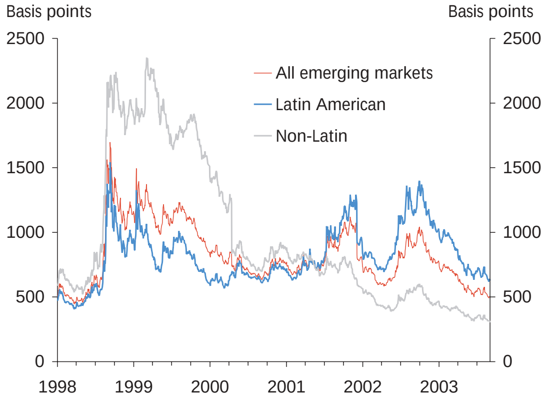
Even so, the global recovery is expected to benefit some regions more than others. Euro zone economic growth was close to zero in the first half of this year, and the gap between growth forecasts for Europe and the rest of the world has widened. In addition to weak domestic demand, the euro has risen by about 15 per cent against the US dollar in the last year alone, which has further reduced the competitiveness of European exporters and import-competing industries.

Asia bore the brunt of the impact of the SARS epidemic earlier this year, and many Asian countries are expected to report a sharp fall in GDP as a consequence. The direct impact of the outbreak was temporary, and some activity will have been delayed rather than cancelled, but it came at a time when growth in the Asian region was struggling to gain momentum. Recent forecasts, including those by the IMF, anticipate a recovery in growth rates across much of Asia.

Investor risk appetite

Investors' appetite for riskier assets has improved immensely, and with this has come a 'search for yield', resulting in strong demand for low-rated corporate bonds and emerging market debt. US corporate credit spreads have narrowed, albeit to levels that are consistent with only modest economic growth. Sovereign credit spreads in most emerging market economies have narrowed significantly, and global investors are not differentiating between countries or regions to the same extent as a year ago. In fact, spreads in some regions are lower now than they were prior to the financial crisis in late 1998 (figure 2). There is a risk that, as in the past, over-optimistic investors may have pushed yields down too far, so that market prices overstate the true outlook and mask potential vulnerabilities. However, there are some genuine indications that credit quality is beginning to improve. Standard & Poor's estimate that worldwide bond defaults in the year to June totalled USD 44 billion, which is above average but down substantially from the previous year.

Figure 2
Emerging market sovereign bond spreads



Source: JP Morgan.

Corporate profitability

Corporate profitability appears to be strengthening, as evinced by the 1,336 companies in the Dow Jones Total Market Index that posted second quarter earnings (as of 22 August 2003) over 50 per cent higher than a year earlier.[4] However, the growth in profitability appears to have come through cost cutting, rather than increased sales. Some commentators have suggested that the lack of growth in jobs could undermine the recovery. While profitability has strengthened, US corporate credit quality has continued to deteriorate, contributing to the longest credit quality decline on record according to Moody's Investor Service. Rating downgrades have outpaced upgrades for 21 consecutive quarters. However, Moody's expects a turnaround in the next 18 months, and 74 per cent of ratings outlooks are favourable, as compared with 40 per cent this time last year.

Equity market valuation

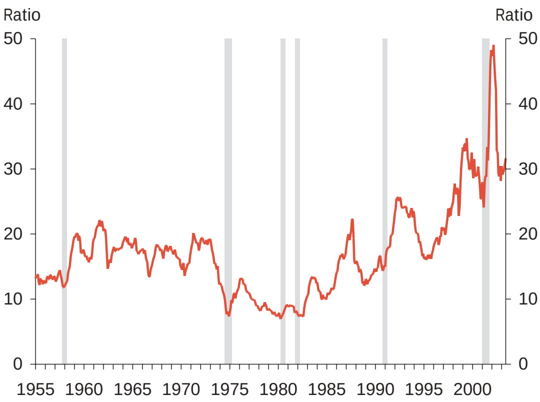
There is some concern that equity market valuations may still be overly optimistic, particularly in the US and Japan. The perception of overvalued markets can lead investors to expect a market correction, and as a result, defer investment. Price-to-earnings (PE) ratios are a common indicator of market valuation, and values between 15 and 20 are generally considered to be indicative of a sustainable valuation on the basis of historical norms. While there has been a recent correction in the US S&P 500 PE ratio, it still remains high from a historical perspective (figure 3). For Japan, the Nikkei

[4] Reuters (2003).

225 median PE ratio is 46.5, suggesting a high degree of overvaluation in the Japanese share market.[5]

Figure 3
Trailing price-to-earnings ratio for S&P 500 firms

Shaded regions indicate US recessions.



Source: Bloomberg.

House prices

Housing valuations are also attracting attention around the world. With poor returns from equity markets in the last three years, property has become a popular investment alternative. House prices have been driven upward sharply in many countries, with double-digit growth in the UK, Australia, New Zealand, and some US states. There is mixed evidence as to whether this growth is transitory, due to demographic changes and better access to credit, or a 'bubble' that will eventually contract. For example, in Australia the main driver has been speculative investment in residential property; but rising vacancy rates, low rental yields, and a wave of new housing supply will mean that a correction in house prices could be expected, particularly in Sydney and Melbourne.

