SUPERVISION OF REGISTERED BANKS’ LARGE CREDIT RISKS

Craig Heppleston and Bruce White examine the Supervision of Registered Banks’ Large Credit Risks. This article outlines the background to policy changes, describes the policy framework with some remarks on the role of policy in the context of banking supervision objectives.

Since August 1991, registered banks have been required to limit the extent to which they extend credit to a single risk. Prior to that time, banks were required to report to the Reserve Bank, each quarter, exposures which exceeded a certain level (equivalent to 20 per cent of their capital). Under the new policy, exposures are required to be reported where they exceed the equivalent of 10 per cent of the bank’s capital, and are required to be kept within a limit equivalent to 35 per cent of capital. This limit has been applied to help ensure that an appropriate degree of portfolio diversification, i.e., spread of credit risk, is maintained in the banking industry.

Key Elements of the Large Exposures Policy

Exposures which exceed a level equivalent to 10 per cent of a bank’s capital are required to be reported to the Reserve Bank.

In the case of exposures which exceed a level equivalent to 20 per cent of a bank’s capital, the Reserve Bank seeks confirmation that they were approved, before being committed, by the bank’s board of directors (or, alternatively, were a bank is a subsidiary of another bank, by the head office of the parent bank).

There is an upper limit, set at a level equivalent to 35 per cent of a bank’s capital, which applies at all times to exposures covered by the policy (the main exclusions are exposures to governments and to other banks). In arriving at this limit, the Bank has had regard to the recommendations of the Basle Committee on Banking Supervision that banks’ large credit exposures should be subject to a limit set within the range 10 per cent to 40 per cent of their capital bases. The limit for New Zealand banks has been set at the higher end of this range, to take account of the characteristics of the New Zealand corporate and financial sectors.
Background
Diversification of risk, or avoidance of excessive risk concentration, is fundamental to
banking. Risk concentrations can arise from exposure in price sensitive areas, e.g., in the
foreign exchange market, or the sharemarket, where losses can arise from unanticipated
price movements. Alternatively risk can arise from excessive funding concentration,
that is, where a bank is particularly reliant on a narrow segment of the market as a source
of finance.

However, experience has shown that in most bank failures excessive lending (or credit)
risk concentration has been an important contributing factor. Lending risk concentration
can arise when banks lend excessively to particular customers, or industries and, perh aps,
geographical regions and countries.

For example, in the mid 1980s, the financial soundness of some international banks was
adversely affected by their high concentration of loans to less developed countries (i.e.,
the LDC debt crisis).

Another example is the financial difficulties which have been experienced by some
banks in the United States in the late 1980s and early 1990s as a result of, among other
things, losses experienced in commercial real estate lending. The problems there have
been compounded by regulatory requirements which limit banks’ ability to operate
outside their home State and to diversify their credit risks across state boundaries. Thus,
in New England, where the commercial real estate market has been more depressed than
in other regions, banks have been more adversely affected. Similarly, quite a number
of banks in Texas experienced financial difficulties when falling oil prices impacted
adversely on the Texan economy.

The experience of a number of New Zealand banks over the last ten years or so has also
highlighted the importance of diversifying credit risks, particularly across economic
sectors and individual borrowers. In the mid 1980s, the credit risks of New Zealand
banks became more concentrated as substantial loans were advanced to high growth
sectors of the economy and some rapidly expanding corporates. By end 1986, some
banks had advanced loans to quite narrow sectors of the economy and to a small number
of corporate borrowers in amounts which were large relative to their capital bases. The
soundness of some institutions had become heavily dependent on the economic health
of particular industries and/or on the financial soundness of a handful of their borrowing
customers.

The October 1987 sharemarket crash, the subsequent slump in commercial property
prices and the failure of a few large corporates, exposed this situation. In some cases,
the institution’s capital was not sufficient to absorb the large losses incurred. For
example, the failure of DFC was due, in part, to its substantial exposure to the
commercial property sector. Some other institutions required injections of capital from
shareholders.

