Task Force on the
Future of the
Canadian Financial
Services Sector

Financing Entrepreneurial Firms: Legal and Regulatory Issues

by
Allan L. Riding
Carleton University

September 1998

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The views expressed in these research papers
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Introduction

Objectives

The Task Force on the Future of the Canadian Financial Services Sector is to inquire into, and to make recommendations about, public policies that relate to the Canadian financial services sector. This study comprises one part of the Task Force's mandate. The objective of this research report is ***to summarize previous research findings regarding regulations and policies that might detract from investment in small businesses or entrepreneurial firms.***

Particular Issues and Questions

Through submissions and other discussions, the Task Force has already identified particular issues and questions that relate to this study. These include:

- The extent to which capital pools managed by mutual funds, pension funds, and the insurance industry contribute reasonably to the development of entrepreneurial firms;
- Access to, and terms of, capital for potentially disadvantaged groups;
- Ownership regulations on access to capital, and terms of capital, for entrepreneurial firms;
- Entry of foreign institutions with otherwise no physical presence in Canada;
- The extent to which entrepreneurial client firms in particular segments of the capital market may be uninformed or otherwise functionally distinct from those in other segments of the markets;
- The presence of policies and regulations that create inconsistencies among segments of the capital markets;
- The effectiveness of the ombuds offices recently established by the major banks; and
- Other issues as submitted to the Task Force.

This report will address these issues in the context of a review of the various segments that comprise the market for capital to which entrepreneurial firms have access.

To assess findings, this review of the published literature will compare Canadian research findings with those from other countries. It will also assess the extent to which the various forms of SME financing perform in the creation of additional employment.

Context for the Research

This review is taking place in the context of powerful forces that are influencing the financial services sector. The task force must take into account the impacts of technological change, internationalization, and shifts in population demographics.

Developments in computer and communications technology are enabling new means of communications among institutions and business clients. These developments are extending the scope of competition and are facilitating entry of additional sources of competition. This has been perceived as having both positive and negative consequences. For example, communications technology is permitting rapid turnaround on loan applications. Artificial intelligence and credit scoring techniques are facilitating more objective and rapid credit decision-making. However, institutions stand accused of making "cookie cutter" loan decisions and of removing the human element from the financing interface. The importance of human interactions between business owners and account managers is diminishing. With this diminution, there is concomitant erosion in the need for institutions' physical presence and lenders struggle to comply with their own recently developed codes of conduct in an electronic environment.

Internationalization also provides both opportunities for change and problems to resolve. The relatively recent establishment of apparently seamless international transactions is a partial outgrowth of technological development. Internationalization has a special implication for policy development: the international financial markets have historically provided a means of circumventing regulations established on regional levels. Indeed, the origins of many of the instruments used routinely in international transactions find their roots in attempts to circumvent regulations that are more provincial. On a conceptual level, businesses can already access financing on a "boundary-less" basis. Large businesses have been taking advantage of the international financial markets for some time. On a practical level, however, smaller firms seem less able to do so.

Demographic shifts are also having a profound impact on the financial services sector. The maturation of the baby boomers and increases in life expectancy has led to the establishment of large pools of capital. This development holds particular implications for the markets for capital for entrepreneurial firms. For example, the expansion of capital managed by Labour Sponsored Venture Capital Funds is one consequence of the demographic change. Increases in the capital holdings of mutual, pension, and insurance-based funds are further outcomes of the aging of the population. The extent to which these increases lead to additional venture capital investment, and the distribution of such investments, is among the issues that the Task Force is to address.

These forces are not independent of each other. Through new technology, for example, smaller firms are better able to undertake export and import. Through large international transactions, financial institutions are able to securitize loan and lease obligations to augment further existing pools of capital. Working together, these forces permit the design of innovative and effective financing methods. These developments challenge the tradition market positions held by the banks and perpetuate disintermediation in the Canadian financial marketplace.

Finally, the Task Force is a creature of the federal government. As a generalization, federal laws tend to govern the debt side of financing whereas equity investments tend to fall under provincial or territorial jurisdictions. As such, the Task Force is in a better position to deal with the debt-related issues than with regulations that inhibit equity. However - and again a generalization - SMEs' needs tend to be greater on the equity side than on the debt side (Canadian Labour Market and Productivity Centre, 1995). Therefore, this report will deal with both debt- and equity-related issues.

Overview of the Demand Side of the Market: Defining Small Business

No consensus exists about the definition of the terms "small business" or "small- and medium-sized enterprise [SME]". These terms are variously defined according to annual sales revenues, the number of employees, legal form, and other dimensions. Among the common benchmarks are definitions of SMEs as firms with fewer than 50 employees, or with annual sales revenues of less than $5 million (or $10 million), sole proprietorships, etc. Rather than add to this uncertainty, this study will focus on the various means of financing that are typically of interest to small businesses. This embraces all forms of financing up to and including initial public offerings of equity on organized securities exchanges.

According to Statistics Canada, approximately 928,000 firms reported having paid employees in 1996. Of these, 75.4% had fewer than 5 paid employees, 17.8% had 5 to 19 paid employees, another 4.3% employed between 20 and 49 people and the remaining 2.4% of firms paid more than 50 employees. These data do not include self-employed individuals without paid employees. Self-employment has increased from 12% of households to 16% between 1991 and 1996.

One of the ways in which small businesses differ from large firms is that small enterprises usually obtain financing at the local, regional, or provincial levels. Local financial marketplaces vary in character and efficacy. For example, Wetzel (1983) coined the term "Silicon Valley phenomena". This term reflects that investors who reside in regions with concentrations of technology-based firms are more amenable to investing in such firms than are otherwise similar investors who live elsewhere.

The small business sector is volatile and hardly homogeneous, comprising, among others, micro-businesses, quasi-firms, home-based businesses.

The Micro-Business Segment

Orser, Riding and Swift (1993) offer the following typology of the very small business sector. It attempts to embrace a number of inter-related sub-sectors into a more comprehensive market model. Components of the small segment include micro-businesses, small-businesses, self-employed people, home-based businesses, quasi-businesses and new firms.

Micro-and Mini-Businesses. Defining these businesses is not straightforward, and micro-enterprises have been defined in several arbitrary ways. One definition classifies micro-businesses as operations with fewer than five full-time employees. An alternative defines micro-businesses as those with one or fewer full-time employees. Regardless of definition, the micro-business sector represents a growing opportunity in the market for financial services. According to Orser (1991, p. 13),

> "economic and structural changes in our economy, ...[and] the increasing number of females participating in the paid workforce, ... may create a push to home enterprise [and micro-business]".

Self-Employment. Self-employed people "are those who effectively control or share control of the company for which they work, regardless of the method by which they are paid" (Economist, 1992). Recent census data reveal that the rate of self-employment has increased dramatically in Canada. Self-employment is a reality in 16 % of Canadian households, and the growth rate of self-employment among women is substantially greater than that of men. It is not clear, however, whether the increase in self-employment is due to the push of economic restructuring or the lure of entrepreneurial successes. Once viewed as marginal, the principals of very small firms are more knowledgeable than has been the case historically, and the businesses more sophisticated (Orser and Foster, 1992). However, self-employed individuals work longer hours than those in paid employment and, in general, receive lower remuneration and benefits than employed individuals. This discrepancy is particularly acute for women (Mallett, 1991).

Home-based businesses are units of production centred in or from the home for the production or distribution of economic goods or services. Home-enterprise is profit-oriented home work. Thompson-Lightstone (1997, p. 151) report that one quarter of small business owners operate their businesses out of the home. They also report that home-based firms tend to be concentrated in sectors that include construction, agriculture, and natural resources. Home based firms are more likely to be unincorporated businesses. They are also concentrated among the smaller SMEs.[1] This is an important segment of the small business landscape if only because, as Orser and Foster (1992) note, 71 % of new firms start as home-based businesses.

Star (1981) defines <u>quasi businesses</u> as those with:

> "no paid employees, are short-lived, lack a conventional business organization, and may represent part-time activities by owners who have other full-time employment. They are often single-venture entities formed for the exploitation of temporary business opportunities."

Clearly, firms defined in this way are difficult to study; nonetheless, such firms often represent other types of businesses in transition, including those going through birth and death.

New firms are also difficult to conceptualize and define. One way to define new firms is to classify as news firms those that are less than, say, six years old. Reynolds and Miller (1988) write about this problem as follows.

> "When is the attempt to initiate an economic enterprise considered? When incorporation occurs? When business cards are printed? When loans are sought? When income is first

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[1]According to the Thompson-Lightstone (1997) study, 90% of home based firms employ fewer than 5 people.

> received? When the first employee is hired? Each criterion has its own set of problems in defining a population of new firms"

Thompson-Lightstone (1997, p. 130), based on a survey of 2,000 households, reported that "someone attempted to launch a new business during 1996" in 9.3% of the homes surveyed. Among these new business starts, 37% did not get off the ground within the first year. Based on a similar survey - administered a year previous - attempts to initiate a business were reported in 7% of homes surveyed, but 77% of these were still in operation within the year.

The variety of very small businesses illustrated by the above taxonomy illustrates that it is misleading to perceive SMEs as alike. These typologies are obviously not mutually exclusive nor is this taxonomy necessarily exhaustive. However, it does illustrate the diverse nature of the micro-business sector and suggests that the nature of the demand for capital varies by type of firm.[2]

Small and Medium-Sized Businesses

In addition to these types of micro-firms, Canada has a rich variety of more traditionally-defined small- and medium-sized businesses. Established small firms span most sectors of the economy. According to Industry Canada, more than 40% of employed Canadians worked for firms with less than 100 employees and more than 80% of all new jobs are attributable to the small business sector.[3]

Not all SMEs, however, are oriented towards growth and the job creation that attends growth. Arend, Amit, Brander, Hendricks, Ross and Whistler (1997) found that a very small proportion of Canadian SMEs grow significantly. Moreover, Blatt (1992) reports that no more than 50% of the owners of new businesses ever seek the expansion of their firms. For the purposes of economic development, therefore, perhaps the emphasis needs to be placed on ensuring, not so much that all SMEs have access to capital, as that growth-oriented businesses have access to the financing necessary for their expansion.

Most research on the market for capital has focussed on the supply side: studies of bank financing, venture capital, angels, and other suppliers are available. Virtually no research, however, has been conducted on the demand side. We know little about the composition of demand for capital from the various types of small firms. The extent to which each of growth, operating costs, or survival generate demand for capital remains to be ascertained. Consequently, even a sufficient supply of capital, if poorly matched to the demands, would result in "gaps". This is an obvious and important direction for future research.

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[2] For example, new firms often need to raise capital to finance market research, product development, or new plant and equipment while quasi firms are more likely to need capital to bridge operating expenses against an end-of-contract receivable. Home-based firms may need operating lines of credit.

[3] Industry Canada, Small Business in Canada: Competing through Growth, Supply and Services Canada, 1990. Using more recent data and more sophisticated analysis Picot and Dupuy (1996) and Arend and his colleagues (1997) find that the appearance of employment growth is more attributable to new business entries than to growth. However, it remains that a disproportionate share of job creation is attributable to the small business sector.

