PRICEWATERHOUSECOOPERS

Ministry of Economic Development

Bank Lending Practices to Small and Medium Sized Enterprises

July 2003

Executive Summary

This report presents the findings from a study of bank lending practices to small and medium-sized enterprises (SMEs). It describes these practices and reviews them from an economic efficiency perspective (which the terms of reference define as maximising New Zealand's long-run rate of economic growth).

Lending Practices

Based on interviews conducted with, and information obtained from, seven banks[1] we note the following:

- All of the banks regard the SME sector as an important part of their portfolio. They perceive growth opportunities and consider the market for this sector to be competitive.

- The facilities offered to SME customers are broadly comparable across the banks and, with two main exceptions, the banks look to lend across the whole SME sector.

- In general, the polices, procedures and processes employed by the banks all derive from international practice, but modifications to parent company policies and procedures are effected to suit New Zealand conditions. In our view, New Zealand banks are at, or only slightly behind, offshore counterparts (notably Australia) in terms of their application of best practice technologies.

- New Zealand has yet to utilise credit scoring as a tool for assessing risk in the SME sector to the extent that it is used in other jurisdictions. This may reflect the relative size of the New Zealand market.

Efficiency of Lending Practices

- We find no obvious signs of inefficiency in the market for lending to SMEs:
  - Interest rates charged to SMEs appear to be competitive when assessed alongside charges to larger businesses and compared against international comparisons.
  - There is evidence from research undertaken by a bank and the Ministry of Economic Development indicating that access to finance is not a major issue for this sector.
  - All banks have policies and procedures for assessing risk in cost efficient ways.

- Notwithstanding these points, there are two sectors of the SME market where access to bank lending is an issue. These are start-up SMEs and SMEs that have intellectual property as their main asset. Theory and evidence suggests that bank lending to these types of SMEs is not the most appropriate form of finance. Other forms, including equity or venture capital, are better suited to their needs.

[1] The seven banks comprised ANZ Banking Group (New Zealand) Limited, ASB Bank Limited, Bank of New Zealand Limited, The Hong Kong and Shanghai Banking Corporation Limited, The National Bank of New Zealand Limited, TSB Bank Limited, Westpac Banking Corporation.

- While we have concluded that there are no obvious signs of inefficiency in the market for lending to SMEs, there are nonetheless several aspects of the market where there is potential for further enhancing the efficiency of the market.

- Specifically, there may be benefits if there was a mechanism for sharing information between them. We understand that this has been attempted in the past, but without success. Further work is needed to understand the reasons why and address any impediments to information sharing.

- There may be benefits to customers if more information on aspects of lending to SMEs was published (as occurs, for example, in Australia and the United Kingdom).

- The banks have suggested a range of initiatives aimed at improving SME access to capital. These options involve various forms of tax incentive, government grant or guarantee. Evidence from overseas suggests that such schemes do not always achieve intended results. More work would need to be undertaken on the design, purpose and evaluation of such initiatives before being in a position to justify their introduction.

Contents

	Executive Summary	1
1	**Introduction**	**4**
2	**Overview of SMEs and Bank Lending**	**7**
	Defining SMEs	7
	SMEs in the New Zealand Economy	8
	The Banking Sector	10
	Bank Lending to SMEs	11
3	**Review of Bank Lending Practices**	**16**
	Strategy and Policies	16
	Decision Criteria and Delegations	18
	Risk Grading and Security	26
	Pricing	32
	Monitoring and Relationship Management	34
4	**Efficiency of Bank Lending to SMEs**	**38**
	Potential Sources of Market Failure	38
	Is There a Problem In Practice?	40
	Regulatory Issues	46
	Start-Up SMEs and SMEs Based Around Intellectual Property	49
	Summary	51
5	**Opportunities for Further Enhancing Market Efficiency**	**52**
	Information	52
	Process Improvements	54
	Other Initiatives	56
Appendix A	Interview Questions and Quantitative Data	59
Appendix B	SME Definitions	68
Appendix C	Basel II	70
Appendix D	Credit Scoring	72

1 Introduction

As part of a broader work programme in the area of access to finance, the Ministry of Economic Development ("the Ministry") has commissioned this study, which is focussed on bank lending practices to small and medium sized enterprises (SMEs)[2].

This report summarises the findings from interviews with seven major banks and from a range of quantitative data obtained from the banks.[3] The interviews were conducted on a confidential and non-attribution basis implying that the findings from the interviews have, of necessity, been aggregated to provide an overall view.

Terms of Reference

The terms of reference for this study have two principal aims:

- To provide a detailed understanding of banks' lending practices to SMEs; and
- To review those practices from an economic efficiency perspective.

In respect of the first of these aims, the terms of reference have required that the study review:

- What constitute commercial lending practices.
- Bank lending systems and procedures including credit scoring techniques.
- Bank portfolio policies including sectoral and regional allocations.
- The differential treatment of loans backed by residential property, loans backed by other collateral and uncollateralised lending.
- Decision criteria and the use of discretion.
- Communication of decisions to customers.

The second of the aims for the study has involved:

- Describing the potential sources of "market failure".
- Assessing what actions the banks take to mitigate the potential causes of market failure (primarily asymmetry of information).
- Assessing whether there are any regulatory impediments to efficient bank lending to SMEs.

[2] The definition of SMEs is discussed further in section 2.
[3] Refer to Appendix A.

- Exploring opportunities for enhancing the efficiency of the market for bank lending to SMEs.

It should be noted that the focus of this study has been on the supply side of the market for lending to SMEs. Moreover, the focus has been limited to bank lending and has not extended to other sources of finance. Issues concerning the demand by SMEs for bank lending (or other sources of finance) have not been part of the study's brief.

Report Structure

To address the terms of reference, the report is structured as follows:

- Section 2 provides an overview of the SME sector, the banking sector and the scope of bank lending to SMEs.

- Section 3 discusses bank lending practices to SMEs.

- Section 4 outlines possible sources of "market failure" and comments on the measures taken by banks to mitigate potential "failure".

- Section 5 concludes this report by commenting on some options that could be considered to further improve the functioning of the market for bank lending to SMEs.

Several appendices are attached to this report. These cover the questions asked of banks during interviews (together with a copy of the worksheet detailing the quantitative data sought from the banks), international definitions of SMEs, an aspect of the regulatory environment governing banks (Basel II) and an overview of credit scoring (which is a tool for assessing risk).

Data and Information

This study has relied heavily on information provided to us by the seven banks involved. There are a number of caveats regarding the information and its use that should be noted:

- It has not been the purpose of this study to undertake a statistical survey of banking practices. The number of banks in this study is relatively few, although they represent a significant share of the SME market. While data provided to us by the banks has been aggregated to provide an overall picture, it would not be appropriate to take from this that the results are "statistically" robust or representative of the entire banking sector.

- We have not sought, or been required, to verify any of the information provided to us by the banks.

- There are a number of potential dangers associated with aggregating the data:

  – Each of the banks uses different definitions of SMEs (although there is a degree of comparability at a high level).

- Some of the banks have changed their classifications of businesses including SMEs over time, which makes inter-temporal comparisons of data difficult.
- In many instances, not all of the banks have been able to provide the data sought. This reflects one or more of:
  - commercial sensitivities;
  - some data is recorded by type of product (e.g. in relation to residential mortgages) and it is not possible to ascertain whether the loan is for SME business purposes or something else (e.g. a home mortgage); and
  - the time and costs involved in extracting the information from bank databases.

Disclaimer

Our report has been prepared with care and diligence and the statements and opinions in the report are given in good faith and in the belief on reasonable grounds that such statements and opinions are not false or misleading. As noted above, we have had to rely heavily on information provided to us by the seven banks. We have not undertaken any verification or audit of the information provided to us and make no representations as to its accuracy.

We reserve the right, but are under no obligation, to revise or amend our report if any additional information which exists on the date of our report, but was not drawn to our attention during its preparation, subsequently comes to light. We will not accept responsibility to any other party other than to the Ministry of Economic Development, to whom our report is addressed, unless specifically stated to the contrary by us in writing. We will accept no responsibility for any reliance that may be placed on our report should it be used for any purpose other than that for which it is prepared.

2 Overview of SMEs and Bank Lending

Defining SMEs

There is no standard definition of a SME, and the classification varies widely across different countries[4]. The parameters that are most commonly used when classifying SMEs are number of employees, turnover and level of capitalisation/value of assets.

The definitions given to small and medium sized enterprises internationally tend to incorporate entities that are significantly larger than SMEs in New Zealand. This reflects, among other things, the relatively small size of the New Zealand economy.

The definition of a SME used by the Ministry[5] is businesses employing 19 or fewer FTEs. Further, this definition is split into two parts:

- small businesses: 0-5 FTEs; and
- medium businesses: 6-19 FTEs.

The definition of SMEs is not consistent across the banks interviewed as part of this study. Moreover, they generally do not use FTEs as the basis for defining SMEs. Rather, banks generally define SMEs according to:

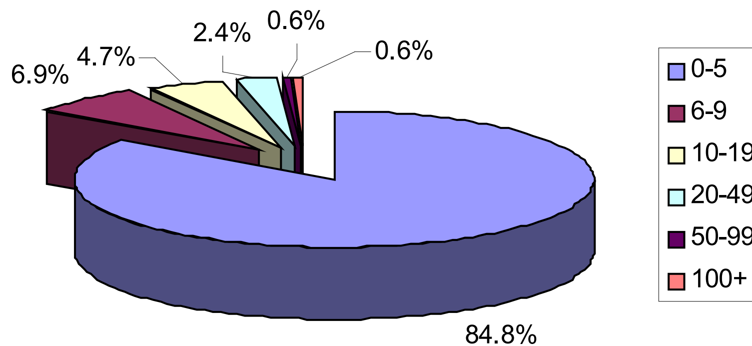
- turnover, where the upper limit used by banks to define a SME was between $2 million and $10 million; and
- exposure level (i.e. size of borrowing). The larger banks consistently define SMEs as having borrowings less than $5 million. The exposure levels for smaller banks are at lower levels – generally in the region of $750k.

For the purposes of this study, we have not attempted to apply a rigid criterion to define SMEs. To do so would have been impractical given that the banks use different definitions of SME and cannot easily massage their data to fit with a "standard" definition. Accordingly, we have worked within each bank's definition of SMEs and, to the extent possible, attempted to draw some conclusions from the information provided, notwithstanding that there is a degree of comparing "apples with oranges".

[4] An international comparison is provided in Appendix B.
[5] Ministry of Economic Development (June 2002) "SMEs in New Zealand: Structure and Dynamics"

SMEs in the New Zealand Economy

The SME sector in New Zealand is large and diverse. As shown in the diagram below, SMEs employing 19 or fewer FTEs comprise 96.4% of all enterprises in 2001.[6]



Source: Ministry of Economic Development

SMEs with 19 or fewer FTEs provide employment for nearly half of the working population and produce 39% of the total output for the New Zealand economy.[7]

The SME sector in New Zealand is also diverse, making up a large proportion of almost every industry, as shown in the following table[8]. More than 70% of entities in all industries (except government and education) are small enterprises with less than six FTEs. This illustrates the prevalence of SMEs in the New Zealand economy in all industries.

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[6] Ministry of Economic Development, op.cit.
[7] Ibid.
[8] Statistics New Zealand "Business Demography Statistics 2002"

Industry	Small	Medium	Total SMEs	Non SMEs	Total
Property	95%	5%	100%	0.4%	100%
Construction	90%	10%	100%	0.4%	100%
Retail Trade	81%	18%	99%	0.9%	100%
Manufacturing	70%	26%	97%	3.4%	100%
Wholesale Trade	79%	20%	99%	1.3%	100%
Personal and Other	89%	11%	100%	0.4%	100%
Agriculture	89%	11%	99%	0.5%	100%
Finance and Insurance	95%	5%	99%	0.7%	100%
Health and Community	78%	20%	98%	1.7%	100%
Recreational Services	91%	9%	99%	0.6%	100%
Transport	84%	14%	98%	1.7%	100%
Hospitality	66%	33%	99%	1.2%	100%
Communication	94%	5%	99%	0.8%	100%
Education	48%	47%	95%	5.0%	100%
Mining	73%	25%	98%	2.4%	100%
Utilities	70%	15%	86%	14.2%	100%
Government	14%	29%	43%	57.4%	100%
Weighted Average	**86%**	**13%**	**99%**	**1.0%**	**100%**

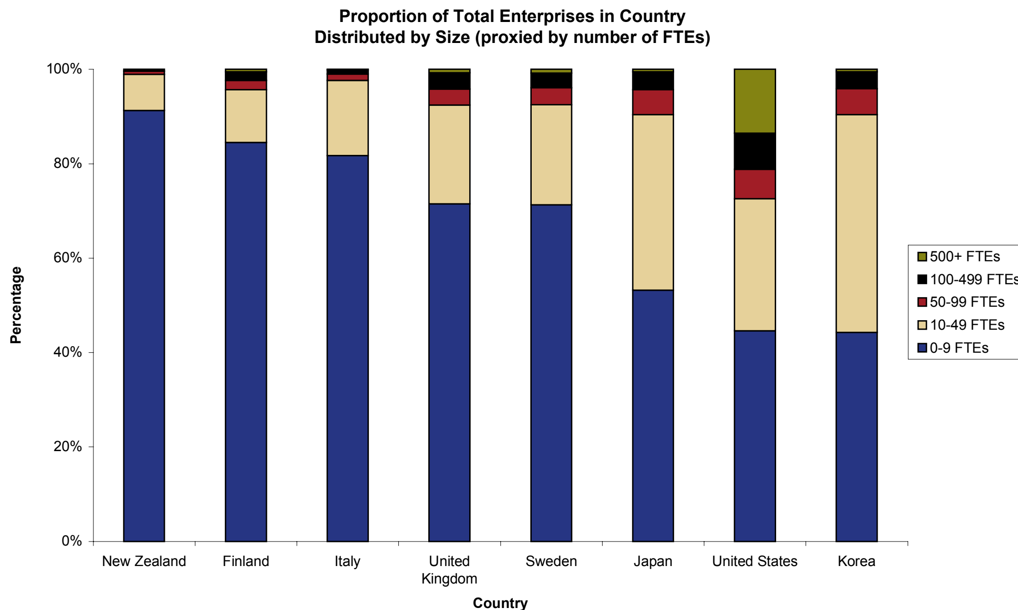
Note: this table classifies medium enterprises as having 6 to 49 FTEs.

The average size of SMEs has changed over time. Between 1994 and 2001, the average number of FTEs per SME business reduced from seven to just four.[9] In addition, the number of SME businesses with less than 10 FTEs has increased at an average rate of 5.4% per annum since 1998.[10]

The concentration of SMEs is significantly higher in New Zealand than in most other developed economies. As illustrated in the chart on the following page, less than half of the enterprises in the United States would be classified as small (less than 9 FTEs), compared to 91% in New Zealand.

Although not included in the graph on the following page, both Australia and Canada have similar concentrations of SMEs to New Zealand. In Australia, 81.8% of businesses employ less than 5 FTEs and a further 6.4% of businesses employ between five and 20 FTEs[11]. Canada has a slightly lower proportion of small businesses (between zero and four FTEs) at 78.3% of businesses. A further 18.9% of Canadian businesses employ between five and 49 FTEs[12].

[9] The National Bank of New Zealand (May 2003) "Lending to Small Business"
[10] Ibid.
[11] "Industry Overview – Number of businesses and employment by size of business" Year Book Australia, 2003.
[12] Canadian Statistics – Establishment by Industry, 2000 (www.statcan.ca)



Source: Ministry of Economic Development, (2002) "SMEs in New Zealand: Structure and Dynamics"

The Banking Sector

As at 30 June 2003, there were 18 registered banks in New Zealand.

The focus for this study has been on those banks that are actively involved in lending to SMEs. Following discussions with the Ministry, the New Zealand Bankers Association and the banks concerned, the following were included in the study:

- ANZ Banking Group (NZ) Limited
- ASB Bank Limited
- Bank of New Zealand Limited
- Westpac Banking Corporation
- National Bank of New Zealand Limited
- Hong Kong and Shanghai Banking Corporation
- TSB Bank Limited.

