Articles

Developments in the banking industry

Allison Stinson, Banking System Department

This article reviews developments in the New Zealand banking sector over the year to December 1999 against the background of the international banking environment. Financial information reported in New Zealand banks' quarterly disclosure statements indicates a strong banking system well positioned to meet the pressures presented by continued competition, technological advances, globalisation and rising interest rates.

1 Introduction

International financial markets during 1999 have been characterised by stronger than expected economic conditions, further consolidation within and across financial sectors, and continued competitive pressures from deregulation and globalisation, changing technology and greater commoditisation of financial products. Initiatives to strengthen the international financial architecture also progressed.

The New Zealand and Australian financial markets have not been untouched by these forces. Increased competition has squeezed interest margins and profitability on traditional banking products. The banking sector, however has benefited from the renewed strength in economic activity and domestic demand for credit. Capital ratios have remained above required levels, asset quality is high and risk exposures appear to be well managed. Reduced operating costs and measures to increase efficiency and revenue diversification have also helped to maintain bank earnings at healthy levels.

This article describes recent developments in the New Zealand banking system against the background of the international environment, and reviews the financial performance of banks in New Zealand on the basis of financial data for 1999 published in banks' disclosure statements.

2 Structural and policy issues

International developments/trends

Global economic and financial conditions improved significantly during the past year. World economic growth was stronger than expected and is estimated by the International Monetary Fund to have reached over 3 percent in 1999. This reflected continued strong growth in the United States, coupled with a sharp rebound in activity in many emerging market economies. Europe also contributed, while indicators for Japan remained fragile.

The negative spillover effects of the financial crises in Asia and other emerging market countries since 1997 now appear to have been less intense and shorter than predicted. However, the serious costs of the widespread financial instability over the last few years, together with the trend towards global financial institutions and the growing integration of financial markets, have prompted global efforts to improve the international financial architecture. The aims are to try to minimise the contagion stemming from financial crises and to strengthen national arrangements. New international bodies have been created, notably the Financial Stability Forum, which brings together the primary agencies engaged in financial supervision and regulation, and work is underway to develop consistent standards of regulation, governance and transparency.

Banking supervision developments have focused on refining and extending existing policies and principles. Key among these was the release in mid-1999 of proposals for revisions to the 1988 Capital Accord by the Basel Committee on Bank Supervision.

The 1988 Capital Accord established a uniform capital adequacy standard for internationally-active banks. The new proposals aim to update the framework to distinguish more accurately degrees of credit risk for capital adequacy purposes, complemented by increased emphasis on supervisory review and greater market discipline.

There is broad agreement that the framework is in need of revision, but a number of concerns have been voiced on the three elements or 'pillars' (minimum capital standards, supervisory review and market discipline) which have been proposed. The Reserve Bank, for instance, has noted some weaknesses in the second pillar (supervisory review) and its potential for inconsistency with the other two elements. The Basel Committee is currently considering submissions on their consultative paper and expects to release a new version of the proposals in early 2001.

At the regional level, the year under review saw the introduction of the euro and the increasing integration of the financial markets of the eleven participating European Union member States within the euro area. The associated financial deregulation and single market legislation resulted in a new round of consolidation, both in the financial services sector and in industry more generally.

In the United States, the Gramm-Leach-Bliley Financial Modernization Act was signed in November 1999 and came into effect in March this year. The Act repealed the long-standing laws separating banking, broking, investment and insurance in the United States, and opened the way for renewed financial sector consolidation and institutional broadening.

Deregulation and increased competition also contributed to renewed restructuring in the banking industry in Japan. Over the last year, seven of the nine big city banks have announced intentions to merge, the result of which will be to halve the number of leading Japanese banks to five.

Progress has been made in Korea, Malaysia, Thailand and, to a lesser extent, Indonesia toward recapitalising and restructuring the banking systems. The pace of reform, however, remains uneven and difficult decisions remain.

A number of trends already apparent in the international financial markets continued. These included further consolidation and broadening of financial groups, and the impact of new technology on competitive conditions.

Deregulation, technological changes, globalisation and increasing emphasis on shareholder value have all contributed to the continuing consolidation, both across and within financial industries. Banks have sought to achieve greater economies of scale and expanded geographical and/or product boundaries. The process is blurring the traditional distinctions between banking, insurance and asset management with the establishment of large universal banks like Citigroup offering a wide range of financial products on a global scale.

Many of the factors influencing the financial industry are interrelated. Rapid advances in information and communication technology have been a major driver behind globalisation as the growth of e-commerce and the internet has significantly reduced traditional barriers to entry and opened up new financial applications and business models.

Existing institutions have the advantage of established customer bases and known brands, but to remain competitive relative to their peers and to compete effectively with the new entrants, banks are striving to improve operating efficiency and reduce the overheads of their high cost branch distribution arrangements.

Technological changes and financial disintermediation have also led to greater access to information on products and prices directly by the consumer, and improved price transparency has added momentum to the commoditisation of financial products. This has put additional pressure on margins and added to the pressure for further consolidation within the industry. Banks have attempted to generate cost savings and diversify income streams to protect core profitability.