Thus, the experience in New Zealand, and overseas, over the past ten years, has
highlighted a number of important lessons. First, it has reinforced the importance of
diversifying all forms of credit risk, particularly in times of rapid lending growth.
Secondly, it has highlighted the importance of identifying where borrowers are related
in such a way that the financial difficulties of one can impact on the financial soundness of others. Thirdly, it has underscored the importance of banks having capital reserves commensurate with the risks being carried (as a buffer to absorb losses should they arise).

It was against this background that the Bank developed the policy concerning concentration of banks' credit risks. Many of the lessons from the 1980s have been encapsulated into it.

The Policy Framework

In developing the large exposures framework, some fundamental questions needed to be addressed: What forms of credit risk concentration should be covered by the policy? To whom should the policy apply? What is an exposure? To whom should banks' limit their exposures? What is an appropriate exposure limit? The following sections address these issues.

What forms of credit risk concentration should be covered by the policy?

As noted in the previous section, credit risk concentration can take a variety of forms. It can arise from excessive lending to individual borrowers, economic sectors / industries, geographical regions, or perhaps countries. All forms of credit risk concentration are important in that they potentially have a material effect on the financial soundness of a bank.

However, some forms of credit risk concentration are less amenable to being controlled within formal limits than others. Levels of exposure concentration to countries, regions and/or industries should be reviewed by banks so that management is aware of the risks being taken and can if necessary adjust the balance. However, these forms of credit concentration, by their very nature, do not lend themselves to precise management within a system of simple quantitative limits. For this reason, the Bank has not prescribed any formal limits but rather has indicated that banks should have appropriately documented internal polices, which have been approved by the boards of directors. The Bank discusses these aspects of risk concentration with banks during the course of regular prudential consultations.

To whom does the policy apply?

The large exposures policy requirements apply to banks incorporated in New Zealand. They do not apply to branches of overseas banks. The credit risks of the New Zealand branch of an overseas bank are indistinguishable from those of the (overseas) head-office. That is, the loans of a New Zealand branch of an overseas bank belong to that overseas bank, in the same way as loans made by the local branch of a New Zealand bank belong to that New Zealand bank, not just the local branch where the account is held. Thus, the capacity of an overseas bank with a branch in New Zealand to absorb losses
arising from loans written by that branch depends on the amount of capital held by the whole bank. For this reason, the responsibility for supervising concentration of risk in an overseas bank, including in respect of business written by its New Zealand branch, lies with the overseas supervisor. No limits are applied by the Reserve Bank of New Zealand. However, the Bank does monitor the largest exposures of the New Zealand branches of overseas banks and liaises with the overseas supervisors where appropriate.

What is an Exposure?

The Bank has applied two principles in defining an exposure. First, the definition of an exposure should encompass all transactions with a single borrower which expose the bank to a risk of loss, should the borrower default on its obligations. Secondly, the definition of exposure should capture the maximum potential amount of that loss.

Exposures can be categorised into three broad groups; financial assets, off-balance sheet exposures and market related contracts. Financial assets include loans, leases, deposits, placements, and other advances and investments, including investments in shares. Off-balance sheet transactions comprise commitments and contingent liabilities, whether revocable or irrevocable, conditional or unconditional. Exposures included in this category include bank guarantees of customers’ obligations to third parties, and committed but undrawn lines of credit (e.g., the undrawn portion of an overdraft facility). Foreign exchange and interest rate agreements, and other price related contracts comprise the third category. Exposures which fall into this category include, for example, foreign exchange forward contracts, and interest rate (and currency) swap agreements.

Exposures are measured at their ‘full value’ (or in the case of foreign exchange and interest rate contracts, the full value of replacing the contract should the counterparty default). Thus, the measurement approach for large exposures purposes is different from that used for the purposes of measuring the adequacy of banks’ capital. In the capital adequacy framework, exposures are ‘risk weighted’, i.e., these exposures are measured at some proportion of their full value, depending on the nature of the counterparty (borrower). For example, exposures to OECD banks are weighted at 20 per cent of the full value of the exposure.