The growth in housing investment has also been fuelled by lower interest rates (at four-decade lows in some countries), which has encouraged households to borrow more. Rising indebtedness, in theory, leaves households more vulnerable to a rise in interest rates – a relevant concern, in light of the sharp rise in bond yields worldwide in the last few months. However, the structure of the debt is an important consideration. In the US at least, mortgages tend to be long-term at fixed interest rates, so while the rise in mortgage rates will discourage new borrowing, it should have little effect on the ability of existing borrowers to meet their interest payments.

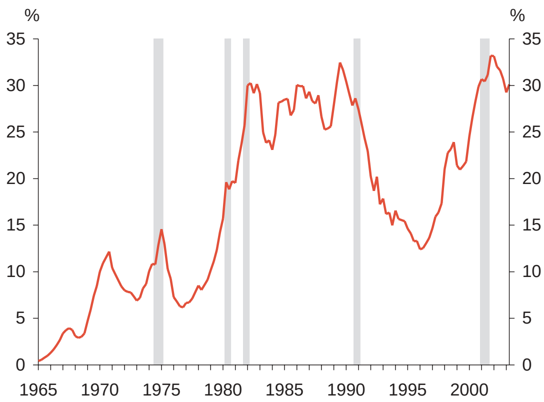
2.2 Structural issues

Corporate indebtedness

A major contributing factor to the shift in market sentiment in the US is a rebalancing of corporate balance sheets and a return to profitability. Corporate indebtedness reached record levels in the last few years, driven by debt-funded mergers and acquisitions in some industries, and more recently, by lower borrowing rates that encouraged firms to increase their leverage. This 'levering up' process has begun to unwind, but debt servicing costs still account for a large portion of corporate profits (figure 4).

Figure 4
Net interest costs as a percentage of profits before interest and tax for US companies

Shaded regions indicate US recessions.



Source: Bureau of Economic Analysis.

Much of the adjustment in corporate balance sheets has come through restructuring rather than reducing debt. Issuance of long-term bonds picked up strongly in the first half of this year, to take advantage of a fall in borrowing rates. The general trend has been to reduce short-term debt obligations, and hence stabilise cash flow, by substituting into longer-term debt. To a degree, this shift has been forced – the short-term commercial paper market tends to be limited

[5] Caution needs to be exercised when assessing share valuation measures, such as PE ratios, given the difficulties in reliably measuring reported earnings, and given that higher PE ratios can be expected in situations where the market is expecting higher-than-normal earnings growth in the future.

to high quality issuers, so many firms have lost access to the market since 2000 as their credit ratings have fallen.[6]

Pension under-funding

In the United States, under-funded corporate pension plans are a key risk to corporate profitability. Many firms offer plans with guaranteed rates of return, and with world sharemarkets slumping in recent years, these firms have been obligated to make provisions for the shortfall. For the S&P 500 firms with pension plans, this shortfall reached USD 226 billion in June this year, compared to a USD 5 billion surplus at the end of 2001. Without a sharp rise in share prices and interest rates, the requirement to fund pension plans will eat into corporate profits for several years, which may leave firms reluctant to introduce new capital spending plans.

Standard and Poor's undertook a review of Australian and New Zealand issuers' unfunded pensions to see if similar risks were present in the region.[7] They found that poor share market performance has resulted in some companies having to dedicate a portion of cash flows towards pensions. Moreover, some Australian and New Zealand firms that have entered European and US markets via mergers or takeovers have inherited some of these liabilities. However, they find that overall these exposures are less material than in the US and Europe.

US mortgage financing agencies

The recent volatility in interest rates has highlighted the role of mortgage financing agencies in US financial markets. The two largest agencies, Fannie Mae and Freddie Mac, are publicly-listed institutions that are chartered by the US Congress to buy mortgages from banks and repackage them as securities to be sold into the market. The hedging activities of agencies, in order to neutralise their own interest rate risk, tend to reinforce trends in long-term interest rates. A fall in long-term interest rates increases the chances that households will refinance their mortgages at lower rates. Agencies pre-hedge against this risk by buying government bonds, which pushes interest rates down further. Similarly, when interest rates began to rise in June this year, agencies unwound some of their hedges by selling bonds. This contributed to a 1.5 percentage point rise in long-term interest rates in the space of two months.

The regulation and transparency of the agencies has recently come into question. Freddie Mac revealed that it understated earnings over the last few years, in order to smooth earnings over time. The US Congress has since begun an investigation into the accounting practices and regulatory oversight of agencies. This is unlikely to dent investor confidence in the same way as recent scandals such as Enron and Worldcom, but there are indications that some investors are reassessing the riskiness of the agency debt market and reducing their holdings. Any significant selling could push interest rates higher and, because agency debt accounts for a growing portion of foreign investment into the US, the US dollar could fall rapidly.