The past year was also influenced by concerns of potential Year 2000 date change problems. Banks and other financial institutions worked with regulatory agencies to prepare for the downside risk of the changeover. Financial institutions undertook extensive testing of their systems, upgrading or enhancing systems in some cases, while central banks put in place a range of measures to help contain potential liquidity and speculative pressures. In the event, the major markets were ready for the changeover and the transition went smoothly, with no material disruption to normal services.

Developments in Australia

In parallel with international trends, the Australian economy suffered a slowdown in 1997-98 before recovering strongly through the latter part of 1999.

The strength of domestic demand and economic growth more generally contributed to a positive year for Australian banks. The major banks recorded sound profitability, strong growth in their balance sheets and high loan quality in their latest financial year. The four major banks maintained an average return on assets of around 1 percent, a standard industry benchmark, slightly higher than that returned in 1998. Capital ratios averaged around 9-10 percent, compared with the regulatory minimum of 8 percent, while continued gains in operating efficiency, asset quality and improving revenue diversity supported profitability.

Profits of the major banks were maintained despite declining margins. Competitive pressures from banks and non-banks, together with new technology eroding the traditional entry barriers, have contributed to tightening interest margins and earnings pressure in core lending business. In the last three years the relative movements of lending and deposit rates have resulted in banks' margins falling about 100 basis points.

Banks have responded in a combination of ways - volume growth, cost containment and business diversification, including acquisitions and alliances.

Volume growth has been achieved in a favourable economic environment. The low inflationary/low interest rate environment led to a declining cost of borrowing while deregulation, innovation and competition increased the availability of credit. Both trends contributed to the strength in domestic demand and lending growth.

A sustained focus on costs and on obtaining greater economies of scale reflects ongoing competitive concerns. Cost to income ratios for the four major banks have fallen steadily, to around 56 percent compared with 70 percent a decade ago. Initiatives to reduce costs and improve efficiency range from the use of lower cost distribution channels, such as telephone and internet banking, to savings through branch closures and reduced staff numbers by moving to more centralised structures, shared service platforms and streamlining and outsourcing processing activities.

Strong competition and the cost of new technology also created pressure for rationalisation through acquisitions and alliances. Although the Government's 'four pillars' policy (which bans mergers between Australia's four largest banks) remains in place, banks have created alliances with other financial institutions, information technology suppliers and retailers aimed at reaching a broader customer base and reducing costs.

Further mergers and alliances are likely as banks work to expand their customer base and move their business mix to increased product cross-selling and fee-based income from funds management, life insurance and online services, in an effort to generate new revenue growth. The current year has already seen the MLC Group's purchase by the National Australia Bank and Commonwealth Bank of Australia's takeover of the bancassurance group Colonial, both takeover targets having strong funds management positions in Australia.

As in New Zealand, increasing bank fees have been topical. A recent study on fees by the Reserve Bank of Australia found that banks in Australia appeared to be recovering the costs of providing payment services and maintaining deposit accounts through direct fees rather than indirectly through interest margins as in the past. The available data however indicated that interest margins had fallen by significantly more than the rise in fees, suggesting that banks had maintained their profitability in the face of intense competition on interest margins, primarily by cutting costs. The study concluded that customers with bank loans had benefited from reduced cross-subsidisation, while customers without a loan, but with low bank balances and high transactions, would have been adversely affected by the pricing changes.

The past year marked the first year of operation of the Australian Prudential Regulation Authority (APRA). APRA was established in 1998 as a single agency responsible for the prudential regulation of all Australian financial institutions. At that time it took over responsibility for the prudential supervision of banks from the Reserve Bank of Australia and for insurance companies and superannuation funds from the Insurance and Superannuation Commission. The Authority assumed the regulatory responsibilities for the State-regulated credit unions, building societies and friendly societies in July 1999, and in August the new APRA structure became fully operational.

The Reserve Bank of Australia remains responsible for the overall stability of the financial system, including the payments system, and the Australian Competition and Consumer Commission for competitiveness and fair trading issues.

To minimise the initial change, the existing prudential standards for the institutional groups were retained. Over the past year APRA has focused on better harmonising the prudential standards across the authorised deposit-taking institutions (banks, building societies and credit unions) and promoting similar approaches to similar risks. Work also progressed on developing improved risk-based approaches to insurance industry oversight and on a policy framework for the prudential supervision of conglomerate financial groups.

New guidelines on innovative equity instruments for banks' capital were also issued during 1999, giving Australian banks greater flexibility in capital management. A number of banks have subsequently issued structured capital instruments as part of their capital management programs. Share buybacks and asset securitisations have also been used by some banks in an effort to maximise shareholders' returns, although the credit rating agencies have expressed some concern over the use of securitisations and lower quality hybrid capital issues.

The financial industry in Australia overall, however has been underpinned by the ongoing strength of the domestic economy. While the banking sector is likely to continue to face pressures on margins, the quality and strong performance of the banking sector over recent years has led credit rating agencies to rate the major Australian banks among the top quartile of rated banks.

New Zealand experience

With increasing globalisation and all but one New Zealand registered bank majority-owned by overseas financial institutions, international economic and financial developments can have a significant impact on the New Zealand banking system. This applies particularly for developments in Australia. At the end of 1999, the five largest banks in New Zealand accounted for 87 percent of total bank assets. Four of these five banks are majority-owned and controlled by major Australian banks. These four banks account for around two-thirds of total banking system assets in the two countries.

