The banking sector in New Zealand: aggregate banking supervision data

Denys Bruce, Banking System Department

This article provides commentary on developments and conditions in the New Zealand banking industry in 1994, based on aggregate data provided to the Banking System Department by registered banks. (A glossary of terms used is to be found on p107.)

I Introduction

Two of the main influences on the performance of the banking system in recent years have been heightened competition and the impact of shifts in the general level of interest rates. Up until the 1994 year, these factors combined to tighten lending margins, creating pressure for banks to diversify activities and improve efficiency. In 1994, however, interest margins improved for the first time since 1990, an outcome associated principally with a rise in the level of interest rates.

The state of the economy and levels of sub and non-performing loans have also had a major impact on banking system profitability. For example, performance picked up markedly in 1993 as the rate of expansion of the economy began to increase after several years of relatively poor economic conditions, and as sub-and non-performing loan expenses declined to more normal levels, once the effects of bad debt problems experienced in the late 1980s and early 1990s were resolved.

This article comments on developments in the banking industry in New Zealand over the 1994 calendar year against this background. Particular emphasis is placed on changes in banking system structure, and on the impact that changes in economic conditions have had on banking system profitability and soundness.

II Banking system structure

After the banking system was opened up to new entrants in the late 1980s, the number of registered banks increased significantly - from 4 in April 1986 to a peak of 23 in 1990. Most of the new banks originated from overseas, although some were New Zealand based non-bank financial institutions which took the opportunity to register as banks, in some cases under new ownership.

Strong competition and the difficult economic conditions which prevailed over the late 1980s and early 1990s later led to a significant rationalisation within the industry. Some of the new overseas banks withdrew from the New Zealand market altogether, and a number of mergers and acquisitions took place.

1994 has seen a continuation of this rationalisation process, although activity has focused mainly on consolidation of initiatives taken in previous years. Of the four banks which relinquished their registrations in 1994, three (the Rural Bank, the Post Office Bank, and United Bank Ltd) did so because their business was being integrated into that of their New Zealand based parents. In each case, integration followed acquisition of the banks concerned by other New Zealand registered banks.

Additionally, one wholesale bank, the State Bank of South Australia, deregistered because of a decision to withdraw from the New Zealand market.

As a result the number of registered banks decreased from a total of 19 to 15 during 1994. (Appendix 1 lists the individual banks registered in New Zealand as at 31 December 1994, and the banking groups of which they are a part).

Figure 1 shows that the number of banking groups operating in New Zealand and the number of individual registered banks came close to converging in 1994, after a period when there were a number of banking groups with more than one registered bank. There is now only one group¹ containing more than one registered bank vehicle (Bank of New Zealand and BNZ Finance are both subsidiaries of National Australia Bank Ltd), compared with five in 1993.

III Profitability

In line with the favourable economic conditions prevailing, banking system profitability improved over the 1994 calendar year - aggregate bank profits after tax and extraordinary items increased by 20.2 percent to $834.9m. Factors affecting profitability in 1994 are examined below. However it is apparent from figure 2 that the 1994 profit growth rate was significantly lower than the growth rate achieved in 1993, when profits increased by 121.7 percent, due principally to a buoyant economy, and a

¹ The Trustbank group, which up until March 1995 included nine separate regional banks, is treated as one registered bank because inter-locking cross guarantee arrangements made it essentially one economic entity.

Figure 1

Number of banks

<table>
<thead>
<tr>
<th>Year</th>
<th>Individual banks</th>
<th>Banking groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec-87</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>Dec-88</td>
<td>22</td>
<td>18</td>
</tr>
<tr>
<td>Dec-89</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Dec-90</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>Dec-91</td>
<td>23</td>
<td>21</td>
</tr>
<tr>
<td>Dec-92</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Dec-93</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>Dec-94</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

Figure 2

Bank profitability

- Net profit after tax (LHS)
- Net profit after tax and extraordianaries (LHS)
- Net profit after tax and extraordianaries as a percentage of average total assets (RHS)
marked reduction in charges for sub- and non-performing loans. 1993 represented a turning point in terms of profitability patterns, as for the three or four years prior, banking system profitability had been weak, reflecting difficult economic conditions and the burden of problem loans incurred in the late 1980s and early 1990s.

