ARTICLES

# Developments in the New Zealand banking industry

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This article reviews developments in the New Zealand banking industry over the year ended December 2002. It discusses some of the structural developments in the banking system, policy initiatives in the banking supervision area, and the financial condition of registered banks. Given the importance of the Australian banking system to New Zealand, the article also includes a discussion of the Australian banking system, with particular focus on the major Australian banks. The information available on the New Zealand and Australian banking systems suggests that both systems continue to perform strongly. For an assessment of the non-bank financial sector in New Zealand, the reader is referred to the companion article in this *Bulletin*: "Financial intermediation beyond the banks: recent developments".

## 1 Introduction

This article discusses recent developments in the New Zealand banking industry, commenting on the financial performance of New Zealand registered banks using data drawn from banks' disclosure statements and highlighting several important developments in the Reserve Bank's banking supervision policy. Given the close links between the Australian and New Zealand economies in general, and the banking systems in particular, the recent performance of the major Australian banks is also described.

## 2 Structural issues

The registered banks continue to be the major players in the New Zealand financial system. As at 31 December 2002, there were 17 banks registered in New Zealand. These banks held total assets of $204.5 billion. The non-bank financial sector is much smaller. Although this sector has grown rapidly in recent times, the total assets of non-bank financial institutions were only around $13 billion in 2002[1].

During 2002 one bank, AMP Bank, announced plans to withdraw from the New Zealand banking market. The bank has subsequently announced the sale of its retail banking business to HSBC, commercial property loans to GE Commercial Finance and rural loans to Rabobank. However, AMP Bank remains a registered bank for the time being.

Since December, one further bank has been registered. St George Bank New Zealand Limited was registered on 3 February 2003. The bank is a subsidiary of St George Bank Limited, the fifth largest bank in Australia. The New Zealand subsidiary has commenced operating a joint venture with the Foodstuffs Co-operative using the name "Superbank".

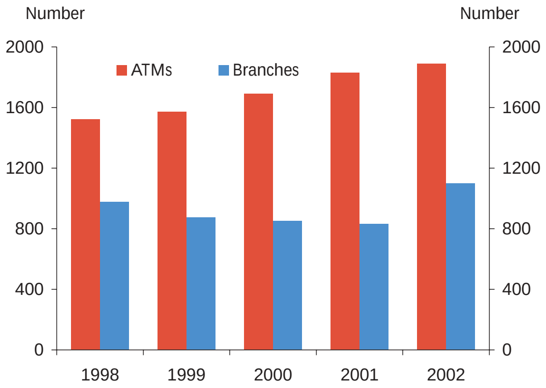
The entry of St George Bank and the potential exit of AMP Bank will not alter two of the notable features of the New Zealand banking system: the domination by a small number of relatively large banks and the extent of foreign ownership. The five largest banks in New Zealand together accounted for 85 per cent of total banking assets as at 31 December 2002. All five of these banks are also owned by foreign banks. Four of the five are owned by Australian banks and, in most cases, the New Zealand operations have very close links to their parents. Of the other registered banks, all but two are foreign owned.

For several years, banks have been encouraging their customers to undertake their banking by telephone or by using the Internet rather than by visiting bank branches. As a result, until recently, the total number of bank branches had been steadily declining. However, in 2002 the number of branches increased significantly (see figure 1). Most of this increase is attributable to Kiwibank, which had

[1] For a discussion of developments in the non-bank financial sector, see the accompanying article by Clive Thorp.

established about 280 branches by the end of the year. ASB Bank and TSB Bank also opened new branches, while the ANZ Banking Group has signalled that it too may add to its branch network.

## Figure 1
## ATMs and bank branches




Source: New Zealand Bankers' Association

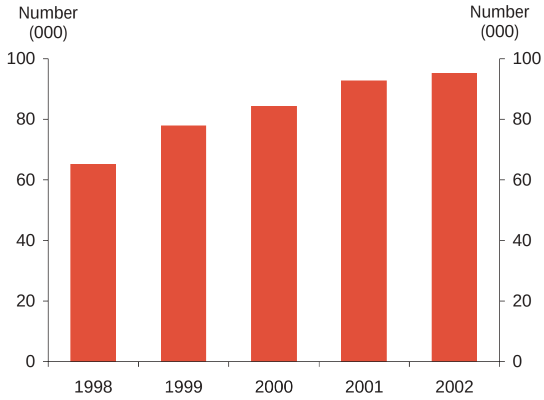
The movement towards there being more physical points of presence for banks will gather further momentum when Superbank commences offering banking facilities at supermarkets. While the Superbank model is a new one for New Zealand, there are examples of banks and supermarkets joining forces in Australia and the United Kingdom. It remains to be seen how popular this approach will be in a New Zealand context.

The alternatives to bank branches experienced mixed fortunes in 2002. The number of ATMs continued to grow, but the rate of growth slowed. After annual increases of around 8 per cent in each of 2000 and 2001, the number of ATMs grew only 3 per cent last year (see figure 1). The use of telephone banking appears to have peaked in 2000. The total number of transactions conducted by telephone has fallen in both the last two years, from about 24.5 million in 2000 to around 21 million last year. However, the popularity of banking via the Internet appears to be continuing to increase, with the number of customers registering to bank in this way reported to be still growing strongly. According to a recent survey,[2] more than a million bank customers are now registered to use Internet banking.