Credit risk migration

US banks have remained highly profitable, and were left relatively unscathed by the recession in 2001. One reason for this is that in recent years they have been able to offload an increasing proportion of their credit exposures through the credit derivatives market. If the issuer of a bond defaults, the seller of a credit derivative is obligated to pay the face value of the bond to the buyer of the derivative.

US banks are believed to be major buyers of credit protection, while insurers and European banks are net sellers. However, the lack of market supervision or a centralised exchange makes it difficult to determine who ultimately holds the risk, and there are concerns that it has ended up largely in the hands of parties with lower disclosure requirements – such as reinsurers – or those who are least able to assess and manage the risks. In October last year, German bank share prices plunged on rumours that massive losses on credit derivatives would cause Commerzbank to fail.

Fragile banking sectors

In addition to the concerns about exposures to credit risk, the German financial sector is burdened by structural issues such as slow income growth, high operating costs and growing loan-loss provisions. However, the banks are making

6 See Shen (2003) for a fuller discussion of this point.

7 Standard & Poor's (2003b).

progress in cutting costs and shrinking their balance sheets.

The growth outlook for Japan has improved this year, but it remains relatively weak and is unlikely to provide relief to the struggling financial sector. Most banks suffer from a large burden of bad loans, and low profitability limits the rate at which they can write off bad loans and make new loans.

Japan's four largest banking groups have raised over ¥1.5 trillion (NZD 21 billion) in additional capital so far this year, in order to meet regulatory requirements. Resona, the fifth-largest banking group, required a ¥2 trillion (NZD 28 billion) capital injection from the Japanese government after its auditor toughened its stance on the use of deferred tax credits as regulatory capital. (Deferred tax credits, which account for over half of the top-tier capital held by banks, have no value if the bank does not earn taxable profits.)

A recent review of Japan's financial sector (IMF, 2003a) noted that there has been some progress in banking sector reform, but more forceful government action will be required to stop the decline. The review recommended faster bad loan disposals, a recapitalisation of the banking sector through capital markets, and a reduction in the involvement of government-sponsored institutions in the financial sector.

China's banking sector also faces a large and growing burden of bad loans – Standard and Poor's estimates that nearly half of all bank loans may be impaired or in default. Unlike Japan, the Chinese economy is growing strongly, and bank lending growth is accelerating – so much so that there are concerns that banks may be lending imprudently. Much of the growth in lending is going towards commercial property speculation and capital investment in industries that are already facing excess capacity.

US dollar

There is a widespread recognition that the US dollar needs to fall in order to correct the US current account deficit, which is at extreme limits, both in dollar amounts and as a proportion of GDP. However, some Asian countries (particularly China and Japan) have resisted such a move because it would require a substantial rise in their own currencies, which would sharply reduce their export income and possibly jeopardise their growth. These countries have either directly maintained their exchange rate pegs against the US dollar, or intervened in the foreign exchange market to sell their currencies and buy US dollars.

Central bank intervention in the foreign exchange market accounts for a growing share of capital flows into the US, funding over 20 per cent of the US current account deficit last year. The US dollars purchased by central banks are mostly invested in government and agency debt, which has helped to keep US bond yields low. However, there is a question mark over Asian central banks' willingness to continue funding this deficit, given the potential for losses if bond yields rise further, and the concerns about accounting practices by US agencies.

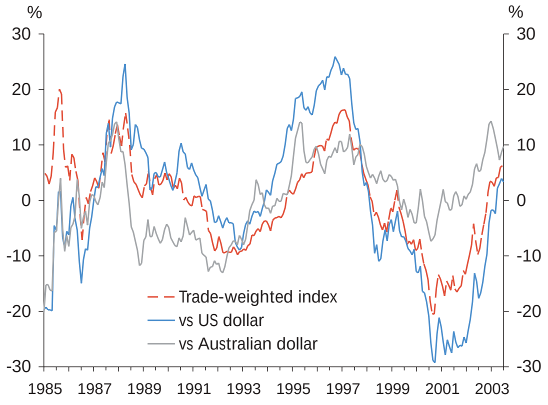
3 Domestic issues

New Zealand has not only weathered the global downturn, it has experienced strong GDP growth in recent years. However, the strong growth of the past year is forecast to decline to some extent, which may result in mild cyclical pressures. Moreover, while New Zealand is not facing some of the structural imbalances still present in many other countries, the savings-investment imbalance remains an issue.

3.1 Cyclical issues

In recent years, the weakness of the New Zealand dollar has shielded the local economy from the downturn in world growth. However, the trade-weighted index has risen by almost 20 per cent in the last year, and is now slightly above its long-term average (figure 5). Although the currency was expected to eventually return to more normal levels, the

Figure 5
NZD relative to post-float average



Source: Reuters and RBNZ.

speed of the appreciation has taken most by surprise. Given that previous exchange rate cycles have been in the range of 15-20 per cent either side of the average, exporters are concerned that the currency could rise even further if this pattern continues.