Economic conditions in New Zealand reflected those in Australia and elsewhere. Economic activity rebounded strongly in the second half of 1999 following a slowdown due to two seasons of drought and the 1997-98 Asian financial crisis. The pickup in economic growth, coupled with continued moves by banks to improve internal efficiency and strengthened credit management processes, contributed to the banking sector emerging from the brief recession in 1998 in a healthy position. Strong domestic demand and higher business confidence flowed through to growth in bank lending and balance sheets more generally.

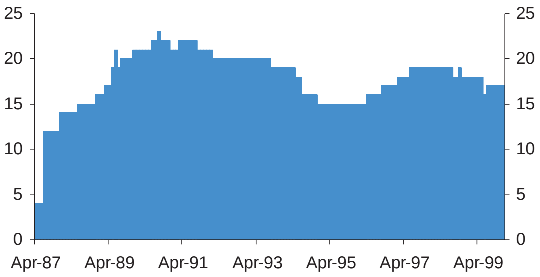
The number of registered banks in New Zealand fell by one during the year, bringing the total to 17 at the end of December 1999. One new bank, Rabo Wrightson Finance Limited, was registered, while two banks voluntarily relinquished their registration. The changes reflected institutional restructuring following local and international mergers and acquisition actions.

Rabo Wrightson Finance Limited was registered as a New Zealand bank in July 1999 and in September the company changed its name to Rabobank New Zealand Limited. The new bank is a locally incorporated subsidiary of Cooperatieve Centrale Raiffeisen-Boerenleenbank B.A. (Rabobank, an AAA rated Netherlands bank) and offers retail banking services.

Rabobank also operates as a branch in New Zealand. The Dutch bank relinquished its New Zealand bank registration for Primary Industry Bank of Australia Limited (PIBA) in June last year after PIBA's New Zealand operations had been folded into Rabobank's New Zealand branch.

The second departure from the sector was Bankers Trust New Zealand Limited (BTNZ). The bank relinquished its registration in June 1999 when its operations were combined with the New Zealand branch of Deutsche Bank AG. This followed the German bank's purchase of BTNZ's US parent, Bankers Trust.

Figure 1
Number of banks registered in New Zealand



Two retail banks completed the integration of financial operations acquired in earlier periods. The National Bank of New Zealand accomplished the integration of Countrywide's activities into the bank, following its acquisition a year earlier.

AMP Bank, newly registered as a bank in New Zealand following the purchase of the local retail banking business of Citibank in 1998, completed the integration of the Citibank banking business and AMP's two existing Ergo subsidiaries into the AMP banking platform. The Ergo activities brought the group's electronic banking and telephone-based financial services, particularly in the mortgage market, directly into the bank.

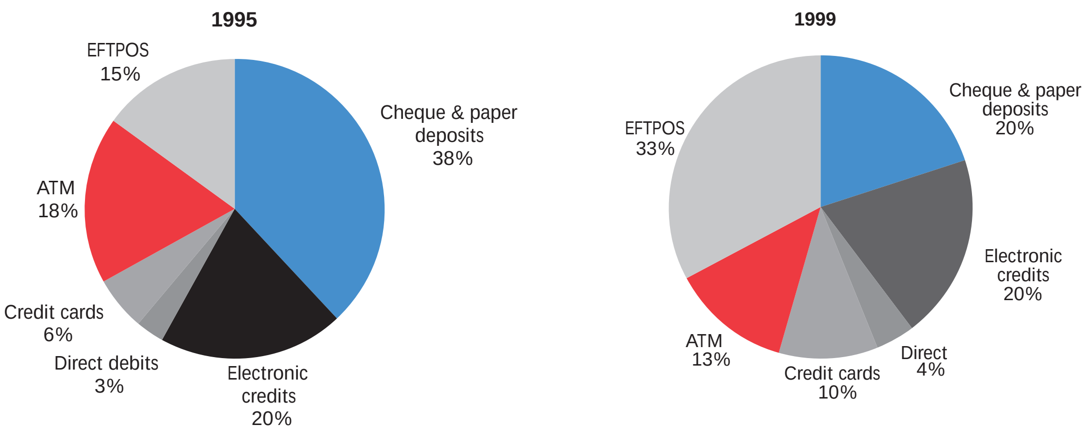
A second significant trend in the sector is the rate of expansion and interest in electronic banking. A year ago only one bank, ASB Bank, offered internet banking services to its customers. Now, all five of the major retail banks in New Zealand provide online banking facilities. A survey by KPMG indicates the number of customers using the internet for banking is still relatively low, at around 120,000 by March 2000, but growing strongly.

Telephone banking and electronic funds transfer at point of sale (EFTPOS) transactions, have continued to grow as the relative costs of the transactions, the overall convenience and general availability have encouraged customers to move from paper-based transactions to electronic ones.

Figures from the New Zealand Bankers' Association on non-cash methods of payment show the extent of the shift in payment patterns away from cheques towards electronic and card-based systems (figure 2). There has been a threefold increase in the number of EFTPOS transactions since 1995, while the introduction of loyalty programs such as 'air points' has contributed to the growth in credit card transactions. Over the same period, the share of payments by cheque and paper deposits has fallen from 38 percent of the total number of non-cash payments to 20 percent last year.