Table 1 shows that the increase in profits in the 1994 year derived from three principal sources: first from gains in net interest income; secondly from reductions in operating expenses; and thirdly from reductions in impaired asset expenses. It also shows, however, that these gains were partly offset by significant abnormal expenses, and a decline in other operating income.

The movements over the 1994 year in each of the main pre-tax operating items shown in Table 1 are examined in turn below.

Net interest income

The increase in net interest income in 1994 was mainly caused by a widening of the spread between the average rate of interest earned on interest bearing assets, and the average rate of interest paid on interest bearing liabilities.

Table 2 shows that banks' net interest margin, that is, the ratio of their aggregate net interest income to average interest earning assets, increased in 1994 for the first time since 1990 as a net result of these factors.

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Note that the data in this analysis have not been adjusted to account for the deregistration of the SBSA, because the impact of that event on the aggregate operating results of banks is immaterial.

Table 2

<table>
<thead>
<tr>
<th>Net interest income</th>
<th>Dec-89</th>
<th>Dec-90</th>
<th>Dec-91</th>
<th>Dec-92</th>
<th>Dec-93</th>
<th>Dec-94</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net interest income ($m)</td>
<td>1,993.0</td>
<td>2,270.3</td>
<td>2,361.0</td>
<td>2,465.9</td>
<td>2,304.3</td>
<td>2,462.4</td>
</tr>
<tr>
<td>Net interest margin (%)</td>
<td>3.17</td>
<td>3.36</td>
<td>3.10</td>
<td>3.01</td>
<td>2.87</td>
<td>2.92</td>
</tr>
</tbody>
</table>

Other operating income

The benefits which banks have obtained from the increase in net interest margin in 1994 were almost entirely offset by abnormal losses, and a reduction in other operating income. The movements in the latter items were mainly caused by reductions in profits earned from trading financial instruments, and by losses incurred on other holdings of financial securities. The rise in interest rates which took place in 1994 played a major role in these developments, by limiting the opportunities available to trade financial instruments profitably, and by creating losses on positions assumed prior to the increase.

A common strategy employed by banks involved in the retail banking business to increase operating income has been to provide financial services complementary to their principal activity of borrowing and lending. These related financial services include insurance services, such as home and contents insurance and mortgage repayment insurance, and a range of funds management services. During the 1994 calendar year, bank managed retail funds management schemes in aggregate grew in size (see below), although the rise in interest rates caused some individual bank schemes to incur losses. The subsequent withdrawal of funds negatively impacted on profitability by reducing the fee earning potential of those schemes.

The impact of interest rates on trading revenues was the most important influence on operating income in 1994. However, there were also a number of factors which had a positive effect on income. These are discussed below.

Over the last few years banks have attempted to offset margin pressures by adopting countervailing strategies targeted at increasing other operating income, and reducing operating costs. This has generally involved an expansion or a diversification of non lending activities, so as to develop non interest forms of revenue, such as commissions, fees, premiums, and trading income. The precise form of these strategies has varied, depending on the particular circumstances of individual banks. Examples include the expansion of retail foreign exchange services, the addition of new electronic payments services, and emphasising fee based transactions in the corporate banking area.

Competition and margin pressure are also increasingly prompting a closer examination of the profitability of individual products and services and customer groups - not only to ensure that an adequate return is earned on the resources that have been committed to providing each product or service, but also to reduce any potential that may exist for one group of customers to subsidise another. The most obvious example of this development concerns the provision of payment services, particularly cheque payment services, which have typically not generated revenues sufficient to match the costs of provision. In response, some banks have increased transaction fees in general in order to better cover costs. Differential pricing has also recently been introduced by some banks in order to encourage customers to use the less expensive, electronic, forms of payments methods. However, the ability of banks to implement these kinds of strategies is tempered by competitor and customer reaction.

