Developments in the New Zealand banking industry
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This article reviews developments in the New Zealand banking system for the year ending December 2001. Financial information extracted from registered banks' disclosure statements highlights a banking industry that is performing well and in a sound financial position. Banks' revenue sources have been subject to pressures from competition and funding constraints in recent years, but they have been able to offset those negative revenue influences through asset expansion, efficiency gains, diversification strategies, and the use of sound credit risk management techniques, so as to enable overall profitability to be maintained and enhanced.

1 Introduction
This article discusses recent developments in the New Zealand banking industry, placing these in the context of recent international economic developments. It comments on the financial performance of the industry, both in 2001, and for the five year period ending in 2001, using data published in registered banks' disclosure statements.

New Zealand banking system policy matters are not covered in this article, as the overview comments provided in last year's Bulletin article continue to highlight the substantive policy issues the Reserve Bank is currently addressing at this point in time. Future Bulletin articles will deal with individual policy issues as they are advanced on a case by case basis.

2 International economic environment
The international economy underwent a slowdown in 2001, with three of the world's most important economic engines, Europe, the USA, and Japan, concurrently undergoing economic decelerations. Periods of negative economic growth were suffered in all three regions during the year, although in Europe and the USA these were relatively short-lived, lasting only one quarter, with positive real economic growth still being reported on a year on year basis. In contrast, Japan's economic contraction was more persistent and real economic growth in 2001 was negative.

During the year the "technology bubble" in the United States also burst, which contributed to slowing down international trade and transmitting its effects to other economies, especially Asia, where most countries, China being the main exception, also underwent material economic slowdowns. And the September 11 terrorist attacks exacerbated these difficulties, through their adverse impact on the tourism and aviation industries.

Although in Australia an economic slowdown was also reported in 2001, this slowdown was not as pronounced as it was in most regions, with GDP growth easing to 2.4 per cent in 2001, from 3.1 per cent in 2000. However, with export performance representing a key ingredient to its overall economic performance, Australia was not unaffected by the world economic out-turn, with the mining, tourism, and technology based industries in particular undergoing difficulties.

This economic environment reduced the credit quality of borrowers internationally and significantly increased corporate bond default rates, which more than doubled over rates prevailing in 2000. In dollar terms, the consequences of default were even greater, with the value of international corporate bonds on which default occurred more than quadrupling in 2001. Naturally, these difficulties in the international corporate bond markets had a parallel in the banking industry in the major economies in terms of the declining credit quality of borrowers. By way of example, in the United States, for the 8,080 commercial banks insured by the Federal Deposit Insurance Corporation, a generalised deterioration in counterparty credit quality resulted in a 44 per cent increase in provisioning for credit losses in 2001,
with the level of those provisions growing to 20 per cent of net interest income, up from 15 per cent in 2000. Similarly, in Australia, the credit loss provisioning of the four major banks grew by 57 per cent on an aggregate basis, with these provisions constituting 12.0 per cent of the aggregate net interest income of these banks, up from 8.0 per cent in 2000.

As will be discussed later in this article, these adverse international conditions have not materially impacted on the financial health of the New Zealand banking industry.

3 Developments in the banking industry in New Zealand

The number of registered banks in New Zealand declined from 18 as at 31 December 2000 to 17 as at 31 December 2001. In March 2001, BNP Paribas SA (formerly Banque Nationale de Paris SA), which had been registered as an overseas incorporated bank since March 1997, relinquished its bank registration as part of a rationalisation of the bank’s operations worldwide. BNZ Finance Limited was voluntarily deregistered on 30 June 2001 to allow its operations to be amalgamated into those of its parent, Bank of New Zealand. Additionally, one new bank was registered on 29 November 2001, Kiwibank Limited, to allow it to test its systems and procedures in anticipation of opening for full business on 4 February 2002. A list of the registered banks as at 31 December 2001 is set out in appendix 1.

As in recent years, 2001 saw further evolution in the nature of payment methods in the banking industry, reflecting the continued uptake of technology. Figure 1 sets out the changes in usage in different payment methods between 1997 and 2001. The key trends highlighted in previous years have not changed, with continued rapid growth in credit cards and EFTPOS as payments methods; and a further decline in the usage of cheques and other paper based payments methods, both by volume and as a percentage of total payments. Reasons for these changes include the customer convenience of transacting electronically, and the differential fee arrangements put in place by banks with respect to different payment methods, with the electronic based payments methods generally being associated with lower fee structures.