New Zealand's interest rates are relatively high when compared with rates in other developed countries - despite the recent reductions in the OCR - and have played a role in attracting offshore investors. However, interest rate differentials do not completely explain the New Zealand dollar's performance. Another key factor is that global investors have been more willing to hold riskier assets in the last year or so, whereas previously they had favoured 'safe' investments such as US dollar assets, despite the low rates of return that they offered. Growing confidence about a global recovery means that investors have favoured those economies perceived to be best placed to benefit from it – that is, countries reliant on overseas trade such as New Zealand, Australia, and Canada.

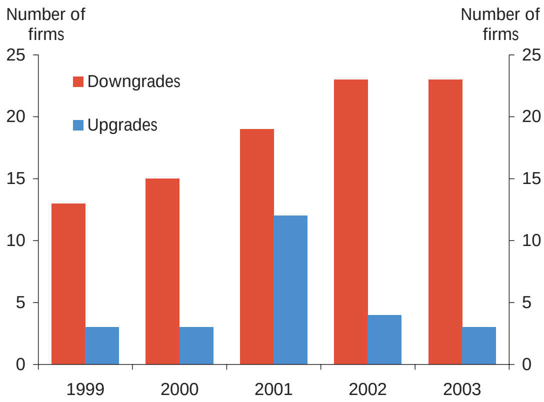
The rapid rise in the New Zealand dollar has reduced the competitiveness of exporters, and there are anecdotes of small and medium-sized firms reducing staff or moving production overseas in response. Large exporting firms have indicated that they are adequately hedged for the next year or so, but after that they will face lower revenues and write-downs of asset values if the dollar remains near current levels. But so far, there are no indications that the stronger currency has reduced firms' ability to meet their debt obligations.

Corporates

Data on corporate indebtedness is not as readily available for New Zealand corporates as it is for US corporates.[8] The rating agency Standard and Poor's (2003a) recently noted that credit quality for industrial and infrastructure firms in New Zealand and Australia (where many firms operating in New Zealand have branches or head offices) weakened further in the past year, with 23 ratings downgrades and only three upgrades (figure 6). The predominant risk factors were event risk, with some notable deterioration in the insurance and funds management sectors, and ongoing debt-funded mergers and takeovers in some industries, which has been a global trend. Credit quality as a whole remains stable for rated companies, and is expected to remain so in the near future.

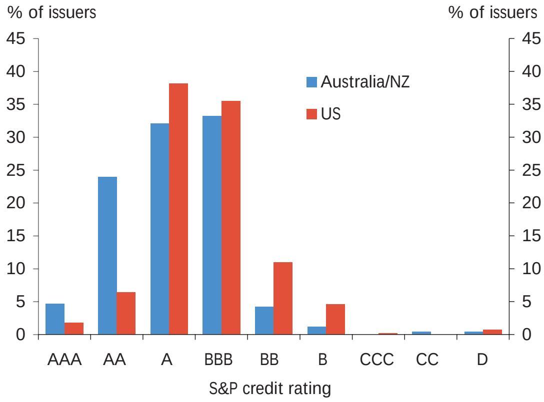
Despite following the global trend in ratings downgrades, New Zealand and Australia's rated issuers are still strong (figure 7), with over 60 per cent of rated corporates having a rating of "A" (strong capacity to pay) or better, and another 33 per cent rated BBB (adequate capacity to pay).

Figure 6
Australia and New Zealand credit rating changes



Source: Standard and Poor's and RBNZ calculations.

Figure 7
Distribution of credit ratings[9]



Source: Standard and Poor's, Bloomberg, and RBNZ calculations.

[8] We are currently working to obtain reliable data on corporate sector liquidity, leverage, and profitability in New Zealand.

[9] A strict comparison between countries is made difficult by potential differences in the sectors represented in each region. Moreover, the data represent all available ratings for New Zealand and Australian firms, but only S&P 500 firms for the US.

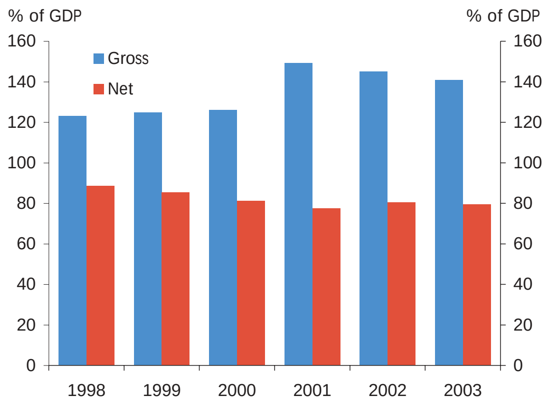
3.2 Structural issues

External indebtedness

The degree of New Zealand's external indebtedness is often cited as an indicator of potential vulnerability, and examples of this can be found in recent IMF Article IV reports.[10] The latest report noted that New Zealand's external debt position is unusually large by developed country standards, but that there are a number of mitigating factors – such as the high degree of hedging, sound macroeconomic policies and settings, healthy bank balance sheets, and so on – that lead to a more benign view of external indebtedness.