Retail transactions account for the vast majority of bank transaction volumes in New Zealand. Wholesale transactions, however, dominate by value. These are settled through a

Figure 2
Payment methods



Total number of transactions 1995 = 1,004 million 1999 = 1,378 million

Source: New Zealand Bankers' Association real time gross settlement system introduced in 1998 that significantly reduced the settlement risk in the payment system. To further reduce potential uncertainty and risk, legislative changes in April 1999 ensured payments finality and gave more certainty to financial netting arrangements. In the case of multilateral netting arrangements, one clearing house, Austraclear New Zealand, has been recognised in terms of the legislation.

Cross border foreign exchange settlement risk (Herstatt risk) remains an area of material payment system risk. International initiatives to reduce this risk offer some promise and the Reserve Bank has been working with the industry towards including the New Zealand dollar in the arrangements.

The high dependence of the banking sector on computer systems and telecommunications resulted in a higher than normal level of operational risk due to the risk of failure or error over the Year 2000 date change. There was also strong international interest in our changeover experience as New Zealand was one of the first countries to see in the new year. An extensive program of testing and remedial work by the industry ensured the banking system operated normally with no disruption to services during the changeover.

Finally, as part of a review of its bank failure management policies, the Reserve Bank reassessed its policy on bank organisation form during 1999. Under existing policy, a bank may choose to operate in New Zealand as a branch of an overseas bank or as a locally incorporated subsidiary. The reassessment led the Bank to propose that systemically important banks and banks with significant retail deposits from countries that do not provide equal treatment to creditors in a wind-up situation, or where disclosure is not comparable with New Zealand's requirements, be required to incorporate locally. This reflected concerns that, with the increasing integration of global banking, the geographical location of assets is likely to become increasingly difficult to determine, particularly in the case of branch operations. The proposals aimed to ensure the systemic risks arising from a bank failure can be realistically managed. The Bank has been consulting with the banking industry on the proposed changes prior to finalising the policy.

3 Financial performance of banks in New Zealand

The commentary in this section is based on data for the year to December 1999, compiled from registered bank disclosure statements. The data disclosed in the four quarterly disclosure statements for each bank over the calendar year have been aggregated where appropriate. Where there is more than one registered bank in a corporate group, totals have been adjusted to avoid double counting.

Profitability

Bank profitability in 1999 was strong, underpinned by lending volume growth and continued efforts by the banks to contain costs. The growth in balance sheets contributed to higher net interest income and lower operating cost ratios despite tightening interest margins.

Almost all banks reported an improved underlying profit (net profit before tax and impaired asset expenses) for the year. As shown in table 1 and figure 3, underlying profit for the sector as a whole improved by 7 percent in 1999 to $2.2 billion, while net profit after tax rose by 32 percent to $1.6 billion. Net profit after tax as a proportion of average total assets (the rate of return on assets), improved to 1.10 percent from 0.89 percent in 1998, above the frequently quoted target of 1 percent for international banks.

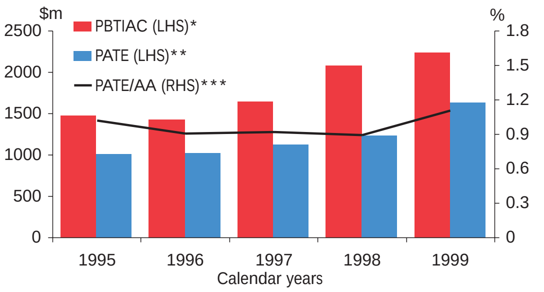
The comparison however has been influenced by two material abnormal items recorded in 'other items' during the last two years. The results for 1998 were dampened by a $120m restructuring charge recorded by one bank that year, while in 1999 banking system profits were boosted by a $107m gain on sale realised on the sale of Bankers Trust funds management business. Adjusting for these one-off items results in a smoother but still rising pattern of growth over the two-year period.

The major source of bank income is net interest income. This is the difference between the interest received on lending and the interest expense on borrowings, and is a key indicator of bank profitability. Net interest income in 1999 was maintained by the banking system growing its lending book. Interest earning assets increased by a strong 13 percent over the year, compared with a 4 percent rise in net interest income.

Table 1
Aggregate income statement

$ million	1995	1996	1997	1998	1999
Net interest income	2,794	2,827	3,095	3,193	3,307
plus					
Other income	1,557	1,638	1,705	1,862	1,865
Less					
Operating expenses	2,877	3,038	3,158	2,982	2,944
Equals					
Underlying profit	1,474	1,427	1,642	2,073	2,228
less					
Impaired asset costs	-8	-42	88	201	144
less					
Tax and other items	477	453	430	637	451
Equals					
Net profit	1,005	1,016	1,124	1,235	1,633