The risk weighting approach used in the capital framework implicitly assumes that banks’ credit risks are well diversified. The large exposures policy, however, is designed to underpin this assumption. Accordingly it would be inappropriate to apply the risk weights used in the capital adequacy measurement framework for the purposes of measuring large exposures. Rather, the focus needs to be on the maximum possible loss a bank could incur from the failure of a single borrower.

However, while the definition of exposure is comprehensive, it can be appropriate for some exposures to be excluded. Sometimes loans are sold to other banks or financial institutions\(^1\). Where assets have been sold outright to an unrelated third party, such that

---


2 Banks’ tradable securities can be sold in the securities market. However, a bank’s loans cannot be sold. But the same effect can be achieved by novation or (statutory or silent) assignment.
the selling bank no longer bears any risk of loss associated with that asset, it is no longer necessary for the selling bank to regard the asset as an exposure. Similarly, assets which have been written off are not included in the definition of exposure. This is because, in the process of writing-off loans, banks reduce their capital commensurately. Therefore, it is not appropriate to include such exposures in the amount which is subject to a limit related to some proportion of the bank’s capital, because the bank’s capital has already been reduced to cover the write-off.

Exposures to OECD governments and central banks, and to other banks, are also excluded from the definition of exposure to which the limit applies. That is, the limit applies only in respect of banks’ exposures to non-bank private borrowers. Exposures to OECD governments and central banks generally entail little credit risk and it has not been seen as necessary to subject them to a formal banking supervision limit.

Exposures which banks have to other banks are also excluded from the scope of the exposures subject to formal banking supervision limits. However, this is not because the Reserve Bank is indifferent to the extent of the risks banks carry against each other. On the contrary, if a bank were unable to meet its obligations to other banks, this could cause major problems within the banking system, the more so if the amounts were very large. However, by the same token, the functioning of the banking system is dependent on funds being able to move smoothly within it. Application of formal inter-bank exposure limits could be disruptive in this regard. The Reserve Bank is studying these matters further, in the first instance, in the context of the operation of the bank payments system\(^3\). At this stage it is too early to say what policy conclusion will emerge from this work. However, in the meantime, banks are required to report their large exposures to other banks to the Reserve Bank each quarter.

**Risk ‘Lay-off’ Arrangements**

Banks enter into a variety of arrangements which enable them to meet the funding requirements of their large borrowing customers while spreading the risk of loss in the event that the borrower defaults. For example, a bank may transfer credit risk associated with a particular loan to a third party (without actually selling the loan). This can be achieved if the bank obtains a guarantee from a third party in respect of default by the borrower. If a bank has a guarantee from a third party, under which the guarantor will ensure repayment in full of the exposure covered by the guarantee, then it is appropriate to regard the exposure as having been transferred to the guarantor. This, of course, assumes that the guarantor is of ‘substance’.

Other ways in which banks may protect their positions against the risk of loss should the borrower default include establishing rights of set-off and by taking collateral. A right of set-off can be created where a borrower has deposit balances with the same bank. Similarly, where a customer has entered into a number of contracts with the same bank in the course of dealing, say in foreign exchange, it may be possible to establish a net

---

\(^3\) The Bank has set up an internal Payment Systems Task Force to look at issues relating to the bank payment systems. In addition, the Bank sends representatives to attend meetings of the New Zealand Bankers’ Association Payment Systems Committee.
amount due to the bank. However, rights of set-off and netting are complex areas of law, and for banking supervision purposes, currently are recognised to only a limited extent (where legal enforceability is relatively certain).