New Zealand's gross investment and net international investment, both relative to GDP, have remained fairly stable over the past several years (figure 8). Strong GDP growth has at least kept pace with external borrowing.

Figure 8
Gross and net foreign investment in New Zealand

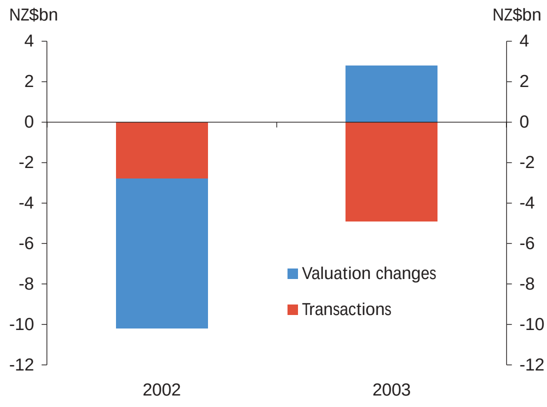


Source: Statistics New Zealand.

New Zealand's net international investment position (IIP) is the value of New Zealand's investment abroad less the value of foreign investment in New Zealand, and is the best measure of our net liabilities to overseas investors. New Zealand's net IIP worsened by $2.1 billion between March years 2002 and 2003, to $100.4 billion in net liabilities. Changes in the IIP are caused either by new transactions or through valuation changes . Transactions can be thought of as active New Zealand investment abroad and foreign investment in New Zealand, whereas valuation changes are a function of changes in exchange rates and changes in the market prices of existing assets and liabilities. Valuation changes do not systematically increase or decrease net liabilities; the direction and magnitude of valuation changes depends on the currency, asset composition, and performance of assets and liabilities.

Persistent current account deficits have resulted in net borrowing that has worsened New Zealand's net position by about $8 billion over the past two years (figure 9). However, valuation changes have played almost as large a role, adding about $7 billion to New Zealand's net liabilities in 2002, although $3 billion of this was reversed in the year to March 2003.

Figure 9
Composition of change in net international investment position (March years)[11]



Source: Statistics New Zealand and RBNZ calculations.

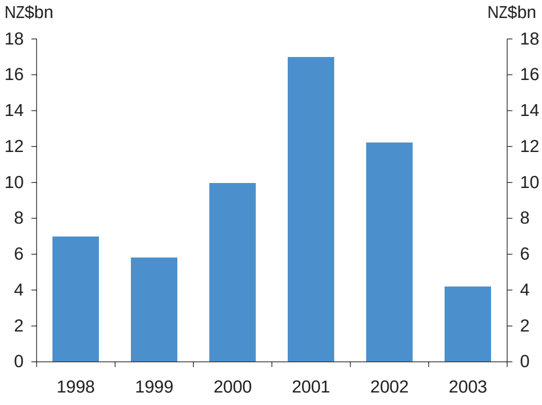
The decline in global foreign direct investment

Current account deficits require offsetting acquisitions of financial assets by foreigners, which are recorded in the financial account as capital inflows. These inflows can be in the form of foreign direct investment (FDI), portfolio equity or debt flows, or other flows, such as loans, deposits, or

[10] See IMF (2003b). Every member of the IMF has an annual consultation with IMF staff. These assessments are often published, and examples of recent New Zealand reports that include vulnerability assessments can be found on the IMF website (http://www.imf.org/external/country/NZL/index.htm).

[11] These figures are subject to a degree of error arising from the existence of errors and omissions in compiling the Balance of Payments statistics. Every country faces errors and omissions in the compilation of these statistics, so this problem is not unique to New Zealand.

Figure 10
Foreign investment in New Zealand (March years)[12]



Source: Statistics New Zealand

trade credits.[13] Inflows to New Zealand were lower in the year to March 2003 than in the previous few years, and a contributing factor was a significant decline in inward FDI.

The decline in FDI is not a New Zealand-specific phenomenon. A recent OECD report shows that global foreign direct investment flows have declined considerably since the late 1990s.[14] The report attributes some of the decline to uncertainty and the global slowdown. In particular, preliminary data for 2001 and estimated data for 2002 imply that FDI outflows from OECD countries were almost half of what they were in 1999 and 2000. About 80 per cent of the stock of FDI into New Zealand originates from OECD countries, so it is not surprising that New Zealand's FDI inflows have dropped significantly in the past two years.[15]

There is an ongoing debate among economists about the 'quality' of capital flows. The Asian crisis demonstrated that a high proportion of 'hot money' (i.e. easily reversible capital inflows) is not as desirable as longer-term flows. FDI is often considered a long-term lasting commitment, and therefore a 'better' type of capital inflow. On the other hand, countries engaged in FDI can also undertake offsetting financial arrangements, so that FDI may not be as 'fixed' as it appears.