Of these banks, five (ANZ, ASB, BNZ, National and Westpac) represent 84% of the total assets of all registered banks operating in New Zealand[13].

[13] KPMG (2003) Financial Institutions Performance Survey

Bank Lending to SMEs

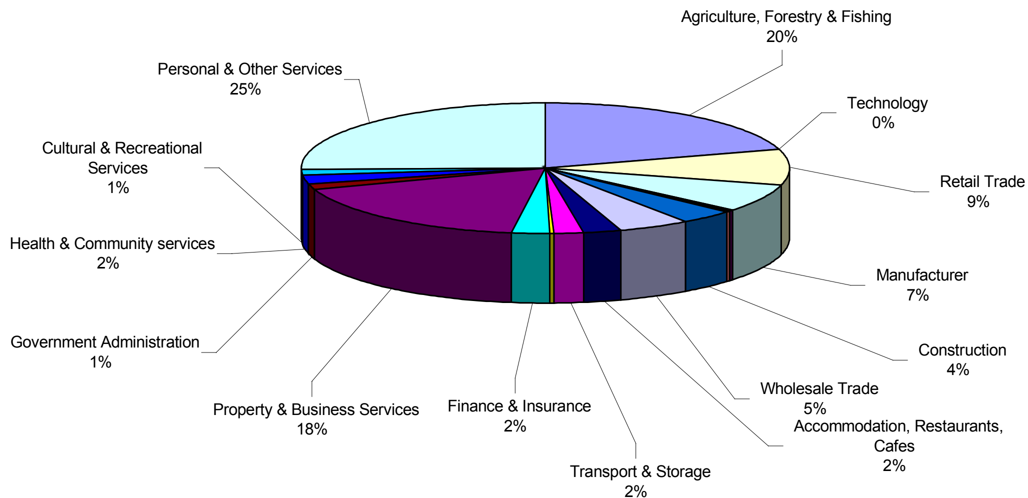
During the course of discussions, the banks made a number of points regarding the market for lending to SMEs:

- The banks perceive there to be vigorous competition for market share in the SME sector.
- Many of the banks are targeting this sector. A number of tools are being used to increase banks' focus on the sector including undertaking and publishing market research, a shift toward more emphasis on relationship management and greater use of performance measures at relationship manager level aimed at growing the SME loan book.
- Most, but not all, of the banks perceive the SME sector to be profitable and these banks are deploying more resources to capture greater market share.
- There is a renewed focus by banks on the SME market. This involves packaging different banking services into a combined service offering, providing more economic and business related information to their SME customers and renewed emphasis on relationship management (discussed further in section 3).
- Banks are 'defending' existing client relationships. This includes more regular reviews of facilities and pricing reductions to match competitive offers.

Most of the seven banks lend to a wide cross section of businesses in the SME sector in terms of industry, business size, and location, although some of the banks have a particular focus on parts of the SMEs market (defined in geographic or other terms, such as rural lending).

Lending by Industry

The banks were asked to provide a breakdown of their SME lending by industry. The industry breakdown was based on the breakdown used by Statistics New Zealand in their business demography statistics. Potentially the classifications used by the banks may differ from the exact classifications used by Statistics New Zealand. Of the three banks that responded to this request, the main areas of lending are personal and other services such as hairdressers, video stores, dry-cleaners (25%), agriculture, forestry and fishing (20%) and property and business services (18%). The full breakdown is illustrated on the following page.



Source: PricewaterhouseCoopers

This breakdown of lending to SMEs by industry is broadly similar to the proportionate number of SMEs broken down by industry as shown in the table below, although there are some differences.

	Lending	Industry
Agriculture, Forestry & Fishing	20%	4%
Technology	0%	0%
Retail Trade	9%	12%
Manufacturing	7%	7%
Mining	0%	0%
Electricity, Gas & Water	0%	0%
Construction	4%	12%
Wholesale Trade	5%	6%
Accommodation, Restaurants, Cafes	2%	3%
Transport & Storage	2%	4%
Communication Services	0%	1%
Finance & Insurance	2%	4%
Property & Business Services	18%	33%
Government Administration	1%	0%
Education	0%	2%
Health & Community services	2%	4%
Cultural & Recreational Services	1%	4%
Personal & Other Services	25%	4%
	100%	100%

Sources: PricewaterhouseCoopers;
Statistics New Zealand, Business Demography Statistics 2002

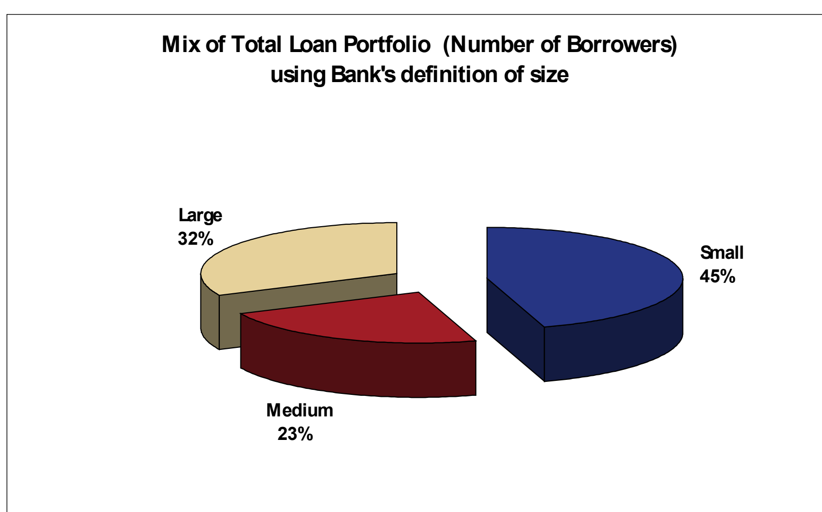
Based on the above comparison, there is relatively more lending to SMEs in the agricultural and personal and other sectors than would be expected given the distribution of SMEs across the economy. In contrast, there is relatively less lending to the construction and property and business services sectors. Of these sectors, the banks specifically noted the property sector as being higher risk.

Lending to Technology-Based SMEs

The banks were also asked, as part of the breakdown, to indicate the proportion of lending to technology-based SMEs. In general, there is little or no lending to businesses in this category (although banks' data does not necessarily include "technology" as a sector). The issue of lending to technology-based SMEs is discussed further in section 4 of this report.

Lending by Number of Loans

Approximately two thirds of all business loans are made to SMEs. Given that SMEs make up a large proportion of the total number of enterprises in New Zealand, it is not surprising that in terms of the number of loans, the large majority are made to SMEs. The graph below shows the position for three banks that provided relevant data.



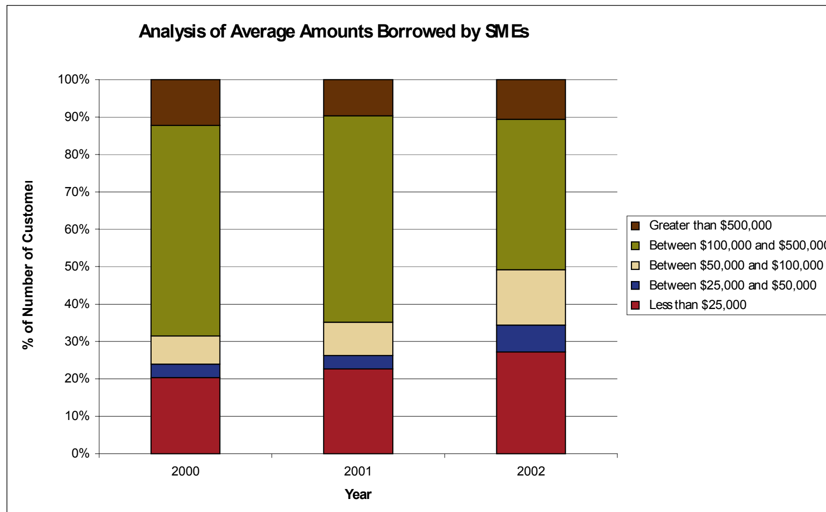
Source: PricewaterhouseCoopers

Lending by Value of Loans

In value terms, SME loans represent only a small fraction of the value of total bank lending. Based on data provided by the banks, the value of SME lending as a proportion of total lending varied from between 3% and 16%.

Lending by Size of Loan

The average amount lent to SMEs varies across the banks interviewed. Averaged across the three banks that provided data, 90% of loans were for $500,000 or less as shown below.



Source: PricewaterhouseCoopers

The loan size, on average, has been reducing in recent years, which is consistent with the data reported earlier that SMEs have been getting smaller.

	2000	*2001*	*2002*
Average Loan Size	$287,972	$242,854	$172, 840

Lending by Facility

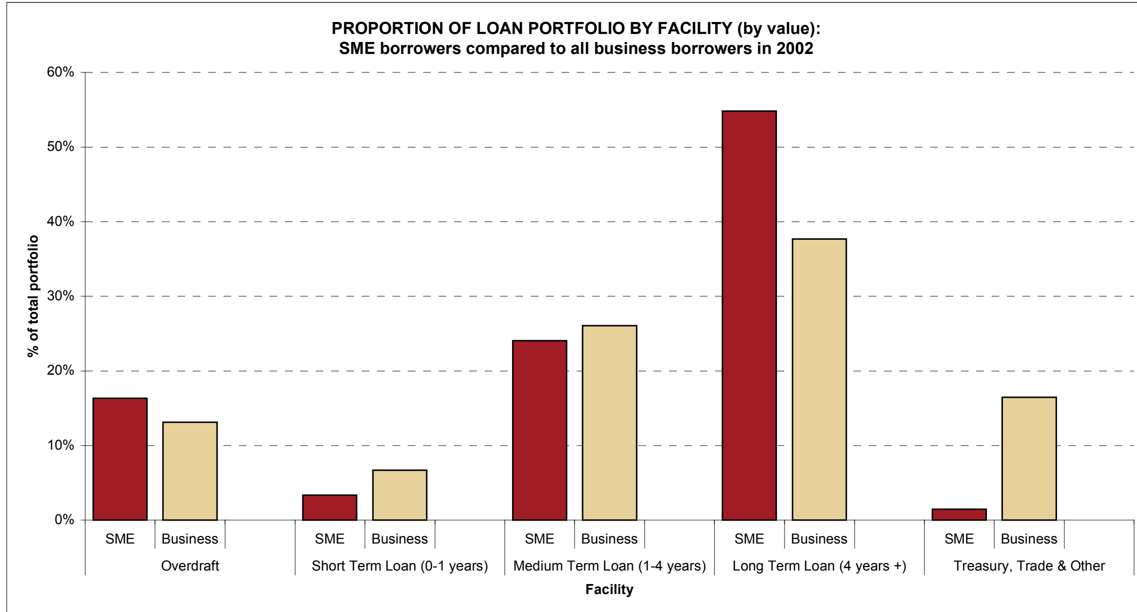
The types of facilities used by SMEs broadly reflect the facilities used by all business customers[14].

The main areas of difference between SME lending and business lending generally are that SMEs:

- Seldom utilise specialist facilities, such as treasury and trade finance[15]. In contrast, these facilities constitute 16% of the borrowings by business customers.

[14] It should be noted that "all business customers" includes SMEs. However, as SMEs contribute only 3% - 16% of loan book by value, the larger business customers dominate this category.
[15] Trade finance can include such products/services as foreign currency accounts, international payment and receipt services, letters of credit, bonds and guarantees.

- Tend to take on loans with longer duration compared to business customers. More than half of SME borrowings are in the form of term loans greater than four years, which reflects the preponderance of residential backed mortgages[16] as security for SME loans.



Source: PricewaterhouseCoopers

[16] The use of residential property as security against bank lending is very prevalent in the SME market. This is discussed further throughout the report.

3 Review of Bank Lending Practices

Strategy

Strategy is obviously something that is commercially sensitive from the banks' perspective, since it is key to gaining a competitive edge. It is difficult, therefore, to make specific comments regarding the strategies being employed by the various banks. Some general points can, however, be made.

- All of the banks see the SME market as being an important part of their overall lending portfolio, reflecting the "fit" with banks' core business and perceived growth opportunities in the SME market.
- There is broad comparability between the banks in terms of lending facilities offered.
- With two main exceptions, the banks look to lend across the whole SME sector. These exceptions are start-up enterprises, and intellectual property based enterprises, although all propositions will be considered.
- Some of the banks focus on all, or most, segments of the SME business community. Other banks focus on niches that can be defined in a number of ways including size and region.
- The banks' strategies are influenced by whether they have a small, but growing market share, or a larger and existing market share that they are seeking to retain.
- Some of the banks have taken a strategic decision to intensify their research into, and understanding of, the SME sector with a view to substantially increasing their market share.
- The banks are intensifying their emphasis on relationship management.
- Most of the banks are developing credit scoring techniques for assessing SME risk as this has the potential for achieving cost efficiencies (credit scoring is discussed further in Appendix D). Such techniques are already used in the personal banking market.

Policies

Consistent with the strategic view held by the banks that the SME sector is an important and growing part of banks' lending portfolios, a common theme arising from discussions with the banks is that their lending policies are designed and implemented in a way which allows each SME lending opportunity to be evaluated on its merits.

Each bank has policies and procedures documented for their lending practices. These cover:

Lending Principles and Processes	**Loan Conditions**
➢ Basic lending principles and lending processes	➢ Terms of lending
➢ Delegations	➢ Facility structures
➢ Financial and operating risk analysis	➢ Pricing
➢ Required rates of return	➢ Security
➢ Exposure limits	➢ Covenants
➢ Prohibited/restricted areas of lending (e.g. family members and illegal activities)	

For most banks, the lending policies are regarded more as guidelines, as opposed to rules not to be broken. Where elements of a lending proposition do not fit strictly within the policy guidelines (for example, lower equity contribution by borrower), it does not automatically discount the possibility of a loan being made to that borrower. For these propositions, conditions may be imposed prior to acceptance of a loan (such as increasing equity stake), or for the duration of a loan (such as more stringent covenants).

The credit policies of the Australian (and other internationally) owned banks are to varying extents influenced by their parent bank. However, the lending policies are subject to input from New Zealand. Comments were made that as the New Zealand market is different to Australia, lending policies are adapted to reflect the local conditions. This was noted with particular reference to the rural sector. In this regard, we also note that virtually all lending decisions in the SME sector are made within New Zealand. Only in very rare instances would approvals need to be made offshore for facilities provided to SMEs.

The attitude of banks toward risk is obviously a critical element of bank lending policies in respect of SMEs and lending generally. Banks have developed sophisticated systems and comprehensive policies and procedures to ensure the risk is properly identified, quantified and managed.[17] The intense focus on risk management by banks is reflected in policies and procedures and stems from a number of considerations. While the importance of each of these can vary from bank to bank, in aggregate, the factors help shape banks attitude toward risk:

- All major banks are subjected to continuous and detailed scrutiny from the capital markets – both debt and equity. The quality of a bank's overall lending portfolio is a crucial aspect in the market's assessment of a bank's performance and value.

- Banks are compared to their peers. Any material reduction in loan quality and bad debt performance would ultimately be reflected in an increase in a bank's cost of capital.

[17] We comment further on the use of best practice technologies in section 5.