Although the number of ATM transactions has increased by 11 per cent over the year, as a percentage of total transactions the increase is not so pronounced. Nonetheless, as figure 2 shows, the total number of ATMs continues to grow rapidly, with 138 new ATMs being added in 2001, up 8.1 per cent

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Note: Total number of transaction in 2001 was 1,597 million, and in 1997 was 1,258 million.

1 These provisions are compared with net interest income because the interest rates charged on loans normally include an allowance to cover the credit risk assumed.

2 Many credit card transactions are now EFTPOS initiated, and so to some extent there is an overlap in these two types of payment methods.
At the same time the number of bank branches has declined by 17 or 2.0 per cent over the year. This decline was less than the 2.7 per cent decrease recorded in 2000, possibly indicating that the scope for any further material rationalisation of branch numbers amongst the existing banks is limited.

Although ATMs have been used to replace branches in instances where branches’ underlying operations have not been profitable, there is also a direct relationship between the numbers of ATMs and the numbers of branches, given that ATMs are often placed outside or within branch premises in order to free up branch personnel to provide more complex or service-based financial services to customers. Many of the alternative transaction services, such as telephone and internet banking, are likely to play a similar role because, at least to date, they appear not to have been widely used to conduct more complex transactions, but rather for more “vanilla” functions. Also, customer choice tends to be viewed as a desirable marketing attribute in its own right, given that most customers will prefer to have the option of accessing a range of transaction methods, rather than rely on one system, so as to best tailor transaction methods to individual preferences and needs.

For all of these reasons, it seems unlikely that the branch numbers of the existing banks will decline substantially in the foreseeable future, but rather that they will continue to remain near current levels. Of course, this comment does not take into account the future impact of new bank entrants, such as Kiwibank Limited, on branch numbers.

In line with the growth in EFTPOS-based transactions, the number of EFTPOS terminals continues to rise (see figure 3). Similarly, internet banking is also growing rapidly, with the numbers of bank customers using this facility to conduct banking transactions reported to have doubled each year for the past two years, and with customer penetration reported to have reached 26 per cent in 2001, up from 15 per cent the previous year.3

4 Financial performance of banks in New Zealand

The commentary in this section is based on data for the year to December 2001, compiled from registered bank disclosure statements. The data disclosed in the four quarterly disclosure statements 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. Also, profits are calculated before the deduction of minority interests, which have been material in 2001, because this report focuses on system profitability as a whole, rather than on how profits are divided amongst the different classes of shareholders.

The economic environment prevailing in New Zealand in 2001 was relatively robust, despite the international economic slowdown described earlier. For the year ending December 2001, real economic activity in New Zealand (as measured

3 See the recently published report by KPMG, Financial Institutions Survey 2002, April 2002.
by GDP) grew by 2.9 per cent, which was up on the year 2000 growth rate of 2 per cent. The resilience of the New Zealand economy in 2001 to adverse international conditions can mainly be attributed to high commodity prices and low exchange rates supporting export revenues, and also to strong migration rates and a low interest rate environment maintaining consumer confidence and domestic demand.

Reflecting the relative buoyancy of the domestic economy, the banking industry performed soundly in 2001 in terms of profitability and key prudential indicators such as capital adequacy and asset quality. Trends in these indicators will be described following a commentary on asset and liability movements, and profitability.

Assets and liabilities
As at 31 December 2001 the total assets of the banking system were $189.6 billion, up by 5.3 per cent on 31 December 2000, but well down on the year on year growth rate achieved in 2000, when total assets grew by 13.6 per cent.4

Figure 4 shows growth in bank assets and changes in asset composition. The information shows that the deceleration in asset expansion in 2001 is due to declines in financial investments and other assets. Total lending growth of 9.5 per cent in 2001 has actually been stronger than the 7.7 per cent achieved in 2000, and is broadly comparable with the average growth rate obtained over the last five years, of about 10 per cent per annum.