It is important that New Zealand can continue to be able to fund its current account deficit. Creditworthiness is a judgement made by investors, and is a function of the credibility of government policies, sound infrastructure, and debt sustainability, amongst other things. Should GDP growth slow significantly while borrowing remains the same or increases (as both are forecast to do), gross liabilities relative to GDP will increase further.

Households

New Zealand households are notable for holding a high proportion of their wealth in housing, and for low levels of financial assets relative to disposable income, compared to most other OECD countries.[16] Since 2000, net financial wealth has fallen sharply, and borrowing for housing has picked up – because of falling interest rates and a strong economy – while managed fund and direct equity investment values have fallen. However, a rise in the value of housing has more than offset the decline in net financial assets (see table 1, overleaf).

The institutional allocation of household financial assets and liabilities is shown in Table 2.[17] Household liabilities are mostly owed to banks, and are predominantly housing loans secured on private residential dwellings. Household deposits at banks have risen at an annual rate of about 10 per cent since early 2001, in contrast to the late 1990s, when deposits grew by less than 2 per cent per year.

The recent acceleration in deposits appears in part to be a process of portfolio reallocation, as households withdrew from managed funds, presumably as a result of the value losses that have occurred since 2000. Anecdotal evidence suggests that some households have used these withdrawals to purchase rental property. A growing proportion of new dwellings are apartments for rent in cities, especially Auckland, taken up by a swelling foreign student population

12 The data from 2001 onwards is not directly comparable to data from previous years because of improvements in data collection techniques.

13 For more detail on the different categories of the balance of payments accounts see St. Clair, Tether, and White (1998).

14 OECD (2003).

15 Statistics New Zealand has indicated that FDI inflows in 2001 were particularly strong and not good benchmarks to measure against. However, inflows in the years to March 2002 and 2003 were low when compared to inflows over the past several years.

16 Gereben, Hull, and Woolford (2002).

17 Household financial assets at banks in this table include around $2 billion in solicitors trust accounts at banks, estimated to be 'secondary' household deposits.

Table 1
Household wealth as a percentage of household disposable income

As at December	1990	1995	2000	2002
Equities	35%	55%	65%	50%
(of which offshore equities)	*10%*	*20%*	*35%*	*25%*
Other financial assets	130%	140%	130%	135%
Total financial assets	165%	195%	195%	185%
Financial liabilities	65%	90%	120%	130%
Net financial wealth	100%	105%	75%	55%
Housing value	250%	310%	320%	355%
Net wealth	350%	415%	395%	410%

Source: RBNZ, SNZ, and NZIER.

and younger people delaying household formation and purchase. If the recent influx of foreign students weakens, individuals that have invested in apartments for student housing may find that the returns are less than anticipated.

Household debt is currently around 130 per cent of disposable income (table 1), driven in recent years by strong net inward migration, low levels of unemployment and a period of relatively low interest rates (and enabled by the relatively robust growth in disposable income). With a greater stock of outstanding debt to income, an increase in interest rates will have a greater impact than was the case in previous years. Hence, it is important to consider the extent to which the household sector is geared and its debt servicing costs.

Some housing debt is actually borrowing for small business purposes, which is secured on residential property. We estimate that the small business share of housing lending was around 4 per cent in 1990, but it has risen and may be around 10 per cent today. After excluding the estimated business share, the trends in household gearing are similar to those observed in Australia (figure 11, opposite). The rise in the value of housing has caused gearing to fall over the last year or so, notwithstanding the relatively fast rates of growth of borrowing.

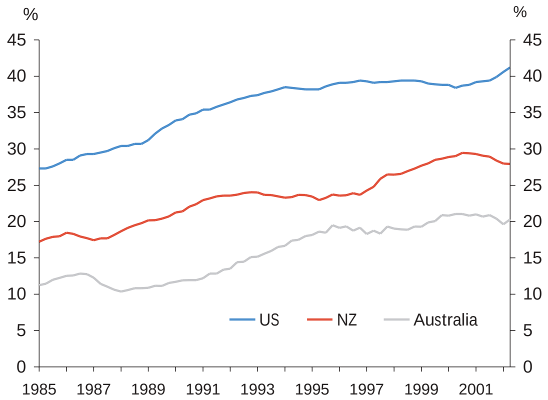
Table 2
Allocation of household financial assets and liabilities

(In NZ$ billion)

As at December	1990	1995	1998	2002
Household financial assets with:				
Banks	29	39	43	52
Other deposit-taking institutions	3	4	4	6
Fund managers	25	38	46	48
Direct equities	9	13	16	15
Non-institutional market	6	6	6	7
Total	72	100	115	128
Household liabilities with:				
Banks	20	41	56	76
Other deposit-taking institutions	2	3	3	5
Fund managers	4	1	3	5
Direct equities	-	-	1	2
Non-institutional market	2	2	2	3
Total	28	47	65	91

Source: RBNZ and NZIER.