The Supply Side of the Market: Sources of Capital for Entrepreneurial Firms

Before addressing the central questions of this review, it may be useful to gain an overall perspective of the sources of capital from which entrepreneurial firms may draw. The suitability of particular sources depends largely on the size of the firm and its stage of development.

Sources of Equity Capital

Personal Assets

Business owners' first source of capital is often their own asset base. Owners of new and small firms frequently draw on their assets to finance the business. This base comprises personal savings, mortgages, pension funds, RRSPs, and life insurance.[4] In addition, the term "sweat equity" connotes the value of the business owners' time and effort in the firm but is not a direct source of funds. Often, lenders and investors will regard the business founders' investment of time and labour, priced at a reasonable rate, as ownership capital. Lenders and investors invariably expect the owners to have made a material investment in their own firms.[5]

Love Money

Friends and relatives often invest in businesses owned by family members, associates, and friends. Love money is one of the most frequently used sources of capital for new businesses.

Earnings Retention

Both theory and evidence find that owners' preferred source of capital is the equity generated by retention of the firm's earnings. Business owners resort to external sources of funds only when internal funds do not meet the needs of the firm. For growing firms, internal sources are often insufficient to support rapid growth in working capital requirements and external funds then become necessary to sustain further growth.

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[4] This discussion prompts identification of what may be a significant research problem. Most studies of small business financing employ questionnaire data, usually administered by mail. Issues of definition arise when small business owners are posed even very basic questions. For example, consider the case of a business owner who has taken a mortgage on the family home to finance the enterprise. The owner, with some justification, would perceive the resulting funds as equity transferred from the home. When presented with a mail-administered questionnaire, the owner might well identify equity as the source of early-stage financing. A financial institution, of course, views the mortgage transaction as debt financing. The implication for methodology is that mail-based surveys must be carefully designed and cautiously interpreted. Telephone and interview survey methods are better able to avoid such definitional pitfalls and the higher response rates result in lower weights being accorded idiosyncratic situations. This paper will review other types of bias inherent in the various types of surveys at a later point.

[5] Dr. William C. W. Moh, CEO and Chairman of the US-based apparel manufacturer, *Bugle Boy Industries*, recounted his experience when he first approached an investor for early-stage capital. The investor eventually provided $2 million, but not before asking Moh how much money he held in savings. Moh replied that he had $387.24 in the bank. The investor, for his $2 million, took 50% of the new firm and required Moh to buy the other half of the ownership for $380.

Partners and Business Angels

Angels, also known as informal or private investors, are prototypically wealthy individuals who invest directly in small firms owned by others. Though largely invisible, informal investment is a significant source of financing for early-stage enterprises. Estimates of the rate at which angels invest range from two to four times the rate at which institutional venture capitalists invest in early-stage businesses. The Canadian Labour Market and Productivity Centre (1995) estimates that angels have financed approximately twice as many firms as have institutional venture capitalist firms. Informal investments, however, tend to be small in scale, and complementary to, financing provided by institutional venture capital companies.

Venture Capitalists

Institutional venture capitalists are among the more visible sources of risk capital. Venture capitalist companies are private or publicly sponsored pools of capital that take an equity position in the firm. The costs of evaluation and monitoring militate against smaller venture capital investments, investments typically less than $1 million. However, the recent growth of labour-sponsored venture capital funds is a dramatic development in this industry, resulting in the apparent availability of large pools of investment capital.

Initial Public Offering [IPO]

An IPO is the process whereby a firm sells equity to the public for the first time, usually by issuing shares through investment dealers. IPO’s are an important element in the market for capital. They provide the exit that allows early-stage investors, venture capitalists, merchant bankers, and owners to exit the firm and realize a return on their early-stage investments. An efficient IPO mechanism offers the prospect of a profitable exit for early-stage investors and therefore encourages risk taking. IPOs are also a means by which the firm can raise the significant amounts of capital often required to support substantive growth steps.

Sources of Debt Capital

Credit Cards and Personal Lines of Credit

For very small firms and home-based businesses, credit cards often provide a ready means of obtaining small-scale debt capital expeditiously. While convenient, they bear relatively high rates of interest and limit the amount of capital available. Recently, lending institutions have expanded personal lines of credit for certain classes of professionals and have established business credit cards. The difficulties inherent in measuring reliance on credit cards as a method of business financing are evident.

Suppliers and Customers

Suppliers and customers can provide a permanent infusion of capital. This requires good fiscal management of the balance between current assets and current liabilities. In addition, factors allow firms to gain liquidity from their holdings of receivables. It is not clear, some anecdotal evidence aside, to what extent small firms can and do take advantage of trade financing

Lending Institutions

Banks and co-operative institutions remain the foundation of most small business financing. Credit facilities to small business clients typically include term lending against specific assets or permanent working capital and operating loans, sometimes tied to levels of working capital components. The majority of Canadian small businesses are bank clients, though not all as borrowers. Nonetheless, a material proportion of small business bank clients appears dissatisfied with their banking relationship. Perhaps therefore, the share of the market held by co-operative lending institutions, such as Credit Unions and the Caisses movement in Quebec, is increasing. Institutions that might wish to enter the commercial lending market to small Canadian firms probably view this unrest as signs of market opportunities.

Leasing and Asset-Based Financing

Leasing is among the most frequently employed sources of financing beyond bank loans. Using leases, businesses can obtain the use of producing assets without having to raise the capital cost of the asset in advance. The evolution of firms that specialize in asset-based financing is also a significant development in the market for capital for SMEs. Such firms base debt or lease financing arrangements on the specific asset being acquired. The asset typically acts as collateral because asset-based financiers tend to be expert with respect to the particular assets.

Merchant Bankers and Mezzanine Financiers

Merchant banks are a relatively recent development of North American financial markets. These institutions are similar to venture capitalists in that they commonly take an equity stake in the firm, but they usually secure their position by means of accompanying debt financing. Merchant bankers are particularly active at the higher end of small firm financing and assist in buyouts, mergers, acquisitions, turnaround situations, and strategic alliances. A few merchant banking firms specialize towards the lower end of the market than others and act as syndicators of venture and informal capital.

While merchant bankers also arrange mezzanine financing, other firms that specialize in subordinated debt lending are increasingly prominent in mezzanine financing arrangements. Deals are often complex and specifically tailored to a given situation.

Specialist Financial Institutions

Specialist financial institutions include firms that hold expertise in a particular aspect of financing. These include insurance companies, commercial mortgage lenders, specialty equipment financiers, and international trade finance companies. With ongoing disintermediation and increased sophistication of business owners, the potential role of such sources of capital for small firms could be considerable.

Debt or Equity?

The theory of modern finance posits that business owners observe a “pecking order” of financing sources. According to this theory, owners’ first choice of finance is internal capital generated by retention of earnings. Debt comprises the second choice and external equity is a last resort. It follows that Canadian small business owners would prefer bank borrowing - debt capital - to various other means of *external* financing. Yet, Canadian business owners, as a group, may rely excessively on bank borrowing. Petersen and Shulman (1987) found, for example, that Canadian small business owners rely on bank financing more so than their counterparts in 11 other countries. MacIntosh (1994) also questions Canadian owners’ reliance on debt. He observes that the additional financial leverage inherent in a dependence on debt increases the vulnerability of Canadian firms to economic downturns. This reliance on debt, therefore, may contribute directly to job losses that result from business failures.

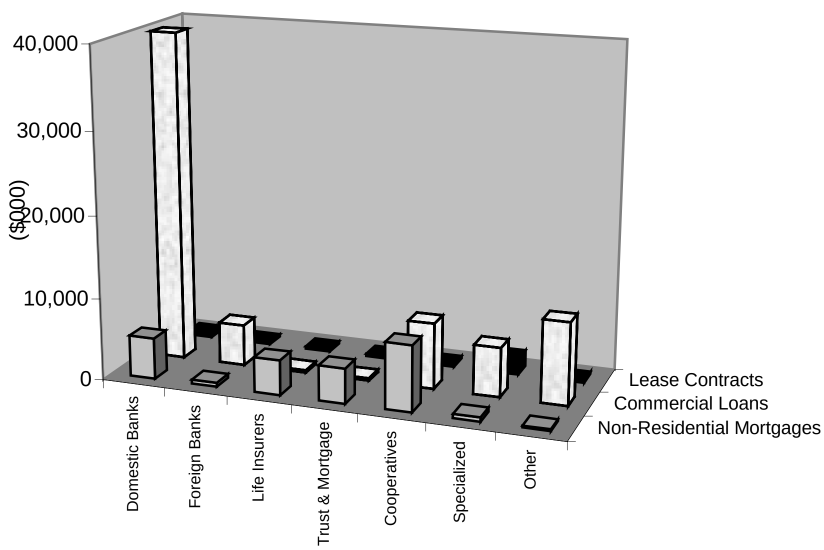
In part, this reliance on debt may stem from underdeveloped equity markets. In this context, the Canadian Labour Market and Productivity Centre (1995), in their review of Canadian financial markets for small firms, concluded that the equity side of the market was most in need of remediation. In general, however, the equity markets in Canada fall under provincial jurisdiction. While the regulation of banks also involves provincial laws, the federal government is primary regulator of the institutions that comprise much of the Canadian market for debt.

SMES and Debt Financing

Bank Borrowing

Banks are the primary source of debt financing for SMEs. In Chart 1, data gathered by the Conference Board of Canada shows the breakdown of the market for various forms of debt capital for SMEs. It illustrates the dominance of bank borrowing.[6]

Chart 1
The Canadian Market for Debt Capital for SMEs



However, the relationship between institutional lenders and SMEs is problematic. It is instructive to examine the interface between business borrowers and institutional lenders.

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[6] Connor, 1995. The process of disintermediation is ongoing. Therefore, the dominance exhibited in this chart continues to diminish. It is reasonable to expect that the market share of the banks will continue to erode. In part, this is because of the growing pools of capital under management by insurance and pension funds, the use of securitization, and the recent emergence of asset-based finance companies.

The Small Business-Lender Interface: The Small Business Perspective

Small businesses look to banks for a variety of services. These include transaction processing, account maintenance, payroll and other such services, as well as borrowing. When a particular bank is not meeting the needs of the business, the owners may search for a new banker. In their study based on U.S. data Dunkelberg, Scott, and Cox (1984) found that "bank performance was rated best on the non-personal aspects (location and service offerings) and worst on knowledge of the firm's business." Haines, Riding, and Thomas (1991) analyzed the Canadian setting using survey data supplied from the Canadian Federation of Independent Business [CFIB, henceforth]. They found that changes in the bank-small business relationship perceived by the customer trigger shopping behaviour. In a subsequent study, Haines, Riding, and Thomas (1994) tested a recursive multi-equation model of the bank-small business relationship, again using CFIB survey data. They report shopping to be dependent on measures of satisfaction[4] and they also report, *inter alia*, that the decision to shop for a new banker is prompted by perceived changes in the banking relationship.