Table 3

<table>
<thead>
<tr>
<th>Other operating income</th>
<th>Dec-90</th>
<th>Dec-91</th>
<th>Dec-92</th>
<th>Dec-93</th>
<th>Dec-94</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other operating income ($m)</td>
<td>1,315.1</td>
<td>1,561.2</td>
<td>1,334.3</td>
<td>1,492.1</td>
<td>1,401.0</td>
</tr>
<tr>
<td>Other operating income/average total assets (%)</td>
<td>1.84</td>
<td>1.97</td>
<td>1.58</td>
<td>1.79</td>
<td>1.59</td>
</tr>
</tbody>
</table>

3 In Table 1, these movements are represented by negative or unfavourable variances totalling $156.6m, comprised of the sum of unfavourable variances in other operating income of $91.1m, and in abnormal expenses of $65.5m.

4 In this context, differential pricing involves charging higher fees for higher cost cheque transactions, relative to the fees that are charged for lower cost electronic transactions.

### Table 4

<table>
<thead>
<tr>
<th>Operating expenses/average total assets (%)</th>
<th>Dec-89</th>
<th>Dec-90</th>
<th>Dec-91</th>
<th>Dec-92</th>
<th>Dec-93</th>
<th>Dec-94</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.86</td>
<td>3.58</td>
<td>3.33</td>
<td>3.03</td>
<td>3.23</td>
<td>2.99</td>
</tr>
</tbody>
</table>

### Operating expenses

The second factor which contributed to an improvement in system profitability in 1994 was a decline in banks' aggregate operating expenses. In total, these expenses declined by $57.7m, or by 2.1 percent, from the previous year, despite overall growth in the banking system.

As noted previously, one of the main strategies banks have employed to offset interest rate margin pressures has been to seek ways of reducing operating expenses by improving overall efficiency. Table 4 shows that this strategy has generally been successful - operating expenses as a percentage of average total assets declined from 3.9 percent in 1989 to 3.0 percent in 1994.

Efficiency gains have been achieved in recent years by banks in a number of different ways - for example, by expanding business at a faster rate than the increase in operating expenses, by obtaining economies of scale through acquisitions and mergers, or by making better use of technology and staff resources.

Of particular interest have been the strategies adopted by banks involved in retail banking. Many of these banks have rationalised their branch structures by closing unprofitable outlets, and by transferring standard accounting and loan processing functions to centralised locations. They have increased the availability of Automatic Teller Machines (ATM’s), and provided more of their services in electronic form, in order to reduce the high costs associated with the provision of manual banking transactions. New payments methods, such as telephone banking, have recently been introduced, and consumers have been encouraged to use electronic payment services, such as EFTPOS, automatic payments and direct debits, in preference to the more expensive cheque payments traditionally used. As a result, the proportion of the total number of payments effected manually, or by cheque, has been declining, and the proportion effected through electronic means increasing.

These kinds of strategies have assisted those banks involved in retail banking to expand the range of products and services they provide in their branches, particularly

### Figure 3

Charge for provisions and write-offs for bad & doubtful debts.

![Graph showing charge for provisions and write-offs for bad and doubtful debts, with values increasing from Dec-89 to Dec-94.](image-url)
in the area of related financial services, and to focus more of their attention on improving the quality of customer services and less on routine transactions processing. These trends are fundamentally altering the manner in which these banks conduct their business.

Sub-performing and non-performing loan expenses

In 1994, an aggregate credit of $96.0m was made to banks’ profit and loss accounts in respect of their sub- and non-performing loans, representing a $150.5m turnaround from the aggregate charge of $54.5m reported the previous year. The credit arose from reversals of specific and general provisions, and recoveries of loans and other assets previously written-off.

Reductions or reversals of charges for sub- and non-performing loans are indicative of a general improvement in the quality of banks’ assets, and as illustrated by figure 3, a trend of improving asset quality has been established in the banking system now for some years.

The changes in 1993 and 1994 are largely attributable to improving economic conditions, although banks have also made substantial efforts to upgrade their credit controls in recent years. Prior to 1993, the aftermath of asset quality problems engendered by the 1987 sharemarket crash and the associated commercial property downturn, as well as asset quality problems incurred in the early 1990’s, had a dominating influence on the levels of sub- and non-performing loans reported by the banking system.