Figure 3
Profitability

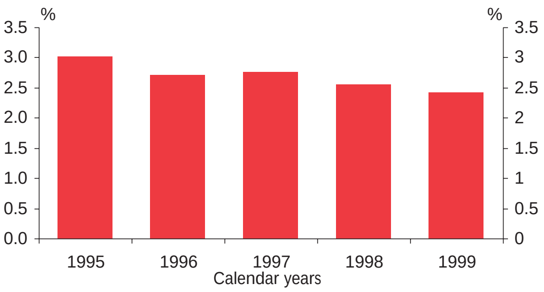


* *Profit before tax and impaired asset charges.*

** *Profit after tax and extraordinary items.*

*** *Profit after tax as percentage of average assets.*

Figure 4
Interest rate margins



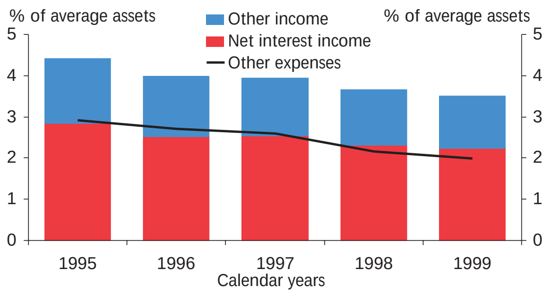
Interest margins (net interest income as a percentage of ,average interest-earning assets) have been under pressure for several years as aggressive competition has forced banks to tighten their margins to retain lending business. As shown in figure 4, bank margins in New Zealand have declined over the last four years and are now around 20 percent or 60 basis points lower than in 1995. Margins fell 13 basis points to 2.42 percentage points during 1999, low by New Zealand and international standards. Rating agency figures, for instance, indicate interest margins for the major banks in Australia were 3.1 percentage points in 1999, while US margins averaged 3.9 percentage points.

Competitive pressures have come from non-traditional and global sources. Some well-known retailers are starting or considering banking services, and mortgage wholesalers, brokers and other financial services companies are squeezing banks' market shares in mortgages and investment products. The overall strength of the industry is also encouraging existing niche organisations such as credit unions and local finance companies to compete more vigorously for personal business. Future pressures are likely to include expanded financial services offered through the internet, which will give consumers more choice and access to financial services.

The second, lesser, source of income is non-interest income. This income is derived from a range of activities, including trading operations, customer transaction and lending fees and management fees. In common with international trends, banks have sought to expand and diversify their income sources into non-traditional areas, such as funds management, insurance, electronic banking and share broking.

Bank fees, particularly transaction fees, have attracted a great deal of attention over the last year as some banks have introduced new fee structures that more closely reflect the cost of providing the service. ATM interchange fees, for example, are levied at the interbank level and until recently have been borne by the banks. While detailed analysis of the trends is not possible due to the lack of a consistent breakdown in the component figures, other (non-interest) income at the aggregate level was unchanged in 1999 compared to 1998. Moreover, as evident in figure 5, both net interest income and other income declined as a proportion of total assets. Where individual bank information is available, the figures for fees appear to be broadly maintaining their profit contribution.

Figure 5
Income and expenses as a percentage of total assets



Changing fee structures, however, may be having an indirect impact on profitability. Fee changes can have an impact on banking habits and shift payment methods from higher to lower cost channels, such as to electronic and telephone banking. This has the effect of reducing bank costs, in turn contributing to improved efficiency and overall returns.

These developments may also present an opportunity for some financial service providers to differentiate their services and fees to establish a particular customer niche, along the lines, for example, of that being proposed by advocates of the 'people's bank.'

The banking sector has achieved significant cost efficiencies in response to increasing competition and declining interest margins. Operating expenses have declined for the past two years in dollar terms, despite a growing balance sheet.

Cost reductions have been realised through continued rationalisation of branch networks, growth in branch alternatives and moves to encourage the use of lower cost means of delivering banking services. Services (such as treasury, funds management and back office support) have been centralised. The measures taken have resulted in a steady fall in operating expenses as a proportion of assets over the last few years, falling from around 3 percent of total assets five years ago to just 2 percent in 1999, as shown in figure 5.

The international trend to rationalise and centralise specialist and support services has resulted in some functionality of New Zealand's banks being centralised to head offices in Australia. This has mixed implications for New Zealand. While the benefits include cost efficiencies and greater standardisation of processes and management, the downside may be a 'hollowing out' of functionality and expertise in the local market and potential vulnerability in times of stress. This risk will need to be managed and the integrity of the functions maintained through appropriate business processes and resilient contingency plans.

Another common efficiency measure is operating expenses to total income. This ratio has also shown a steady downward trend in recent years, and from an average of 69 percent in 1996, the major banks' ratios have converged to 55 percent in 1999. This level compares with the Australian ratio of around 56 percent for the major banks and the US average of 58 percent.

Reduced impaired asset costs from $201m to $144m in 1999 reflected the improvement in asset quality as business conditions recovered last year.

Balance sheet

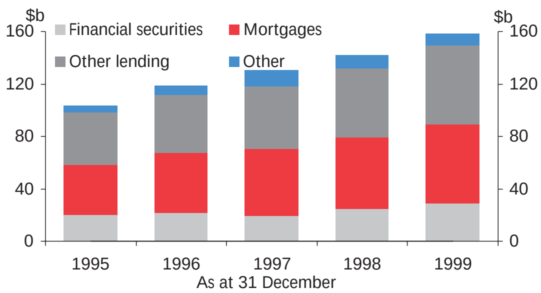
Consumer demand and increased business confidence contributed to continued growth in the total assets of the banking system. Total banking system assets increased by 12 percent in 1999 to $158 billion. The asset growth was broad-based, with financial securities, mortgages and other lending rising by 12-16 percent over the year, as shown in table 2 and figure 6.