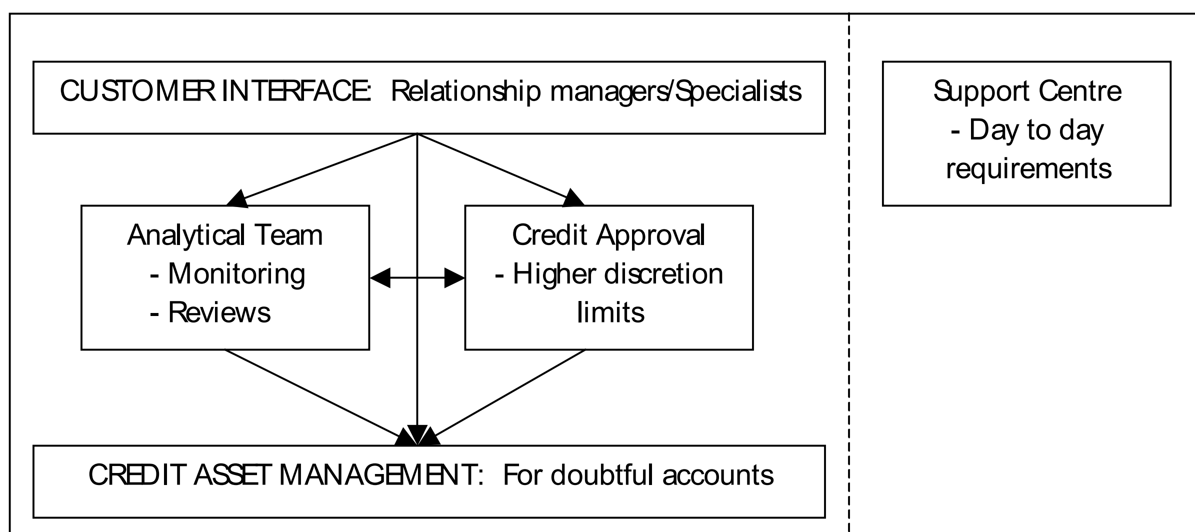
- Shareholders (and debt providers) investing in a bank expect policies and procedures to be followed that protect the capital base, facilitate growth and provide a commensurate return for the perceived risk. Several of the banks emphasised that their shareholders do not expect, or desire, banks to invest in risky investments. "Shareholders are investing in a bank, not in a high risk enterprise". That said, two of the banks have established subsidiaries to provide equity finance. One of these has since withdrawn from this line of business.

- Banks are highly geared and accordingly, they are sensitive to the fact relatively small changes in financial performance can have a significant impact on bottom-line profitability.

- Regulations, often imposed by the offshore parent of the New Zealand subsidiary establish, among other things, minimum capital levels and maximum risk exposures. This has a bearing on the acceptable levels of risk a bank is able to accept. This will be even more relevant as the Basel II regulations[18] begin to be applied to banks globally. Minimum capital levels will be directly related to the type of loans, security and quality of borrower.

Decision Criteria and Delegations

In broad terms, the approach to decision making in terms of criteria and roles and responsibilities is relatively comparable across the banks interviewed. The diagram below summarises roles and responsibilities within a "typical" bank in respect of SME lending.



[18] A brief overview of Basel II is provided in Appendix C.

Relationship Managers

In all of the banks interviewed, relationship or business managers are assigned to SME customers once they reach a certain size based either on turnover or on facilities granted. Regional or district managers, to whom the relationship managers report, are in place in some of the banks. For those SME customers not assigned a relationship manager, business may be conducted through call centres or support centres, including bank branch support.

Relationship managers are able to approve loans within their discretionary limits. Any loans outside of their discretion are passed on to a credit manager for approval.

We have observed considerable variation between the banks in terms of the discretion limits assigned to relationship managers. In one case, business managers/salespeople have no discretion to approve credit exposures at all and must always seek approval from their credit managers for all facilities. At the other extreme, business managers have discretion to lend up to $1 million on a secured basis per client. Discretion levels tend to be given to an individual, not a position, and vary according to the level of security offered against a loan.

Given the size of loans to SMEs, the implication is that at least in some banks, decisions regarding loans to SMEs are made at the relationship manager level and do not require higher levels of approval.

In situations where approval is required by a credit manager, the approval process has become relatively automated in a number of the banks. Relationship managers complete an assessment and this is electronically transmitted to the credit centre for approval. The length of the assessment varies between banks, from one page up to ten pages, and depends on the complexity and/or size of loan.

The assessments may typically cover a range of factors, including:

- General remarks/narrative.
- Business plans.
- Financial statements.
- Industry analysis.
- Management assessment.

There is a degree of standardisation in the assessment forms, with the use of templates and/or tick box sections. The advantage of this is to reduce information requirements and also reduce the time to make decisions. However, as noted above, narratives of varying lengths are also required.

In some banks, approval from a risk management/credit approval team is required for all facilities.

Relationship managers have the responsibility for communicating the decisions which bank's make in response to applications from borrowers. In instances where applications are declined, the relationship manager will typically work with the customer to explain why the application was declined and to explore options, where appropriate, for modifying the application.

In some cases, applications fail because of the lack of good quality information provided to the bank. While banks do not generally see it as their role to provide professional advice to customers, they will endeavour to point the customer in the direction of appropriate advice. The nature of the advice required varies between customers. Some need assistance with preparation of budgets and financial statements. Others need assistance with business plans. Others require marketing or business development advice.

Analytical Team

The majority of the banks have a dedicated team of people who analyse the financial information (and potentially non-financial information) provided by the SMEs. Analytical teams provide analysis to relationship managers and credit teams to facilitate the assessment and monitoring of risk and credit worthiness. Analysis typically includes four key areas: liquidity, profitability, gearing and operational performance.

This analysis is completed prior to the loan acceptance, and during the loan term.

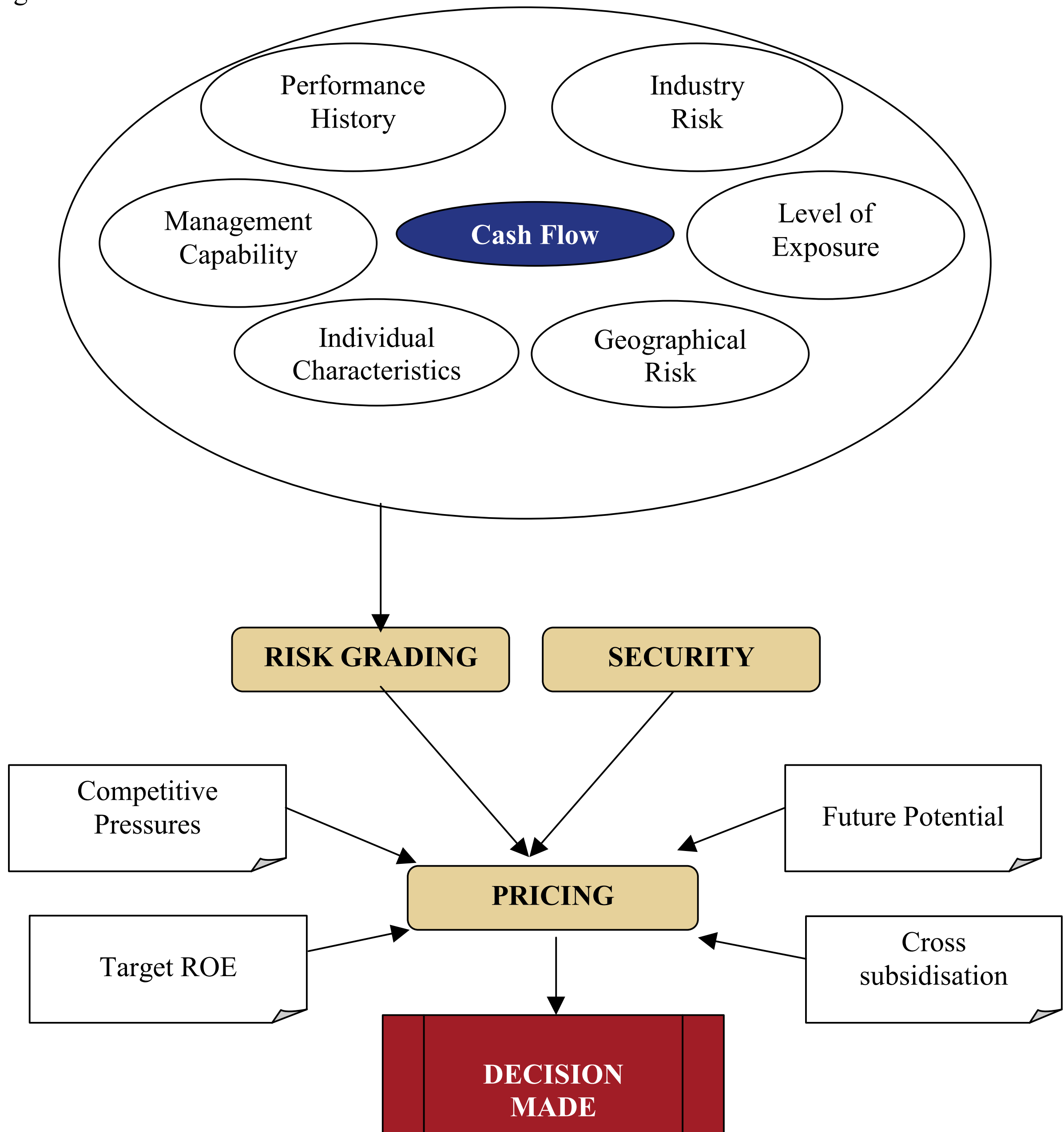
Credit Approval

Credit managers have considerably greater delegation than relationship managers, ranging from $3 million to $12 million per client, but generally averaging between $3 million and $5 million. This is generally well beyond the size of loans provided to SMEs.

It is worth reiterating that the banks tend to grant lending limits to individuals rather than positions. This is because it is the experience and skill of the individual that is perceived as being critical to good decision-making. The levels of delegation are not uniform, however, across all loan applications. The level of delegation generally falls as risk increases, and distinctions are made between new and existing customers. The level of delegated authority in respect of new customers can be 50% lower than that for existing customers. Moreover, delegation levels vary between well secured and unsecured borrowers.

Decision Criteria

The factors impacting upon lending decisions are summarised in the diagram below. A number of the factors influence the risk grade[19] (as shown in the circle in the diagram below) that is assigned to each account.



Risk grading is primarily focused on the probability of default (ie the risk of having insufficient cash flow to meet debt obligations). The level of security offered is also an important part of decision making. Security is particularly relevant in the context of loss on default.

[19] A risk grade is assigned to each borrow in relation to the probability of default (i.e. ability of borrower to meet debt obligations). This concept is discussed in more detail later in this section.

Management Capability

A number of the banks emphasised the importance of the management capability of SMEs:

- Experience – the more experienced the management, the more favourably a bank will look upon the proposition. In general, a young, inexperienced person potentially presents greater risk than an older, more experienced, manager.
- Continuity – in relation to key person risk, a bank will be interested to know that existing management will continue for the duration of the loan term. An owner/manager approaching retirement age may be of concern, if no succession planning has been undertaken to ensure that the business will continue as a going concern subsequent to the retirement.

Individual Characteristics

A bank will be interested in the individual/s who are applying for a loan. In particular, they will consider:

- Credit/Account History – according to the banks interviewed, consideration may be given to an individual's characteristics if these pointed to greater chance of default or funds being used for inappropriate/illegal activities. Relevant applicant characteristics could include, but may not be limited to, credit ratings of the individual(s) and account history and behaviour.
- Key Person Risk – the importance of the person to the organisation is another potential consideration. Key person risk tends to be more of an issue where the individual has specialist skills and/or is critical to the relationship with clients.

Characteristics not focussed on by banks are:

- Ethnicity/Gender – banks were asked whether either of these characteristics were taken into account in lending decisions. In general, the banks indicated that these criteria are not relevant[20].

[20] The international evidence with respect to gender is mixed but many studies do not adequately separate gender from other factors such as firm size and industry. Refer, for example, to Haines. G.H. et al (1999) Myths and Realities: An Empirical Study of Banks and the Gender of Small Business Clients" Canadian Journal of Administrative Sciences 16(4) pp291-307.

Geographical Risk

Geographical location of SMEs can also be one of the factors considered as part of a loan application:

- Location – some banks limit their exposure to residential property in certain areas. The value and marketability of residential property differs substantially between urban centres and small rural areas. The implication of this is that the level of security (if residential property) in small rural areas may be considerably less, and with less security the margins[21] may be higher.

- Geographically Specific Risks – there are risks associated with a geographical area (such as low population bases in the West Coast or the earthquake fault-line in Wellington), which may be taken into account if the risk impacts on the entity applying for the loan.

Notwithstanding these considerations, the banks have indicated that there is no material difference in pricing between regions. The policies regarding security requirements are generally the same irrespective of location.

Performance History

- The banks look favourably upon SMEs with a good track record, and strong financial performance. Size of the entity, as an entity-specific characteristic, was not in itself looked upon as a factor for consideration. However, if the small size of an entity was a reflection of a lack of track record, experience or capital, this could affect the price, or availability, of loan finance.

Level of Exposure

- For larger loans, banks may put more time and resource into understanding the SME business and associated risks. This is because the size of the loan directly impacts the exposure the bank faces.

Industry Risks

- Property Sector – most of the banks referred to property development as a high-risk sector.

- High Risk Sectors – some of the banks identified higher risk industries. Beyond the property sector example, the banks did not have a uniform view as to the higher risk sectors. In identifying high risk sectors, the banks were signalling that loan terms and conditions might be more stringent and/or that the hurdle for approving a facility in these sectors was set at a higher level. A number of high risk sectors were mentioned by one or more of the banks. The extent to which the list applies to any one bank depends on the market position and strategy of that bank. Sectors identified included SMEs:

[21] "Margins" are a premium above the bank cost of funds (i.e. as applicable, usually the 90-day bank bill rate or the inter-bank swap rate).

- operating in the social sector (e.g. rest homes, schools, churches). It is harder to close down this type of business;
- with low margins and/or high failure rate (e.g. logging contractors, small service stations, small transport companies, small cafes in Auckland and country pubs);
- of a specialist nature where the bank did not have the specialist knowledge or expertise to understand the risks involved; and
- involved in a range of other sectors including information technology, agriculture and fishing (shellfish).

- Prohibited Sectors – only one bank had guidelines that specifically prohibited lending to certain industries, which were classified as high risk. In general, the banks indicated that each case would be evaluated on its merits. Higher risk would usually translate into higher margins for SMEs or, in some cases, the decline of loans to such entities.

- Dubious Propositions – banks do not lend to dubious propositions, such as those that might be regarded as having some connection to money laundering, arms/weapons, or political agendas.

Portfolio Allocations

The banks were asked whether they have any limits on the extent of lending to SMEs either in total or according to certain criteria (e.g. sector/industry, geographic location, urban versus rural etc).

Of the four banks that responded to this question, three did not have restrictions on the maximum proportion of the total loan portfolio by value that can be allocated to SMEs. In the case of the one bank that did have a restriction, it was more than five times the current level of lending.

Factors that appear to contribute to the lack of any portfolio limitations include:

- The fact that in lending to SMEs, banks are lending to a very wide cross-section of the New Zealand economy and so are diversifying their risk;

- In aggregate, the value of lending to SMEs is a relatively small proportion of the total loan book; and

- Default by one SME tends not to have flow-on effects to other SMEs. In contrast, a large business may have considerable ramifications for regional economies and/or the national economy.

Information

Quality of information as submitted by the SMEs may impact on the decision to approve or decline a loan application, and potentially will affect the pricing as well. Information often requested by banks includes:

- History of business.
- 2-3 years historical financial statements (preferably audited).
- Budgets.
- Cash flow forecasts.
- Information/background on key individuals.
- Key supply arrangements.
- Key customer arrangements.
- Details of trade terms.
- Security (and valuations).
- Business plans/strategy.
- Industry analysis.
- Credit checks.

The consensus of the banks is that the quality of information varies enormously. Some SMEs provide comprehensive financial statements, forecasts, strategies and business plans. Others furnish very little, and often dubious, information.

Relationship managers often need to work with the customer to get information, and in some instances will direct them to seek professional advice from accountants, financial advisors or various agencies, including regional economic development agencies.

Most of the banks were not comfortable in making the generalisation that SMEs exhibited a significant lack of business planning skills, lack of financial expertise or lack of understanding of working capital management. It was noted that for many SMEs this is an issue but, equally, there is a proportion that possess these skills.