Haines, Riding, and Swift (1992) find that small businesses value the interpersonal aspect of the relationship. These aspects include the transaction-handling facility provided by the bank, the economic value of bank services, and the knowledge and advice that the banker may be able to offer. One of their findings was documentation of the widespread perceptions that "bankers were all the same" and that inter-bank competition was limited. This perception and their observation that Canadian chartered banks appear to be more interested in larger loans argues strongly for policies which would intensify competition in the market for small business lending.

Wynant and Hatch (1991) carried out a comprehensive study of the relationship between bank lenders and small business borrowers. They employed three sets of data: inspection of a large sample of bank files, interviews with lender loan account managers, and a survey of small businesses. Among their key findings was that "banks are in the business of providing *low risk* financing to small businesses. This financing role has not been adequately communicated to customers" (p. 3, emphasis as in original).

Wynant and Hatch also found that most small businesses have modest loan needs, that almost "50% of the firms … had arranged loans of less than $50,000 and 23% requested bank financing of less than $20,000". They also found that the scope of the job of loan account manager had increased and that account manager turnover was substantial. More than 60% of small business clients had experienced at least one change in account manager and 22% had three or more account managers over the preceding three-year period.

The interface described by Wynant and Hatch is one bound to be problematic. They describe:

- a high volume – low margin business;
- high turnover of account managers with growing job requirements; and,
- inadequate communications of the banks' financing role.

These factors combine to establish a setting that is bound to be a source of dissatisfaction. It is no surprise that a high proportion (32%) of bank borrower clients expressed dissatisfaction (Wynant and Hatch, 1991, p. 205).

A summary of the previous research reveals three particularly noteworthy facts. First, business owners value non-price aspects of the relationship between small businesses and lenders. Second, lenders' performance on those aspects of the relationship that seem to be valued the most by borrowers are not, in aggregate, rated very highly by small business owners. Consequently, business owners express high rates of dissatisfaction with their banking relationship.

The Small Business-Bank Interface: The Bank Perspective

It comes as no news that six large multi-branch national banks dominate the Canadian lending market for SMEs. These six institutions hold more than eighty % of the market for small business loans (Haines, Riding, Swift, 1992). During the 1980's, most of these institutions established small business banking centres in which small business banking activities were centralised. This reduced banks' costs of operating in the small business sector and has led to a high degree of standardization. Traditionally, banks assessed applicants for debt capital according to criteria known as the "5 C's" of credit.[7] Lenders are increasingly making use of credit scoring models in evaluating loan applications. This approach has the advantage of cost effectiveness, standardization of criteria, and speed of decision-making. The disadvantages include that human interaction is minimized and that certain types of viable, and potentially profitable, innovative businesses may not fit the standards of the assessment criteria.

From the point of view of lenders, this market segment is costly to administer in terms of human and financial resources. Lending to small firms is not as profitable as lending to larger firms. According to various researchers, the average loan to Canadian SMEs is less than $50,000 (Wynant and Hatch, 1991; Haines and Riding, 1994; Thompson Lightstone, 1996, 1997). Small lending balances imply that loan account managers must administer large volumes of borrower clients to contribute to lender overhead and profit. Large caseloads result in little time for monitoring existing borrowers and appraising new applications. This situation has several consequences.

Lenders' representatives (loan account managers) are too squeezed for time to service adequately their borrower clients. This implies passive loan account management and a situation where the clients do not perceive that the loan account managers understand their business needs.

Because they may not have sufficient time to allocate to due diligence, especially for smaller loans, lenders may perceive micro-enterprises as risky. This perception may not always arise because of the client's actual level of risk. This perception can also obtain because the account

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[7] **Capacity** is the extent to which an organization is able to meet its obligations as they fall due. **Capital** relates to the amount of equity investment made by the owner(s). **Collateral** relates to the value of assets available to secure the loanable funds against liquidation or default. **Character** includes the track record of the business and its owners. **Conditions** refer to the proprietary nature of the product or service, the size of the market, and the industrial climate.

manager lacks sufficient time to get to know the client in a manner that is cost-effective. The perception of risk, then, is attributable to asymmetry of information. Informational asymmetry can lead to credit rationing. Research shows clearly that firm size appears to be an important factor in determining SMEs' access to, and terms of, commercial debt capital (Haines and Riding, 1994; Thompson Lightstone, 1996 & 1997).

Business borrowers perceive the lender to be non-responsive and un-involved. Their view that the lenders do not get to understand their business leads to dissatisfaction. Most surveys of borrower satisfaction with lenders suggest material levels of dissatisfaction (Wynant and Hatch, 1991; Thompson Lightstone, 1996 & 1997).

Low profitability of small loans may pressure lenders to employ "tied-selling" tactics. For example, lenders may require business borrowers' personal banking business: home mortgages, personal loans, RRSPs, etc. As institutional lenders enter broader ranges of financial services, tied selling could become a more significant problem, allowing lenders to increase indirectly their returns on small business borrowing at the expense of business owners. From the point of view of small business owners, competition among banks is not always apparent. Therefore, they do not engage in shopping and switching (Haines, Riding, and Thomas 1991) as often as they might with other suppliers.

On "Bankability": Attributes of Bank Borrowers

One of the issues that the Task Force is to address is "the extent to which entrepreneurial client firms in particular segments of the capital market may be … distinct from those in other segments of the markets." Accordingly, this section explores the attributes of firms that have been able to access bank financing and attempts to determine salient ways in which such firms may be distinguished from non-borrowers.

It is postulated that firms able to borrow successfully from an institutional lender need to meet a minimum standard across a set of criteria that jointly determine the "bankability" of the deal. These criteria might well include such variables as size, historical relationship with the bank, financial health of the firm, collateral availability, market projections, age of firm, sector, etc.[8] Firms above a threshold level of bankability get loans; others do not. Under this premise, firms furthest above the threshold get the best terms of credit.

To investigate what constitutes bankability, this section revisits data collected by Haines and Riding (1994), Wynant, and Hatch (1991). Comparisons are drawn between salient characteristics of SME bank borrowers and corresponding attributes of the general population of SMEs.[9]

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[8] Several Canadian banks employ formal "scoring systems" that use such variables as formal criteria.

9 As reflected in Statscan's Small Business Profiles data, data that include balance sheet and selected expense items, employment, and several financial ratios. The Small Business Profiles aggregates firms by sales quartiles, major geographic regions, and 4-digit SIC codes. Income statement data are based on approximately 180,000 cases and balance sheet data representing approximately 46,000 T2 forms.

A Profile of SME Bank Clients

Two recent studies have compiled profiles of business bank borrowers based on random samples of bank loan files. Wynant and Hatch (1991) gathered data from 1,539 credit files and Haines and Riding (1994) sampled 1,393 files. The Wynant-Hatch study used a series of conditions to select data on bank borrower firms to focus exclusively on those that, in their opinion, demanded "the time, planning, and operating skills required to run a more substantial business" (p. 57). Haines and Riding did not employ such exclusions. Thus, the latter study provides a more representative sample of population of bank business borrowers; however, the Wynant-Hatch sample is less subject to inclusion of quasi-firms or businesses used to supplement owners' other incomes.

The following table shows the breakdown of sales volumes for the two samples of business borrowers. Both samples of bank loan files clearly show that bank borrower firms are tend to be larger than average. Overall, SME bank borrowers seem to rank at the large end of the size distribution of SMEs.

Table 1: Comparative Sizes of Bank Borrowers

Annual Sales	Wynant & Hatch (p.65)	Haines & Riding (p.40)	All Canadian SMEs[10]
Less than $500,000	57.7%	48.8%	85.8%
$500,000 to $2,000,000	35.3%	37.8%	11.4%
More than $2,000,000	7.0%	14.5%	2.8%

To appreciate better this size distinction, data on assets, equity, and sales are drawn from Haines and Riding (1994, p. 42) to compare borrowers with the general population of SMEs.[11] The benchmarks are the corresponding dimensions for the four quartiles of SMEs reported by the Statscan Small Business Profiles database.

[10] Small Business in Canada: A Statistical Profile, 1984-1986, Statistics Canada, Catalogue 61-231, 1986, as cited in Wynant and Hatch(1991), p. 65.
[11] Wynant and Hatch (1991) did not report these attributes

Table 2: SME Borrowers and the Small Business Profile: Selected Financial Statement Data

Measure	Means[12] ($000)	Revenue Quartile Means per Small Business Profiles			
		1	2	3	4
Total Assets	572	262	340	482	1,489
Total Equity	214	118	128	185	486
Annual Revenues	1,090	25 ~ 85	85 ~ 193	193 ~ 476	>476

The average SME borrower is within the third quartile in terms of equity and the fourth quartile in terms of assets, both measures of size. Borrowers exhibit extraordinarily high levels of sales compared with the profiles of all Canadian SMEs. The annual levels of sales are considerably greater than the mean values for firms even in the highest quartile.[13] SME bank borrowers clearly tend to be among the larger small firms.

The next table presents the comparison of SME borrowers with the population of SMEs as represented by the Small Business Profiles according to financial ratios available from the Haines-Riding study.

Table 3: SME Borrowers and the Small Business Profile: Selected Financial Ratio Data

Ratio	Statscan Small Business Profiles	Bank Borrowers[14]
Current Ratio	1.3	1.6
Debt/Equity	1.8	1.7
Debt/Assets	0.6	0.6
Current Debt/Equity	0.8	1.0
Revenue/Equity	1.8	5.1
Gross Margin	39.9%	36.0%

The debt position of bank borrowers is similar to that of the small business profile: current debt appears to be slightly higher, yet total debt is in line with the aggregate. However, these data demonstrate again that small business borrowers have very high levels of revenues (relative to equity).

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[12] Haines and Riding (1994, p. 42).
[13] This finding understates the case. Small Business Profile balance sheet data reflect primarily T2 forms from incorporated businesses. Balance sheet values for typically smaller un-incorporated firms are not included in the benchmark.
[14] Based on data from Haines and Riding (p. 42).

Accusations and Responses

The differing perspectives on the lender-SME market have led business owners and their lobby organizations to reproach lenders about a variety of issues. A review of the minutes of the 1994 hearings of the Parliamentary Standing Committee on Industry reveals the following bank practices as issues to which business owners take exception.

Table 4: Criticisms of Canadian Banks

Criticism	Reference (Minutes: Parliamentary Standing Committee on Industry)
Bank charges too high	Whitmore (28/4/94, 13:74), Cullen (23/3/94, 6:55) Gauthier (23/3/94, 2:19); Zepf (15/3/94, 3:20); Veroni (15/3/94, 3:7) Landry (17/3/94, 4:19), Lapointe (23/3/94, 6:19) and others
Banks restrict access to credit	Starr (15/3/94, 3:33), Courtemanche (15/3/94, 3:45), Landry (17/3/94, 4:18), Bellan (22/3/94, 5:4), Robbins (22/3/94, 6:19), Lapointe (23/3/94, 6:19)
Banks only lend against collateral	Whitmore (28/4/94, 13:74), Zepf (15/3/94, 3:18), Courtemanche (15/3/94, 3:42), Pleet (22/3/94, 5:19), McGarvie (22/3/94, 5:56), Gagnon (23/3/94, 6:37), and others.
Banks are less willing to lend to high-risk/high-return borrowers.	Landry (17/3/94, 4:24), Gorman (17/3/94, 4:9), Bellan (22/3/94, 5:6)
Banks arbitrarily call loans or decrease line of credit limit.	Courtemanche (15/3/94, 3:42), Robbins (22/3/94, 5:53), Zepf (15/3/94, 3:17), Egli (22/3/94, 5:18), Bellan (22/3/94, 5:4), Hornick (23/3/94, 6:42), Cullen (23/3/94, 6:55)
Banks have poor relationship with SMEs	Pleet (22/3/94, 2:10), Hornick (23/3/94, 6:42)

The difficult relationship between lenders and some small business borrowers is not specific to the Canadian setting. Several of the concerns raised by bank clients may reflect systemic issues. This is witnessed by the following table which presents a listing of criticisms that SME clients have advanced regarding banks in the UK.