Table 2
Composition of assets

(as at 31 December)

$ billion	1995	1996	1997	1998	1999
Investments	19.4	21.5	19.6	23.5	28.2
Mortgages	38.5	45.7	50.6	54.5	60.9
Other lending	40.1	43.9	48.8	52.8	60.3
Other assets	5.1	7.5	11.8	11.1	9.0
Total assets	103.1	118.6	130.8	141.9	158.4

Figure 6
Composition of assets



Residential mortgages remain the banking system's largest single asset and grew 12 percent last year in response to the low interest rates and a surge in residential construction. Regarded as low risk, the mortgage market is intensely competitive as mortgage wholesalers, brokers and other non-banks attempt to increase their share of the market.

Other lending has expanded steadily and in 1999 outpaced mortgage growth. Business loan growth in particular picked up in the latter part of 1999 as companies moved to improve productivity and lift capacity. The overall soundness of company balance sheets and potential for further growth has resulted in increased targeting of this sector by some banks.

The level of financial securities and liquid assets held by banks has also increased significantly over the last two years. The figure tends to fluctuate in response to comparative interest rates and trading and investment opportunities, but the introduction of the real time gross settlement system in 1998 may have contributed to an increase in demand from banks for financial securities. Banks also appear to have built up liquidity balances at the end of 1999 as a precautionary measure ahead of the Year 2000 changeover.

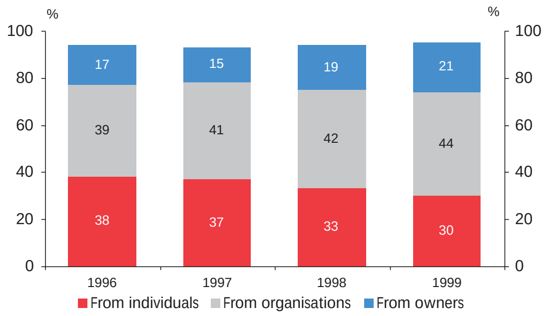
Other assets, the main items of which are fixed assets and revaluation gains on off-balance sheet items, declined by 13 percent. Fixed assets have fallen in recent years as banks have closed branches or sold and leased back properties, while the level of revaluation gains fluctuates depending on the nature and size of the off-balance sheet commitments and movements in market rates.

The overall size and structure of banks' balance sheets may also be influenced by the use of loan securitisations and other discretionary actions available to financial institutions. These decisions are typically taken to improve profitability or capital efficiency and may impact on year to year comparisons.

On the liability side of the balance sheet, figure 7 shows the breakdown of funding sources for the banking system. The share of funding (deposits) from individuals has declined significantly in recent years, reflecting increased competition for individuals' savings, most notably from managed funds companies. The major banks, in turn, have responded by broadening their services to include insurance and funds management services through alliances or acquisitions.

The growing indebtedness of individuals, the long-term trends of which are discussed in another article in this Bulletin, has resulted in an increasing gap between banks' funding from and to individuals. From a generally balanced position

Figure 7
Funding



Note: *Information for this graph has been extracted from half-year or end-of-year General Disclosure Statements; therefore the data is either from 30 September or 31 December.*

in the mid-1990s, total bank lending to individuals exceeded their bank deposits by $18 billion by the end of 1999.

The banking system's funding requirement has been primarily met by increased funding from other financial institutions and from bank owners. The funding structure of the banks varies significantly, depending on the markets they are active in. The system's profile shown in figure 7 closely matches that of the large multi-purpose banks that account for three-quarters of the total. The newer, smaller banks do not have the broad customer base of the major retail banks and have limited access to individuals' savings. These banks depend heavily on funding from their overseas owners, supplemented by wholesale funding from other financial institutions.

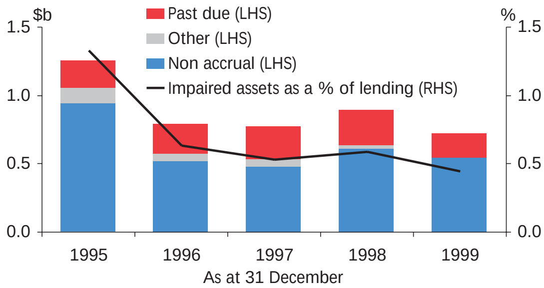
Asset quality

After some deterioration in banks' asset quality in 1998, the overall asset quality of the banking system resumed the improving trend recorded over the past decade and finished 1999 in a healthy position.

As indicated in figure 8, improvements were recorded in all the key asset quality indicators. Total impaired assets were 15 percent lower than a year earlier and past due assets some 30 percent lower. Impaired assets as a percentage of lending fell to 0.44 percent, extremely low by both New Zealand and international standards. This compares with the ratio for Australian and US banks, which were also low, averaging around 1 percent in 1999.

Further improvements in asset quality indicators may be difficult to achieve, particularly in a rising interest rate environment. Any deterioration, however, is expected to be modest and, in the absence of major adverse shocks to the system, comfortably managed.