Risk Grading and Security

Risk grading and security are two key factors that determine pricing. The assignment of entities to a risk grade is made in relation to the probability of default (i.e. ability of borrower to meet debt obligations). Security is a major consideration in the determination of loss on default. Both the probability of default, and expected loss on default, have a major bearing on pricing.

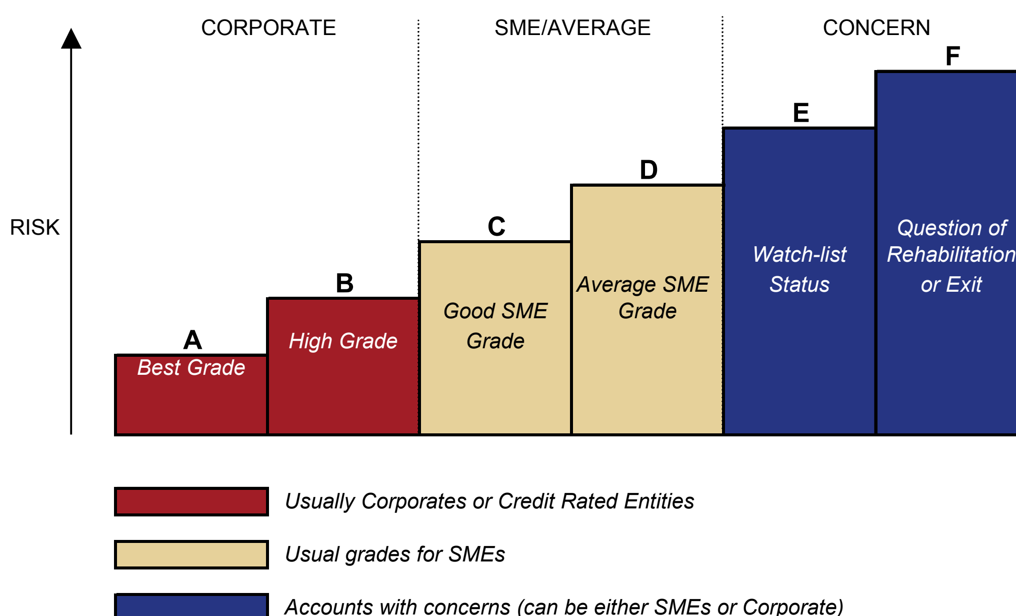
The majority of banks use a two-part grading system. For example if an entity has a "D1" grade, the "D" relates to the risk assessment grade, and the "1" relates to the security indicator. A small number of banks combine the security quality indicator with the risk assessment grade to generate a single risk grade.

The terms of reference have required that consideration be given to credit scoring. While this technique for assessing risk is under development among several of the banks in respect of SME lending, it is not currently in use. Accordingly, it is not considered further here, but is discussed briefly in Appendix D.

Risk Grading

Each of the seven banks assign risk grades to each borrower on their books. The concepts, purpose and application of the grading systems were analogous for all of the banks. The systems cater to *all* customers, not just those in the SME sector.

The diagram below illustrates in a generic fashion the concept of the risk grading systems used by the banks. The actual number of grades employed by each bank varies between banks (and indeed most of the banks have more than six grades), with more categories for SMEs and higher risk accounts.



Higher grades are generally assigned to larger corporate or rated entities; although it is feasible that very high quality SMEs could be assigned an “A” or “B” level grade. Characteristics of entities in these grades would include:

- strong and sustainable cash flow;
- very strong and accountable management;
- good reporting and information systems; and
- credit ratings/proven debt servicing record.

In many of the banks, SMEs are initially assigned a “C” or “D” grade. A “C” grade would reflect:

- good cash flow/strong business;
- strong management capability;
- good debt servicing history (if available); and
- good account history (if available).

A “D” grade would more likely reflect characteristics such as:

- adequate but not exceptional financial performance;
- reasonable management capability;
- good debt servicing history (if available); and
- good account history (if available).

Each of the banks has a cut-off risk grade for which any proposition below will not be approved. This is usually at the “E” grade.

When an existing borrower is downgraded to an “E” grade, it would normally mean that there is cause for concern over the account, although the downgrade may only be a precautionary measure. There are many reasons for a downgrade to this watch-list status, such as:

- Breach of financial covenants.
- Poor financial performance.
- Poor industry performance -Industry risks (such as the travel industry in the current environment, due to SARS).
- Account conduct (for example, excessive use of overdraft facility).

- Pressure on entity from third parties (such as a large creditor or IRD demanding payment).
- High level of gearing.
- Exception reviews from quarterly behavioural assessments. Automated behavioural systems are frequently used by banks to monitor account activity on a regular basis (usually quarterly). These produce exception reports when a borrower's activity is unusual, such as exceeding overdraft limits, defaulting on payments.

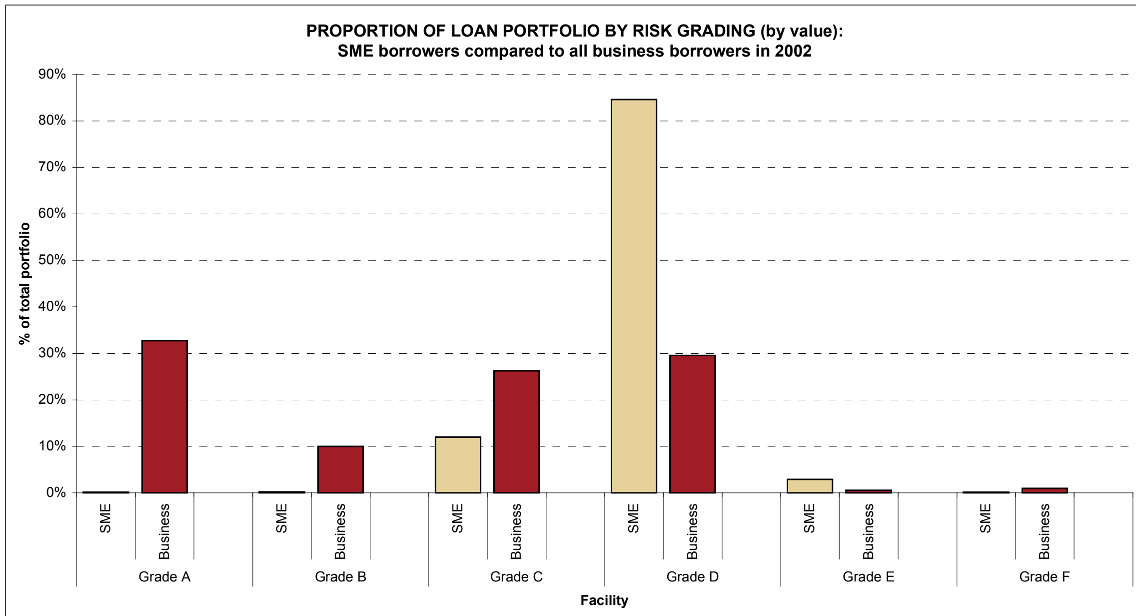
The impact on the entity of being downgraded to watch-list status can be:

- The account remains under the control of the relationship manager, unless the account is overly complex or exposure level is sufficient to require credit management involvement.
- Account review/monitoring is undertaken more frequently.
- Discussions undertaken with customer to understand what the issues are, and if necessary, a strategy for improvement.

A borrower, in respect of which there are serious concerns, will be assigned an "F" grade. Causes of this are similar to those issues in "E" grade, but are more serious in nature. For accounts assigned to an "F" grade, the bank takes action immediately:

- The account is transferred (if not already) to the credit management team.
- The customer is interviewed to ascertain why default occurred, and to look at ways to avoid an exit strategy being employed.
- If rehabilitation is the chosen course of action, then a strategy is developed between the customer and the bank.
- Detailed budgets, forecasts and cash flows are required, along with ongoing management accounts and variance reports.
- The level of monitoring is intensified.
- Interest on loans may be suspended to assist the borrower in the short term.
- Professional advice may be required to assist the borrower.
- Investigating accountants may be called in by the bank to assess the reality of the situation faced by the borrower.
- If an exit strategy is agreed upon, then asset sales, receivership or liquidation is likely.

The graph below shows the distribution of SME customers relative to all business customers over the generic grades discussed above. Based on the information provided to us by the banks, our interpretation is that the clear majority of SME loans would be classified in the "D" grade as defined above.

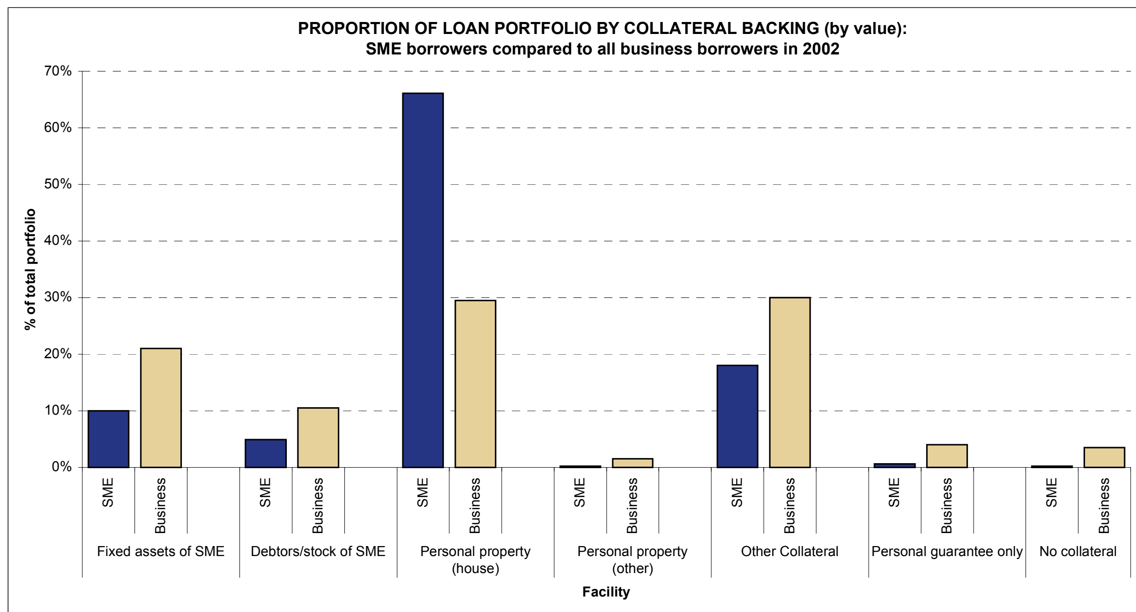


Source: PricewaterhouseCoopers

Only 3% of SMEs and 2% of all business customers are classified as being lower than D grade.

Security

There are some notable differences between the types of security used to back loans between SMEs and business customers as shown below.



Source: PricewaterhouseCoopers

Key points arising from the statistical data responses and discussions with the banks are:

- Residential homes are a predominant form of security for SME loans. Banks favour lending against property (commercial and residential) because, in general, it can be easily sold in order to realise value and does not depreciate in value (although value obtained net of costs in the event of default is usually below “market” value).

- The preference for property as security is demonstrated by the data provided by the banks, which indicate that roughly two thirds of the value of SME loans is backed by residential property. This compares to slightly less than one third in the case of all business lending.

- Several banks suggested that the proportion of SME loans with property as security could be in the region of 80%. This is somewhat higher than the figures just noted, but there is not always complete certainty as to whether home loans are for business or personal purposes.

- We note also that independent research provided to us on a confidential basis indicated the approximately 35%-40% of the value of SMEs loans was supported by residential property. This research was based on a survey of customers as opposed to responses from banks. It is possible that the survey results under-state the extent to which residential property is used as collateral because survey respondents may view lending backed by the family home as, in effect, an equity injection by the owner to the business.

- One bank commented that lending over residential property is the most cost effective option for SMEs, as price was often determined without regard for the credit grading assigned. The margins in housing backed loans are regarded as being very fine. SMEs would pay a premium if lending were not in the form of a home mortgage.

- Debtors and stock are not favoured as security. If debtors and stock are used as security, they are heavily discounted typically by between 33% and 50%.

- The clear preference among the banks was not to lend on debentures[22]. This is because when it comes to executing a debenture, there are costs involved in realising value (e.g. collecting payments from debtors, selling stock etc), there are usually competing claims against the residual value of the entity and the value realised from company assets is lower than their book value.

- The value of loans made without any collateral backing is negligible for SMEs (around 0.2% of all SME loans), especially in comparison to business customers (3.5%). This is not surprising given the general requirement by many (but not all) of the banks for “two ways out” before approving a loan (i.e. repayment through cash flow and realisation of collateral). Statistics for the number of loans without collateral backing was not available.

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[22] A debenture is an obligation of a kind that is charged upon the assets of one party, so as to provide a priority as against ordinary unsecured creditors. Blanchard and Gedye (1994) “The Law of Company Receiverships in NZ and Australia”

- With respect to the very small proportion of SME loans that are unsecured, all of the banks indicated that a number of characteristics must be present:

  – Very strong cash flow
  – Trading history
  – History and good relationship with bank
  – Strong managerial capacity
  – Quality financial information
  – Strong financial position
  – Guaranteed future sales/contracts or viability assessments
  – Personal guarantees and covenants required to be met.

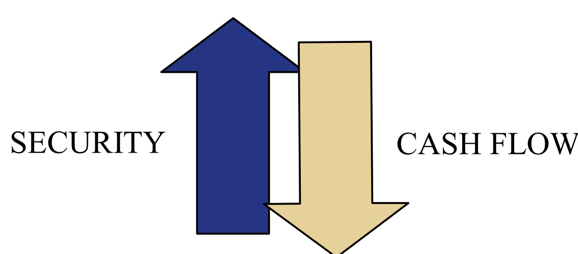
A security quality indicator is assigned to a borrower offering collateral, which is based on the value of the security in relation to the value of the loan. A higher indicator would be assigned for a loan of $100,000 where security offered was $200,000 than for a loan backed by only $50,000 security. The security indicator is influential in setting loan terms, including price.

Relationship between Security and Cash Flow

The banks all require adequate levels of cash flow and security to ensure that the risk of default and loss on default is minimised.

Interestingly, all but one of the banks classified themselves as cash flow lenders, as opposed to asset lenders. In reality, however, given that a very small proportion (less than 1%) of lending to SMEs is unsecured, cash flow lending is very much the exception rather than the rule.

To an extent, there is an element of trade-off between security and cash flow. While ideally all banks would prefer strength in both cash flow and asset backing, if an SME is particularly strong in one dimension, then it tends to lower the extent to which reliance is placed on the second.



For example, if a loan application was made that was to be secured against a house that was twice the value of the loan, then the emphasis on cash flow is lessened (although no bank will lend if there is poor cash flow).

Similarly, the banks have indicated that they will lend at lower levels of security if the cash flow is particularly strong.

Variations exist between the banks in relation to the definition, number and allocation of the grades, but all utilise comparable risk characteristics and all place heavy reliance on having the two sources of repayment.

Pricing

Banks base their pricing primarily on risk grade, adjusted by the level and quality of security held in respect of the facility. The risk grades used by the banks are correlated to statistical data held by the banks, which is used to estimate the probability of default and likely loss on default. Due to relationship and/or competitive reasons, however, it is quite feasible that two entities in the same risk grade with equivalent facilities and security may pay different interest rates. Equally, two entities with different risk grades may pay the same rate of interest.

The banks were invited to provide information regarding interest rates and margins[23] with respect to business and SME loans generally and with respect to loan type and nature of security. Four of the seven banks provided some information in relation to these questions but, for a range of reasons, the information is rather limited in scope. Accordingly, the comments below need to be treated with considerable caution and are indicative only:

- As noted earlier, a large proportion of SME loans are backed by property (often residential). Home mortgages are an important source of financing for SMEs and the interest rates for these are a very cost-efficient form of financing. Currently, a typical margin for a standard home loan product is in the range of 1.3% - 1.5%. A range of 1.0%-2.0% for a large customer with collateral would be typical.

- Short-term loans and overdrafts for SMEs who have collateral will attract higher margins than this. The range varies from around 2.0% up to around 3.5%.