In 2002, EFTPOS transactions represented the largest non-cash means of payment, constituting 35 per cent of non-cash

[2] KPMG, *Financial Institutions Performance Survey 2003*

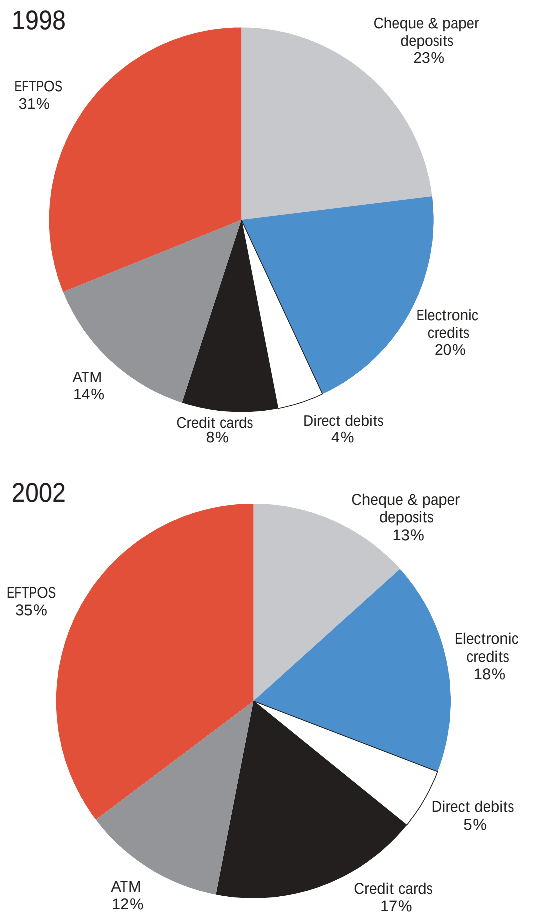
## Figure 2
## Number of EFTPOS terminals




Source: New Zealand Bankers' Association

payments by volume. Use of EFTPOS has grown steadily over recent years, as has use of credit cards. Meanwhile, cheque use has continued to decline as bank customers switch to other means of payment in the face of the relatively higher fees for non-electronic payment methods (see figure 3).

## Figure 3
## Payment methods




Source: New Zealand Bankers' Association

# 3 Policy developments

The Reserve Bank of New Zealand Act 1989 assigns to the Bank responsibility for the registration and supervision of banks. These tasks are to be carried out for the purposes of promoting the soundness and efficiency of the financial system and avoiding significant damage to the financial system in the event of the failure of a registered bank.

The approach to bank supervision adopted by the Reserve Bank is based on three types of discipline: self discipline (what directors and management do to ensure the soundness of the bank concerned); market discipline (the influence brought to bear by creditors, shareholders and other interested external parties, such as financial journalists), and supervisory discipline (the actions of regulators). The Bank's policies aim to provide an appropriate balance in each area of discipline. For example, we seek to reinforce self discipline through the requirement for bank directors to sign quarterly attestations on the adequacy of their bank's risk management systems and the requirement for the boards of each locally incorporated bank to have a non-executive chairman and to include at least two independent directors.

We seek to reinforce market discipline by promoting high quality, regular disclosures by banks, by promoting a contestable banking system and a level playing field in the financial sector, and by avoiding structures that insulate depositors and other creditors from the possibility of loss should a bank fail. The Bank supplements these measures with a targeted approach to the regulation and supervision of banks, including requiring banks to comply with minimum capital ratios (broadly in line with international standards), placing a limit on the extent of a bank's exposure to related parties, monitoring banks using their quarterly disclosure statements, and meeting with bank senior management annually. The Bank also has a range of powers to intervene should a bank get into difficulty, including the capacity to give directions to a bank (with the approval of the Minister of Finance) and to recommend to the government that a bank be placed into statutory management.

The Bank believes that self discipline is very important. For self discipline to be effective, it requires sound corporate governance and a board of directors that takes full responsibility for ensuring that all of their bank's risks are being prudently identified, measured, monitored and controlled. However, the extent of foreign ownership of New Zealand banks provides some challenges with respect to the responsibilities placed on bank boards of directors. For instance, where a bank operates as a branch of an overseas incorporated bank, legitimate questions can be raised about the extent to which the bank's directors will look after the interests of New Zealand creditors.

The Reserve Bank has moved to address this potential problem by introducing a requirement that systemically important banks and banks with substantial retail deposits operate as New Zealand incorporated entities. However, local incorporation is only a partial response. Even where a foreign bank does establish a New Zealand incorporated subsidiary, it is likely that the bank concerned will look to manage its business, including importantly its information technology, accounting and risk management functions, on a global basis. None of these functions are currently required to be carried out in New Zealand and they may be performed by a legal entity other than the entity registered as a bank in this country. Such "outsourcing" of key functions appears to be increasingly the case for some of our major banks and for banks internationally.

In normal circumstances, the location of core functionality of a bank is of relatively little concern, provided that there are robust service agreements and the bank in question is fully satisfied that the providers of the functions (whether inside the banking group or third parties) are capable of performing the functions efficiently and reliably. However, when stress emerges, the legal structure and physical location of different parts of the business become very important, impacting directly on the options available and ability to manage the stress. For this reason, the Reserve Bank has been assessing a number of different options for ensuring that the New Zealand operations of foreign banks are organised in ways that suit the New Zealand financial system. The work underway includes examining the scope for closer harmonisation of New Zealand and Australian banking regulation and looking at options for enhancing the prudential requirements on banks operating as branches of overseas incorporated entities. We are also reviewing the corporate governance arrangements applicable to banks, and have conducted a survey of bank boards on their oversight of their bank's risk management systems. The results of this survey will provide a basis for assessing the adequacy of existing corporate governance requirements for banks.