IV Asset growth and composition

As a result of the favourable economic conditions prevailing during 1994, the total assets of the banking industry grew 7.8 percent over the calendar year. This was more than three times the rate of growth of 2.4 percent experienced in 1993. The rate of growth achieved in 1994 was the fastest recorded by the banking industry since 1990, when total assets grew by 16.6 percent. In the three years following 1990 growth was modest - an average annual rate of 3.0 percent.

Sector growth

The growth patterns of the different banking sectors have tended to mirror the opportunities available to banks in the business areas in which they are engaged.

Table 5

<table>
<thead>
<tr>
<th>Lending to the non-bank private sector</th>
<th>(million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Residential mortgages</td>
</tr>
<tr>
<td>Dec-90</td>
<td>15,943.0</td>
</tr>
<tr>
<td>Dec-91</td>
<td>19,851.2</td>
</tr>
<tr>
<td>Dec-92</td>
<td>23,112.8</td>
</tr>
<tr>
<td>Dec-93</td>
<td>27,237.0</td>
</tr>
<tr>
<td>Dec-94</td>
<td>32,734.7</td>
</tr>
</tbody>
</table>

The growth rate of the retail sector of the banking industry in 1994 was substantially different to that of the other banking sectors. The total assets of the large multipurpose banks grew by 8.2 percent, which was roughly in line with the 8.6 percent rate of growth achieved by the mainly wholesale banks. However the main retail banks grew at a much faster rate of 13.8 percent, which was largely reflective of the rapid expansion of residential mortgage lending in New Zealand over the past year (see below).

The growth of the mainly wholesale banks is of particular interest, as in aggregate that sector had declined in importance over 1992 and 1993. However, within that sector, the rates of growth of individual banks have varied considerably over the last three years.

Table 5 shows that residential mortgage lending has underpinned growth in total bank lending since 1990. Residential mortgage lending has grown steadily at an average annual rate of 19.7 percent since 1990, which is in contrast to lending patterns evidenced in the commercial and corporate area, where lending volumes actually declined in 1991 and 1993, and only grew at a modest rate of 2.2 percent in 1992. Although commercial/corporate lending recovered somewhat in 1994 (a growth rate of 8.0 percent was achieved) due to an improvement in economic conditions, in nominal dollar terms the amount of lending recorded at the end of December 1994 is still less than it was on the same date in 1990.

The strength of the residential mortgage market over the past few years has progressively increased the importance of mortgage lending relative to total lending to the non-

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5 After adjusting for the deregistration of SBSA.

6 After adjusting for the deregistrations of Postbank, United Bank, and the Rural Bank.
bank private sector. Figure 4 shows that in 1990, residential mortgages comprised 27.6 percent of total non-bank private sector lending, whereas in 1994, that ratio had increased to 44.6 percent. A number of different factors have contributed to these lending patterns.

One reason is that demand for credit from corporates in recent years has tended to be much weaker than it was in the mid 1980s. Economic performance in the early 1990s was generally weak, and as a consequence many corporates concentrated on repaying debt in order to strengthen balance sheet ratios. Also, some larger corporates obtained more of their funds directly from the financial markets, thus reducing their reliance on bank funding.

There are a number of reasons for the more rapid growth in mortgage lending. Banks have picked up mortgage business previously undertaken by other mortgage finance providers, such as solicitors. Additionally, the average size of mortgages required to finance the purchase of homes has increased considerably over the past few years, in line with increases in the average prices of residential dwellings and sections. The fact that residential mortgage lending figures include some business and personal lending, as banks often encourage or require small business and personal lending to be secured by mortgages over residential property, may also have had some impact.

**Commitments and contingencies**

Banks may enter into a range of contractual arrangements involving rights or obligations to provide or receive funds in the future. The nature of these contracts tends to vary considerably. Some kinds of contracts, such as forward foreign exchange contracts, involve certain obligations which must be met on specified future dates, while others, such as guarantees and standby letters of credit, represent contingent obligations7 which, if exercised, must be done so before an agreed expiry date. In contrast, option contracts involve a right, but not an obligation, to receive or pay funds on the part of the option purchaser.