- Margins for SMEs with no or little collateral can range up to 7.0%. A large commercial customer without collateral might be charged a margin of roughly half this amount (i.e. 3.0%-4.0%) but it will depend very much on the specifics of the customer.

- These margins compare with an average margin across all businesses (including SMEs) in New Zealand of roughly 2.5%.

In discussions with the banks, the comment was made that the margins on SME loans have tended to remain constant, or declined slightly, over recent years.

Each bank has different methodologies for pricing, consistent with their business strategies. For confidentiality reasons, we are not able to disclose the differences and we have not been provided with details of pricing methodology.

A number of general observations can, however, be made. Prices are generally combinations of fees and margins. Fees are charged to cover the costs incurred by the bank for establishing and servicing the loan. Margins are charged to provide a return commensurate to the risk inherent in the loan and reflecting the cost of capital faced by banks.

[23] "Margins" in the context of this report are in relation to bank cost of funds (i.e. as applicable, usually the 90-day bank bill rate or the inter-bank swap rate).

The proportion of fixed interest term loans (by value) taken on by SME customers is very similar to the proportion for all business customers.

	SME Customers	All Business Customers
Fixed Interest Rates	50%	52%
Variable Interest Rates	50%	48%

A number of banks use a matrix (setting out risk and security, as well as customer need/product type) to ascertain an appropriate base price, and then adjustments are made to reflect the relative risk of the SME. This may increase or decrease the base pricing. Relationship managers or credit managers have discretion to change prices as necessary.

In respect of micro SMEs, it is more likely that a uniform rate of interest will be charged (with no, or little, variation in interest rate between micro-business customers).

There was a view from most, but not all, banks that the risk/reward relationship in respect of SMEs is attractive for the banks at present:

- The banks reported that the profitability of the SME sector is perceived to be higher than personal banking.
- Some of the banks regarded SME lending as their most profitable sector.
- An interesting comment was that the SME market has a higher risk of default, but a lower loss on default, and should be priced accordingly.

While risk grading is a primary driver of pricing, there are generally four other considerations in relation to the pricing of loans to SMEs:

- competitive pressures;
- target return on equity;
- future potential; and
- level of cross-subsidisation.

So long as the risk grade is above the cut off point, one or more of the other considerations may take precedence in determining price.

- Competitive pressures are a key influence on margins, and some banks feel that this is eroding the risk-return relationship (notwithstanding comments made regarding the profitability of lending to the SME sector). The banks consider that the industry is highly competitive and that they tend to be unwilling to lose a customer primarily due to price.

- Target return on equity is a high level consideration in setting price, but other factors are more important on a case-by-case basis. Target margins ensure the desired level of profitability is achieved. However, banks tend to match rates or negotiate pricing to win new business, or more importantly to attempt to retain business under threat from a competitor.

- Future potential earnings are a consideration when banks price facilities. For a SME with good growth prospects, a bank may provide loans at discounted rates or margins, in order to secure what potentially could be a long-term profitable customer. This is beneficial for both the SME and the bank – the SME can access the funds at very competitive rates to enable its growth, and the bank secures a profitable client.

- Level of cross subsidisation is taken into account. This encompasses the fees received from the customer from other accounts held within the bank. Certain banks have more sophisticated pricing models that are based on the overall relationship profitability, rather than individual product profitability.

Monitoring and Relationship Management

Once the decision has been made to approve a loan, the bank will maintain an ongoing relationship with the customer.

Monitoring

The level of ongoing monitoring depends on a number of factors:

- Account conduct, such as overdraft usage, cash inflows and outflows, number of transactions. In the event of unusual conduct, a bank may monitor an account more closely.

- Risk level, in reference to the SME itself, industry and economy in general. The higher the risk assessments, the higher the level of monitoring.

- Borrower preferences for contact with the bank/relationship manager – some borrowers prefer a lot of contact, whereas others desire as little as possible.

- Borrower needs for further facilities and/or facility restructuring, which would impact on the level of monitoring required by banks.

If the account does not exhibit any adverse trends or exceptions, then it will generally be subject to an annual review. The annual review focuses on:

- movements in balance sheet items;
- cash flow;
- analysis of financials (preferably audited); and
- discussions with the borrower.

Many of the banks utilise an automated behavioural system that can identify when account conduct changes for the worse. This is useful in providing early warning of impending cash flow or profitability problems. According to the banks with such systems, a relationship manager can tell up to three months ahead if an account may be having issues. Where such systems are in place, many accounts will only be reviewed when exceptions occur.

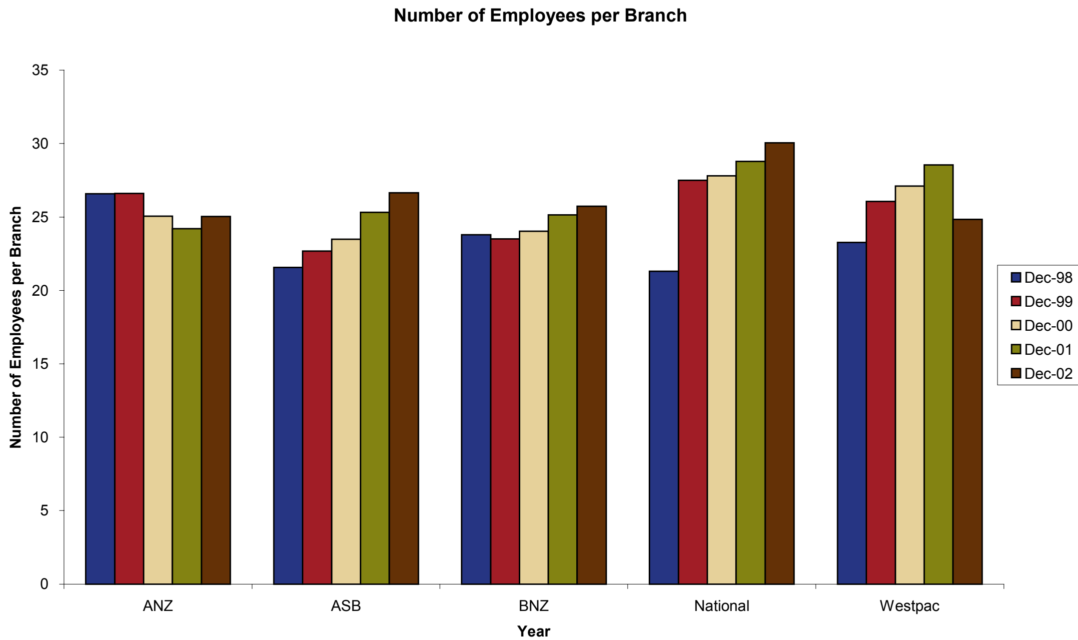
If an account gets into considerable difficulty, then procedures will be followed along the lines outlined in the risk grading section earlier in this report. Monitoring may then occur as frequently as once a month.

When a customer is downgraded below a certain level as a result of the bank becoming concerned with the adverse trends affecting the customer, the account may be transferred to a credit or asset management team. This team works with the customer to determine a strategy for rehabilitation, or if rehabilitation is not considered possible, then an exit strategy is formulated by the bank and normally executed with minimum delay.

Relationship Management

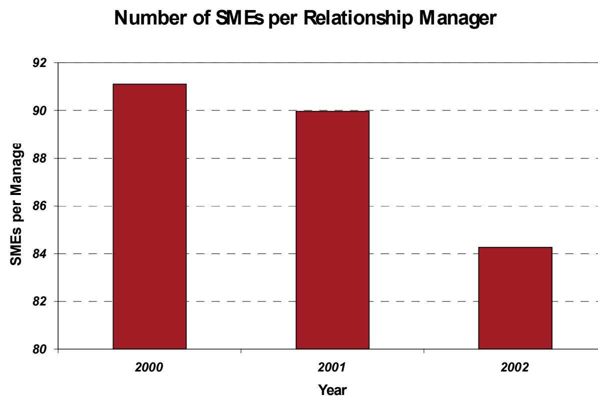
There is some evidence that banks are beginning to bring back more of a relationship approach to the SME market, and to place more resources at the customer interface level:

- There is a trend toward increasing the number of employees per branch.
- The number of branches has remained fairly constant over the past four years in contrast with earlier and significant branch closures.



Source: KPMG Financial Institutions Surveys, 1998 – 2003

The number of customers per relationship manager ranges from 25 (for the largest of the medium sized businesses) to 300 (for small/micro businesses). On average, relationship managers are responsible for approximately 84 SMEs. This figure has fallen over the past three years as shown below.



Source: PricewaterhouseCoopers

The trend toward more intensive relationship management applies less in the case of micro and small enterprises. For very small or micro enterprises, which do not require regular contact with a bank manager or specialist skills, business is often conducted through call centres or support centres. Telephone, internet, email and post are the “new” interface for customers in more isolated areas, where there may not be a branch. Farmers, for instance, are increasingly adapting to doing their banking on the internet.

Most banks provide specialist services and/or locate specialist expertise in specific areas within the bank. These individuals would have a greater understanding of the risks and technical aspects of particular industries/markets and services. Specialist areas include international trade, insurance, payment services, investments, property finance, as well as specific industry sub-sectors.

A number of banks reported that if a business was overly complex, regardless of size, then it might be transferred to a division where a more comprehensive service could be provided.

4 Efficiency of Bank Lending to SMEs

A well functioning financial system is a key enabler of economic growth. SMEs are an important part of New Zealand's economic growth and bank lending is the primary source of external finance for SMEs[24]. Therefore, it is important that the banking sector responds efficiently and effectively to the needs of SMEs.

Popular opinion is not always complimentary in this regard. Branch closures, loss of regular contact with branch managers and other bank personnel, perceptions of high interest rates and fee charges[25] and inability to obtain finance[26] are from time to time raised as "evidence" that SMEs (and other customer groups) are not always well served by banks. A report prepared for the Ministry indicated that 23% of small firms considered access to finance (not just bank lending) a barrier to business development.[27]

Competition can usually be expected to deal with over-pricing and/or poor quality of service. New Zealand's banking market is generally perceived as being competitive reflecting the number of registered banks and the competition provided for certain products (especially mortgages) by other forms of providers (finance companies, savings institutions, insurance companies and so on).

The banking sector is, however, different in some respects from the markets for other goods and services. A range of factors, discussed below, could create potential sources of market failure even if there is strong competition between banks. Market failure, for the purposes of this study has been interpreted in a general sense to mean any situation where banks do not supply facilities to SMEs on competitive terms and conditions (including interest rates which reflect underlying risk). In more formal terms, use of the term market failure has been used primarily in the context of allocative efficiency.

Potential Sources of Market Failure

There are a number of features of lending generally which potentially could affect the efficiency of the market for lending even if the market is competitive. The relatively small size of SMEs means that, in theory, these features may have a disproportionately greater effect on the market for lending to SMEs.

[24] Based on data reported by the Ministry of Economic Development, 29% of small firms said that up to 50% of funding for innovation or business expansion purposes was sourced from banks and 21% indicated that banks provided more than 50% of funding. The comparable figures for savings and retained earnings were 27% and 18% and the figures for raising new equity were 19% and 10%. Ministry of Economic Development (2002) op. cit., p148.

[25] "Westpac cash fees hit small businesses" Dominion Post 19 May 2003 page C2

[26] "Banks accused of cramping style of small firms" New Zealand Herald 2 August 2002

[27] Knuckey, S., et al. (2002) "Firm Foundations: A Study of New Zealand Business Practices and Performance" Ministry of Economic Development p148.

Information Asymmetry

Information asymmetry refers to a situation where business owners or managers know more about the prospects for, and risks facing, their business, than do lenders. Where information asymmetries exists, theory predicts that lenders may respond by increasing lending margins to levels in excess of that which the inherent risks would require. Theory also suggests that banks may also curtail the extent of lending - credit rationing - even when the SME would have been willing to pay a fair risk-adjusted cost of capital. The implication of raising interest rates and/or curtailing lending is that firms will not be able to finance as many projects as otherwise would have been the case. In short, investment will be below the level that would have occurred had there not been information asymmetry.

In short, the more information that banks obtain about borrowers, the less they have to improve borrower incentives by setting loan contract terms (including, in particular, interest rates and collateral requirements).[28] Investing in information is, however, costly. Investments in gathering and analysing information will only be made up to the point where benefits just offset the costs involved.

If the relatively small size of SMEs means that it is uneconomic for banks to invest time and resources in developing an in-depth understanding of each enterprise, then banks may lack the information to accurately gauge the level of risk involved in lending to SMEs. Information asymmetry may, therefore, be more acute in the case of SMEs.

Granularity

Where the risk grading system does not evidence enough ability to discriminate between good and bad risks (i.e. it lacks granularity), an outcome can be that the relationship between risk grade and pricing loses its predictive capability resulting in the bank experiencing losses outside the predicted parameters. The consequence of this can be a tightening in credit terms, or an increase in prices, or both.

From the borrower's perspective, this leads to an outcome where the bank is over-pricing good risks and under-pricing bad risks. In turn, this causes the bank to end up with a greater proportion of poorer quality loans on its books as better quality borrowers seek alternatives elsewhere. This outcome is referred to as the adverse selection problem.

Pecking Order

From a borrower's perspective, and following on from the last point, if faced with a cost of lending that is above the true risk-adjusted cost, the borrower will have incentives to seek out alternative sources of funding. There is considerable evidence in the literature that businesses in this situation will prefer to utilise retained earnings ahead of raising loans from banks[29]. This is referred to as the pecking order hypothesis.

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[28] Lehmann, E., and D. Neuberger (1999) "Do Lending Relationships Matter? Evidence From Bank Survey Data in Germany" p6.

[29] There may be other factors influencing the choice of retained earnings over external sources of finance including preferences to avoid diluting ownership interests and/or ceding control to third parties.

Moral Hazard

Once loans are made to businesses, the owners of the business may have incentives to take higher risks than they otherwise would. This is because the owner of the firm benefits fully from any additional returns but does not suffer disproportionately if the firm is liquidated. This is referred to as the moral hazard problem. The problem is analogous to people taking greater risk once they have taken out an insurance policy. The moral hazard problem can be viewed as creating a situation of over-investment.

From a theoretical standpoint, the extent to which moral hazard gives rise to over-investment is not clearly established. For example, incentives for over-investment might be influenced by the legal form of the entity. Where the entity is a proprietorship or partnership and the liability of the owner(s) is unlimited, it can be argued that the owner(s) may be less prone to moral hazard because the owner(s) may suffer loss in event of liquidation.

It can also be argued that when banks lend to a firm, their monitoring of the firm helps to impose discipline in the firm and, in so doing, reduces the tendency within the firm to over-invest.

Other Considerations

The relative size of SMEs may affect the market for lending to them in other ways as well:

- Small enterprises may have little or no collateral to offer as security against a loan.

- Small enterprises may find it harder to switch banks. Any enterprise will apply a benefit cost test to determine whether it is worthwhile switching banks. One cost that would be considered is the fixed costs involved in switching. The smaller the business, the more significant these fixed costs are likely to be, and therefore it may be less likely that the benefits of switching outweigh the costs involved.

- The costs which banks face in overcoming the information asymmetry problem may be more of an obstacle to efficient lending when the value of the loans is relatively low. In short, no bank will devote the time and energy to a $30,000 loan that it will to a $30 million loan.

Is There a Problem In Practice?

For a number of reasons, there are no obvious signs of inefficiency in the market for lending to SMEs. This conclusion rests on a number of considerations, (a discussion on each follows), including:

- The supply of loans.

- The level of interest rates.

- The level of bad debts.

- The policies and procedures that the banks have put in place to deal with the information asymmetry and related issues.