Most of the loan growth in 2001 originated in the “other lending” category, comprising mainly business lending. This category grew by 12.1 per cent in 2001, compared to 9.9 per cent in 2000. In contrast, residential mortgage lending growth has been more subdued, growing by 6.8 per cent in 2001, slightly up on the 5.4 per cent growth rate achieved in 2000. The faster growth rate for business lending over mortgage lending has been a typical feature of lending patterns over the past five years, and has resulted in a fall in the proportion of residential mortgages to total lending, from 51 per cent in 1997, to 48 per cent in 2001.

A significant amount of the business lending growth in 2001 occurred in the agricultural, food manufacturing and property and business services industrial sectors, where strong lending growth rates were recorded. In particular, beef, lamb, and dairy prices remained at high levels for most of 2001, and in combination with relatively low exchange rates, produced favourable returns for farming in New Zealand.

However, expansion in overall business lending was constrained by the fact that lending to particular types of industries fell or did not evidence much growth at all in 2001. For example, prices for forestry products and hides and skins declined due to cyclical business patterns, and lending to these industries fell in line with those cycles. Similarly, lending growth to the retail and wholesale sectors, and to the hospitality/tourism industries, tended to be flat or negative over the year.

Figure 5 shows how the assets of the banking system are funded, in terms of the nature of the funding contributed by different types of investors. A key fact to note is that the proportion of bank funding contributed by individuals has declined significantly over the past five years, from 37 per cent of total assets in 1997 to 26 per cent in 2001. Most of the additional funding required to finance asset growth has been sourced from external wholesale sources (organisations), with the balance from owners, either in the form of equity, or related party funding. Over the five year period, funding from individuals (or the retail market), has only grown by $3.9 billion (from $45.7 billion in 1997 to
In contrast, funding from organisations grew by $41.9 billion (from $51.1 billion in 1997 to $93.0 billion in 2001).

The sluggish growth in retail-sourced funding most likely reflects the slow growth in household savings within the New Zealand economy. The attraction of alternative investment opportunities in areas such as managed funds, insurance bonds, the property markets, and the share market may also have contributed.

**Profitability**

Bank profitability in 2001 was relatively strong, with net profits before taxes growing by 23.0 per cent in relation to the same period one year earlier, and by 20.1 per cent on an after tax basis (refer table 1). For the locally incorporated banks, this profitability improvement translates into a return on average equity of 24.4 per cent, up from 23.8 per cent in 2000.

Of the items contributing to the dollar growth in pre-tax profits, the growth in net interest income is the most important, increasing by $384 million (10.9 per cent) on the previous year, followed by growth in other income of $124 million (5.8 per cent), and a decline in operating expenses of $119 million (3.8 per cent). Impaired asset expenses made a negative contribution to the pre-tax profit, after a 50.4 per cent or $64 million increase over the year.

Table 1

<table>
<thead>
<tr>
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<td>1,235</td>
<td>1,643</td>
<td>1,821</td>
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Table 2

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<th>Profitability as a percentage of average assets</th>
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<th>12 mths to 31/12/00</th>
<th>Change</th>
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<td>Net interest income</td>
<td>2.05%</td>
<td>2.09%</td>
<td>(0.04%)</td>
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<td>Impaired asset expenses</td>
<td>(0.10%)</td>
<td>(0.07%)</td>
<td>(+0.03%)</td>
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<tr>
<td>Other income</td>
<td>1.19%</td>
<td>1.27%</td>
<td>(0.08%)</td>
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<tr>
<td>Operating expenses</td>
<td>(1.57%)</td>
<td>(1.85%)</td>
<td>(-0.28%)</td>
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<td>NPBT*</td>
<td>1.57%</td>
<td>1.44%</td>
<td>+0.13%</td>
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<td>NPAT**</td>
<td>1.15%</td>
<td>1.08%</td>
<td>+0.07%</td>
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*Net profit before taxes
**Net profit after taxes

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.
However, when the components of profits over the last two years are denominated in terms of a common yardstick for measurement - and the one which is normally employed in the industry is average total assets - then a different picture emerges (see table 2).