Table 5: Criticisms of Banks by Small Firms[15]

Criticisms	Storey's (1994) Comments
Bank charges are: ▪ too high; ▪ frequently are calculated incorrectly; and ▪ customer doesn't get itemised charges.	▪ Difficult to assess. ▪ Private computer programs now available to check charges. ▪ In 1992/93 most banks introduced itemised charges.
Interest rate reductions are not passed on immediately to customers.	Not a justified criticism.
Banks only lend against collateral.	Not wholly correct. 80 % of start-up loans are not collateralised.
Banks are less willing to lend to high-risk/high-return borrowers.	Broadly correct
Banks close down businesses "too early" if it gets into difficulties.	Not proven.
Banks have an "attitude" problem and do not understand small firms.	Less true than in the past. Staff training and reorganisation have led to improvements.

Complaints registered in the UK are similar to those expressed in Canada. Given these similarities, the relationship lender-SME seems to involve some generic issues.

First, given that the profile of the typical business borrower excludes many firms that are small or new, it is not surprising to find a high level of dissatisfaction with institutional lenders. Nor is it surprising that access to credit is more of an issue than the terms of credit.

In part, the difficulties arise because of the relatively high cost of evaluating and monitoring small lending balances. However, advances in computer and statistical technologies are providing lenders with models that may be used for credit scoring, an approach to evaluation that, according to Dial, drastically reduces the costs of evaluation. [16] To the extent that credit scoring reduces the administrative costs of SME lending, institutions could conceivably lend to riskier borrowers and still lend profitably. However, it is not clear that reliable credit-scoring models based on Canadian data are available.

High levels of dissatisfaction and the particular difficulties faced by smaller and newer firms with access to bank credit seem endemic in Canada. Foreign lenders may view this apparent lack of "brand loyalty" as opportunistic. If lenders, foreign or domestic, can better estimate risk and overcome the low margins associated with small lending balances, the market could be profitable for entry from alternative sources of debt. Asset-based financial firms are addressing these

[15] Compiled by Storey (1994, p. 232).
[16] T. Dial, Vice President, Wells Fargo, Remarks, Annual Conference International Council for Small Business, San Francisco, CF, June 1997.

challenges by specializing in asset classes and through securitization and they appear to be capturing some of this market.

Moreover, the use of credit scoring techniques, if done properly, may allow lenders to estimate risk more precisely. Lenders, both domestic and foreign, that can draw on technological advances for loan appraisal and monitoring could improve their market share. Certain foreign banks, such as *Wells Fargo,* are currently proposing to service the SME segment of the Canadian market. It may not be coincidence that Wells Fargo is a leader in the development of credit scoring methods

It is instructive to compare, briefly, the interface between institutional lenders in the US with US small businesses. First, access to bank credit in the US seems about the same as in Canada: in both countries, the turndown rate is approximately 14 %.[17] In the US, however, lenders charge, on average, higher rates of interest yet small business customers report greater satisfaction with their lenders.[18] The difference in satisfaction levels may be attributable to the primary difference between the US and Canadian banking systems.

In the US, with its tradition of local banks, bank staffing is likely to be more stable: the lack of a branch system means that loan account managers may spend considerably more years in a single region. Consequently, such personnel are probably more familiar with their customers and are more likely to deal with customers on a more personal level. In Canada's multi-branch system, personnel shifts (and the instability these shifts appear to have on the banking relationships) have been a concern of small business lobby organizations for several years.

The economic theory of credit rationing also provides a partial explanation of difficulties in the lender-borrower relationship. Appendix A provides a concise summary of the theory of credit rationing in the context of lending and investing along with an annotated bibliography of articles that relate to credit rationing.

Given the high levels of dissatisfaction and the particular difficulties faced by smaller and newer firms with access to bank credit, it seems that the market is one that could be profitable for entry of alternative sources of debt. To this end, foreign banks are currently proposing to service the SME segment of the Canadian market.

Proposed Entry of Foreign Lenders

Banks owned and operated by non-Canadians has been a fact for some time in Canada. The Hongkong Bank of Canada, for example, has been active as a lender to Canadian SMEs. Therefore, the issue of foreign competition in the market for SME lending is not new, and

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[17] Dennis, W., W. Dunkelberg, J. Van Hulle, (1988) Small Business and Banks: the United States, NFIB Foundation, Washington,DC.

[18] According to Dennis, Dunkelberg, and Van Hulle, the average interest rate to US small business bank borrowers is 2.21% above prime rate and 78 % of clients report that they are satisfied or highly satisfied with their lender. According to Wynant and Hatch (1991, page 158) the average interest rate charged by banks to Canadian business borrowers is between 1.73% and 1.83% above prime. Wynant and Hatch also report (page 206) that 32 % of bank borrowers were "generally dissatisfied".

appears to have been resolved. More at issue, perhaps, are applications such as that being advanced by Wells-Fargo bank, according to which the lender would not have a "physical" presence in Canada. Rather, the lender would use the Internet and other means of direct communications to administer its business.

However, business banking through electronic means is currently in effect in Canada. Most "traditional" banks already have such mechanisms in place. For example, the Toronto Dominion bank has a business banking product such that all transactions must be conducted either by telephone or by computer. While the Citizens' Bank has a relatively small "bricks and mortar" presence, it, too, conducts much of its business without the use of an extensive branch network.

Thus, foreign competition for SME banking business is with precedent. Likewise, competition for SME banking services that do not involve traditional bank branches is also with precedent. Competition in this sector must be welcomed, particularly if it improves access to credit for smaller, newer businesses.

Facilitating Small Loans: the SBLA

Since its inception in 1961, the SBLA has provided for guarantees of term loans to SMEs for plant, equipment, and acquisitions. According to the program, a small firm that approaches a lender for a qualifying term loan can, with agreement of the borrower, obtain a loan guaranteed by the federal government. The borrower must pay both an initial and annual fee through the lender to the SBLA administration. The role of government is entirely passive. It is limited to collection of fees, making good on loan losses, and collection of data.

In April 1993, the Canadian federal government amended the Act. Eligible firms now include those with annual revenues of less than $5 million.[19] The maximum loan size increased from $100,000 to $250,000. Firms in sectors such as finance, insurance, mining, and the professions became eligible. The amendments also allowed lenders to charge interest rates of up to 1.75% over prime on floating rate term loans and 1.75% over the residential mortgage rate on fixed rate term loans.

Subsequently, borrowing under the terms of the Act has increased from a rate of approximately $500 million annually during 1992 to approach the then-legislated ceiling of $4 billion by September of 1994. The government introduced further amendments for 1995. These included institution of an annual fee of 1.25% that lenders normally add to the 1.75% interest rate. Moreover, the SBLA was to become self-sustaining such that the additional fee incomes were to cover operational costs as well as defaults.

In their analysis of the SBLA, Haines and Riding (1995) found reasonable levels of incremental lending associated with the SBLA. A high proportion of SBLA borrowers was new firms, unlike the portfolio of traditional bank loans to SMEs. They also found that the SBLA contributes significantly to economic prosperity, job retention, and job creation.

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[19] The previous limit was set at $2 million.

They also found that the risk profile of the SBLA portfolio changes and that the amendments to the Act were likely to increase the participation of riskier borrowers. In particular, they argued that increasing the fees may not have been well-advised. Haines and Riding estimated that a 3% initial fee would cover defaults. However, by adding a 1.25% annual fee, the cost of SBLA borrowing has increased significantly. Consequently, Haines and Riding warned that the higher fees could establish an adverse selection problem as described by Stiglitz and Weiss (1981). The result could be a material increase in the level of defaults and defeat of the principle of financial self-sustenance.

The Canadian SBLA has much to recommend it. Among other aspects, the private sector delivers the program without undue government intervention. It relieves lenders of the need to establish security and small businesses viewed the program. Moreover, the SBLA allows lenders to lend at fair rates of return and is relatively inexpensive to administer.

Several issues pertain to further potential changes to the SBLA. The first relates to whether or not the program ought to be extended to term loans to include financing for working capital. The second is whether the program should be extended to provide guarantees for capital leases.

Expansion of the program to include guarantees of loans for working capital was advocated by several witnesses who appeared before the 1994 hearings of the Parliamentary Standing Committee on Industry. No research regarding this issue appears to lie in the public domain. Before extending loan guarantees to finance working capital, research regarding the demand for capital needs to be undertaken. As noted previously, most research on the capital markets for SMEs has focussed on the supply side.

Conceptually, it is not clear that financing working capital would lead to the employment gains attributed to facilitating term loans for plant and equipment. Firms that must resort to term debt to finance short-term assets are arguably riskier than firms seeking term financing for expansion purposes. This is clearly an issue that demands further research.

The case for extending the SBLA for capital leases is more clear. As Kalymon (1995) correctly points out, capital leases are virtually indistinguishable from term loans on a conceptual basis. Moreover, as will be seen in a subsequent section, firms engaged in capital leasing provide a material portion of financing for SMEs. There appears to be no reason that SBLA loan guarantees should not be extended to capital leasing so long as the parameters of the SBLA are applied consistently to lenders and capital lessors.

Several special issues have also arisen with respect to bank financing of SMEs. These relate to lenders' treatment of women business owners and the potential establishment of legislation requiring lenders to reinvest in local communities. These topics are considered presently.

Gender and SME Lending

> *"Discrimination against women small business owners by Canada's major financial institutions is widespread across the country. … Women seeking financing are refused 20 per cent more often than men; and women are regularly charged a higher rate of interest than men"*

Canadian Federation of Independent Business,
//www.cfib.ca/english/research/reports/financin.html
"Financing Double Standard", June 28, 1997

There is a pervasive belief that women owners of small firms face disproportionately greater difficulty obtaining bank credit than do men. This belief is articulated in the popular media (Languedoc, 1988 among many), the professional literature (Bérard and Brown, 1994, p. 10), the positions of lobby organizations (Canadian Federation of Independent Business, 1995), and the academic literature (Belcourt, 1991). One consequence of this widespread understanding is that policy makers, industry regulators, and officials of lending institutions devote significant resources to address this accusation. Moreover, women business owners, fearing discriminatory treatment may avoid banks as a source of capital.