Generally the obligations or benefits arising under these kinds of contracts are either not recognised, or only partially recognised, on banks’ balance sheets, and hence are often referred to as “off balance sheet activities”. However in common with financial instruments that are fully accounted for on banks’ balance sheets, such as ordinary loans, they can give rise to significant credit, market, liquidity, legal, and operational risks. Appendix 2 sets out broad categories of banks’ commitments and contingencies, and provides examples of the kinds of obligations/financial contracts classified in each category.

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7 That is, the obligation to make a payment in the future depends on the occurrence of some other event, which may or may not occur.
As at 31 December 1994, the aggregate amount of banks' commitments and contingencies, as measured in credit equivalent terms\(^8\), was $11.2 billion, or 12.1 percent of total on balance sheet assets. The 1994 amount represented an increase of 17.8 percent over the total amount of these items held at the same date in 1993, and an 0.9 percent increase as a proportion of on balance sheet assets.

Figure 5 shows that the bulk of the credit equivalent amount of commitments and contingencies is represented by derivative contracts\(^9\), and that most of the growth in commitments in 1994 can be attributed to those contracts. Direct credit substitutes, such as bills of exchange and general guarantees of indebtedness, are second in importance to derivative contracts.

The extent to which the different banking sectors are involved in off balance sheet activities varies considerably, reflecting the different mix of business activities undertaken in those sectors. Off balance sheet activity is particularly important for banks predominantly involved in trading financial instruments and the provision of risk management services. For this reason, the business mix of wholesale banks tends to contain a proportionally greater share of commitments and contingencies than it does for the retail banks, for whom lending activities are most important. Reflecting these kinds of considerations, as at 31 December 1994 the credit equivalent amount of commitments and contingencies represented 27.4 percent, 12.6 percent, and 4.0 percent of on balance sheet assets for the mainly wholesale banks, multipurpose banks, and mainly retail banks respectively.

Related financial services

As noted previously, over the past few years banks have been expanding their involvement with less traditional banking services, such as insurance and retail funds management services. The latter activity in particular has been prominently promoted by banks, not only because of a need on their part to offset margin pressures, but also because of a desire to protect their base of customers, who were increasingly attracted (albeit at higher risk to themselves) to the higher returns offered by investment funds, as interest rates declined.

Table 6 provides a record of the strength of these trends. Over the two year period ending 31 December 1993, the total value of retail funds under management increased at an average annual rate of about 48 percent.

However, table 6 also shows that the rise in interest rates in 1994 slowed the rate of growth of bank managed funds, by making them less attractive as investments relative to

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\(^8\) A credit equivalent is a measure of the credit risk associated with commitments and contingencies which allows a direct comparison with on balance sheet items.

\(^9\) So called because their contract value derives from the value of another "underlying" contract. Financial derivatives include forward, future, option, and swap contracts based on interest rate, equity, and foreign exchange underlyings. Derivative contracts may also be based on commodity underlyings.

*Reserve Bank Bulletin, Vol 58 No. 2, 1995*
Table 6

<table>
<thead>
<tr>
<th>Retail funds management and other similar activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net assets under management</strong> ¹</td>
</tr>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td><strong>All surveyed fund managers</strong></td>
</tr>
<tr>
<td>Unlisted unit trusts ²</td>
</tr>
<tr>
<td>Insurance bonds</td>
</tr>
<tr>
<td>Retail superannuation funds</td>
</tr>
<tr>
<td><strong>Banking groups</strong></td>
</tr>
<tr>
<td>Unlisted unit trusts ²</td>
</tr>
<tr>
<td>Insurance bonds</td>
</tr>
<tr>
<td>Retail superannuation funds</td>
</tr>
<tr>
<td><strong>Market shares</strong></td>
</tr>
<tr>
<td>Unlisted unit trusts ² (%)</td>
</tr>
<tr>
<td>Insurance bonds (%)</td>
</tr>
<tr>
<td>Retail superannuation funds (%)</td>
</tr>
</tbody>
</table>

¹ Source: FPG Research Ltd.
² Including Group investment funds.

bank deposits. For example, growth in unit trusts has slowed to an annual rate of 15.2 percent, and that of registered superannuation schemes to 16.7 percent. While these rates of growth may seem relatively impressive, the data disguises the fact that during the last quarter of 1994, most schemes suffered a net outflow of funds. The aggregate data also does not show that in 1994 the schemes of some individual banks incurred net withdrawals of funds on a year on year basis, as investors responded to the losses associated with rising interest rates.