Banking system profitability has also been strong in average asset terms, growing by 0.13 percentage points on a before tax basis and by 0.07 percentage points on an after tax basis over the year to 31 December 2001. However, in contrast to the conclusions of the dollar contribution analysis above, the analysis of profits relative to average assets shows that the only item which has made a positive contribution to system profitability in 2001 is the decline in operating expenses. Net interest income's contribution is actually slightly negative, and similarly, the contribution of other income has also been negative. In comparison, the dollar fall in operating expenses translates into a solid contribution to the increase in profitability.

A discussion on developments with respect to net interest income and operating expenses is presented below. As for other income, this revenue stream suffered in 2001 due to pressures on money transfer fees and on loan fees and similar banking facility fees, which for some banks produced little dollar growth at all over the year. Competition, including the continuing consumer shift towards lower fee earning electronic payments methods, and slow growth in some banks’ business lending, are the main causes of this trend. Growth in the profits derived from trading activities were variable across different banks, but for the system as a whole were also modest.

The dollar rise in impaired asset expenses was reasonably generalised across most banks. Several factors contributed to their increase, including new specific provisioning, direct write-offs of impaired assets, and increases in “dynamic” provisions, that is, general provisions based on statistical evaluations of the expected credit losses in the overall loan portfolio. Most importantly, the growth in impaired asset expenses is not material in terms of average assets, nor are these expenses material as a percentage of net interest income (4.9 per cent). As has been the case for a number of years, the impaired asset expense levels of New Zealand banks tend to be low vis-à-vis international levels, and this situation has not changed in 2001, despite the large dollar increase in these expenses.

**Longer term profitability**

This section looks at the main factors influencing the underlying profitability of banks over the five year period ending 31 December 2001, with underlying profitability being viewed in terms of profitability before abnormal items and taxes.

**Figure 6**

Profitability as a percentage of average total assets

![Figure 6](chart)

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*PAAT/AA* Profit after abnormals and taxes/average assets.

**PBAT/AA** Profit before abnormals and taxes/average assets.

Figure 6 shows profitability measured as a percentage of average total assets, over the five years to December 2001. The figure shows that underlying banking system profitability has been gradually trending upwards. Over the five year period, this increase equates to a rise of 30 basis points on average total assets.

**Net interest income and net interest margin**

An important driver of bank profitability is net interest income relative to average assets. A key factor which affects the performance of this ratio over time is the net interest margin, or the ratio of net interest income to average interest-bearing assets. In turn, the latter ratio is influenced by a number of factors, the most important being the interest rate spread, or the difference between the average yield on interest-bearing assets, and the average cost of interest bearing funds.
Figure 7 shows how net interest margins and spreads have developed over the last five years. Margins have declined significantly over the period, from 2.75 per cent in 1997 to 2.29 per cent in 2001, a fall of 46 basis points, and this fall has mainly been driven by a similar decline in interest rate spreads, of 40 basis points.

Since spreads tend to reflect differences in credit quality across different market sectors, then changes in the industrial or sectoral mix of lending can also have an impact. For example, any increase in the proportion of business lending to major corporates is likely to reduce spreads, other things being equal, because the generally higher credit quality of these counterparties will result in finer loan pricing in that business segment compared to other business segments.

Against this background, the pressures placed on spreads by competition have been driving a trend towards ensuring that loan pricing adequately reflects the risk/return trade-offs inherent in lending relationships. The process generally involves designing credit risk management systems in such a manner as to ensure that the credit risk characteristics of different classes of counterparties, as well as the credit risk implications of various loan features and collateral arrangements, can be reliably and objectively understood and distinguished from each other (including in relation to the estimation of the expected and unexpected losses associated with different credit risk rankings). The implications for lending objectives are that the profitability of lending relationships tends to assume priority over volume growth and market share.

Of interest is the fact that the net interest margin in 2001 compared to 2000 has remained unchanged at 2.29 per cent. Given that a 9 basis point decline in spreads has occurred over the year, and that a small decline in the general level of interest rates in 2001 will have tended to reduce the benefits that banks receive on their non-interest-bearing funding, a fall in the margin might also have been expected. The reason the margin has not changed is largely due to a sizeable increase in the levels of non-interest-bearing funding in 2001, mainly attributable to the activities of one bank, which has lowered the average effective cost of funds of the overall banking system, offsetting the impact of the other influences.