Banks generally take collateral (ie, security over the assets of a borrower) to protect their position in the event that the borrower defaults on the loan. However, prudent lending behaviour dictates that loans should be made, first and foremost, on the basis of the borrower’s ability to meet the loan repayments, ie, on the basis of the borrower’s future net income stream. Collateral is generally regarded as ‘insurance’, ie, something which can be called upon in the event that unforeseen circumstances arise which adversely affect the borrowers ability to meet loan repayments. The experience of banks has shown that collateral cannot be always relied on to fully protect a bank’s position in the event of a borrower defaulting. For example, the realisable value of the collateral may prove to be less than its book value when the assets over which the bank has taken security have to be sold in a ‘fire-sale’, or because the assets depreciate in value when the borrower’s business is no longer a going concern. Therefore, collateral, for exposure measurement purposes, is recognised to only a limited extent, ie, where the value of the collateral is relatively certain. Specifically, the amount of an exposure is reduced by the amount of collateral held only where the collateral comprises funds placed with the bank, Certificates of Deposit issued by the bank, or securities issued by OECD governments or central banks.

At this point it is helpful to introduce two additional definitions used in the Reserve Bank’s policy: gross credit exposure, and net credit exposure. The distinction between gross and net credit exposure is important in respect of how the different requirements outlined in the box are applied. Gross credit exposure represents the full amount of exposure to those customers covered by the policy excluding only:

- exposures which have been sold to unrelated third parties,
- exposures which have been written-off prior to the commencement of the reporting period.

Net credit exposure consists of gross credit exposures less the amount of exposure which is supported by qualifying guarantees, collateral, and set-off arrangements.

The requirements to report, and to obtain board approval for exposures, apply to the ‘gross’ definition, while the formal limit (35 per cent of capital) is applied on the basis of the ‘net’ definition.

What is a Counterparty?

In normal circumstances it is relatively simple to define a counterparty in terms of a single legal entity, whether a corporate, official or private person. However, when a borrower gets into financial difficulty, banks often discover that the financial soundness of other, apparently separate, borrowers is also adversely affected by the failure of the first borrower. If the financial soundness of one borrower can materially affect the
financial soundness of another borrower, then these borrowers should be regarded as a single borrower for large exposures management purposes. That is, loans to a group of closely related borrowers are normally regarded as constituting a single exposure.

One of the difficulties in managing credit risk concentration is identifying the circumstances in which apparently separate borrowers are linked in such a way that they constitute a group of closely related borrowers. The Bank’s large exposures policy provides guidance on when two or more borrowers should be regarded as a group of closely related borrowers. Specifically the definition of an “individual counterparty” (or individual borrower) for large exposures purposes, includes:

- a holding company and all its subsidiaries (as defined in section 158 of the Companies Act 1955);
- a company and a person who has the ability to appoint more than half the directors of that company;
- persons who are related by cross guarantee;
- a company and a person who holds a substantial shareholding in that company relative to other shareholders.

However, it is virtually impossible to specify all the circumstances, or relationships, in which two or more borrowers may be regarded as closely related. Accordingly, the policy also includes two general or ‘catch-all’ grouping requirements. That is, the definition of an individual counterparty also includes:

- a company and a person who by any other means has the ability to control that company; and
- a group of closely related borrowers, whether comprising legal or natural persons, or both, where those persons are related in such a way that the financial soundness of any one of them may materially affect the financial soundness of the other or others.

In addition, attention is drawn in the policy to the New Zealand Society of Accountants’ accounting standard SSAP 22 (Related Party Disclosures), which provides guidance on the circumstance in which persons might be appropriately regarded as closely related for the purposes of related party disclosures in financial statements. This standard encompasses cases where the horizontal or vertical interdependence of the industries in which borrowers operate is such that a dependent customer relationship exists.

A Three-Tiered Approach

Our policy comprises three key elements: reporting exposures to the Reserve Bank, board approvals for large exposures and a large exposures ceiling.
Reporting Exposures to the Reserve Bank

Aggregate gross credit exposures (as identified above) to a single borrower (or group of closely related borrowers) which exceed 10 per cent of a banking group’s capital must be reported to the Reserve Bank on a quarterly basis. This reporting enables the Bank to monitor emerging trends in banks’ high value lending to the corporate sector, including clustering of loans to borrowers in similar, or related, industries.