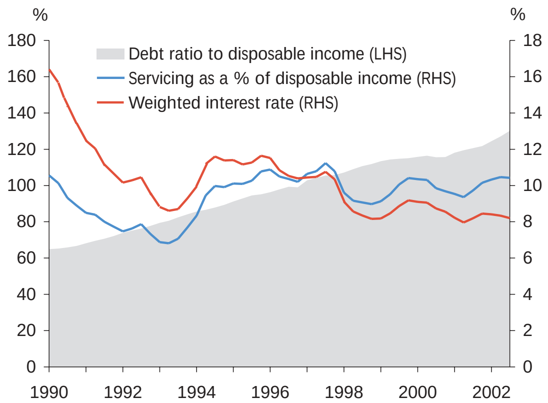
Figure 11
Ratio of household debt to housing value



Source: Federal Reserve, RBA, and RBNZ estimates.

Given that household gearing has slightly declined recently even though loan values are rising, servicing costs provide a useful check on potential risks arising from greater indebtedness. Interest servicing costs for loans secured on residential housing have been fairly stable, at around 10 per cent of disposable income since the mid-1990s (figure 12). Servicing costs for the typical borrower are likely to be higher than this, as almost half of all residential dwellings are estimated to be mortgage-free.[18] Excluding the estimated interest costs for rental property and business loans, the ratio is closer to 7 per cent, which is similar to the figure for Australia.[19]

Figure 12
Interest servicing costs as a percentage of disposable income



Source: RBNZ and SNZ.

The household sector appears to have no difficulty in servicing the current interest (and principal repayment) costs. However, the trend towards higher levels of debt over the last few years means that households are potentially more vulnerable if housing loan interest rates begin to rise from their historically low levels. The impact of interest rate changes will be spread over time, depending on the structure of household lending. About 60 per cent of housing loans are at fixed rates, although over half of these loans have less than a year until the next interest rate 'fixing'.

Considering the relatively lower level of gearing, and a slowdown in the pace of net immigration that is expected to be modest, the risks to financial stability from the recent rise in household sector borrowing do not seem to be any greater now than in the mid-1990s.

3.3 Agriculture sector

Loans to the agriculture sector (farmers and 'agribusiness') are a large component of registered bank balance sheets, comprising a third of their non-household domestic lending. Within that third, over $18 billion, or more than 80 per cent of the agriculture sector total, are loans to farmers. Because of the relatively large exposure of the banking system to the agricultural sector, we monitor the sector separately from other business sectors.

One issue of interest is the distribution of agricultural sector lending. The market for farm loans is relatively concentrated. Six banks hold over 98 per cent of bank farm debt, but of these, two banks hold more than 55 per cent of the banking system's loans to farmers. Agriculture sector specialist Rabobank is the most exposed to the farming sector, as this sector makes up 65 per cent of their total domestic loans. National Bank's exposure is about 20 per cent of total domestic loans and the other four banks active in the sector have average exposures that are less than 10 per cent.[20]

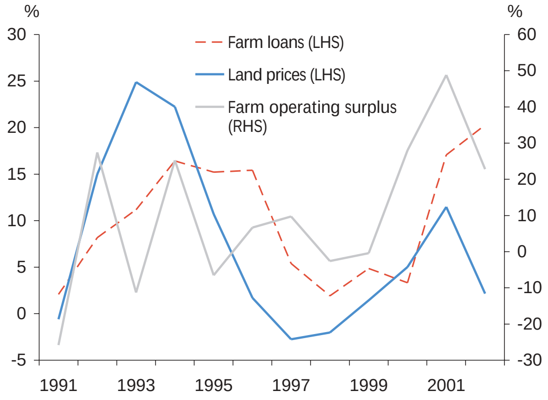
The farming sector is subject to volatile income fluctuations. These fluctuations influence land prices and lending growth rates with varying lags, and can give rise to uncertainty about risks in farm lending. Figure 13 illustrates the annual

18 Non-rental, non-farm, residential dwellings (including unoccupied dwellings).

19 Macfarlane (2003).

20 Of course, banks undertake credit risk management strategies based on the composition of their loan portfolio.

Figure 13
Rural land prices, farm loans outstanding, and farm operating surplus
(annual percentage change)



Source: MAF, QVNZ and RBNZ.

percentage rate of growth of rural land prices, farm loans, and farm incomes (before net interest costs) for the past decade. Farm incomes grew strongly for several years into the early 1990s and land prices recovered strongly from the late 1980s lows. Loan growth for farm purchases lagged the rise in land prices. Peak farm loan growth rates occurred in the mid-1990s to finance the turnover of higher-priced farms. From 1993, the rate of growth of farm land prices abated and their level hardly changed from 1995 to December 1999, despite modest growth in farm incomes.