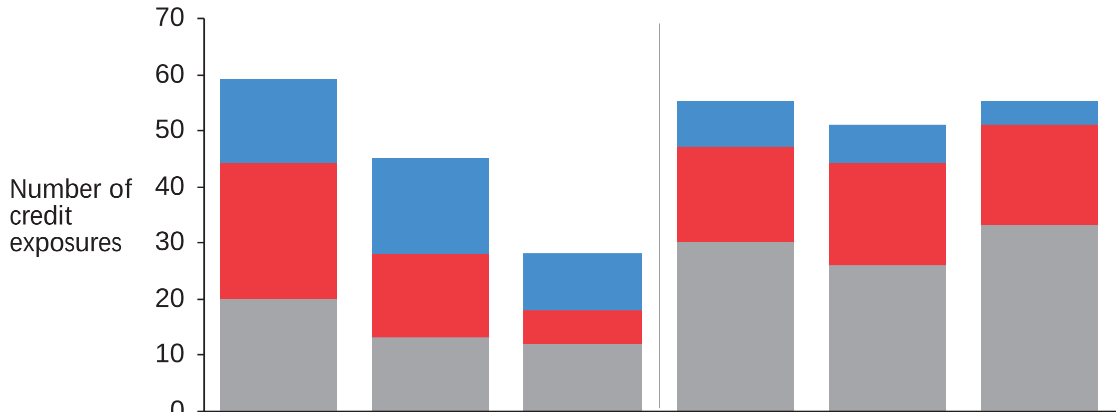
Figure 8
Asset quality



Large exposures

Figure 9 indicates, for the last three years, the aggregate number of credit exposures to individual counterparties held by banks that exceeded 10 percent of their equity as at year-end.

Figure 9
Number of large exposures to bank and non-bank counterparties



	Banks 1997	Banks 1998	Banks 1999	Non banks 1997	Non banks 1998	Non banks 1999
>40% of equity	15	17	10	8	7	4
20-40%	24	15	6	17	18	18
10-20%	20	13	12	30	26	33

Note: As at 31 December.

Exposures to other banks are an integral part of banking business as banks manage their funding and financial relationships on a day to day basis. The exposures are typically short-term and can vary significantly from period to period and bank to bank. The marked reduction in large exposures to banks at the end of 1999 primarily reflected changes to the institutional composition of New Zealand's banking sector, notably the purchase and amalgamation of BTNZ's business into a branch operation. As the exposures are measured against bank equity, branch banks seldom have exposures in New Zealand that exceed the 10 percent reporting requirement.

Large exposures to non-banks tend to reflect longer-term credit relationships between companies and their bankers, and normally fluctuate less over time. Trends in these exposures may indicate changing economic or industry conditions or shifts in bank credit risk management practices. Large non-bank exposures increased slightly over the year, all in the lower 10-20 percent range. Renewed business confidence in response to stronger balance sheets and business prospects is likely to have contributed to this increase.

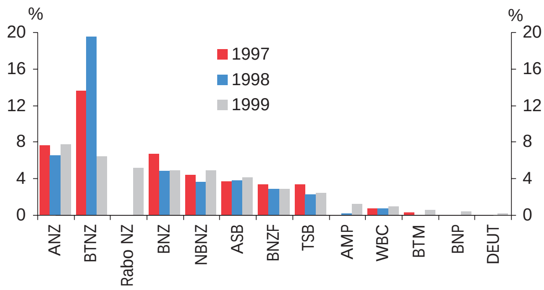
Aggregate bank equity has also increased in recent years, accommodating some increase in counterparty credit limits in dollar terms without adding to credit concentration. As lending grew at a faster pace than bank equity last year, this may have contributed to the modest rise recorded in the number of large exposures to non-bank counterparties.

Market risk

Market risk is the risk of loss arising from changes in market rates, typically interest or exchange rates. Banks are subject to this risk in their day to day trading operations and in managing their overall assets and liabilities, off- and on-balance sheet. The volatility of market rates can expose banks to large gains or losses, which ultimately will be reflected in the bank's capital. Banks' capital positions are therefore important when assessing the level of market risk.

The bank market risk disclosures are designed to give an indication of the size of each bank's market risk as an amount and as a percentage of equity. Unlike the requirements in some countries, banks in New Zealand are not required to hold capital in excess of the minimum 8 percent of risk

Figure 10
Peak interest rate risk as a percentage of equity



Note: See appendix 1 for full bank names.

weighted exposures specifically to cover market risks. Disclosure of the risk is expected to provide banks with sufficient incentive to hold additional capital to cover the risks involved.

In general terms, banks in New Zealand do not take high market risk exposures relative to equity and, in the case of branch banks, the levels are minimal measured against the bank's global capital.

Interest rate risk tends to be the largest component of market risks reported. Figure 10 shows details of peak interest rate risk for individual banks for the last three years. Day to day exposures may vary significantly, depending on market movements and each bank's risk appetite. Accordingly, there are marked differences among the banks, but the peak exposures over the three-year period for each bank have, in most cases, remained relatively stable.

Operational risk

Operational risk is the risk of loss due to the breakdown of day to day operational processes. This can be due to human error or fraud, or from a breakdown in systems, services or information. The increased reliance on technology and centralisation of support activities has impacted on the scope and nature of this risk, as illustrated by the Year 2000 concerns.