Conversely, there is a significant literature that documents empirical findings that do not support the allegation of gender bias (for example, Fabowale, Orser, and Riding, 1995; Riding and Swift, 1990; Statistics Canada, 1994; Buttner and Rosen, 1992). In spite of Bérard and Brown's (1994, p. 10) contention that "There is agreement in studies . . . that women entrepreneurs who seek outside financing face more obstacles than men", no such agreement exists and this question remains open.

The issues of access to credit and terms of lending for women business owners remain unresolved. On the one hand analyses reported by Riding and Swift (1990); Wynant and Hatch (1991), Fabowale, Orser and Riding, (1995), Statistics Canada (1994) and CLMPC (1995) do not sustain the contention of gender bias. Yet other published studies (Marleau, 1995, Belcourt *et al.*, 1991, the Alberta Ministry of Economic Development and Trade, 1990) conclude for gender bias.

Although based on the same sources of data, three of these studies led to different conclusions. Data drawn from the membership of the Canadian Federation of Independent Business [CFIB, henceforth] were used by Riding and Swift (1990), Fabowale (1991), and Marleau (1995).

The first study, (Riding and Swift, 1990) noted that, on average, women-owned businesses were younger and smaller than those owned by men. To the extent that age and size of firm were measures of financial risk, it was unclear to what extent gender (as opposed to age and size) might account for differences in borrowing experiences. To control for these factors, Riding and Swift matched female-owned firms with firms owned by male respondents based on business size, geographical location, age, sector, and form of business. By means of this matching approach, they were able to compare credit experiences across gender after allowing for these potentially confounding factors. They found no statistically significant differences across gender on most dimensions. Specifically, interest rates on term loans, interest rates on lines of credit, co-signature requirements, rates of turndowns on applications for new loans did not differ by gender. They found one dimension, collateral requirements, to differ by gender. However, with no differences on the other terms of credit, it was not credible to attribute the latter finding to bias.[20]

In the second study, Fabowale (1991) studied the responses of more than 2,700 small business owner (one-third of who were women) respondents to a 1990 survey of CFIB members. She used multivariate techniques to control for potentially confounding factors and found no evidence of gender bias in any respect. Finally, Marleau (1995) analyzed a third sample of CFIB members and found differences in turndown rates and interest rates (and no difference in collateral requirements). She concluded for gender bias. Potentially important shortcomings of Marleau's findings, however, were the presence of multicollinearity[21] and the lack of normality of the predictor variables and dependent variables. Marleau's conclusion of gender bias is also at variance with two other empirical studies that investigated the role of gender in access to capital.

The first of these two studies was conducted by the Canadian Labour Market and Productivity Centre [CLMPC, 1995] in conjunction with the Canadian Chamber of Commerce regarding access to capital. Their primary research agenda was to investigate how Canadian SMEs had raised capital and their needs for financing. The CLMPC used telephone interviews, resulting in 1,002 cases and a high response rate. Simultaneously, the Chamber of Commerce used the questionnaire developed by CLMPC to conduct a mail survey of Chamber members, generating more than 400 additional responses, albeit with a low response rate. The CLMPC investigated gender bias using the combined sample of 1,400 businesses and holding size of firm constant. Their data did not support the hypothesis that the degree of difficulty accessing debt capital differed by gender.[22]

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20 There is a strong probability that the finding of a difference in the latter term of credit was a statistical anomaly. With a five % level of significance employed on each of six tests, the probability of finding at least one significant result due purely to chance is $\{1 - (0.95)^6\}$, or 26 %. At a ten % level of significance, the chance of a spurious finding in at least one of six tests increases to 47 %.

21 Marleau confirms that survey respondents differed by gender in terms of size and age of the firm and by industrial sector. Moreover, Marleau states that that "all [of these factors] have an effect on access to financing" (p. 8). Further, Marleau confirms the need for "a statistical method which makes it possible to isolate the effect of each variable" (p. 8). However, Marleau used multiple regression (with interest rates as the dependent variable) and logistic regression (for loan turndown outcomes as the dependent variable). Among the independent variables, she retained industry sector, age of firm, size of firm, and gender as explanatory variables although she had established that these variables were highly inter-correlated. According to Stevens (1986. p. 65), "multicollinearity makes determining the importance of a given variable difficult because the effects of the predictors are confounded due to the high correlation among them". In addition, it is well known that multicollinearity poses other problems that include high levels of sample sensitivity and large error variances. In this context, the non-response bias typical of mail questionnaires becomes yet more serious a problem. Taken together, Marleau's findings are highly questionable.

22 These findings, too, are questionable. The data they used resulted from the blending of two surveys. Approximately one-third of their respondents were drawn from a mail survey of the membership of the Canadian Chamber of Commerce, a population that is skewed towards large firms. This survivorship bias is confounded by what is likely to be a significant non-response bias attributable to a very low response rate. The other segment of the sample was based on a telephone survey from Dun and Bradstreet listings. Again, a (different) survivorship bias was introduced and it is unclear to what extent the final sample represents that population of Canadian SMEs. Riding and

Statistics Canada (1994) also investigated the gender bias issue based on a telephone survey of 2,200 respondents. They found that when confounding factors such as industry, sector, and firm size were held constant, women were not subject to higher rates of loan turndowns than were men. The study noted that women submit proportionately more loan applications on behalf of [riskier] wholesale and retail businesses. According to the Statistics Canada findings turndown rates, after allowing for sector, were virtually identical across gender.

The most recent study of gender bias in the Canadian context is work reported by Haines, Riding, and Orser (1997). Based on 1,393 cases of bank lending to SMEs, this study used data extracted directly from bank loan files. Therefore, they avoided problems of low non-response rates and the potential for non-response and of survivor biases. They found that businesses bank borrowers did not differ by gender of owner in terms of both financial and non-financial attributes. From this, the researchers concluded that both male- and female-owned firms must survive a common minimum standard of creditworthiness. In case of discrimination, businesses owned by women would need to be more creditworthy than those owned by men. This study also reports that business borrowers face similar terms of credit (size of loan, interest rate on loans, collateral demands) across gender of owner. The researchers conclude against gender bias.

It is interesting to note how Canadian findings compare with those from international studies. In the US, Buttner and Rosen (1987, 1989, 1992) published a series of articles on gender in lending. In the first (1987) study, they found that bank loan officers more frequently associated characteristics of successful entrepreneurs to men than to women. Consequently, they speculated about the high potential for gender bias. In their 1989 study, Buttner and Rosen in a simulation study found that loan officers' decisions were not gender of applicant, type of loan officer, or presentation format of application played a role in loan decision-making.[23] In their subsequent 1992 study, Buttner and Rosen recognized the consistent allegations of gender bias in the popular and professional media yet noted that the weight of statistical studies documented the absence of gender bias in the US. They tested three alternative hypotheses that attempted to explain the incongruity. Their survey data failed to support that either:

- female business owners were more likely to underestimate the difficulty inherent in securing capital; or,
- female owners were more likely to attribute rejection to gender bias than to shortcomings of the business; or,
- male owners were more active than females in the search for capital.

Orser (1996) used the blended data file to demonstrate the impact of non-response bias on study conclusions. They found that the two sub-samples used for this study led to diametrically opposite policy implications.

[23] Fay and Williams (1993) replicated the spirit of the Buttner and Rosen study using New Zealand data. They mailed scenarios of an application for loan finance to loan officers of major trading banks. In their experiment, scenarios were identical except for the sex and education level of applicants. Significant differences in response to female and male applicants were observed, favouring the male applicant.

Findings reported in the literature are clearly inconsistent. A critical review of this literature suggests the following possible explanations for inconsistencies.

- Most of the empirical evidence to date used mail surveys of small business owners. Such surveys typically result in low response rates. Low response rates can lead to both survivor and non-response biases.

- Most research recognizes that firms owned by women are, on average, smaller and younger than those owned by men. Women-owned businesses also are disproportionately located in the service and retail sectors. Size, age, and sector of firm are determinants of creditworthiness. The empirical puzzle of disentangling the confounding effects of gender, firm size, age of firm, and industry sector is problematic.

- The research results appear to be highly sensitive to the methodology employed. For example, several early Canadian studies that conclude for the allegation of gender bias (Stevenson, 1986; Belcourt, Burke, and Lee-Gosselin, 1991). However, they failed to compare womens' credit experiences with those of a control group of male business. This shortcoming is also true of at least one study that concludes against gender bias (Wynant and Hatch, 1991). Most of the studies that did use male control groups find against gender bias (Fabowale, 1991; Riding and Swift, 1990; Orser, Riding, and Swift, 1994; CLMPC 1995; Statistics Canada, 1994). Yet one study that appears to use male controls concludes for gender bias (CFIB, 1995).

- Published and frequently cited surveys of research literature almost universally fail to weight research conclusions according to the quality of the study. Small-sample exploratory studies are often weighted equally with large-sample highly focused analyses (see, for example, Alberta Economic Development and Trade, 1990). Even studies that conclude against the allegation of bias are occasionally cited as "proof" that gender bias exists (e.g., FBDB, 1992; Belcourt et alia, 1991 p. 20; Bérard and Brown, 1994, p. 10)! Moreover, studies that employ non-Canadian data are extrapolated without misgiving to the Canadian context.

- Finally, researchers do not always account for the heterogeneity of women-owned businesses. This heterogeneity includes the diversity among the owners of the firms and variations in the attributes of the firms themselves (e.g., financial history and performance, sectoral differences, stage of business development, age of firm, etc.).

The question of gender bias is not resolved and further research is required. Such research should minimize the effects of non-response and survivor, potential problems that cloud the interpretation of research findings based on mail surveys. Statistical techniques such as reverse regression might be applied usefully to eliminate as much as possible the effects of confounding variables. Finally, respected and independent researchers should carry out such research. In the interim, legislation or further regulations rooted in accusations of gender bias should be deferred.

On Requirements for "Community Reinvestment"

Consideration of community reinvestment legislation for Canada stems in part from the Community Reinvestment Act model that is in effect in the US. For example, The recently formed Canadian Community Reinvestment Coalition [CCRC] states its goals as follows:[24]

"The CCRC will address the following issues, among others:

- discrimination in bank lending patterns and practices;
- reinvestment by banks in communities and job-creating initiatives;
- provision of bank services fairly and equitably to all people;
- the creation of a financial consumer organization;
- the creation of a truly independent and effective Banking Ombudsman office;
- banks' cash reserves with the Bank of Canada; and,
- disclosure of banks' costs/revenues for services and credit card operations."

Before considering adoption of such laws, it is instructive to review the origination of the Act in the US context and to learn from the US experience with it.

The US Experience

In the US, the Community Reinvestment Act [CRA] of 1977 specifies that lending institutions have a legal responsibility to meet the credit needs of their local communities. This section examines the US experience with their Community Reinvestment Act [CRA]. This review draws particular references to implications of the act for financing entrepreneurial firms.