If interest rates remain at current levels over the near future, the increased attractiveness of bank deposits as investments, vis-à-vis bank managed funds, should further slow rates of growth in the managed funds area over the coming year.

V Asset quality

The asset quality of New Zealand banks has continued to improve in 1994, against the background of improving economic conditions.

Figure 6 shows that as at 31 December 1994, the aggregate gross amount of sub-and non-performing loans held by banks had declined by $236.3m to 2.1 percent of total lending to the non-bank private sector. This decrease continues a pattern begun in 1991, and is similarly mirrored by reducing amounts of sub-and non-performing loans, net of specific provisions. Most of the dollar decline in sub-and non-performing loans can be attributed to the multipurpose banks, although retail banks have also experienced a small reduction in those loans. In contrast, wholesale banks as a group experienced a small increase in 1994.

Of more importance from a prudential point of view is the net exposure of banks to sub-and non-performing loans, as a percentage of total capital. As figure 7 demonstrates, for non-branch banks this ratio has also declined significantly over the last few years, from 44.1 percent as at December 1990, to 12.3 percent as at 31 December 1994.

Improving economic conditions are not solely responsible for these trends. Following the credit problems most banks experienced in the late 1980s, subsequent to the
sharemarket crash and the associated downturn in property prices, banks have also placed greater emphasis on applying more rigorous credit standards, and on improving the management of problem loans in general.

VI Exposure concentrations

The failure of an individual counterparty (or a group of closely related counterparties) to which a bank has a large credit exposure relative to capital has the potential to significantly undermine the financial soundness of that bank. Accordingly, trends in the extent to which banks are carrying large exposure concentrations to individual
non government counterparties provide some indication of the ability of the banking system as a whole to withstand such failures.

Table 7 shows that the number of exposures held by locally incorporated banks to corporates which exceeded 10 percent of banks' capital (ie “large exposures”) declined in 1994. The table also shows that since December 1991, the total number of corporate large exposures has halved in number, and that the number of exposures which exceed 30 percent of capital has reduced to one quarter of the number held at that time. This is an encouraging trend, and points to a reduction in the risks posed to system soundness by such exposure concentrations.

Similarly to the trend established for corporate exposures, large exposures to other banks have also declined significantly in number since December 1991. Table 8 shows that the numbers of large exposures to bank counterparties have decreased by 85 since that time. While this data suggests that the risks to the banking system that might arise from the failure of one bank counterparty have been significantly reduced, in some individual instances peak inter-bank exposures recorded over the period have been significantly greater than the end-of-period exposures.

The exposures set out in table 8 are measured as at the end of the business day. As such, they do not include the large intra-day credit exposures to New Zealand banks arising under current inter-bank settlement arrangements, or exposures to correspondent banks arising under international settlement arrangements. These kinds of exposures can be very significant in their own right. The Reserve Bank is currently undertaking work to reduce risks in the payments system by altering the nature of domestic inter-bank settlement arrangements. Once those new settlement arrangements are in place, banks will have the ability to control intra-day inter-bank exposures, and it is likely that this will lead to a significant reduction in the level of such exposures.

Another aspect of exposure concentration concerns large exposures to “connected counterparties”, that is, to counterparties such as bank holding companies and parent banks, who are connected to the registered bank as a result of their capacity to exercise a controlling influence or a significant influence over the management of the
registered bank. Exposures to these counterparties are of special interest, because of the ability of those counterparties to direct the lending policies of the registered bank. Table 9 shows that the number of large exposures to connected counterparties has reduced by three, after reaching a peak of 10 on 31 December 1992.

Other characteristics of exposure concentrations which affect system soundness include counterparty credit standings, the nature and term of exposures, security features, and the nature of rankings on a winding up. For example, although most inter-bank exposures are unsecured, they also tend to be short-term in nature, are mostly of senior ranking, and are to counterparties of generally high credit standing. Other things being equal, these characteristics tend to make large inter-bank exposures less risky, on average, than are large corporate exposures.