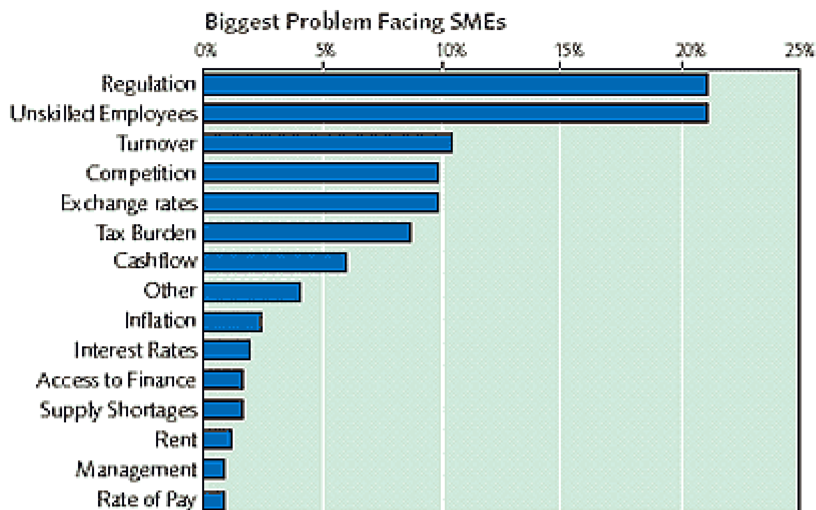
Supply of Loans

In general, the banks have indicated that they are willing lenders to the SME sector because they perceive it as being profitable. Opinions varied between the banks, however, in terms of the extent to which they believe rewards adequately offset the risks involved and the profitability of the SME sector relative to other sectors.

We asked the banks about their growth in lending as one way of gaining insights to the availability of finance. Only three of the banks responded, of which two reported growth rates in line with the growth in nominal GDP and Gross Fixed Capital Formation over comparable periods. The other bank reported no growth, although this reflects the particular circumstances of that bank.

While it has not been within the study's terms of reference to assess access to lending from an SME perspective, two surveys suggest that this is not a major issue for SMEs.

In one of these, the National Bank Small Business survey, less than 2.5% of respondents believed access to finance was the biggest problem faced by SMEs. Access to finance was rated 11th of 15 problems faced by SMEs.



Source: Small Business Monitor, April 2003, National Bank of New Zealand

The other survey, undertaken for the Ministry, concluded that 4% of small firms in New Zealand consider that funding for borrowing is not available and 11% that loans were available only on "unacceptable" terms.[30]

[30] Knuckey, S., (2002) op cit. pp 148-9

The results from these surveys are not out of line with other evidence:

- Recent studies in the United Kingdom indicate that access to credit or finance was an issue for only 1%-3% of SMEs.[31]

- Australian surveys suggest that difficulties in obtaining credit have not been a primary concern since 1999.[32]

Bad Debts

We note that the level of bad debts associated with SME loans is very low. Of the four banks that provided data, the level of bad debts ranged from 0.2% to 0.4% of SME loan book value. This compares to a bad debt ratio of between (roughly) 0.1% and 0.3% across the main banks in relation to their overall loan book (i.e. all forms of lending)[33].

Very low rates of bad debts could be interpreted as evidence that banks are restricting the availability of lending (although theory would suggest that credit rationing results in only the highest risks obtaining finance). A more likely explanation, however, it that the low bad debt rates reflect the favourable economic conditions which New Zealand has experienced in recent times. It may also reflect increased monitoring by banks of their SME loans (which may result in early detection of adverse trends on an account).

The fact that bad debts for SME loans appear to be slightly higher than is the case across all loans is consistent with comments made by some of the banks that there is a higher risk of default in the SME sector.

Cost of Lending

Although the information provided relating to margins is relatively limited in scope, on the face of it there would not appear to be major issues in terms of the margins that SMEs have to pay for bank finance. Points to note in support of this conclusion include:

- The majority of SME loans are backed by residential property and standard home loan margins apply.

- Where SMEs are backed by other forms of collateral, the margins do not appear to be excessively above those for large businesses.

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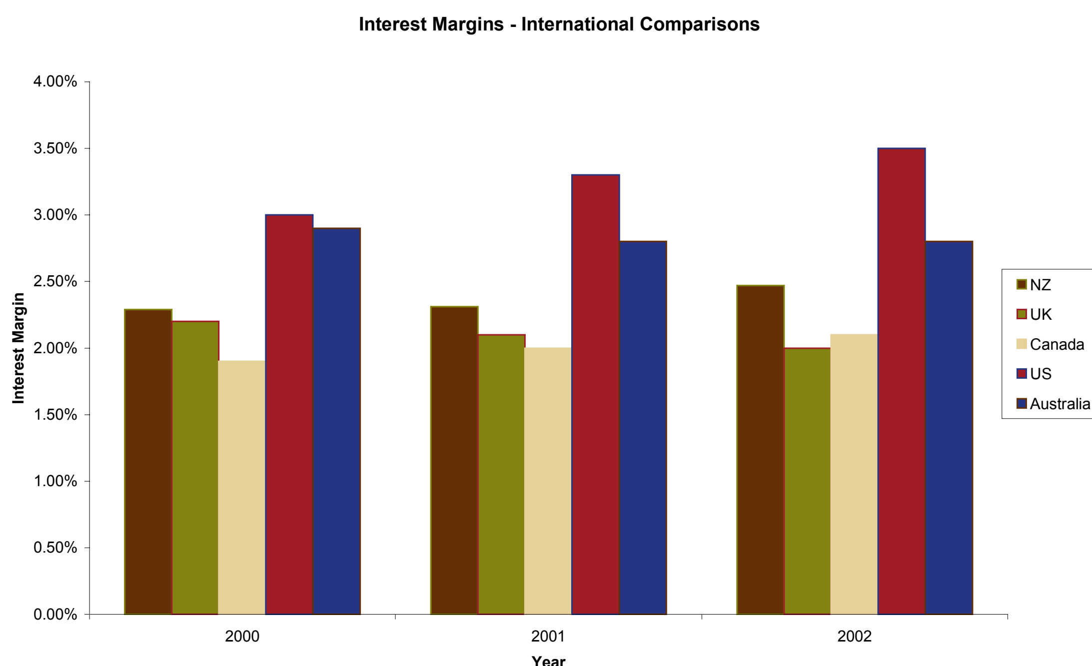
[31] Bank of England (2003) "Finance for Small Firms – A Tenth Report" p15
[32] Reserve Bank of Australia (2002) "Recent Developments in Small Business Finance" Reserve Bank of Australia Bulletin February 2002 p57.
[33] Estimated based on data contained in KPMG (2003) op. cit.

- Margins for SME loans compare favourably with those in Australia as summarised below.

Banks' Indicator Lending Rates for Small Businesses in Australia (February 2002)	
Residential secured:	%
• Overdraft	2.55
• Term loan	2.00
Other security:	
• Overdraft	3.25
• Term loan	2.60

Source: Reserve Bank of Australia (2002) "Recent Developments in Small Business Finance" RBA Bulletin

- Internationally, margins in New Zealand for bank lending to businesses (small and large) compare favourably with other developed countries.



Source: KPMG Financial Institutions Surveys, 1998 – 2003

Polices and Processes for Managing Information Asymmetry and Moral Hazard

Further reasons for concluding that the efficiency of the market is not, in general, adversely impacted by information asymmetry and related issues stem from the policies and processes which the banks have in place for dealing with these issues.

The most obvious of these is the role of risk grading as discussed above. Other steps taken by the banks also assist in addressing information asymmetry and moral hazard issues.

Collateral

Banks look for two sources of repayment as noted earlier. The fact that almost all SME loans are backed by some form of collateral (usually in the form of property) in our view is the single most important factor beyond risk grading that the banks rely upon to deal with information asymmetry and agency costs.

The existence of collateral means that banks do not have to rely as much as they otherwise would on detailed investigation and analysis of the borrower's business. At one level, collateral can be viewed as a relatively efficient form of insurance for banks. But at a more fundamental level, collateral serves as an important incentive acting upon borrowers to avoid defaulting on loans and as a means by which borrowers can signal their creditworthiness to lenders.

In situations where the owner of a SME is willing to offer the family home as security against the loan, it is reasonable to argue that the incentives on the owner to avoid default will be relatively strong. Collateral assists with agency issues in this regard.

Collateral also provides a useful signalling device. A borrower's willingness to accept a collateralised loan contract offering lower interest (relative to unsecured loans) will be inversely related to its default risk.[34]

The importance of collateral does, however, depend on other factors. As a generalisation, collateral is more important when one or more of the following conditions apply:

- The business is small. Larger firms generally have other attributes that diminish the need for collateral such as strong cash flow, credit rating etc.
- The enterprise has only been in business a short time (or is a start-up business). In this situation, the banks have less track record to call upon to inform their lending decision.
- The borrower does not have an established relationship with the bank. Reputation and character are important variables in the lending decision.

While collateral is a key tool for dealing with the implications of information asymmetry and moral hazard, it is possible that the incentives it creates are something of a "double-edged sword". The emphasis on collateral, particularly where this involves residential property, could be argued to create an environment that discourages risk taking.

As noted earlier, the incentives to avoid the risk of default are likely to be stronger where the family home is used to obtain business finance. To the extent that taking risks is an important part of business and, moreover, growing businesses, factors that impede risk taking might not always be a good thing.

[34] Lehmann, E., and D. Neuberger (1999) op.cit.

This study has not interviewed or assessed small businesses and so it is not possible to conclude whether this is an issue in practice.

Relationships

The length of relationship between the bank and its SME customers is also an important factor in reducing information asymmetry. Each time a loan contract is renewed, the renewal acts as an acknowledgement of the firm's ability to meet its debt obligation. An established relationship helps to create economies of scale in information production.[35]

We asked the banks for an estimate of the average length of their relationship with SMEs. While there were only 2 responses to these, both were significant; in one case an average of 8.5 years and in the other, an average of 11 years.

Relationships of this duration allow the banks to build up a good picture of the firm, the industry within which it operates and the calibre of the people running the business. The closer the relationship, the better the signals banks receive concerning managerial attributes and business prospects.

In this context, we note the trends discussed in the context of monitoring and relationship management and, in particular, the indicators that point toward renewed focus on relationship management.

Quality of Information

Accurate risk assessments obviously rely upon good information regarding the SME and its prospects. We noted earlier that the quality of information provided to banks varies markedly. It is worth noting, however, that the banks are making efforts to encourage SMEs to improve the quality of information provided (but we do not have data to ascertain the degree of success in this regard).

The banks do not see it as their role to directly provide business advisory services to SME clients. However, a number of banks commented to us that they will readily suggest that their client obtain professional advice and, in some cases, will point the client to specific advisers.

Customer Considerations

The efficiency with which markets operate depends, in part, on the extent to which customers can influence the price and other terms of trade. In this regard, a significant incentive for efficiency comes from the threat of losing customers to competitors.

The SME market is somewhat different to the corporate market in that corporate customers generally have a wide range of financing options to choose from and are not as dependent on bank financing as is the case for SMEs.

The extent to which SMEs can easily switch to another bank is another factor that can influence the level of competitive pressure on banks. Evidence suggests, however, that switching between

[35] Ibid. p8.

banks by customers is not a widespread phenomenon. One study[36] estimates that less than 5% of business customers switch banks annually although the point is made that once the customer has switched banks, they are unlikely to return.

During the course of interviews with the banks, the point was made that customer migration is a more prevalent form of customer response. That is, customers will tend to seek out facilities from a competing bank without necessarily terminating the relationship with their existing bank.

This is an area that could be worth further investigation as the extent to which customers are "locked" into an existing bank relationship could give rise to a "dual" market in which loan terms and conditions are less favourable for existing customers relative to new customers.

Regulatory Issues

In addition to considering issues surrounding information asymmetry and related issues, consideration has also been given to the regulatory environment for banks and the implications this has for the efficiency of lending to SMEs.

In brief, the view of banks is that the regulatory environment they have to operate under is not imposing any undue impediment to lending to SMEs. All banks noted, however, that their SME clients face a wide range of compliance costs under various Acts and regulations (e.g. RMA, GST, ACC).

Reserve Bank of New Zealand Act 1989

Banks are subject to the regulations under, and the requirements of, the Reserve Bank of New Zealand Act 1989. The Act is a key part of the regulatory environment for banks. None of the banks regard the Act, or regulations, as being impediments to their lending to the SME sector. Accordingly, we have not focused any further on this legislation.

Personal Property Securities Act 1999

The Act provides for the:

- creation and enforceability of security interests in personal property;
- determination of priority between security interests in the same personal property;
- determination of priority between security interests and other types of interests in the same personal property;
- enforcement of security interests in personal property other than consumer goods; and
- establishment of a register of security interests in personal property.

[36] KPMG (2003) op cit p27.

Potentially, this Act could have implications on banks' in respect of the security or collateral they are willing to accept. Incorporated within the Personal Property Securities Act is the concept of a Purchased Money Security Interest (PMSI).

A holder of a registered PMSI (a seller of goods or a lender if the loan proceeds are used to purchase specific collateral from a third party) is granted priority over the bank for claims on the security covered by the PMSI, assuming certain conditions are met. The priority exists not only over the specified collateral, but if the collateral is used to create a good or on-sold, then the finished product or proceeds from sale can be attributed to the PMSI holder, assuming the original collateral can be traced through. Consequently, the presence of registered PMSIs can affect the banks' priority over stock and debtors.

Discussions with the banks suggested that in general the Act has not adversely impacted upon the way banks do business. Many of the banks already heavily discount stock and debtors anyway (often up to 50%) and special purpose assets, when assessing the value of such security. Only one of the banks noted a "slight" reduction in credit availability to SMEs due to the risk of not being able to realise security in the event of liquidation.

The Act was seen by some banks to be beneficial as it enhances the transparency of outstanding claims on borrowers' assets (and so reduces information asymmetry). With the requirement to register, banks have the ability to (and do) monitor claims made on the security.

Basel II

Under the 1988 Basel Accord, capital requirements for credit risk were based on broad classes of asset with no differentiation for the risk of the asset in question. The new Accord (Basel II) aims to align regulatory capital more closely with risk with the implication that lending to lower risk borrowers will attract lower capital requirements.

Basel II sets out two different methods for measuring credit risk. A standardised approach, which has only limited sensitivity to risk and which, broadly speaking, reflects the current (Basel I) approach. The other approach – internal rating based approach or IRB – is more sophisticated and involves banks calculating capital requirements according to their internal assessment of the risk on each loan.[37]

Those banks that adopt the IRB approach will be required to maintain detailed statistics on a far more detailed basis than is required under current capital adequacy regulations. The banks' performance in credit risk management in terms of processes, data and statistics collected, as well as actual experience, will drive the minimum capital requirements for each bank.

[37] Relevant credit risk factors include the probability of default, exposure at default, loss given default and maturity associated with each loan.

Implications

In general, those banks that have sophisticated risk measurement techniques will have lower minimum capital requirements. Potentially, therefore, there may be scope for increasing the supply of lending to SMEs and/or reduction in margins (as banks more closely align interest rates with economic cost). Those banks which successfully employ the IRB approach should, in theory, be better placed to avoid over-pricing good risks and under-pricing bad risks. It follows that there may, therefore, be some migration of higher risk SME loans to those banks which do not adopt the IRB approach and which, by implication, rely on less sophisticated and more standardised measures of risk.

The extent to which the introduction of Basel II has an impact in lending to SMEs remains to be seen. The issue was not discussed at any length by the banks during the course of interviews and the impression gained was that the potential impact is perceived by the banks as being small.

One possible explanation for this is that the Reserve Bank has signalled that for regulatory purposes, banks will be required to report and hold capital as if using the standardised approach under Basel II (which is broadly comparable with existing regulatory requirements). Thus, from a regulatory perspective little change in mandatory capital requirements is anticipated. In this regard, Basel II is not seen as being an impediment to lending.

A further explanation may be that it is simply too early to know what the impact of Basel II may be. Work is continuing on establishing the relationship between the probability of default and the amount of capital that a bank must hold under the IRB approach. The latest Basel II proposals are being tested involving banks from a large number of countries. The results of these tests are being incorporated into a further round of consultation. Finalisation of the new Basel Accord is still some months away.