## Revised Basel Capital Accord

The Basel Capital Accord was introduced in 1988 and currently bank capital regulation in more than 100 countries, including New Zealand, is based on it. The Accord prescribes rules for measuring a bank's credit exposures, both on and off the balance sheet, and assigns risk weights to broad categories of exposure to ensure that more capital is held against higher categories of credit risk. The Accord also specifies rules for the categorisation of different forms of a bank's capital and specifies minimum capital requirements for banks in the form of minimum ratios of capital against risk weighted exposures (of 4 per cent for tier one, or core, capital and 8 per cent for total capital). The Accord was developed by the Basel Committee on Banking Supervision (BCBS).[3] The Committee has been working for the last few years to produce a revised Accord (Basel 2) to address perceived deficiencies with the existing requirements.

Basel 2 is based around three "pillars": minimum capital requirements, supervisory review and public disclosure. The proposed changes to the Accord include the introduction of different ways by which banks may (with supervisory approval) calculate their capital ratios. It would allow banks to either adopt a standardised risk weighting framework (which is similar to the existing framework but with greater specification of different risk categories) or to use their own models (as approved by the supervisory authority) to calculate risk-weighted exposures. The revised Accord also broadens the types of risks against which capital must be held to include operational risk. There is no proposed change to the minimum capital ratios for banks at this stage.

The BCBS issued a final consultative paper in late April 2003 and plans to have Basel 2 finalised by the fourth quarter of this year. The target date for all countries to have implemented changes resulting from the new accord is the end of 2006.

The Reserve Bank has some misgivings about the prominence given to supervisory validation in the new arrangements. In particular, we are concerned that the planned role for supervisors will undermine incentives on bank directors and management. Following a process of consultation, the Bank has therefore informed banks operating in New Zealand that we propose to make locally incorporated banks subject to the simplest option in the new accord. That option is the "Standardised Approach", which emphasises the use of external credit ratings in determining capital requirements.

## Conglomerates and connected lending

The Reserve Bank has recently reviewed the restrictions placed on the nature of the business that could be conducted by banks and their subsidiaries and on the lending by banks to "connected persons" (essentially a bank's parent or other companies owned or controlled by the parent).

Previously there have been no limits on the types of business that banks could undertake other than a general requirement that most of a bank's business consist of borrowing and lending or the provision of other financial services. However, the combination of banking and non-banking business can pose significant risks within the New Zealand context given the importance of self discipline and market discipline in the Reserve Bank's approach to bank supervision. Capital adequacy rules and disclosure requirements that are appropriate for banking will not necessarily be appropriate for non-banking business. The involvement of banks in life insurance and funds management activities is of particular concern in this regard, given that the risks inherent in these kinds of activities are very different from those of core banking business. The Reserve Bank has therefore concluded that there should be restrictions on the nature of business conducted by banks. We are currently implementing changes to our policies. Registered banks and their subsidiaries will no longer be permitted to conduct material insurance underwriting or non-financial business and there will be constraints on banks' financial involvement with affiliated insurance activities. Parents of registered banks will still be able to conduct non-banking business in New Zealand, but will have to do so through entities other than the bank or subsidiaries of the bank.

3 The Basel Committee on Banking Supervision comprises representatives of the central banks and banking supervision agencies of the major industrial countries. The Committee's role is to formulate broad supervisory standards and guidelines and to recommend statements of best practice.

The concern with lending to connected persons is that credit exposures to such parties might not be entered into on an "arm's length" basis because of the ability of the connected party to influence the lending decisions of the bank. Thus, the financial soundness of the bank may be undermined by such exposures. Lending to a bank's parent could also be used to remove capital from the bank quickly, particularly in times of stress when there would otherwise be a risk of loss for the parent.

In order to limit the possibility that exposures to connected persons will undermine the bank in this way, the Reserve Bank imposes limits on lending to connected persons. However, we have concluded that the existing approach is too generous and have therefore moved to impose tighter limits. In 2002 we decided, after consulting the banks, to impose new limits such that aggregate credit exposures of a non-capital nature to connected parties will be subject to ratings-contingent limits. For banks rated AA or above the limit is 75 per cent of tier 1 capital. The limits progressively decline depending on ratings to 15 per cent of tier 1 capital for banks rated BBB+ or below. Where an acceptable bilateral netting agreement is used, it will be possible for the bank to bilaterally offset exposures to a connected person against borrowings by the bank from the same legal entity. Advances of a capital nature to a connected person will have to be deducted from a bank's tier 1 capital.

### Amendments to the Reserve Bank Act

As noted previously, the Reserve Bank's responsibilities with respect to bank registration and supervision are set out in the Reserve Bank Act. Amendments to that Act are currently being considered by Parliament.

Part IV of the Act regulates the use of the words "bank", "banker" or "banking" in names or titles by non-banks. The restrictions on the use of these words are currently too narrow and the exemptions allowed are too broad. The provisions are being revised to make it harder for non-bank financial institutions to pass themselves off as banks.

The registration and supervision of banks and the management of bank failures are dealt with in Part V of the Act. The proposed amendments to this part are largely technical and designed to make it easier for the Reserve Bank to meet its objectives, particularly with respect to managing a bank failure.

The Amendment Bill also adds two new parts to the Reserve Bank Act. These parts relate to the Bank's oversight of the payment system and were discussed in an article in the March *Bulletin.*[4]

### Responding to banking system distress

The Reserve Bank Act assigns the Bank a range of powers to deal with bank distress and failure events. The aim is to respond quickly and decisively to an incipient distress situation in order to minimise disruption to the financial system and to preserve public confidence. To that end, the Bank is working on a number of initiatives to further strengthen its capacity to respond to bank distress and failure events. One of these initiatives is the development of a framework that would enable the Bank to address a bank failure situation in ways that avoid or minimise the need for government or central bank support. In addition, we are developing our policies for responding to a bank liquidity shortfall, and to develop the strategies and tactics, and further enhance our skills, for responding to a range of possible crisis scenarios. These initiatives are being taken not because the Bank expects that we will have to use these powers in the foreseeable future – as this article makes clear, the financial system is currently robust and well placed to absorb economic shocks. Rather, we are developing our crisis management capacity so that, if the need ever arises, we can act effectively to resolve the crisis and restore order to the financial system.