The New Zealand branch business of banks incorporated overseas is legally inseparable from the overall business of the global entity of which it is a part. Accordingly, large exposures held in the New Zealand books of those branches are assessed against the global capital of the overseas bank. Measured in that way, branch lending tends to relatively less concentrated than that of locally incorporated banks, because of the greater absolute size of the former banks’ global capital positions.

VII Capital adequacy

Banks in New Zealand are required to comply with the international minimum capital adequacy standards developed by the Basle Committee. This means that they must have a tier one capital (essentially equity) ratio of at least 4 percent and a total capital ratio of at least 8 percent. (See glossary of terms on page 107).

Table 10 shows that as at 31 December 1994 the aggregate capital adequacy ratio for locally incorporated banks declined slightly (by 0.26 percent) from the ratio recorded at the same date the previous year. The fundamental

Table 9

<table>
<thead>
<tr>
<th>Distribution of non-branch banks' connected lending</th>
<th>Number of exposures</th>
</tr>
</thead>
<tbody>
<tr>
<td>as a percentage of capital</td>
<td>Dec-91</td>
</tr>
<tr>
<td>10 percent to 20 percent</td>
<td>2</td>
</tr>
<tr>
<td>Over 20 percent to 30 percent</td>
<td>1</td>
</tr>
<tr>
<td>Over 30 percent</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
</tr>
</tbody>
</table>

The table includes registered banks owned by other registered banks.

Table 10

<table>
<thead>
<tr>
<th>Capital ratios for non-branch banks</th>
<th>Dec-89</th>
<th>Dec-90</th>
<th>Dec-91</th>
<th>Dec-92</th>
<th>Dec-93</th>
<th>Dec-94</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier one capital (S$m)</td>
<td>3,265.8</td>
<td>3,842.1</td>
<td>3,891.5</td>
<td>2,964.9</td>
<td>3,472.8</td>
<td>3,855.1</td>
</tr>
<tr>
<td>Tier one capital Ratio (%)</td>
<td>7.49</td>
<td>8.10</td>
<td>8.39</td>
<td>6.79</td>
<td>7.72</td>
<td>7.75</td>
</tr>
<tr>
<td>Tier two capital (S$m)</td>
<td>799.5</td>
<td>1,361.9</td>
<td>1,265.0</td>
<td>1,353.6</td>
<td>1,368.1</td>
<td>1,367.3</td>
</tr>
<tr>
<td>Tier two capital Ratio (%)</td>
<td>1.83</td>
<td>2.87</td>
<td>2.73</td>
<td>3.10</td>
<td>3.04</td>
<td>2.75</td>
</tr>
<tr>
<td>Total capital (S$m)</td>
<td>4,065.3</td>
<td>5,204.0</td>
<td>5,156.4</td>
<td>4,318.5</td>
<td>4,840.9</td>
<td>5,222.4</td>
</tr>
<tr>
<td>Total capital ratio (%)</td>
<td>9.32</td>
<td>10.97</td>
<td>11.12</td>
<td>9.89</td>
<td>10.76</td>
<td>10.50</td>
</tr>
</tbody>
</table>

The strong economy has also been a significant factor in improving the overall quality of banks’ assets, with the total level of sub and non-performing loans in the system declining by 13.0 percent to 2.1 percent of total lending to the non bank private sector. The improvement in asset quality, and the increased attention which has been paid to the quality of banks’ credit controls, together have created a net aggregate credit to banks’ profit and loss accounts for sub- and non-performing loan expenses.

The rise in the general level of interest rates has been associated with a small increase in the aggregate net interest margins of banks, thus reversing the decline in margins that has been evident over recent years. However, the rise in interest rates has also been a factor in reducing other operating income, and in giving rise to some significant losses on banks’ holdings of financial securities. The impact of these effects almost completely offset the benefits obtained from the increase in net interest margins.

Some further efficiency gains have also been achieved in 1994, as witnessed by the aggregate reduction in operating expenses.