In the June 2000 year, pastoral farm incomes grew strongly, with strengthening markets and a weakening currency contributing to better earnings. For the next two farming seasons, strong overseas markets, good weather, a low currency, and falling interest rates all continued to support farm incomes, which in 2002 were two and a half times the income of three seasons earlier. Again, farm loan growth rates lagged this income rise, with the first full season of much improved incomes not reflected in borrowing.

In mid-2001, at the end of the second season of accelerating farm income growth, the level of farm debt was around 10 per cent above the previous year. Annual rates of growth of farm debt topped out around 20 per cent in 2002. In this recent cycle, land price effects have not been as strong as previously. In the first cycle, the aggregate rural land price index almost doubled, whereas the gain was only 20 per cent in the second five-year period.

The strong growth in farm debt raises questions about the ability of the sector to service its debts going forward.[21] Growth in farm incomes in 2001 and 2002 were exceptional, at roughly double the average for the previous five years. Moreover, Ministry of Agriculture and Forestry forecasts of farm annual operating surplus out to 2007 are still relatively strong (at around 80 per cent of the 2001 and 2002 years). If these forecasts eventuate, income gains appear to provide significantly greater debt servicing capacity in the sector than was the case in the 1990s, despite higher debt loads.

4 Conclusion

This paper has provided an overview of the state of financial stability in New Zealand and has highlighted continued resilience in New Zealand's banking, corporate, and household sectors. We conclude that New Zealand continues to be well placed to weather continued slow global growth as well as the forecast slowdown of the domestic economy.

The external sector still faces many challenges. There are signs of a pick-up in the US economy. However, there are doubts as to the sustainability of the recovery, as shares remain highly valued, and increased earnings may reflect cost cutting rather than revenue increases. Moreover, corporate credit quality in the US continues a 21 quarter decline – the longest on record. The German and Japanese banking systems remain fragile, and European growth prospects remain low.

In New Zealand, relative to last year, we see a slightly higher degree of risk around household and agricultural indebtedness, growth in house prices, and the current account deficit. Net debtors are vulnerable to the interest rate cycle. The higher exchange rate and continued weakness overseas is expected to enlarge the current account deficit, which will put upward pressure on gross and net external debt. Moreover, from a cyclical perspective, the outlook is slightly weaker for the near-term performance of the

[21] It should be noted that while gearing levels for the farm sector have increased over the past three years, it appears that the degree to which this has occurred is not significant in aggregate. One study of farm debt (Wilkinson and Jarvis (2000)) suggested that larger farms had higher gearing, but for sheep and beef farms the ratio of liabilities to gross income decreased as farms grew in size, and remained constant for dairy farms, suggesting viability is not reduced by this higher gearing level.

economy than it has been over the past year. This may have a negative impact on corporate profits and balance sheets.

While we have noted several potential vulnerabilities, we believe that there are no immediate threats to New Zealand's financial stability. Banks remain well capitalised and profitable, fiscal policy is sound, and inflation remains low and stable. Corporate credit quality is stable and is expected to remain so over the next year.

References

Ernst & Young (2003), *Profit Warnings Watch*, August.

Gereben, A, L Hull and I Woolford (2002), "Recent developments n New Zealand's financial stability", *Reserve Bank of New Zealand Bulletin* 65(3), 17-37.

IMF (2003a), *Japan: Financial System Stability Assessment*, forthcoming.

IMF (2003b), *New Zealand: 2003 Article IV Consultation – Staff Report.*

OECD (2003), *Trends and Recent Developments in Foreign Direct Investment*, June.

Macfarlane, I, (2003), "Do Australian households borrow too much?", Reserve Bank of Australia.

Mortlock, G and I Woolford (2003), "Financial sector assessment programme", *Reserve Bank of New Zealand Bulletin* 66(1), 15-20.

Reuters (2003), "Record credit rating slump seen lingering."

Shen, P (2003), "Why has the nonfinancial commercial paper market shrunk recently?", *Federal Reserve Bank of Kansas Economic Review*, First Quarter.

St. Clair, R, C Tether, and B White (1998), "The intermediation of international capital flows," *Reserve Bank of New Zealand Bulletin* 61(2), 86-99.

Standard and Poor's (2003a), *Australia and New Zealand CreditStats,* June and July.

Standard and Poor's (2003b), *Australia & New Zealand CreditStats 2003: Unpredictable Events Pressure Ratings on Australian & New Zealand Corporates*.

Statistics New Zealand (2003), *Technical notes for the Balance of Payments and International Investment Position, Year ended 31 March.*

Thorp, C (2003), "Financial intermediation beyond the banks: recent developments," *Reserve Bank of New Zealand Bulletin* 66(2), 18-28.

Wilkinson, R and P Jarvis (2000), "National survey of New Zealand agriculture sector debt 1998", Landcare Research, Lincoln, Technical paper 2000/16.

Woolford, I (2001), "Macro-financial stability and macroprudential analysis," *Reserve Bank of New Zealand Bulletin* 64(3), 29-43.