## 4 Australian developments

The close links between the New Zealand and Australian economies, and the fact that four of New Zealand's largest banks are owned by Australian banks, make developments in Australia very important for the New Zealand banking system. This section therefore briefly describes the

4 Stinson, Allison and Michael Wolyncewicz (2003), 'Recent developments in the payment system', *Reserve Bank of New Zealand Bulletin*, vol 66, no 1.

performance of the five major Australian banks over their 2002 financial years. The focus is on these five banks because the Australian banking system, like New Zealand's, is dominated by a small number of large banks. The four major Australian banks (ANZ, Commonwealth Bank of Australia, National Australia Bank and Westpac) all have significant operations in New Zealand. The fifth largest bank in Australia, St George Bank, is also now represented on this side of the Tasman through its involvement in Superbank. The information in this section has been drawn from publicly available sources, including the published accounts of the banks.

For the last decade or so, Australian banks have enjoyed a healthy economic environment. The Australian economy turned in a relatively strong performance over 2002 with real GDP growing 3 per cent over the year, faster than real GDP in the major (G7) economies. Economic activity was underpinned by strong consumer spending and a buoyant housing market. The growth rate was achieved despite the constraining effect on the rural sector of drought conditions and the relatively weak international economy.

In this environment, the major Australian banks have been very profitable. The five banks achieved an after-tax return on assets of 1.1 per cent over 2002, above the internationally accepted benchmark of 1 per cent and up on the 0.9 per cent return achieved in 2001.

However, it is necessary to interpret reported profitability carefully because of the impact of asset sales by several banks. After adjusting for this impact, profitability still appears solid and has been the result of increased net interest income, continued cost containment and growth in fee income.

Strong growth in lending, particularly lending to households, has resulted in increased net interest income. Overall interest margins were down slightly, reflecting strong competition, particularly from non-bank specialist mortgage providers. However, margins on corporate lending are reported to have shown some improvement.

For several years, banks in Australia have been focusing on reducing their costs in the face of margins eroded by competition. Cost to total income ratios for all the major banks have fallen from levels of 60 per cent or more in the late 1990s to around 50 per cent in 2002. Efforts to contain costs have seen branches closed and staff numbers reduced. However, banks are coming under increasing pressure to maintain their branch networks, particularly in rural areas. Consequently, cost savings are now being sought in other areas, with banks' information technology coming under particular scrutiny.

Despite increased income from transaction fees, the banks' total non-interest income fell as a result of lower returns from wealth management activities. The major banks have been looking to develop their involvement in wealth management in order to diversify their income and to respond to a move away from bank deposits by savers in Australia. An increased focus on retirement savings has seen households look for alternatives to putting their money in the bank. The four largest banks all now have major wealth management businesses. Income from these businesses came under pressure in 2002 as declines in world equity markets impacted, both through revaluations of assets held in managed funds and through reduced management fees as investors went in search of higher or less volatile returns elsewhere.

The total assets of the major Australian banks as a group grew about 2 per cent in 2002. This growth reflected growth in total lending, with particularly strong growth in lending for residential mortgages driven by the buoyant housing market. Residential mortgage lending makes up more than 50 per cent of the major banks' total lending. Corporate borrowing did not grow as strongly, with major companies having tended to move away from borrowing from banks in favour of funding their business directly in the financial markets.

The other result of the lessening importance of deposits in bank balance sheets in recent years has been that the banks have increasingly had to fund themselves in wholesale financial markets. A lot of this funding has been sourced from offshore, but the banks are well hedged and carry little foreign currency risk.

The total impaired assets of the major Australian banks fell by about 4 per cent in 2002 and impaired assets were only about 0.7 per cent of total gross lending. The good credit quality reflects the strength of the economy generally and was achieved in spite of several high profile, large corporate collapses.

Australian banks are required to maintain minimum capital adequacy ratios in line with international standards. Tier 1 capital must be at least 4 per cent of risk weighted exposures and total capital 8 per cent. In 2002, the reported tier 1 ratios for all five major banks lay between 6.5 and 7.9 per cent, while total capital ratios were between 9.8 and 10.8 per cent.

The strong financial performance of the major Australian banks is reflected in their credit ratings. All five banks have maintained ratings of A or better for the last several years.

Overall, the major Australian banks, and the Australian banking system as a whole, appear to be in good health and to be reasonably well placed to absorb economic shocks without giving rise to significant financial instability. Nevertheless, we remain aware of the potential for some economic events to impact adversely on the Australian financial system. Such events would include possible declines in asset prices, particularly in the main urban areas, continued drought conditions and any further weakening in the international economy. We will therefore continue to closely monitor developments in the Australian economy and financial system and to assess any potential risks for the New Zealand financial system.