Changes in the composition of lending and other interest-bearing assets are also likely to have played a role in the decline in spreads. In particular, an increasing proportion (about 4 per cent) of interest-bearing assets are now held in lower yielding financial investments, and there has been a corresponding reduction in the proportion of residential mortgages comprising interest-bearing assets.

Interest rate spreads are subject to strong competitive pressures, but also can be affected by compositional effects - that is, changes in the nature of interest-bearing liabilities and interest-bearing assets.

On the liability side, the mix of wholesale and retail funding is an especially important factor, because retail interest rates tend to be lower than those prevailing in the wholesale market, due to the higher costs associated with the provision of the retail distribution infrastructure. Over the five year period, wholesale markets have become an increasingly important source of funding relative to the retail market, with the result that there has been about a 10 per cent reduction in the proportion of interest-bearing funding sourced from the retail market. The impact of this change in funding mix on spreads will depend on market conditions and on the nature and term of the retail funding. However, it is likely that the change will have had a material impact on the contraction in spreads over the five year period.

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The growth in non-interest-bearing funding in 2001 is an unusual feature, and represents about a 3 per cent increase on the recent historic average ratio of non-interest-bearing funding to total funding.

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Other factors affecting long term profitability

The other key factors affecting profitability have been a steady decline in other income and operating expenses, and the relatively low levels of impaired asset expenses of New Zealand banks.

Other income fell by 21 basis points as a percentage of average assets during the five years, reflecting much the same trends evidenced in 2001, especially the pressures placed on loan fees and money transfer fees by competition and the shift towards electronic payments methods. It is likely that these pressures would have generated a more significant decrease in other income had it not been for the offsetting impact of diversification strategies, such as the emphasis now placed on the distribution of funds management and insurance products, and the solid growth in trading income achieved over the five year period.

When the impact of the fall in other income is added to that of declining net interest income, together these factors account for a significant negative profitability impact of 69 basis points. Only through containing operating expenses and impaired asset expenses, while at the same time being able to grow assets significantly, have banks managed to improve profitability over the period - operating expenses relative to average assets fell by 1.02 percentage points over the five years, with changes in impaired asset expenses accounting for the final outcome of a 30 basis point rise in profitability before abnormal items and taxes.

In part the fall in operating expenses reflects economies of scale – in particular, loan sales and administration resource requirements do not bear a one-to-one linear relationship to growth in loan volumes. Some other reasons why significant operating efficiencies have been achieved over the past few years include the following:

• an increased rationalisation and specialisation of resources, for example, through outsourcing, rationalisation of branch numbers, and through the development of specialist lending units;

• the shift towards lower cost electronic delivery of basic banking services – that is, towards ATMs, EFTPOS, telephone banking, and internet banking;

• economies of scope - a greater range of products and services is now distributed through branch networks, in part because of the above shift; and

• productivity improvements, for example, through targeted deployment of modern technologies in internal administrative functions.

Finally, maintaining impaired asset expenses at relatively low levels over the past few years has made a significant contribution to overall bank profitability. As noted previously, the levels of impaired asset expenses of New Zealand banks in relation to international comparators, e.g. in relation to the US, European, and Australian banking industries, are very low, and were these expenses to rise to typical international levels, the profitability of New Zealand banks would be significantly reduced. New Zealand banks use relatively sophisticated credit risk management systems, although broader macroeconomic policy and performance is likely to have assisted in bringing about this result, by promoting the conditions necessary for a sound economic performance on the part of New Zealand companies, thus tending to strengthen their general creditworthiness, other things being equal.

To summarise on profitability, over the five year period under review, it would appear that banks have been able to make up for the negative revenue influences imposed by funding constraints and competition mainly through asset expansion, diversification strategies, the generation of operating efficiencies, and through the use of effective credit risk management techniques.

Asset quality

As noted previously, in 2001 the New Zealand economy performed strongly, despite a turbulent international environment. However, within this overall positive picture there were some negative features, particularly with respect to cyclical downturns in some industries, including tourism.

5 These levels can vary depending on the country, the type of bank involved, and the stage of the economic cycle. In normal times, a typical system ratio of impaired asset expenses to net interest income for countries in the regions mentioned above would be in the vicinity of 12 per cent, although for some the ratio can be significantly higher. In New Zealand, in 2001 this ratio was 4.9 per cent, and has averaged 4.4 per cent over the last 5 years.
In addition, the airline industry underwent some stress in the latter half of the year.