The net overall effect of these developments on operating results has been positive, with banking system profits after tax and extraordinary items increasing by 20.2 percent to $834.9m.

Banking system soundness has improved in 1994, due largely to the improvement in the quality of banks’ assets, and to a decline in the numbers and levels of banks’
exposure concentrations. Although system profits increased over the year, the dollar amount of profits retained was insufficient to offset growth in risk weighted assets, which meant that by year end aggregate capital adequacy levels had declined slightly.

The impetus provided by competition to improve efficiency is fundamentally altering the way in which retail banking business is being carried out. In particular, the promotion of electronic means of processing transactions is enabling expensive cheque payments and routine face to face transactions processing to be reduced, and for branch structures and administration to be rationalised. This process has also enabled the range of products and services provided to consumers to be expanded, and for increased attention to be paid to improving the quality of customer services.

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**Glossary of terms**

**Risk weighted exposures**

Assets and off-balance sheet exposures are weighted according to broad categories of credit risk as determined by the risk weighting framework. For example, Government exposures of less than one year are weighted at zero, while commercial lending is weighted at 100 percent. Banks are required to hold capital against their risk adjusted credit exposures.

**Capital**

The residual claims on the assets of the bank once all claims of depositors and other obligations have been satisfied. Under the Basle framework capital is divided into tier one and tier two capital.

**Tier one capital**

Tier one capital is shareholders’ funds or net worth (primarily issued share capital and retained earnings). It represents that part of a bank’s funding which is available to absorb unanticipated losses without the bank being obliged to cease trading and which is free from any fixed servicing obligations.

**Tier two capital**

Tier two capital consists mainly of hybrid capital instruments such as subordinated debt, which have some, but not all of the characteristics of equity. In most cases they are only capable of absorbing losses in a winding up.

**Total capital ratio**

The total capital ratio is the sum of tier one and tier two capital divided by risk weighted exposures.
Appendix 1
Registered banks as at December 1994

### Multi-purpose banks
- ANZ Banking Group (New Zealand) Limited
- Bank of New Zealand Limited
- The National Bank of New Zealand Limited
- Westpac Banking Corporation (B)

### Banking group
- Australia and New Zealand Banking Group Limited
- National Australia Bank Limited
- Lloyds Bank Plc
- Westpac Banking Corporation

### Wholesale banks
- Bankers Trust New Zealand Limited
- Banque Indosuez (B)
- Barclays Bank Plc (B)
- BNZ Finance Limited
- Citibank NA (B)
- Primary Industry Bank of Australia (B)
- The Hongkong and Shanghai Banking Corporation (B)
- Bankers Trust New York Corporation
- Banque Indosuez
- Barclays Bank Plc
- National Australia Bank Limited
- Citibank NA
- Rabobank Nederland N.V.
- The Hongkong and Shanghai Banking Corporation

### Mainly retail banks
- ASB Bank Limited
- Countrywide Banking Corporation Limited
- Trust Bank New Zealand Limited
- TSB Bank Limited
- Commonwealth Bank of Australia
- Bank of Scotland
- Trust Bank New Zealand Limited
- TSB Bank Limited

(B) Banks registered in New Zealand as branches of overseas incorporated banks

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Appendix 2

Commitments and contingencies

Direct credit substitutes

These are off balance sheet exposures where the risk of loss to the reporting institution is equivalent to a direct claim on the counterparty. Examples of direct credit substitutes include:

- Bills of exchange
- Guarantees
- Standby letters of credit

Other commitments to provide financial services

These include commitments to provide financing facilities at a future date - such as undispersed loan commitments, and commitments to provide finance leases - where the institution has an irrevocable obligation but drawdown is uncertain.

Commitments with certain drawdown

Included in this category are legal agreements to purchase assets or acquire claims which are certain to be drawn down at some future date. The credit risk is regarded as being the same as if the asset were already on the balance sheet. Examples include:

- Partly paid shares and securities

Derivatives

Derivative contracts mainly consist of foreign exchange and interest rate contracts such as currency swaps, forward interest rate agreements, forward foreign exchange contracts, and interest rate and currency options purchased. Other market related contracts such as share and gold options purchased are also included in this category.