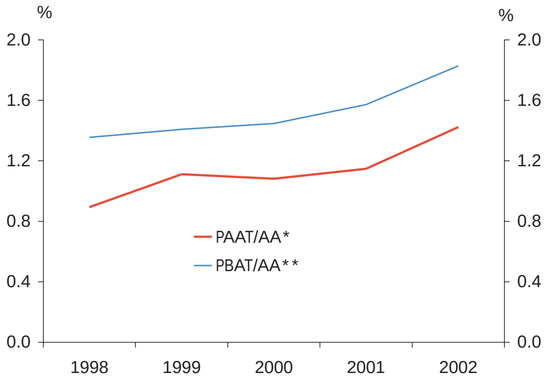
## 5 Financial performance of New Zealand registered banks

During 2002, New Zealand registered banks were operating in an economy which, like Australia's, was performing relatively strongly. Real GDP in New Zealand grew 4.4 per cent for year ended December, compared with 2.7 per cent the previous year. This performance was driven by robust domestic spending, a flourishing housing market, and net immigration, which provided an economic stimulus, particularly for urban economies.

In these conditions, the registered banks have performed well and, as a group, were very profitable by international standards. Total after tax profits for all registered banks for the year ended 31 December 2002 were $2.8 billion, 28 per cent higher than for the 2001 year. This profit represented an after tax return on average assets of 1.4 per cent, comfortably above the generally accepted 1 per cent benchmark (see figure 4).

Part of the increase in profits recorded in the period was due to abnormal income of $196 million. This income largely comprised the proceeds of the sale of subsidiaries by three banks. Adjusting for this effect would reduce the return on average assets to 1.3 per cent.

Figure 4
Profitability as a percentage of average total assets




* Profit after abnormals and taxes/average assets

** Profit before abnormals and taxes/average assets

The key factor driving growth in underlying profit (ie before abnormal items and tax) was very strong growth in net interest income, which grew by 20 per cent. This growth resulted from the expansion in interest earning assets and increased interest margins (see figure 5). Interest earning asset expansion reflected the robust increase in lending achieved by the banks in supportive economic conditions. Both residential mortgage lending and other lending grew strongly, such that total lending at the end of 2002 was 8 per cent higher than at the end of 2001.

The reasons for the improvement in the banks' reported net interest margins are less easy to find, with some of the traditional explanations for margin increases not seeming to apply. For example, higher margins are often linked to lower levels of competition in the banking industry. However, the entry of Kiwibank and the activities of non-bank lenders, as well as efforts by major banks to build their market shares, suggest that there is a reasonable degree of competition in the New Zealand banking market, particularly in the market for residential mortgages. There would certainly appear to be no evidence of declining levels of competition.

## Table 1

### Aggregate income statement of registered banks

| $million | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|
| Net interest income | 3193 | 3307 | 3527 | 3911 | 4699 |
| *Less* | | | | | |
| Impaired asset costs | 201 | 144 | 127 | 191 | 196 |
| *Equals* | | | | | |
| Net interest income after impaired asset costs | 2992 | 3163 | 3400 | 3720 | 4503 |
| *Plus* | | | | | |
| Other income | 1862 | 1865 | 2140 | 2264 | 2254 |
| *Less* | | | | | |
| Operating expenses | 2982 | 2944 | 3106 | 2987 | 3165 |
| *Equals* | | | | | |
| Profit before abnormals | 1872 | 2084 | 2434 | 2997 | 3592 |
| *Plus/Less* | | | | | |
| Abnormals | -130 | 125 | -7 | -11 | 196 |
| *Equals* | | | | | |
| Profit before tax | 1742 | 2209 | 2427 | 2986 | 3788 |
| *Less* | | | | | |
| Tax | 507 | 566 | 606 | 799 | 991 |
| *Equals* | | | | | |
| Net profit after tax | 1235 | 1643 | 1821 | 2187 | 2797 |

## Table 2

### Profit as a percentage of average assets

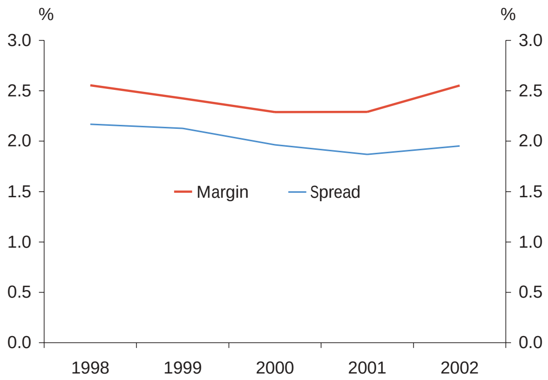
| % of average assets | 2001 | 2002 | change |
|---|---|---|---|
| Net interest income | 2.05 | 2.39 | + 0.34 |
| Impaired asset expense | ( 0.10 ) | ( 0.10 ) | ( 0.00 ) |
| Other income | 1.19 | 1.15 | ( 0.04 ) |
| Operating expenses | ( 1.57 ) | ( 1.61 ) | ( 0.04 ) |
| Net profit before tax | 1.57 | 1.93 | + 0.36 |
| Net profit after tax | 1.15 | 1.42 | + 0.27 |

Movements in the general level of interest rates also do not seem to provide an explanation for the increase in margins. Over 2002, the general level of interest rates increased. When interest rates are rising, the effect on banks' interest margins will depend on how quickly banks are able to adjust their lending and deposit rates and on the composition of their funding. If wholesale interest rates adjust more quickly than lending and deposit rates and banks are sourcing a significant amount of their funding from wholesale financial markets then interest rate margins and spreads would come under pressure. Alternatively, if a significant proportion of bank funding is in low interest retail deposits (especially cheque accounts) and strong demand for credit allows banks to increase interest rates on lending more quickly than they raise deposit rates, margins and spreads will increase. During 2002, the average return on banks' interest earning assets and the average cost of their interest bearing liabilities both fell, meaning that there was little change in the interest rate spread.