The CRA obliges commercial banks, savings and loan associations, and savings banks to "meet the credit needs of the local communities in which they are chartered, consistent with the safe and sound operation of such institutions" (U.S.C. §2901, 1977). US regulators did not enforce vigorously the CRA after its inception in 1977. However, in 1989 the Financial Institutions Reform, Recovery, and Enforcement Act amended the CRA and mandated public disclosure of CRA ratings.[25, 26] Originally, noncompliance was only problematic for banks when they sought to merge or expand because noncompliance was one reason that bank regulators would withhold

[24] Submission of the Canadian Community Reinvestment Coalition to the Task Force on the Restructuring of the Canadian Financial Sector, February 17, 1997.

[25] Compliance of US lending institutions with the act was rated on a four-point scale: "outstanding", "satisfactory", "needs to improve", and "substantial noncompliance".

[26] A further amendment in 1996 reduced the costs of complying with the CRA by reducing the number of assessment criteria employed by bank examiners from 12 to 3.

permission to do so. With public disclosure, the penalties for noncompliance increased to include public criticism and negative publicity.

The genesis to the CRA in the US was the perception of *redlining* that institutional lenders discriminated against low-income communities. The hearings that accompanied the legislation received testimony about how some institutions denied loans to members of poor inner-city neighbourhoods, yet used their deposits to make loans to inhabitants of more affluent neighbourhood. According to Senator William Proxmire, the primary sponsor of the Act in the US Congress:

> "By redlining … I am talking about the fact that banks and savings and loans will take their deposits from a community and instead of reinvesting them in that community, they will invest them elsewhere, and they will actually or figuratively draw a red line on a map around the areas of their city, sometimes in the inner city, sometimes in the older neighbourhoods, sometimes ethnic and sometimes black, but often encompassing a great area of their neighbourhood."[27]

The concern about redlining voiced by Proxmire and others was that financial institutions would treat particular geographic areas (especially decaying urban zones with concentrations of minorities) as off-limits for financing. Doing so denied disproportionately credit to racial minorities. It was the view of supporters of the CRA that banks discriminate against low-income communities.[28] By doing so, they were contributing further to urban decay by sending financial resources out of the areas from which they had obtained the capital. According to Macey and Miller (1993, pp. 298-299),

> "The overwhelming focus of the legislative history of the CRA was on the need to preserve local communities, and on the argument that depository institutions could invest in their local communities and still make a profit."

Other goals of the act were to help small businesses and to create jobs for members of minority groups. Accordingly, the CRA (United States Congress §2901) provides that:

> "Regulated financial institutions are required by law to demonstrate that their deposit facilities serve the convenience and needs of the communities in which they are chartered to do business;
>
> the convenience and needs of the communities include the need for credit services as well as deposit services; and
>
> regulated financial institutions have a continuing and affirmative obligation to help meet the credit needs of the local communities in which they are chartered."

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[27] *Congressional Record*, daily ed., June 6, 1977, S. 8958, cited in Lacker (1995, p. 15).
[28] In this discussion, the term "banks" will refer to commercial banks, savings and loans associations (also known as thrifts), and savings banks.

Thus, the justification for the CRA rests on the empirical perception that institutional lenders discriminate against particular neighbourhoods and, as Macey and Miller argue, an ideology of community reinvestment that rests on three premises:

1. that banking is (or ought to be) a local industry;

2. that banks drain financial resources out of local communities; and,

3. that banks owe special duties to their local communities.

These conceptual bases to the CRA, as well as the empirical basis that banks practice redlining, bear further investigation.

The Empirical Basis of the CRA in the US: Do US Banks Discriminate?

This question has two elements: whether or not banks discriminate against *neighbourhoods* and whether or not banks discriminate against *individuals*.

On Discrimination against Neighbourhoods

First Generation Research. Proponents of the CRA based their allegations of redlining on research that showed large disparities in mortgage lending activity according to the racial composition of neighbourhoods.[29] These initial studies, as well as several studies conducted during the 1980's, concluded that banks had curtailed the *supply* of credit to particular neighbourhoods. The first generation research, however, did not account for factors that influence the *demand* for mortgages (for example, income and wealth levels, owner occupancy-rates, etc.), factors that also correlate with racial composition of neighbourhoods. Without controlling for demand-related factors, it is not valid to base conclusions about supply restrictions only on the quantities of loans.

*Second Generation Researc*h. Subsequent research used information about the economic characteristics of neighbourhoods to investigate redlining. For example, Schill and Wachter (1993) and Canner, Gabriel, and Woolley (1991) controlled for different types of demand-related economic attributes of neighbourhoods. They found that after holding "other things equal" mortgage flows and loan approval rates did *not* relate to neighbourhood racial composition. Thus, with hindsight, research has found no evidence that banks discriminate against neighbourhoods based on race. The appearance of redlining appears to be an artifact. First, inhabitants of inner-city neighbourhoods are less likely to demand credit than are other bank clients. Moreover, they more frequently do not possess the levels of wealth and income that lenders require.

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[29] See, for example, Canner (1982) and Benston (1979) for surveys of this body of research.

On Discrimination Against Individuals

Like the question of discrimination against neighbourhoods, the research methodologies employed to test for discrimination to individuals have evolved. Early studies measured access to, and costs of, credit for various racial groups. The early analyses carried out these comparisons without regard to systemic cross-group differences. Race-related differences include wealth, incomes, and other measures of creditworthiness. Research that is more recent has re-examined whether or not banks discriminate against individuals by employing techniques that control for measures of individual

Perhaps the most important study of discrimination is the "Boston Fed" study of 1990 HMDA data (Munnell et al., 1992). Other investigators have examined and re-examined these data using a diverse set of methods. Until recently, all investigations reached the same conclusion: that after allowing for reasonable measures of creditworthiness, a term conveying membership in a minority group remained statistically significant. This finding implied that US banks did appear to discriminate across racial lines.

Recently, application of a statistical technique known as reverse regression to the same HMDA data set has questioned the earlier findings of discrimination (LaCour-Little, 1996). Given the apparent sensitivity of the findings to the investigative technique employed, we can conclude that while the weight of evidence suggests racial discrimination by US banks, room for doubt remains.

However, even if US banks do discriminate racially, it does not follow that the CRA is the best means of rectifying discrimination against individuals. While it is true that in the US there are many instances whereby the racial mixtures of particular neighbourhoods follow geographic boundaries, integration of racial minorities across neighbourhoods is increasingly the rule. If racial discrimination is the problem, the best solution is enforcement of existing laws against discrimination, not legal compulsion of institutions to follow particular geographically defined lending and investing patterns. Existing laws in the US at both the federal and state levels specify fair lending practices.[30] Therefore, as a means of dealing with discrimination against individuals, the CRA is both inappropriate and redundant.

On the Conceptual Basis for the CRA in the US[31]

Banking as a Local Industry

In the US, there is a popular image of banks as fundamentally local institutions. The roots of this historical image lay in the legal settings that once governed US banking practice.[32] Until very recently, legal prohibitions against mutli-branch banks and interstate banking limited bank expansion. Moreover, transportation and communications technologies are relatively recent

[30] For example, the Equal Opportunity Credit Act of 1975 is one such act.
[31] Much of the discussion in this section is based on that advanced by Macey and Miller (1993) and Lacker (1995).
[32] The US tradition of a single-branch local bank is quite different from that Canadian norm of large multi-branch banks.

developments that facilitate remote transactions. The historical US norm was one in which the only practical source of credit was the local banker. This model of banking is far from the reality of the present. Banking is much less of a local industry than it had been historically. Virtually all states in the US now permit branch banking and interstate banking is increasingly common. Expansions, mergers, and regulatory changes have increasingly concentrated the US banking system. For the most part, the US federal and state laws no longer limit US banks to the confines of a particular neighbourhood or community. The reality of current US banking practice is that it occurs in a global setting. Hence, giving meaning to the term "community" in community reinvestment is at issue.

It is possible that the proponents of the act intended that, in a normative sense, banking *should* be a local industry instead of the global industry to which it is evolving. However, the transition to a global banking system has been one that has been of immense benefit to both individual and corporate consumers. It is not defensible to suggest that the global banking industry should regress to one that is inherently regional and insular.

The premise that banking is a local industry is invalid empirically and indefensible on normative grounds.

Banks Drain Funds from Local Neighbourhoods

There are two aspects to this assertion. This is clear from part of Senator Proxmire's statement to congress:

> "We find many banks … which take money from the community and invest it elsewhere, in some cases abroad, in some cases in other parts of the country. …We have found many cases where these institutions have invested virtually nothing in the local community." [33]

This argument depends heavily on the rhetoric and choice of words. It is one thing to "drain" money from a community, and this choice of wording is harshly negative. Yet, it is a different thing to "export" money from a community! Countries, provinces, and other jurisdictions usually encourage exports. If money were an exported commodity instead of cash, perhaps there would be no debate about this banking practice. As Macey and Miller (1993, p. 308) contend:

> "… The export of credit, like the export of grain or other commodities, provides benefits to the locality in which the credit is generated, in the form of local banks that can pay higher interest rates for their deposits as a result of their ability to make profitable loans in distant locations."

Credit is, by nature, entirely fungible. Thus, although banks may transport funds across communities, credit importer communities do not necessarily benefit at the expense of credit exporter communities.

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[33] 123 Congressional Record 17,603 (1977) as reported in Macey and Miller (1993), p. 307.

Moreover, the implication here is that money is being "drained" from depressed regions more often than from affluent neighbourhoods. This does not make sense. Banks "drain", or export, capital from *all* neighbourhoods and invest where they find profitable opportunities. What does make sense is that banks are more likely to find profitable investment opportunities in affluent areas than in economically disadvantaged regions. This, however, has more to do with *investment* decisions than with where the funds originated.

Perhaps, then, it is not so much that banks export capital that is problematic as that banks may not be investing locally. As mentioned in the latter part of Proxmire's statement, an important premise of the CRA was that banks were not investing in profitable opportunities within their local areas. However, aside from the allegation that banks discriminated against communities, the debate on the CRA advanced no compelling reason why institutions should return funds from a particular region to the same locality. A price system allocates credit and directs it to the users who most value it. CRA argue that un-exploited profitable loans are available locally. If true, it is specious to think that local institutions are not exploiting them. In this sense the logic of the Act's proponents is seriously flawed because either:

1. it is profitable to serve the local community anyway; *or*,

2. it is not profitable to service the local community.

If the former assertion is true, the CRA is redundant.[34] Alternatively, compliance with the CRA requires a cross-subsidy such that above-average profits from other services or regions subsidize the losses from the unprofitable service to the local community.[35] If this is true, banks will not enter communities (and services) that are unprofitable. Moreover, they would attempt to exit depressed regions if the CRA required continued local reinvestment.[36] In this event, the CRA would result in reduction or elimination of banking services to the very neighbourhoods the Act seeks to revitalize. Thus, in the view of White (1993, p. 14) "The CRA's emphasis on localism is anachronistic and ultimately self-defeating."