A third possible explanation is that the major banks consider that they are pricing SME loans according to the true risk of exposure anyway. Therefore, any enhanced sensitivity of regulatory capital requirements to risk may be doing nothing more than aligning the regulatory environment with current practice.

In summary, the introduction of Basel II is not being perceived by the banks as an impediment to lending to SMEs (or other customer groups) and, indeed, may be being perceived as ratifying current practice. In any event, Basel II should be viewed as a positive development from SMEs' perspective since it promotes the alignment of interest rates with true economic cost.

Consumer Credit Review

There is the prospect of replacing the Credit Contracts Act and the Hire Purchase Act with new legislation the aim of which is to ensure that financiers and consumers are treated fairly, and that the law is reflective of modern credit practices.

As currently drafted, the new legislation is not applicable to business borrowers.

As a generalisation, many small business proprietors would be considered to be unsophisticated borrowers, and would be likely to require as much protection as consumers. We understand that the Ministry of Economic Development has been tasked to look at whether specific legislation is required for this sector.

Only one bank mentioned the changes during our interviews. Possibly this might reflect an expectation by the banks that there will not be legislation specific to SMEs.

Start-Up SMEs and SMEs Based Around Intellectual Property

While the foregoing suggests that the potential for "market failure" is not a major issue in the context of SME lending, it is clear from discussions with the banks that not all SMEs have good access to bank lending. In particular, the banks have indicated that they either do not, or are unwilling to, lend to start-up SMEs and SMEs where the only asset or collateral is intellectual property (IP).

Start-ups

Banks will lend to start-ups only if there is guaranteed or likely cash flow *and* sufficient collateral (such as a residential property) backing the loan. Their reluctance to lend reflects the following:

- The banks do not regard it as their role to fund start up ventures. In large part, the basis for this view stems from concerns about risk and, in turn, the responsibilities of banks toward their shareholders, providers of debt capital and regulators.

- There is a perception by the banks that a high proportion of small businesses fail within a few years of starting operations. Several banks commented to us that they do not perceive the SME sector as being unduly risky. Such views would be consistent with policies that focus lending to SMEs on those businesses that have already established themselves.

- It is often difficult for start-ups to satisfy bank requirements in terms of demonstrating experience in industry, meeting minimum equity levels, and having in place contracts for sales to support business plans.

- Personnel with specialist skill sets are sometimes necessary to understand the risks inherent with particular start up ventures. The banks do not necessarily have such staff.

There are some forms of start-up that will attract bank lending. Start-ups that are franchisees may be more readily financed by banks depending on the level of support given to the franchisee by the franchiser. Comments were made by a number of banks that there is a strong appetite for lending to franchises.

IP SMEs

Apart from the lack of collateral issue, banks are also unwilling to lend to IP-based enterprises because they traditionally do not have employees with the necessary skill sets to assess the likelihood of success or failure of highly specialised new ventures. Such ventures are often based on the perceived value of intellectual property and market potential in new products, and require specialist skills and a deep understanding of industry specifics to form a sound view of the venture's prospects. Further, IP businesses often are characterised as selling products that have little or no track record, are largely untested in markets and are usually subject to high obsolescence rates.

Consequently, there is a distinct reluctance by banks to lend to ventures that are exposed to risks not understood by the banks employees, or that undertake operations that are exceptionally risky. Five of the seven banks observed that it is "not the banks role" to finance start-ups or the IP market.

Pecking Order Considerations

Theory suggests that where information asymmetry and moral hazard are prevalent, firms are likely to fund themselves firstly from retained earnings and then from bank debt rather than issuing equity. Based on the information provided by the banks, this would seem to be borne out in practice.

IP and start-up SMEs present a slightly different problem in that often there are little or no retained earnings available for finance. As discussed above, bank lending is unlikely to be forthcoming for these types of firm. The pecking order hypothesis suggests that bank lending may not in fact be the right sort of product for these types of firms where the problems, from a bank perspective, of information asymmetry and moral hazard are particularly acute.

There is theoretical and empirical support[38] for the idea that equity is the preferred form of funding for IP-based businesses, particularly those that are in start-up phase. The underlying logic for this is that certain categories of equity investors – venture capitalists – may in fact have better information than either the business or bank about the prospects for the firm. This might be because the venture capitalist knows more about the market that the firm is trying to enter than does the firm itself. Particular forms of equity such as preferred and/or convertible stock might on theoretical grounds at least be a much better form of finance for IP/start-up SMEs than is bank lending.

It has not been within the scope of this study to investigate the supply of venture capital in the New Zealand market and we note that considerable work has already been undertaken in this regard.

[38] Bank of England (2001) "Financing of Technology-Based Small Firms" (refer especially to the Annex).

Summary

Several theoretical considerations raise the possibility that the market for bank lending may have a degree of inefficiency even though the banking market in New Zealand is generally regarded as being competitive. Key among the issues is information asymmetry.

The small size of SMEs means that the information asymmetry problem may be more acute for this segment of the market.

In practice, the banks deploy a range of policies and processes for dealing with information asymmetry and related issues. In the SME market, the use of collateral is a particularly important feature in this regard. This feature, coupled with observations regarding the supply of loans and margins charged suggest that the market for SME loans is working efficiently.

Further, the regulatory environment for banks is not perceived by the banks as having major adverse implications for the efficiency of bank lending to SMEs. The impending implementation of Basel II, to the extent that this will impact upon the SME market, is likely to have beneficial effects as a result of further aligning interest rates with true economic cost.

Notwithstanding these general conclusions, it is clear that there are some specific segments of the SME market where banks are reluctant to provide loans. Specifically, start-up SMEs that lack collateral and SMEs that are based around intellectual property present interesting challenges that make bank lending a relatively inefficient source of finance. Both theory and practice would appear to suggest that other forms of finance are to be preferred ahead of bank lending. It is important to emphasise, however, that this is not due to inefficiency on the market for bank lending.

It has been beyond the scope of this study to investigate the supply of other forms of finance (including, for example, venture capital) to SMEs, but this is an area that the Ministry may wish to consider further.

5 Opportunities for Further Enhancing Market Efficiency

The efficiency with which banks collect and process information lies at the heart of their role as financial intermediaries. Accordingly, discussions with the banks have included a focus on options for improving the level and quality of information available to the banks in the context of lending to SMEs.

In addition, some comments are made regarding process improvements that are being implemented by the banks. Finally, we briefly consider several other initiatives that the banks have suggested could be considered with the objective of improving SME access to capital.

Information

Two issues in relation to information sharing have arisen during the course of this study. The first is that there is minimal sharing of information between the banks. The second is that there is little data published in relation to SME lending.

Information Sharing

Several of the banks noted during the interviews that attempts have been made in the past to centrally collate and disseminate information which the banks hold in relation to lending to their SME customers. The point was also made, however, that in general, one or more banks have usually pulled out of such initiatives. Because this undermines the usefulness of the information, initiatives to share information have not been successfully implemented.

We are aware that ACNeilson prepare a Small Business Banking Monitor. We understand that several, but not all of, the banks covered by this survey subscribe to the Monitor. However, the Monitor draws on surveys of SMEs. Accordingly, it does not include all information that would be of interest to banks including, in particular, information that is useful for risk grading purposes.

We consider there are some parallels with the insurance industry in terms of the desirability of having pooled data. Within the insurance industry, pooling of claims data is relatively commonplace (e.g. in the health, accident, life and fire/general sectors). Data is pooled either by insurance companies, or industry associations or commercial third parties for re-sale to insurers and others. The drivers for collection can be both commercial and regulatory in nature.

We note also the roles of the Australian Prudential Regulation Authority one of which is the collection and collation of statistics across a wide range of financial institutions including banks as part of the organisation's prudential supervision role.

Each of the banks indicated that they would be willing to provide information on lending to the SME sector to a central repository for aggregation and distribution provided that commercially sensitive information was protected. However, none of the banks offered views as to how information sharing might be achieved.

The impending implementation of Basel II provides an opportunity to progress this issue since it is focussing attention on the drivers of risk. The development of credit scoring is a further and complementary driver in this regard.

If pooling of data collection is to become a reality, however, there may be a need to develop some standards to govern the type of information collected. As noted earlier in the report, different banks apply different definitions to SMEs, collect different types of information in relation to SMEs and use different systems for the collection and management of data.

Common standards will potentially enhance the usefulness of pooled information. From the banks' perspective, there will be a benefit cost analysis to be undertaken to weigh the advantages of pooled data against the costs of collecting data. Given the difficulty we have had in gathering comparable information for the purposes of this study, there may be a considerable amount of work required by the banks to produce comparable data. The fact that the banks have unsuccessfully tried to collectively pool their information suggests that some form of incentive may be required in order to make progress.

Information Publication

There is limited data is published in New Zealand in relation to SME lending. The table below summarises information relating to SME lending which is published on a regular basis in Australia and England by each country's central bank.

Australia	England
• Growth in bank lending to SMEs • Composition of small business loans (fixed versus variable rate lending) • Indicator lending rates (by type of facility, term and security) • Bank fees • Loan fees (by size of loan)	• Value of bank lending to SMEs by type of facility • Sources of finance for SMEs • Average margins over base lending rates

In addition to the above, the British Bankers Association web-site provides comparisons of the range of facilities offered by a large number of banks to SMEs. The web-site provides details of bank fees but it does not extend to comparisons of interest rates.

Potentially, there is scope for the Reserve Bank and the New Zealand Bankers Association to consider publishing similar information to that described in the table above. As with the data sharing issue, however, there is a benefit cost issue to consider particularly in light of the current non-standardised nature of data currently held across the banks.

Publication of data relating to facilities on offer, margins, security requirements and so on would be of benefit not only to the banks themselves but also to customers. In general, the better informed are customers, the better placed they will be to make choices between competing service offerings.

Quality of Information

The banks have indicated that the quality of information received from SMEs in support of loan applications is highly variable.

We discussed with the banks their impressions of the extent to which SME clients sought external advice from government-sponsored and other advisers. The response indicates that use of professional advisers is mixed.

With respect to government-sponsored agencies such as “biz-info”, the banks indicated that their impression was that SMEs were generally aware of such agencies. However, some quite strong themes can through from the banks in terms of a perception that SMEs were not always sure how to access the services on offer and/or were somewhat confused by, or did not understand, the array of services on offer.

In the light of this, some banks suggested that one way of improving the efficiency of lending to SMEs would be to further increase government (central or local) support for government-sponsored advisory agencies and/or improve the “signposting” for such agencies so that customers have a better understanding of what is on offer.

The comments made suggest that there may be an underlying policy issue in terms of how best to strike an appropriate balance between providing a standard package of business support which is easier to publicise and access versus providing a service which caters to a range of specialist and local needs.

In light of the comments made by the bank, we conclude that there may be scope to undertake further work to identify whether there are issues in relation to the co-ordination of, and access to, government sponsored business support agencies.

Process Improvements

Application and Behavioural Scoring

As discussed in Appendix B, the banks are developing credit scoring techniques with a view to application to the SME market. The focus is on reducing manual processes that are both time consuming and expensive to operate.

This involves developments in terms of application scoring (i.e. the process of credit scoring that takes place at the time of loan application) and behavioural scoring which is a form of credit

scoring which looks principally at the behaviours of the customer as distinct from the financial factors used in determining accept/reject loan decisions.

Process Re-Engineering

We understand that the banks continually focus on initiatives to improve the efficiency of loan application processing and management. Consistent with developments in relation to scoring, the objective is to reduce the time and cost involved in approving, managing and reviewing SME loans while, at the same time, not compromising the level of quality of information necessary for decision making.

The banks are making increased use of technologies such as XBRL. This is an internationally agreed taxonomy of accounting terms, which is used to establish a standardised chart of accounts in electronic form. XBRL enables the banks to, for example, electronically extract from business customer financial accounts those financial details that are relevant and convert them into the normal format for bank analysis.

Further, the banks increasingly attempt to find cost effective ways of obtaining information from SME customers as part of normal day-to-day customer interactions with the banks.

The progressive take-up of internet, email and telephone banking has also improved the efficiency of services provided to customers.

Based on our knowledge of bank practices in New Zealand and offshore (particularly Australia), our judgement is that New Zealand banks are largely comparable with, or only slightly behind, their parent banks in terms of their development maturity and application of best-practice technologies. Australian banks are fairly well aligned with international best practice although there are some exceptions most notably in relation to credit scoring where the US market has a longer history of using this tool.

Brokers

Some of the banks noted that they obtain customers through brokers. While quantitative data was not available, in general the impression is that this channel accounts for a small proportion of total customers. The comment was made, however, that in the United States, brokers are becoming a larger source of referrals.

There are benefits and costs associated with the use of brokers. One potential advantage is that brokers can provide a screening process for the banks and, in this regard, can assist in dealing with information asymmetries.

However, using brokers introduces another layer of cost into the overall lending transaction. These costs have to be recovered from somewhere. To the extent that competition has already pushed margins to low levels, the use of brokers could imply an increase in lending costs.

It is likely that brokers may be better suited to some parts of the SME market than others. For example, brokers are used in the residential mortgage market. Given the prevalence of SME lending that is backed by residential properties, it is likely that brokers are, by implication, already a feature of a part of the SME lending market. Brokers are more likely to be cost effective where the lending product provided is highly standardised and competition is purely price-based. Equally, brokers are likely to be less cost effective where the nature of the product/service offered is more bespoke in nature. In this context, the banks have noted that the circumstances surrounding individual SME customers varies widely and there are dangers in attempting to "pigeon-hole" them into well-defined categories.

Other Initiatives

The banks suggested a number of other initiatives aimed at further improving SME access to capital. To varying extents, all of the options involve government intervention by way of tax incentive, grant or guarantee. The principal options raised were:

- Further development of venture capital funds with an implicit assumption that this would involve some form of financial backing from the Government
- Government guarantee or underwriting of SME loans
- Government provision of export guarantees.

As discussed in section 4 of this report, to the extent that there is any evidence that the banks are unwilling to provide finance to SMEs on competitive terms, the "market failure" this implies is limited to start-up SMEs and SMEs where the primary asset is intellectual property.

It is important to note, however, that even if there is a degree of market failure, it does not automatically follow that the Government should intervene since intervention of itself involves both costs and benefits. These have to be compared against the costs associated with the perceived market failure.

It is beyond the scope of this study to undertake an analysis of the various initiatives raised by the banks. However, a few comments can be made based on similar initiatives operating elsewhere. In particular, we have drawn on summary analysis provided by the Bank of England in relation to a range of schemes operating in the United Kingdom which, in theory, are targeted at start-up and IP-based SMEs.[39]

[39] Ibid., Chapter 8.

Specifically, in relation to venture capital, the Bank of England has commented on two schemes – Venture Capital Trusts (VCT) and the Enterprise Investment Scheme (EIS). Both schemes involved tax relief for investments and relief from capital gains tax (which obviously is of less relevance in New Zealand). The terms of the schemes have meant, however, that they are not well targeted at small businesses. As a result the VCT has failed to raise as much money as was targeted and only one-in-five investments have been in start-up SMEs. The EIS similarly is not well targeted at small companies.[40]

With respect to underwriting or guarantees for SME loans, three schemes operating in the UK have some relevance:

- The Small Firms Loan Guarantee Scheme (SFLGS). This involves provision of a government guarantee to lenders.

- The Small Firms Merit Award for Research and Technology (SMART). This involves providing grants to SMEs to assist them in accessing technology and research with the objective of developing innovative products and processes (in other words, to held SMEs get started)

- The Enterprise Fund. This Fund aims to assist SMEs in gaining access to finance through two channels. The first channel is an equity fund comprising private and public sector contributions and the second channel is through loan guarantees (in this respect, the Fund has absorbed the SFLGS).

None of the schemes appear to have met with overwhelming success in terms of improving access to capital. The SFLGS has had limited effect in stimulating finance for IP-based SMEs with less than 10% of the total number of loans being made to IP-based SMEs.[41] The implication appears to be that the overwhelming majority of loans are made to other forms of SME where the case for some form of Government assistance is, or might be, less strong. The Enterprise Fund has absorbed the SFLGS. We are not aware of any research undertaken to evaluate the effectiveness of the fund. This may reflect the relatively short time that the Fund has been operating (approximately 3 years).