Another factor determining a bank's overall interest margin is the way that the bank chooses to structure its business, since margins on some business lines will be higher than on others. During 2002, some banks moved to alter their business mix to emphasise higher margin activities.

Much of the explanation for margin movements appears to revolve around how the banks have funded their lending growth. Interest earning assets grew by almost 8 per cent over the year, but interest bearing liabilities by only 3 per cent. The banks seem to have been able to fund their lending growth from increases in non-interest bearing liabilities and increases in their equity, including retained profits (profits that banks have not paid to their owners as dividends).

## Figure 5
### Margins and spreads



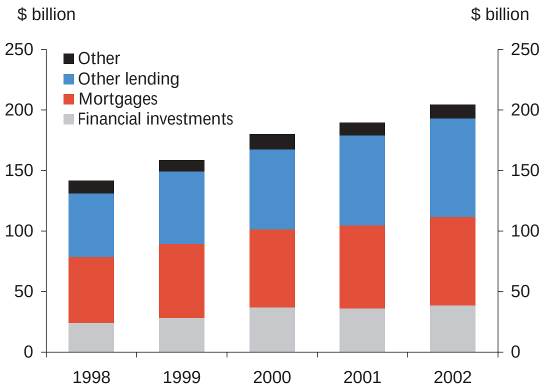

The other components of underlying profits are income from sources other than interest (such as transaction fees) and operating expenses. There was little change in total non-interest income over 2002. This income declined in relative importance, with its share of total income falling to 32 per cent in 2002 compared with 37 per cent in the previous year.

Banks' total operating expenses in 2002 were about 6 per cent higher than in 2001. However, costs continued to decline as a proportion of total income. This ratio fell from 48.4 per cent in 2001 to 45.5 per cent in 2002. The rate at which this ratio has been declining appears to have slowed, suggesting that the banks may now be reaching a point where further reductions in costs will be harder to extract.

## Balance sheet

The total assets of the banks at 31 December 2002 were $204.5 billion, up almost $15 billion from December 2001. Most of this increase was due to lending growth, with both residential mortgage lending and other lending increasing by $5.8 billion. There was little change in the composition of bank lending over 2002, with lending to the household sector continuing to be the single largest component of total lending. Residential mortgages accounted for almost a half of total lending and more than a third of total assets as at 31 December 2002. It is important to note, however, that perhaps up to 10 per cent of residential mortgage lending represents lending for business purposes.

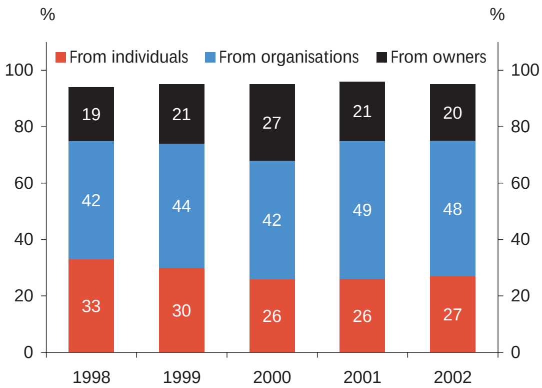
## Figure 6
### Composition of assets




As at 31 December

Figure 7 provides an indication of how banks have funded their assets in recent years. The late 1990s saw a decline in the share of total funding from deposits, as savers increasingly placed their savings in managed funds. As a result, a larger proportion of bank funding came from wholesale financial markets and particularly from overseas sources. More

## Figure 7
### Composition of funding




Note: Information for this graph has been extracted from half-year or end-of-year General Disclosure Statements. Therefore the data are either as at 30 September or 31 December. Items which do not perform a funding role have been excluded from the percentages in this graph.

## Table 3
### Composition of assets

| $billion | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|
| Financial investments | 24.3 | 28.2 | 37.1 | 36.1 | 38.7 |
| Mortgages | 54.5 | 61.0 | 64.3 | 67.3 | 73.1 |
| Other lending | 52.5 | 60.3 | 66.3 | 75.7 | 81.5 |
| Other assets | 10.3 | 9.0 | 12.4 | 10.5 | 11.2 |
| Total assets | 141.6 | 158.5 | 180.1 | 189.6 | 204.5 |

recently this trend appears to have come to an end with a small increase in the share of funding represented by deposits in 2002. This change probably reflects a switch back to bank deposits by savers in the face of disappointing returns by many managed funds.

## Asset quality

The overall quality of bank assets continues to be high, both by international standards and in historical terms. Total impaired assets at 31 December 2002 were only 0.33 per cent of total lending, down from 0.42 per cent the previous year. These ratios are very low, particularly when compared to their levels in the early 1990s. For example, at 31 December 1991, impaired assets were 8.3 per cent of loans. As figure 8 shows, reported past due assets also fell last year after they had risen noticeably in 2001. These movements are largely attributable to exposures by several banks to the Central North Island Forestry Partnership and, given that these exposures are in US dollars, to movements in the exchange rate, with the strengthening of the New Zealand dollar against the United States currency reducing the recorded value of the loans in New Zealand dollar terms.

Total provisions remained equal to around 0.5 per cent of total gross lending. Within this total, specific provisions increased, partially offsetting a fall in general provisions. Specific provisions represented 38 per cent of total impaired assets (see figure 9).