Banks Owe Special Duties to their Local Communities

According to the CRA, "Regulated financial institutions have an … obligation to help meet the credit needs of the local communities in which they are chartered." This implies that the privilege of a bank charter entails responsibilities relating to returning credit to the community from which it draws deposits. It is not at all clear *why* this should be so. Other types of

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[34] In this event, it is hard to conceive of any other party than the local banker as the best person to uncover such opportunities.
[35] With increased competition in the financial services sector, opportunities for above-average profits are likely to disappear or dwindle.
[36] White (1993, p. 16) reports two such instances that are already matters of public record. In 1980, the Freedom National Bank headquartered in Harlem became insolvent in 1980 and the Federal Deposit Insurance Corporation [FDIC] seized it. The FDIC could not locate any other institution to take over Freedom's operation, even when the FDIC agreed to cover losses on the loans of the bank. Consequently, residents of the area had fewer banking service providers available. Likewise, with the 1991 failure of the Goldome Bank, the FDIC was able to find only one bank to take over its Harlem branches.

enterprises do not face legal obligations to serve their particular local communities. Banks do differ, of course, because they "are among the few types of firms in the marketplace that do not automatically respond 'yes, how many do you want?', when a potential customer expresses interest in their product" (White, 1993, p. 17).[37]

Banks also differ from other enterprises in other ways. Banks have historically held considerable economic power. Their liabilities (deposits) imply government regulations that seek to preserve the safety of these deposits and of the banking system. The success of banks has made them relatively easy targets for lobby organizations and the media. However, proponents of the CRA have not advanced a rationale for why they single out banks to have legally enforced local responsibilities.

To be sure, there appears to be a need to revitalize particular neighbourhoods in the US, as well as in parts of Canada. It is not at all clear that revitalization of inner cities through a system of credit redistribution ought to be a particular responsibility of the banking system. Accordingly, this goal is one consistent with the CRA only if the Act is understood to be a redistribution system. However, direct subsidies would better serve this goal than what amounts to an indirect tax.

Costs and Benefits of the CRA in the US

Macey and Miller (1993, p. 293) report that many bankers view the statute as burdensome. Compliance costs are high and the cross subsidization from high-profit areas to meets the terms of the CRA is seen as a tax design to stem the deterioration of inner city communities. That being said, there seem to be three clear beneficiaries of the CRA: small businesses and small farms, banking regulators, and special interest groups.

The benefits to small firms stem from a perverse logic. Given that the CRA is law and that lenders must both comply with it and be seen to comply with it, banks have a choice of how to respect the CRA. One the one hand, they can extend loans to borrowers in depressed inner city neighbourhoods. Alternatively, however, lenders can comply by extending loans to small businesses or small farms, both of which have powerful local and national lobbyists. In doing so, banks comply with the Act; however this lending does not necessarily advance the objectives of the Act that relate to perceived discrimination against communities. This defeats the original goal of the Act.

Regulators benefit because the CRA provides "a useful mechanism that regulatory agencies can use to increase their authority over institutions in their jurisdiction" (Macey and Miller, 1993, p. 342).

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[37] Insurance companies are another.

Lobby groups also gain. According to Macey and Miller (1993), the vast majority of CRA assessments yield judgments that the institutions complied with the Act.[38] Nonetheless, applications for bank expansion or mergers are regularly contested on grounds of non-compliance with the CRA, even when the institution in question has exhibited an exemplary public record of compliance.[39] Dealing with these contentions is costly and time-consuming for the financial institution and can be wasteful of public resources. Consequently, financial institutions have sometimes reached accommodations with special interest groups to forestall challenges under the CRA.[40]

Lindsey (1995), however, argues that the CRA benefits the economic environment. He describes the CRA as a government program that entails a minimum of bureaucracy, includes great local autonomy, and involves no federal tax dollars. He argues that the act results in material community and economic development activity. Garwood and Smith (1993) also argue that the CRA has stimulated attention to community needs in low income and minority areas and that it affords opportunities for meeting the credit needs of communities.

The Canadian Setting for Community Reinvestment Legislation

Several groups advocate that Canada adopt legislation such as the CRA.[41] However, advocates of community reinvestment have not presented reasons to require that banks observe special obligations to the communities (however defined) in which they are resident. As noted, the image of banks as local institutions is even less tenable in Canada than in the US. The banking systems of the two countries reflect very different models. Whereas the US does have a history of banks as local institutions, there is no such legacy in Canada.

Moreover, the conceptual arguments of the preceding section are generic in nature:

- Canadian banks are not, nor should they be, purely local institutions. A vision that banks should be local institutions is not defensible.

- Banks do not "drain" so much as "export" capital from communities. It may be true that Canadian banks invest funds raised from relatively disadvantaged neighbourhoods in regions beyond these districts. By the same logic, banks invest

[38] Macey and Miller (1993, p. 302) report that 90% of institutions are rated either "satisfactory" or "outstanding" and that only 1% fall in the "substantial noncompliance" category. They also report that the frequency of being in noncompliance is greatest for smaller institutions: banks found to be in the "substantial noncompliance category" had average assets of only $55 million.
[39] Macey and Miller (1993, pp. 334-337) recount several examples of this pattern.
[40] Macey and Miller (1993, pp. 337-340) recount several instances in which banks have apparently agreed to hiring quotas and philanthropy in efforts to evade CRA-based challenges. The authors also report speculation that in one instance a labour union mounted a CRA challenge that might have been retaliation for the involvement of the bank in a takeover that entailed loss of union jobs.
[41] See, for example, comments by S. Bellan to Conference on Entrepreneurship Development, Brock University, June 1994. In addition, the Canadian Community Reinvestment Coalition was founded in December of 1996 and has raised questions about "about their [banks'] lending to women, minorities, in low- income neighbourhoods or specific regions of Canada. "[CRCA, 1997, p.3] .

funds from relatively advantaged vicinities beyond these advantaged districts as well! What may be at issue is that the returns to depositors are lower that advocates might wish.

- If banks discriminate against individuals, the appropriate remedy is to enforce existing laws against discrimination. Enforced community reinvestment is not a remedy for discrimination against individuals, even if sustained by research (and, as seen in other sections of this report, such research is not conclusive).

- Legislating reinvestment of credit in the communities from which it originated would constrain, possibly inappropriately, banking practices. The regulation would be burdensome, have significant costs of compliance and monitoring, and probably require sub-optimal lending practice.

- Requirements for community reinvestment would result in investment of depositors' funds in sub-optimal investments and therefore be at variance with lenders' fiduciary obligations, and, more importantly, would not solve the problem.

- The rationale is not tenable that because the US has adopted the CRA it must therefore be beneficial for Canada.

Debates about the CRA continue in the US media and research literature. The weight of the evidence, might best be summarized by Lacker (1995, p. 24 and 32):

> "The CRA cannot be rationalized as a corrective for lending discrimination or some other identifiable market failure … The CRA is not an efficient vehicle for revitalizing decayed neighbourhoods, despite its laudable goals."

The review of the US experience makes it clear *that advocates of community reinvestment must articulate clearly what problem any proposed legislative action is to address*. If banks discriminate against neighbourhoods an empirical case for some form of corrective legislation, perhaps even community reinvestment requirements, might be advanced. However, there does not appear to be any existing published evidence of lenders' discrimination against communities in the Canadian setting. Accordingly, to inform better any prospective CRA-like legislation, further research is necessary on discriminatory bank lending practices. Research on discriminatory constriction of credit supplies, if pursued, should control effectively for demand-related factors and other potentially confounding effects.

Debt Alternatives to Bank Borrowing

Asset-Based Financing

Asset-based financing is a means by which a business raises cash by using the value of a physical asset, often the particular asset for which the firm needs the funds. Leasing, term loans, and conditional sales contracts are among the financial services that comprise methods of "asset-based financing." For an asset-based financing, the focus is on the value of the asset itself.

Asset-based financing arrangements can be attractive alternatives to bank borrowing. First, companies that specialize in this type of financing are usually more willing than banks to structure payments that reflect clients' cash flow situations. For example, payments on assets often vary from month to month to mirror seasonality of lessees' cash flows. Second, traditional lenders base their lending decisions on the ability of the lender to service the additional debt, the borrower's record of accomplishment, and the quantity and quality of the firm's collateral. Conversely, asset-based financiers place most emphasis on the value of the asset.

Third, asset-based finance companies have expertise in the management of, and asset markets for, most of the property they finance. This expertise allows them to reduce the uncertainty regarding the liquidation values of assets, an uncertainty that non-specialist traditional lenders perceive as risk. Traditional lenders, as generalists rather than specialists, are less able to tap into the resale markets at the end of the lease or in case of default.

The most frequent form of asset-based financing is leasing. Asset-based financing firms provide other financial products including secured commercial loans, factoring of receivables, non-residential mortgages, and conditional sales contracts. Not all firms provide all these services.

The Canadian finance and leasing industry spans a diverse group of firms.[42] Three categories of these firms are of particular interest. The first are those firms best described as asset-based financing companies. Examples of such firms include AT&T Capital Canada, and the recently merged Commcorp Financial Services and Newcourt Credit Group. These firms offer a wide range of financing methods that include, among others, capital and operating leases, term loans, and conditional sales contracts. The segment of the financing and leasing industry is the fastest growing due both to demand and acquisition activity.

A second category of firms is best termed manufacturers' captive finance companies. Examples of these firms include, among others, Bombardier Finance Inc., Pitney Bowes Leasing, OE Financial Services Inc. Typically, these firms specialize in the products of parent industrial firms, and, therefore they tend to specialize according to the type of equipment leased.

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[42] A detailed review of the asset-based financing and leasing industry is available and updated on an annual basis. See Mary McDonough Research Associates (1996). The Canadian Finance and Leasing Association has more than 100 member firms and, according to the Conference Board of Canada, these account for 80 % of asset-based financing in Canada (Conner, 1995).

The third major category is finance and leasing arms of financial institutions. These include such firms as Royal Bank Leasing, the leasing activities of the Bank of Nova Scotia, among others. These institutions are more broadly based in leasing activities than are the captive firms.

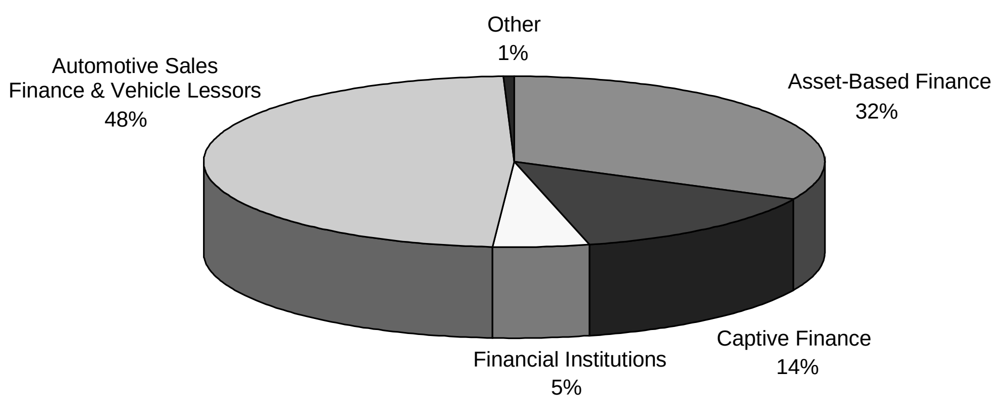
Other types firms that constitute the finance and leasing industry include:

- automotive sales finance companies (e.g., Chrysler Credit Canada Ltd., etc.);
- vehicle lessors (e.g., Jim Pattison Lease, Sako Auto Leasing, etc.)
- brokers or agents (e.g., Consolidated Leasing, Lease West Financial Corporation); and,
- distributor dealers such as Telecom Leasing Canada.