To prepare for the higher than normal level of operational risk due to the century date change, the banking industry carried out a comprehensive program of systems testing and contingency planning. The Reserve Bank, in addition to testing its own systems and liaising with the local and international financial community, took additional measures to provide adequate liquidity to the market.

As well as ameliorating the date change risk, the work had a number of useful subsidiary benefits. Among these were an improved industry understanding and management of operational risk, (including a better understanding of the critical and interrelated nature of many IT systems), gains in business contingency planning and a willingness of the industry and officials to work together to tackle a potentially systemic risk.

Capital adequacy

To support their banking operation, New Zealand incorporated banks are required to maintain a tier one capital ratio of 4 percent of risk weighted exposures and an 8 percent total capital ratio. These are minimum levels consistent with internationally recognised standards. Overseas-incorporated banks that operate in New Zealand as a branch of the bank are not required to maintain separate capital in New Zealand as they are subject to capital ratio requirements on their global operation in the country of incorporation.

The capital position of the New Zealand banking system has been relatively stable and above 10 percent of risk weighed exposures since 1992. As at the end of 1999, the capital adequacy ratio for the system as a whole was 10.3 percent. This was down slightly from 10.5 percent a year earlier, and reflected the strong growth in banks' on-balance sheet exposures during the year. See figure 11.

Total risk-adjusted exposures grew 13 percent over the year, outstripping the 6 percent increase in bank capital. As figure 12 shows, risk weighted on-balance sheet assets have increased steadily in recent years while risk weighted off-balance sheet exposures have grown more slowly and continue to decline as a proportion of total risk weighted assets.

Banks' tier one capital increased $147m in 1999 due to higher retained profits, which more than offset the impact of BTNZ withdrawing from the sector. The growth in risk-adjusted assets, noted above, implied that the aggregate tier one capital ratio declined from 7.3 percent at the end of 1998 to 7.1 percent in 1999. Tier two capital was unchanged at 3.2 percent. Both tier one and the total capital ratios for all banks remain comfortably above the international minimum standards of 4 percent and 8 percent respectively.

Figure 11
Capital adequacy

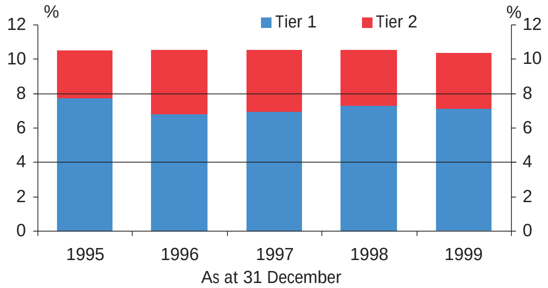
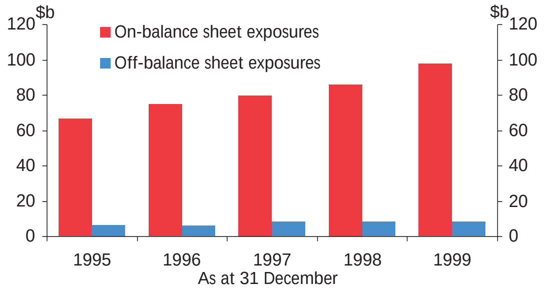


Figure 12
Risk weighted exposures



Conclusion and outlook

The banking system in New Zealand has shaken off the effects of the Asian crisis and domestic slowdown to begin the new millennium in an extremely sound overall position. The sector has performed strongly over the last year, recording robust profitability, strong balance sheet growth and high asset quality while maintaining sound capital adequacy. The medium-term outlook is favourable, with the prospect of further growth and increased diversification of products.

Nevertheless, a number of vulnerabilities will need to be managed, most notably the impact of continued technological change and competition, a rising interest rate environment and the departure of some skills and resources offshore.

The number and type of non-bank competitors are likely to continue to grow and interest margins could be further squeezed as technological advances further lower the costs and barriers to entry.

The rising interest rate environment from the low levels reached in 1999, and the historically high level of household debt, may also temper the growth in mortgages and lending to individuals and result in some pressure on credit quality in the medium term.

Most of these developments are not new. They represent a continuation of trends that have been evident for some time, and banks have been actively responding to them. While the banking sector faces some significant challenges in the period ahead, these developments also mean there will be some interesting opportunities for the industry.

Appendix 1

Registered banks as at 31 December 1999

New Zealand incorporated banks

Registered bank	Owner(s)	Abbreviation
ANZ Banking Group (New Zealand) Limited	Australia and New Zealand Banking Group Limited	ANZ
ASB Bank Limited	Commonwealth Bank of Australia (75%), ASB Community Trust (25%)	ASB
Bank of New Zealand	National Australia Bank Limited	BNZ
BNZ Finance Limited	National Australia Bank Limited	BNZF
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 N.V.	ABN AMRO
AMP Bank Limited	AMP
Bank of Tokyo-Mitsubishi (Australia) Limited	BTM
Banque Nationale de Paris S.A.	BNP
Citibank N.A.	CITI
Deutsche Bank A.G.	DEUT
Kookmin Bank	KMIN
Rabobank Nederland	RABO
The Hongkong and Shanghai Banking Corporation	HKSB
Westpac Banking Corporation	WBC