Figure 8 shows that, despite the potential for difficulties, total gross impaired assets within the banking system have not risen significantly over the past two years (by $53.1 million or 9.7 per cent), and that more importantly, in relation to total gross loans and advances, they have remained stable at 0.42 per cent. At these levels, impaired assets are at historic lows, and they are also well below international levels - for most comparable countries, the ratio of gross impaired assets to total gross loans and advances rarely go below 1 per cent.

Figure 8 also shows the amount of past due assets over the past few years. The figure shows that total past due assets have increased significantly over the past year, by $815.5 million or 314.9 per cent, and that the December 2001 year end figure of $1.1 billion represents 0.75 per cent of total loans and advances, well up on the recent historic average of about 0.22 per cent. However, and most importantly, because these credit exposures are not classified as being impaired as at the end of 2001, then at that time banks have made the judgement that they will not incur losses on those exposures.

An issue is whether the increase in past due assets is restricted to assets in specific industries, or is indicative of a more generalised, material decline in the overall credit quality of banks' loan portfolios. Although it is difficult to draw firm conclusions on this issue, the evidence does not tend to support the latter position, especially in the context of the relatively low level of impaired asset expenses which have been charged to banks' profit and loss accounts in 2001. A sizeable proportion of the increase in impaired asset expenses relates to dynamic provisions, and because these provisions are statistically based (taking into account the risk attributes across the entire loan portfolio), changes in them can act as a leading indicator of declines in overall asset quality - suggesting that indeed some generalised asset quality deterioration has occurred. But again the increase in these provisions is not material in terms of average assets or in terms of net interest income, in part because the provisions are growing from a low base.

Figure 9 shows that levels of general provisions, specific provisions, and total provisions as a percentage of total loans within the system have been declining over the past few years, with the December 2001 data being at their lowest level for four years. These data also do not provide support for a material decline in overall asset quality. While not all banks carry a general provision for loan losses in their New Zealand books, but rather are covered by the general provisions held in the books of their parent or head office financial statements, other indicators, such as movements in specific provisioning, or information provided on the geographical allocations of statistically based general (dynamic) provisions, also point against such a conclusion.
increase spread fairly evenly across exposure bands. This increase is mainly due to the change in the composition of banks which occurred in 2001, rather than because of any fundamental differences in the patterns in which these large inter-bank exposures occur.

Finally, one important category of large exposures relates to the exposures of locally incorporated banking groups to their “connected persons”. Connected persons mainly comprise persons who have control of, or are able to exercise significant influence over, the banking group, but they also include the related parties of those persons (other than the members of the banking group). Were these connected persons to get into difficulties, conflicts could arise between their interests and those of the registered bank. For this reason, exposures to connected persons are subject to limits, director attestations as to the arms-length nature of the exposures, and to a requirement for banks’ boards of directors to comprise at least two independent directors. Over 2001, exposures to connected persons were maintained within the limits imposed by the Bank.

Market risk
Market risk disclosures are designed to give an indication of the potential exposure of a banking group to economic losses arising from changes in the value of all of a banking group’s on-and off-balance sheet financial assets and liabilities, where those changes are driven by movements in market prices (interest rates, exchange rates, and equity prices). Banks are required to disclose exposures to these aspects of market risk on a quarterly basis, both in respect of balance date exposures, as well as in respect of peak exposures over the most recent quarter.
As a condition of registration, banks which are incorporated in New Zealand are required to maintain a minimum tier one capital ratio of 4 per cent of risk-weighted credit exposures and an overall 8 per cent total capital ratio. Branch banks are not required to maintain a capital requirement in New Zealand, as they are subject to capital ratio requirements on their global operations in their country of incorporation.

Figure 12 shows that the total capital position of the New Zealand banking system remains strong, with a tier 1 ratio of 7.6 per cent and a total capital ratio of 10.8 per cent as at 31 December 2001. Although the total capital ratio is slightly down on the 31 December 2000 level, it is still above the average ratio for the previous five years, of 10.5 per cent.

Banks tend to maintain a buffer above the minimum ratios in order to cover exposure to risks not explicitly covered by the ratios, such as market risks, as well as to meet contingencies and the need to provide a base for further asset growth.