Board Approvals

Aggregate gross credit exposures to a single borrower (or group of closely related borrowers) which exceed 20 per cent of a banking group’s capital must have prior board (or parent bank head-office) approval before being committed.

In some countries, exposures above a certain level can be committed only with the prior approval of the banking supervisor (and such approvals are generally given only exceptionally). In New Zealand, it is considered more appropriate that the responsibility for approving large exposures above a certain level should rest with the bank’s board (or parent bank head-office), not the Reserve Bank. This is consistent with the principle which underpins prudential supervision policy, namely that the ultimate responsibility for ensuring banks operate in a prudent manner rests with the banks themselves.

Large Exposures Ceiling

Net credit exposures (as defined above) to a single borrower (or group of closely related borrowers) must not exceed an amount equivalent to 35 per cent of a banking group’s capital.

However, the Bank was concerned that the large exposures policy should not unnecessarily disrupt banks’ business relationships with their large borrowing customers. Accordingly, banks which had exposures in excess of the ceiling as at 31 August, 1991 were able to enter into transitional arrangements with the Reserve Bank so that they could comply with the large exposures ceiling with limited disruption to their existing customer relationships. Although a number of banks entered into transitional arrangements, all banks should be in full compliance with the large exposures policy by 31 August, 1992.

In addition, the large exposures limit was set towards the upper end of the Basle Committee’s recommended range. The Basle Committee recommended that limits between 10 and 40 per cent of bank’s capital be imposed on exposures to single non-bank borrowers, with 25 per cent as the preferred central point for a limit. This preferred exposures ceiling was recommended as a ‘best practice’ guide rather than a rigid prudential standard because the appropriateness of a 25 per cent limit depends on the supervisory arrangements in, and the economic circumstances of, each country.

Reserve Bank Bulletin, Vol 55, No. 1 1992
A large exposures ceiling at the upper end of the Basle Committee's recommended range was considered appropriate because New Zealand's corporate sector is, in general, more concentrated than the corporate sectors of other larger economies. Moreover, the New Zealand private sector includes large conglomerates, some of which are themselves diversified to some degree. These characteristics of the New Zealand corporate sector suggest that a large exposure limit in New Zealand at a level higher than the limits applied by other overseas supervisors is appropriate. Nevertheless, it must be recognised that the limit is quite high compared with limits imposed in other countries, which underscores the importance of the limit being understood as a ceiling rather than as a norm or 'average' standard. It is not expected that banks would have large numbers of exposures approaching that level.

In sum, in setting the large exposures limit, the Bank needed to pay particular attention to the effects of the limit - on borrowers and banks alike.

Conclusions
The Bank's large exposures policy has important implications for banks, large New Zealand corporate borrowers, and ultimately the financial system. First and foremost, the policy should help to promote a spread of credit risk in the banking industry and should ensure that a level of diversification is maintained, including at times of economic upswing and buoyancy, when the risks of concentration of credit risk might be less evident. More generally this policy should help keep a focus on the importance of risk diversification, including industry and sectoral diversification of credit risks.

Secondly, having a formal limit in place may also help to identify where banks' information and control systems for managing concentrations of credit risk are deficient. One area of importance in this regard concerns the monitoring of changes in ownership, business, and control relationships between their (large) borrowing customers, where these changes are of a nature which cause degrees of common risk to emerge.

Thirdly, the credit lay-off arrangements which New Zealand banks enter into other banks, including parent banks, will be explicit and certain. This should underpin the foundations for confidence in the New Zealand banking industry.

Fourthly, to the extent that large New Zealand corporates diversify their sources of funding, the corporate sector may be better insulated from the adverse effects of a bank failure, with beneficial feedback implications for the rest of the banking industry.

In sum, the large exposures policy put in place should promote and reinforce banks' diversification of credit risks and, therefore, enhance the stability of the financial system.