Figure 8
Asset quality

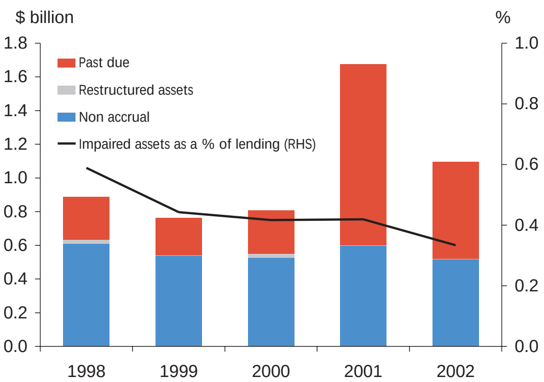
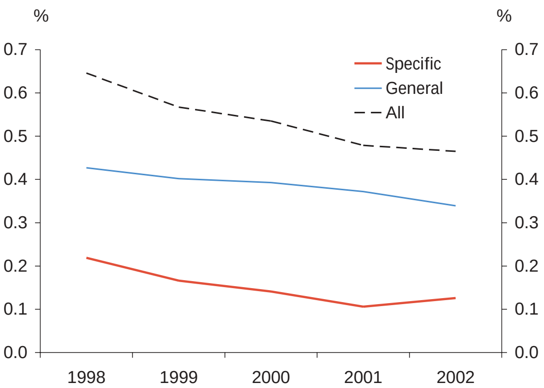



Figure 9
Provisioning as a percentage of total gross loans

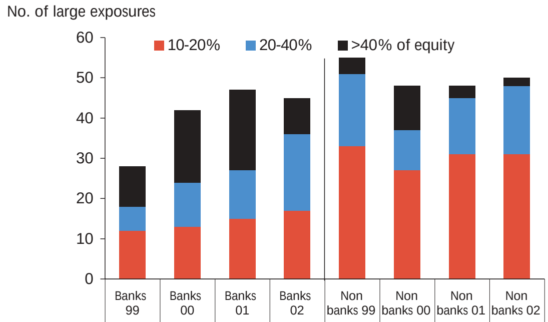



As at 31 December

## Large exposures

Registered banks are required to disclose information on the number of credit exposures in excess of 10 per cent of their equity. Figure 10 summarises that information. As can be seen, the total number of large exposures reported by banks at the end of 2002 was the same, but there were some differences in the mix of exposures. In particular, there were two more exposures to non-banks, with the increase being in exposures greater than 20 per cent of equity. There were also fewer exposures to banks in excess of 40 per cent of equity.

Figure 10
Large exposures to bank and non-bank counterparties




| | Banks 99 | Banks 00 | Banks 01 | Banks 02 | Non banks 99 | Non banks 00 | Non banks 01 | Non banks 02 |
|---|---|---|---|---|---|---|---|---|
| >40% of equity | 10 | 18 | 20 | 9 | 4 | 1 | 3 | 2 |
| 20-40% | 6 | 1 | 12 | 19 | 18 | 10 | 14 | 17 |
| 10-20% | 12 | 13 | 15 | 17 | 33 | 27 | 31 | 31 |

As at 31 December

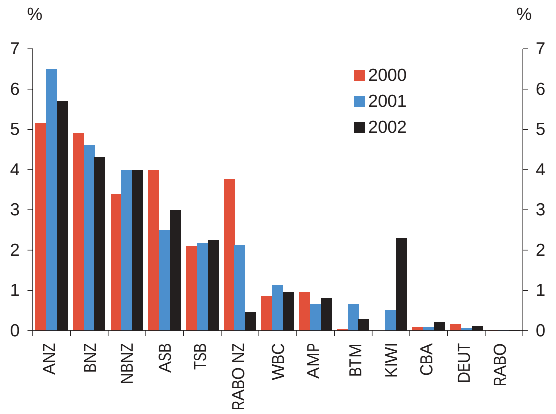
## Exposures to connected persons

As noted above, there are limits on the exposures of locally incorporated banks to connected persons. There were five banks subject to these limits that reported exposures to connected persons during 2002. The peak exposures reported by these banks ranged from 10 per cent to 42 per cent of the tier 1 capital of the bank concerned. These ratios were all lower than the peak ratios reported for the previous year and well below the current maximum permitted ratio of 75 per cent.

## Market risk

Market risk arises because changes in interest rates, exchange rates and equity prices impact on the value of banks' financial assets and liabilities. These changes can erode a bank's capital position, particularly if the bank maintains large open positions. Banks are required to disclose information on their exposure to this risk. In 2002, exposures to interest rate movements continued to be the most significant market risk exposures faced by banks. Foreign exchange and equity exposures continued to be very small, as banks generally hold few equities and tend to fully hedge foreign exchange positions. As figure 11 shows, interest rate exposures were also not particularly large, with the largest exposures ranging from about 3 per cent to 6 per cent of equity for the major locally incorporated banks.

### Figure 11
### Peak interest rate risk as a percentage of banking group equity

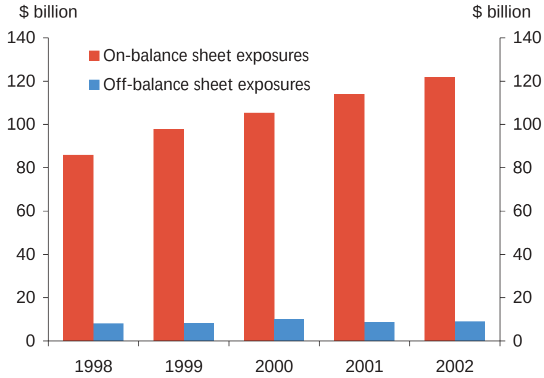



Note: See appendix for full bank names.

## Capital adequacy and credit ratings

The Reserve Bank's capital adequacy framework requires all registered banks incorporated in New Zealand to hold minimum levels of tier 1 and total capital. These requirements are based on the standard Basel Capital Accord with the exception that banks in New Zealand are not required to hold capital in relation to market risk positions. Banks are therefore required to maintain a minimum tier 1 ratio of 4 per cent and a total capital ratio of 8 per cent. Branch banks are subject to capital requirements on their global operations in their country of incorporation.