The SMART scheme has had relatively better results compared to the SFLGS although the evidence remains somewhat mixed. One evaluation of the scheme concluded that that there was little evidence that the scheme had made much difference to the attitude of venture capitalist to investment in small high-tech firms. Another study, however, concluded that the injection of finance to fund innovation assisted the long-term prospects of the SMEs involved and established a degree of track record. This in turn has improved the chances of these SMEs obtaining bank finance.[42]

[40] Ibid., p69
[41] Ibid., p 66
[42] Ibid., p 67

Implications for New Zealand

The observations noted above do not necessarily give good guidance to the impact that such schemes might have in New Zealand. However, there are three conclusions that can be drawn.

Firstly, there needs to be clear problem definition. It is not a foregone conclusion that Government assistance will actually result in achieving the objective of improving access by start-up and IP-based SMEs to capital (bank finance or other). Second, the choice of instrument to address the problem needs to be carefully evaluated. The design of any scheme is likely to be critical in terms of its chances of success. Thirdly, there needs to be a clear basis for monitoring the effectiveness of any initiative that is implemented.

These conclusions suggest that much more work would need to be undertaken before being in a position to justify further government intervention to address perceived failure, if any, in the market for lending to SMEs.

Appendix A

Interview Questions and Quantitative Data

Bank Lending Practices to Small and Medium Sized Enterprises in New Zealand

Interview Questions

	General:
1	How does the bank define the SME sector?
2	Can you describe the organisational structure within the bank, in respect of both credit and lending, as it applies to the SME sector
3	Could you please confirm your specific role, and responsibilities
4	What sort of data and statistical information do you collate on the sector on a regular basis. Can you provide us with a selection of sample reports?
5	Can you give us an overview of the bank's philosophy on the provision of banking products and services to this sector
Credit Risk – Policy and Procedures:	
6	Can you provide us with a copy of your Lending Policies as they apply to SMES
7	How 'risky' do you think this sector is – can you talk about this generally?
8	Do you have detailed bad debt statistics on this sector, going back several years
9	Can you describe the credit approval processes for the main products and lending exposures in this sector?
10	Can you provide us with a copy of the delegated credit approval discretions in place within the bank for the SME sector
11	Do you risk grade exposures within this sector – can you provide us with the latest portfolio risk profile and if possible a series over several year ends
12	Does the bank utilise credit scoring techniques with any of its lending approvals to this sector.
13	Does the bank make any distinction in its lending policies to exposures in

	- rural vs urban sectors or other regions - size of entity - age of entity/borrower - ethnicity of borrower
14	Are there any SME sub-sectors which are considered by the bank to be higher risk, and where special lending criteria apply?
15	Does the bank have any portfolio exclusions, or limits which in any way restrict the granting of loans to this sector
16	What is the bank's policy on unsecured loans to this sector? Are all advances secured? What sort of security is taken?
17	What impact do PMSI's have on the bank's willingness to lend over stock?
18	How do banks deal with SMEs that are start-ups or have high levels of IP, and few fixed assets to use as security?
19	To what extent do you think the bank is a 'cash flow' lender, and if it does adopt that approach, what tools and techniques are utilised to assess ability to repay.
20	To what extent is 'home equity' a feature of lending to SMEs?
21	Can you describe the bank's credit management processes – i.e. annual review, account monitoring, excess/ default management, bad debts and provisioning, management of seriously defaulting accounts
22	How do you inform your customers of the success/failure to obtain loans? What reasons are given?
23	Are you aware of any differences in practices between New Zealand and other international jurisdictions?
The Front Line – Marketing the Banks Products and Services to the SME Sector:	
General:	
24	How does the bank define the SME sector
25	Can you describe the organisational structure within the bank, in respect of both credit and lending, as it applies to the SME sector

26	Could you please confirm your specific role, and responsibilities
27	What sort of marketing data and statistical information do you collate on the sector on a regular basis. Can you provide us with a selection of sample reports?
28	Can you give us an overview of the bank's philosophy on the provision of banking products and services to this sector?
Products and Services:	
29	Can you provide us with documentation that sets out the various products and services the bank provides to its customers in this sector?
30	Can you explain your marketing philosophy in terms of the SME sector? How important is this sector to you? How profitable is the sector? How risky is the sector?
31	Can you explain, in some detail, the pricing methodology that is applied to loans and advances to SME customers?
32	Do you utilise a standard 'NIACC" or Risk Adjusted Pricing Tool?
33	What sort of default parameters are utilised for advances to SME customers. Do these parameters depend also on the nature of the security held?
34	How competitive is the market? Can you provide any examples of transactions that you have bid for on a competitive basis, and lost?
35	Which sub-sectors within the SME sector are particularly attractive
36	Which sectors do you find the most difficult – for example obtaining of credit approvals?
37	What is your experience of the accuracy, substance, comprehensiveness and professionalism of the information supplied to you by SME clients, particularly at annual review time, and for new loan applications?
38	What information do the banks request? What information requests by the bank do SMEs find difficult to furnish?
Managing Clients:	
39	How do you structure the actual customer interface, and the management of the relationships – at all levels within this sector.

40	Are these relationships and responsibilities structured on size of advance, size of company or other criteria?
41	On average, how many clients would a typical relationship manage have responsibility for.
42	For those clients without a designated relationship manager, how does the bank manage that customer interaction? Discuss the extent to which those managers, or bank officers have sufficient time to develop a 'relationship', or at the smaller entity level.
43	How is this interface handled in the rural areas, as against the larger urban centres?
44	Are there any particular sectors where the bank might have a dedicated sales team
45	What new products have you brought to the market to target SMEs? If so, why? Are there any products/services you are anticipating bringing to market in the future?
46	What is the driving force behind moving focus to the SME sector?
Economic Efficiency:	
47	Are there any initiatives your bank has put in place to improve the efficiency of lending to SMEs
48	What opportunities do you see for improving bank lending to SMEs?
49	How is competition in the sector likely to affect the attractiveness of lending to SMEs?
50	What impediments or barriers do you perceive there to be to the financing of SMEs?
51	What future strategies do you have in relation to SMEs?
52	In an ideal world, what would you see happen to improve the efficiency of SME lending in NZ? Is there anything the banks could do in conjunction to improve efficiency? - Share information

	- Technological advancements
53	Are there any legislative regulations/policies that make lending to SMEs difficult?
54	What inefficiencies, such as information asymmetries, exist in SME lending
55	What, in your opinion, would constitute market failure in the area of bank lending to SMEs?
56	What could the government do to facilitate improvements in lending to the SME sector

CUSTOMER DATA

	YEARS				
	2002	**2001**	**2000**	**1999**	**1998**
1.1 Number of Customers by FTE:					
less than 5 employees					
between 6 and 9 employees					
between 10 and 19 employees					
between 20 and 49 employees					
larger than 49 employees					
1.2 Number of Customers by Revenue:					
less than $500,000					
between $500,001 and $1,500,000					
between $1,500,001 and $3,000,000					
between $3,000,001 and $8,000,000					
greater than $8,000,000					
1.3 Number of Customers by Industry:					
Agriculture, Forestry & Fishing					
Technology					
Retail Trade					
Manufacturer					
Mining					
Electricity, Gas & Water					
Construction					
Wholesale Trade					
Accommodation, Restaurants, Cafes					
Transport & Storage					
Communication Services					
Finance & Insurance					
Property & Business Services					
Government Administration					
Education					
Health & Community services					
Cultural & Recreational Services					
Personal & Other Services					
1.4 Your classification and count of business customers					
Small ______					
Medium ______					
Large ______					

LOAN PORTFOLIO

2.1 What % of your loan portfolio is with SMEs?

2.2 What is the maximum % of your loan portfolio that can be allocated to SMEs?

2.3 What is the average amount of finance per SME?

2.4 How many SME customers borrow amounts of:
Less than $25,000
Between $25,000 and $50,000
Between $50,000 and $100,000
Between $100,000 and $500,000
Greater than $500,000

2.5 What proportion of financing offered to SMEs is in:
Overdraft facility
Short term Loans (0 - 1 year)
Medium term Loans (1 year - 4 years)
Long term Loans (4 years +)
Other ____________
Other ____________

2.6 What proportion of financing offered to all business customers is in:
Overdraft facility
Short term Loans (0 - 1 year)
Medium term Loans (1 year - 4 years)
Long term Loans (4 years +)
Other ____________

2.7 What interest rate premium is charged, relative to established companies, for:
SMEs with no track record (ie start ups)
SMEs with no collateral
SMEs with a track record and collateral

2.8 Are interest rate premiums higher for any particular industry? If so, how much?
Industry 1: ____________
Industry 2: ____________
Industry 3: ____________
Industry 4: ____________

2.9 What proportion of SME lending is based on fixed term interest rates (by volume)?

2.10 What proportion of SME lending is based on variable term interest rates (by volume)?

2.11 What proportion of all business customer lending is based on fixed term interest rates?

2.12 What proportion of all business customer lending is based on variable term interest rates?

2.13 What proportion of SME lending is backed by collateral (by volume)?

2.14 What proportion of all business customer lending is backed by collateral?

OPERATIONAL ASPECTS

3.1 How many applications do you receive from SMEs per year - start up companys?

3.2 How many applications do you receive from SMEs per year - non start up companys?

3.3 How many applications do you accept from SMEs per year - start ups?

3.4 How many applications do you accept from SMEs per year - non start ups?

3.5 How many SME applications are rejected because of:

Credit scoring result
Lack of collateral
Inadequate business plans, cash flow forecasts
Lack of experience/management knowledge
Lack of contribution by entrepreneur
Other ______________________
Other ______________________
Other ______________________

3.6 How many SMEs that your bank financed defaulted on their financing?

3.7 How many business customers in total that your bank financed defaulted on their financing?

3.8 How many SMEs your bank financed went into receivership/liquidiation?

3.9 How many business customers in total that your bank financed went into receivership/liquidiation?

3.10 What was the level of bad debts ($000s) resulting from SMEs?

3.11 What proportion (%) of your total bad debt figure was from SMEs?

3.12 What is the average length of relationship with SMEs?

Appendix B

SME Definitions

The table below summarises the definitions given to SMEs across a range of countries.

	Employees	**Turnover (US$ millions)**	**Balance Sheet Capital (US$ millions)**
USA	SMEs <500		
United Kingdom	Small 1-50 Medium 51-250	Small <4.6 Medium <18.4	Small <2.3 Medium <9.2
European Community	Small 1-50 Medium 51-250	Small <11.8 Medium <58.8	Small < 11.8 Medium <50.6
Australia	SMEs <200		
Brunei Darussalam	Small 1-10 Medium 11-100		
Indonesia	SMEs <100	SMEs <1.00	SMEs <0.84
Lao PDR	Small 1-10 Medium 10-29	Depends on the number of entities in sector	
Malaysia	SMEs <76		Small <0.20 Medium <0.94
Myanmar	Small <50 Medium 50-100	Small <0.42 Medium <1.67	Small <0.17 Medium <0.84
Philippines	Small 10-99 Medium 100-199		Small <0.57 Medium <2.28
Singapore	SMEs <100		SMEs <8.57
Thailand	Small <50 Medium 50-200		Small <0.78 Medium <3.91
Vietnam	Small <50 Medium 50-100		Small <0.01 Medium <0.02
Hungary	Small <50 Medium 50-250	Small <3.27 Medium <18.70	Small <2.34 Medium <12.62
South Africa	Small <50 Medium 50-100		

Source: www.europa.eu.int/comm/enterprise_policy/sme_definition/index_en.htm

Appendix C

Basel II

Basel II is an important part of the regulatory environment for banks. Basel II, which is currently under development, is intended to replace the original 1988 Accord issued by the Basel Committee on Banking Supervision.

There are three broad elements to the Basel II Accord:

- Minimum capital requirements. These play an important role in limiting the amount of lending a bank can undertake.
- The role of bank supervisors.
- Measures aimed at strengthening market discipline through enhanced disclosure.

Of greatest relevance to this study are the changes to minimum capital requirements foreshadowed by Basel II. Under the original accord, capital requirements for credit risk are based on broad classes of asset. Under Basel II, minimum capital requirements are to be more closely aligned with underlying risk and, moreover, there is to be much greater differentiation of risk levels between asset categories.

Banks will have the option of calculating their credit risk (and, hence, minimum capital requirements) either using a standardised approach or an internal ratings based (IRB) approach. With respect to SME loans in particular, banks will also have the option of including their SME exposures as part of a retail portfolio (subject to certain conditions) or in a commercial portfolio. Depending on which option is chosen, the risk weighting attached to SME exposures will vary and, by implication, the amount of capital that a bank has to have will also vary.

The implications for SME lending are discussed briefly in section 4 of the report.

Appendix D

Credit Scoring

Credit scoring is a sophisticated statistical tool utilised by most banks in their assessment and approval (or decline) of the vast majority of their personal loan business. Credit scores are derived from specially designed loan application forms and assessed against statistically approved templates derived from a detailed analysis of past lending experience. The aim is to identify characteristics that are powerful predictors of the risk of default. As such, credit scoring depends on large amounts of data; the greater the level of data and experience to draw upon, the less the statistical error involved in predictions.

While credit scoring has been successfully applied to the personal loan market, it is not currently used in the context of business (including SME) lending. Comments made by the banks indicate a certain amount of scepticism that credit scoring in the SME market can be successfully applied in New Zealand. There are a number of reasons for this:

- There is an awareness of the inherent danger in attempting to apply credit scoring to business lending. The concern is that good loans may be turned down by trying to "fit borrowers into boxes", especially given the diversity in operations, goals and behaviour of businesses.

- The banks have indicated an increased emphasis on relationship management. Credit scoring is not necessarily seen as something that would, or should, replace the judgment exercised by the relationship/branch manager.

- To work well, credit scoring depends on having a considerable amount of information upon which to develop measures that are reliable indicators of default risk. The size of the New Zealand market means that there may be issue around whether or not there is sufficient information to populate credit scoring models.

- The widespread use of collateral was not seen by the banks as a factor influencing their views on the use, or otherwise, of credit scoring.

Notwithstanding the cautionary remarks offered in relation to credit scoring, certain banks are currently testing credit scoring models with a view to their application to small commercial loans. It remains to be seen whether these models will be applied in practice.

We note anecdotal evidence from the United Kingdom where credit scoring is increasingly being used for loans up to £100,000. For small loans, credit scoring may be used as the primary decision tool but that as loan size increases toward £100,000, it is more likely that credit scoring will be used as a decision aid.[43]

[43] Bank of England, (2003) "Finance for Small Firms – A Tenth Report" p17. The report did not indicate the extent to which credit scoring was being used by banks.

It is worth noting that there is some international evidence that credit scoring can assist in overcoming the inherent benefit/cost trade-off that banks face when deciding whether or not to invest in obtaining information regarding a potential borrower. For example, one study[44] estimated that the cost of evaluating micro loan applications in the US using credit scoring was reduced to around $100 compared to a range of $500-$1800 prior to the introduction of credit scoring. The time saving involved meant that banks could focus more time on marginal applications, existing loans that are showing signs of distress and processing more loan applications.

There is also some evidence that use of credit scoring means that the marginal benefits of taking and maintaining collateral are not justified for small loans. The Bank of England reports that there is some evidence of banks being more willing to lend on an unsecured basis when using credit scoring which potentially improves the access to bank finance for very small and start-up SMEs.[45] Specifically, the Bank of England noted that Barclays estimated that 85% of borrowing applications from its small business customers are determined irrespective of whether security is available.[46]

[44] Asch, L., (2000) "Credit Scoring: A tool for More Efficient SME Lending" SME Issues Vol1 No.2 World Bank Group.
[45] Bank of England (2003) op.cit., p17.
[46] Ibid, p17