Figure 13 sets out the development of risk-weighted exposures over the past five years. Total risk weighted exposures grew by 6.1 per cent in 2001, following a 9.1 per cent increase in 2000. All of this growth occurred in the on-balance sheet category of risk weighted exposures, which increased by 8.1 per cent over the year, in contrast to off-balance sheet risk-weighted exposures, which fell by 14.5 per cent over the same period. Off-balance sheet risk-weighted exposures constitute only 7.0 per cent of total risk-weighted exposures.

Another important indicator of financial strength is the credit ratings provided by ratings agencies. As was the case last year, banks’ credit ratings are indicative of a banking system that is financially very strong. As at December 2001 the number of registered banks having a credit rating of AA- or above was 12, an increase of one above the number a year earlier, although this increase was due to the registration of Kiwibank Limited on 29 November 2001, rather than because of any upgrades of the ratings of existing banks. A double A rating is the second highest in the rating scale and means that rating agencies judge these banks to have a very strong
capacity to pay interest and to repay principal in a timely manner.

5 Conclusion

The international economic environment in 2001 has been difficult, with a synchronised slowdown in the performance of the world's key economic drivers tending to reduce the overall credit quality of borrowers internationally. Yet despite the international economic slowdown, New Zealand's economy performed well, with real economic growth for the year to December 2001 at 2.9 per cent actually outstripping the growth rate for the previous year. There were some negative features to this performance however, with some industries undergoing cyclical downturns, or suffering as a result of the flow-on effects of the September 11 terrorist attacks.

New Zealand's robust economic environment and sound risk management by banks seem to have sheltered the banking industry from most of the ill effects of the international economic downturn. The New Zealand banking industry performed well in 2001. After-tax profits increased and the industry remained in a strong financial position, not only in terms of credit ratings, but also in terms of asset quality, capital adequacy, and the management of exposures to key banking risks. Although there was an increase in past due assets, banks did not expect to incur credit risk losses on those exposures, nor is the increase otherwise indicative of a more generalised material decline in the overall asset quality of banks' loan portfolios.

The growth in profitability in 2001 is mainly attributable to ongoing asset expansion and a containment of banks' operating expenses, with net interest margins remaining stable, and other income coming under pressure from slow growth in fees and commissions. Over the five year period ending in December 2001, banks' profits have been subject to considerable pressure from competition and funding constraints, but through asset expansion, the generation of operating efficiencies, and the implementation of diversification strategies and sound credit risk management techniques, banks have been able to offset those pressures and maintain or enhance profitability.

Appendix 1

Registered banks as at 31 December 2001

<table>
<thead>
<tr>
<th>New Zealand incorporated banks</th>
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<tbody>
<tr>
<td>Registered bank</td>
</tr>
<tr>
<td>ANZ Banking Group (New Zealand) Ltd</td>
</tr>
<tr>
<td>ASB Bank</td>
</tr>
<tr>
<td>Bank of New Zealand</td>
</tr>
<tr>
<td>Kiwibank Limited</td>
</tr>
<tr>
<td>The National Bank of New Zealand Limited</td>
</tr>
<tr>
<td>Rabobank New Zealand Ltd</td>
</tr>
<tr>
<td>TSB Bank Limited</td>
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</tbody>
</table>

<table>
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<tr>
<th>Overseas incorporated banks</th>
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</thead>
<tbody>
<tr>
<td>Registered bank</td>
</tr>
<tr>
<td>ABN Amro Bank NV</td>
</tr>
<tr>
<td>AMP Bank Limited</td>
</tr>
<tr>
<td>Bank of Tokyo-Mitsubishi (Australia) Limited</td>
</tr>
<tr>
<td>Citibank NA</td>
</tr>
<tr>
<td>Commonwealth Bank of Australia</td>
</tr>
<tr>
<td>Deutsche Bank A.G.</td>
</tr>
<tr>
<td>Hong Kong and Shanghai Banking Corporation</td>
</tr>
<tr>
<td>Kookmin Bank</td>
</tr>
<tr>
<td>Rabobank Nederland</td>
</tr>
<tr>
<td>Westpac Banking Corporation</td>
</tr>
</tbody>
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