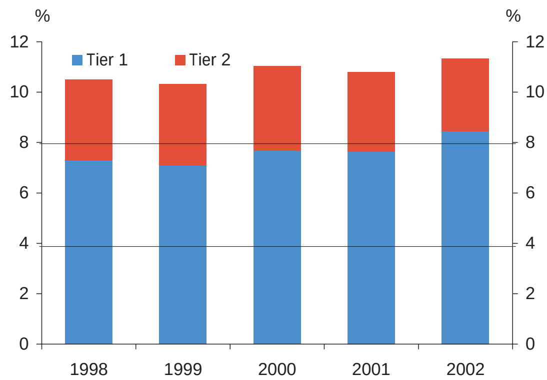
### Figure 12
### Risk weighted exposures




Total risk weighted credit exposures grew by 6 per cent in the year to December 2002, with both off-balance sheet and on-balance sheet exposures growing. Reported capital ratios also increased, with the increase being the result of a 19 per cent rise in tier 1 capital held by the seven locally incorporated banks. Tier 1 capital essentially comprises issued share capital and audited retained earnings and the majority of the increase in this form of capital over the year is explained by increases in retained earnings. The overall tier 1 ratio increased from 7.6 to 8.5 per cent and the total capital ratio from 10.7 to 11.3 per cent (see figure 13). No banks had capital ratios below the minimum requirements.

All registered banks in New Zealand are required to have a credit rating from a rating agency acceptable to the Reserve Bank. Two banks experienced credit rating downgrades in 2002 and the ratings for two other banks were raised. Of the 17 banks registered at 31 December 2002, 13 had ratings of AA- or better, one more than a year earlier. This increase was due to one of the upgrades. The other banks all had investment grade ratings ranging from BBB- to A-.

### Figure 13
### Capital adequacy

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## 6 Potential vulnerabilities

Although the banking system remains in good health when compared with historical experience and with the experience of other developed countries, no banking system is completely immune to potential vulnerability. That is the case with the New Zealand banking system and the trends described in section 5 highlight two areas of potential vulnerability. The first is the banks' very large exposure to the household sector (as evidenced by the large proportion of total lending comprising residential mortgages), given the high levels of household indebtedness. The second is the degree to which banks rely on funding from foreign wholesale financial markets.

The risks associated with these two features of the New Zealand banking system were discussed in an article in an earlier *Bulletin.*[5] As that article noted, the strong profitability, capital adequacy, collateral coverage and high asset quality of banks in New Zealand, along with their hedged foreign currency exposures, mitigate these risks to a significant degree. Nonetheless, we remain mindful of the risks and continue to keep a close watch on developments. In this regard, the stress testing process that the Bank is currently developing in co-operation with the major banks in New Zealand in preparation for the Financial Sector Assessment Programme (see the article on this topic in the March 2003 issue of the *Bulletin*[6]), will provide us with a clearer picture of the banking system's capacity to withstand various types of economic shocks.

With four out of the five largest New Zealand banks being Australian owned and close links between the economies of the two countries, another important aspect of the operating environment for New Zealand banks is the state of the Australian economy and banking industry. Banks on the other side of the Tasman also appear to have performed well financially over 2002.

The interconnections between New Zealand banks and their foreign parents could create difficulties with respect to managing the failure of a bank in this country. The Reserve Bank will therefore be continuing to ensure that the New Zealand operations of banks are structured in ways that will deliver outcomes that promote the maintenance of a robust financial system.

## 7 Conclusion

The New Zealand registered banks again performed well in 2002, recording for the second year running an increase in after tax profit of more than 20 per cent. In achieving this result the banks benefited from a relatively strong New Zealand economy, which supported asset growth and helped to maintain the quality of the banks' assets.

5 See Gereben, Aron, Leslie Hull and Ian Woolford (2002), 'Recent developments in New Zealand's financial stability', *Reserve Bank of New Zealand Bulletin*, vol 65 no3

6 Mortlock, Geof and Ian Woolford (2003), 'Financial sector assessment programme', *Reserve Bank of New Zealand Bulletin*, vol 66 no1

# Appendix

## Registered banks as at 31 December 2002

### New Zealand incorporated banks

| *Registered bank* | *Owner* | *Abbreviation* |
|---|---|---|
| ANZ Banking Group (New Zealand) Limited | Australia and New Zealand Banking Group Limited | ANZ |
| ASB Bank Limited | Commonwealth Bank of Australia | ASB |
| Bank of New Zealand | National Australia Bank Limited | BNZ |
| Kiwibank Limited | New Zealand Post Limited | KIWI |
| The National Bank of New Zealand Limited | Lloyds TSB Group plc | NBNZ |
| Rabobank New Zealand Limited | Rabobank Nederland | RABO NZ |
| TSB Bank Limited | TSB Community Trust | TSB |

### Overseas incorporated banks

| *Registered bank* | *Abbreviation* |
|---|---|
| ABN AMRO Bank NV | ABN AMRO |
| AMP Bank Limited | AMP |
| Bank of Tokyo-Mitsubishi (Australia) Limited | BTM |
| Citibank NA | CITI |
| Commonwealth Bank of Australia | CBA |
| Deutsche Bank A.G. | DEUT |
| Kookmin Bank | KMIN |
| Rabobank Nederland | RABO |
| The Hong Kong and Shanghai Banking Corporation | HSBC |
| Westpac Banking Corporation | WBC |

Note: Since 31 December 2002, one further bank, St George Bank New Zealand Limited, has been registered.