The charts that follow provide breakdowns of the industry according to the categories of firms listed here. Chart 2 presents the breakdown of the industry according to total financial assets managed by the various categories of firms.

Chart 2

The Canadian Finance & Leasing Industry: Total Financial Assets
(Source: Annual Survey: Asset-Based Finance & Leasing 1995, CFLA)

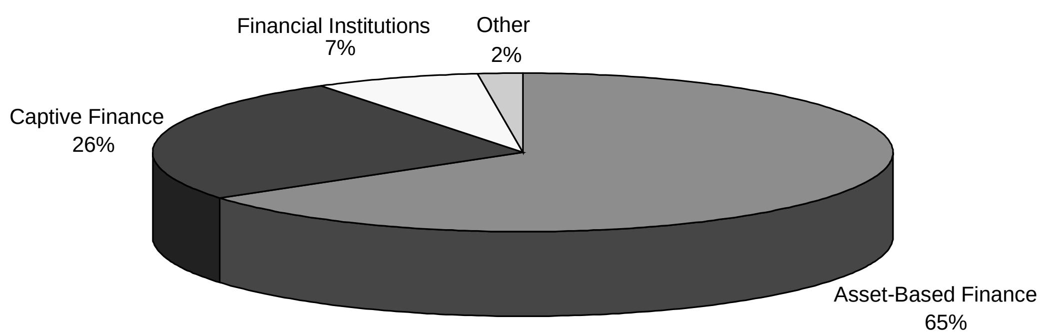


The increase in market penetration of the industry bears witness to its growth. In 1992, asset-based lending and leasing accounted for only 11 % of asset financing by businesses. For 1995, the CFLA estimated penetration to be 15.9 %. In part, this is due to increasing demand for products such as computers and communications. However, this growth also represents the increased level of activity from the industry with respect to vendor financing and other point-of-sale arrangements.[43]

Chart 3 presents a breakdown of the industry according to new business written in 1995. Unlike Chart 4, the third chart focuses on the three categories of firms of primary interest to this study.

Chart 3

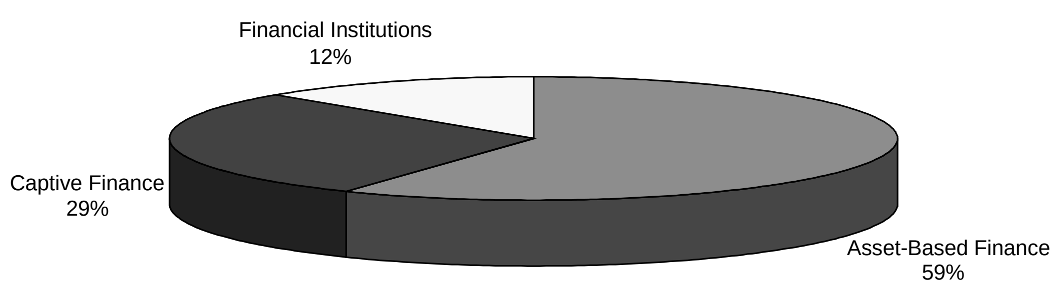
The Canadian Asset-Based Finance & Leasing Industry: New Business Written, 1995
(Source: Annual Survey: Asset-Based Finance & Leasing 1995, CFLA)



In Chart 4, the new business written specific to SME clients is broken down for the three types of finance firm of interest here. Clearly, asset-based financing firms dominate the SME segment of the market. However, all three categories of firms appear to focus on particular types of equipment.

Chart 4

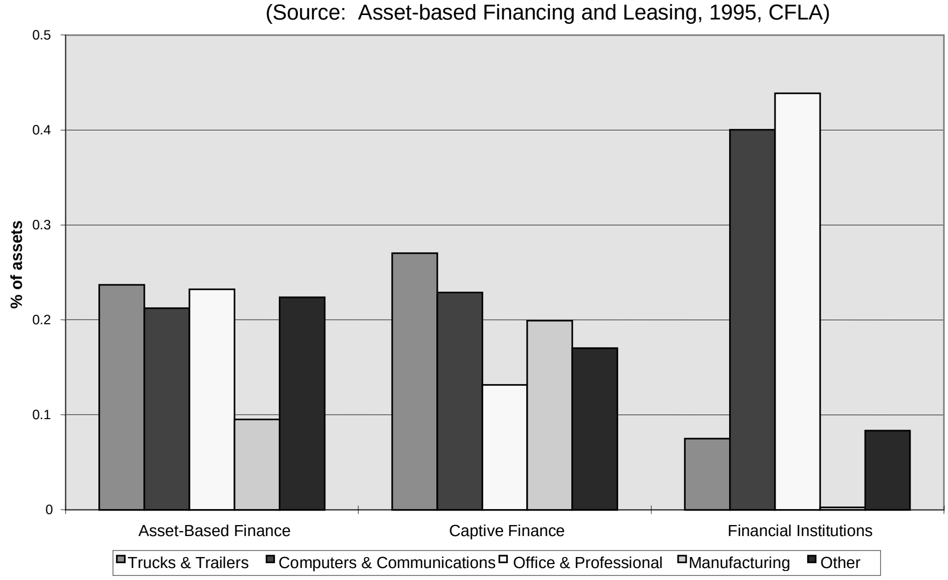
Estimated Distribution of Asset-Based New Financing to SMEs, 1995



[43] Vendor financing is the arrangement whereby an asset-based finance company acts as a lessor on behalf of an equipment vendor.

Chart 5 breaks down the portfolios of lessor firms according to the frequency of types of asset under lease.

Chart 5
Financing by Equipment Types
(Source: Asset-based Financing and Leasing, 1995, CFLA)



Clearly, all three categories of firms focus on three classes of equipment for financing:

- office furnishings and professional (doctors dentists) equipment;
- trucks and trailers; and,
- computers and communications equipment.

These categories of equipment are those for which active after-markets are available and are equipment types amenable to the specialization that characterizes this industry. Table 1 provides estimates of the breakdown of the 1995 new business written by the three main categories of asset-based finance companies for the six categories of equipment leased most frequently by SMEs.

Table 6: Market Estimates of Financing by Equipment Type

($million; Source Mary McDonough Research Associates (1996))

Equipment Category	*Asset-Based Finance Firms*	*Financial Institutions*	*Captive Finance Firms*	***Totals***
Computer-related	1,348	165	1,360	**2,873**
Construction	297	34	196	**527**
Office & Professional Equipment	1,948	37	1,514	**3,499**
Tractor Trailers	1,927	277	255	**2,459**
Vehicles	496	60	64	**620**
Printing Equipment	397	30		**427**
Totals	**6,413**	**603**	**3,389**	**10,405**

Forms of Asset-Based Financing

Regardless of the nature of the equipment or the nature of the leasing transaction, there are two broad categories of leases: operating leases and capital leases.[44] The Canadian Institute of Chartered Accountants qualifies a lease as a *capital* lease if any one of the following conditions holds:

- there is a reasonable assurance that the lessee will obtain ownership of the asset by the end of the term of the lease;
- the term of the lease exceeds 75 % of the useful life of the equipment; or,
- the present value of the lease payments is more than 90% of the original cost of the equipment.

If there is no reasonable assurance that the lessee will own the equipment by the end of the term of the lease and if the other two conditions do not hold, the lease is an operating lease. In short, capital leases and purchasing the asset by term loan borrowing are almost indistinguishable.

Capital Leases

Capital leases usually provide equipment financing that spans the useful life of the equipment. The lessee cannot usually cancel the lease. Hence, capital leases are also known as "full payout"

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[44] According to McDonough Research Associates (1996), capital leases accounted for 42% of contracts for asset-based lenders, 53% for captives, and 81% for financial institutions. In addition, McDonough Research Associates estimates that 52% of transactions are in the "small to mid-market" category of less than $100,000 per transaction. For this segment, it is estimated that $2.16 billion of new business was written by these specialized financial firms with respect to capital leasing in the SME market segment in 1995.

leases because the lessor structures the lease to recover the full original cost of the equipment, as well as a contribution to profit and overhead. Essentially, all the rights and benefits of ownership of the equipment rest with the lessee.

With a capital lease, the risk the leasing company takes is primarily a credit risk, the risk that the lessee will not, or cannot, make the contractual lease payments. In the event that the lessee fails these obligations, the lessor can repossess the leased asset and resell it. Consequently, several lessors specialize in particular types of equipment. They become conversant with the market value of the leased equipment and are able to resell it at the best possible price.

One common variation of the capital lease is the “stretch lease”. Under a stretch lease, the lessee has the option to purchase the leased asset after a specified number of payments at a given option price. The intent of a stretch lease is to make sure the lessor receives its full return even when the lessee need not purchase the equipment at the expiry of the lease. The price is such that the lease payments to that time with the option price provide the full-required return. If the lessee does not exercise the option, the lease is ‘stretched’ for an additional number of payment periods such that the value of the incremental lease payments is equivalent to the option price. At the end of the extended period, the lessee may buy the asset at its then fair market value or return it to the lessor.

Operating Leases

Operating leases finance equipment for only a portion of its useful life. Operating leases are those with a term that is usually less than 75 % of the useful life of the equipment and where the present value of lease payments is less than 90 % of the original equipment cost.

For operating leases, the lessor takes on credit risk and faces uncertainty of the market values for used equipment. Lessors deal with credit risk in the same ways as for capital leases: by careful investigation of the creditworthiness of the prospective client. Lessors deal with equipment risk in two ways. First, operating leases are usually only available for equipment that has a ready resale market, such as automobiles. Second, leasing companies often specialize in particular types of equipment, thereby becoming expert the resale markets.

Tax Treatment of Leases

For tax purposes, lease payments are a tax-deductible expense for the lessee; the lessor, as owner of the asset, claims Capital Cost Allowance [CCA]. However, Revenue Canada deems a lease to be a sale if any of the following conditions is present:

- title to the equipment passes to the user automatically by the end of the lease;
- the lessee is required to purchase the asset; and,
- the lessee has the option, during or at expiry of the lease, to acquire the asset on terms that a reasonable person would exercise.

If any of the above holds, the lease is a sale for tax purposes and the user of the asset claims CCA, but not the lease payments.

It is important to note that the tax treatment of types of equipment when leased can differ from the treatment of the same equipment if purchased by the user. For example, tractor-trailer rigs are one of the primary types of equipment that end-users typically lease. Lessors of such rigs can deduct CCA at a 30% rate; yet, users who purchase these vehicles can deduct CCA at a 40% rate. This tax-based inconsistency, which spans several types of asset groups, establishes a bias towards borrowing-to-own in the financing market are should be re-examined.

Other Forms of Asset-Based Financing

In addition to leasing, asset-based finance companies also offer secured commercial loans, non-residential mortgages, conditional sales contracts, and factoring of receivables.

Secured Commercial Loans

While the banks are the largest source of term loans, asset-based finance companies are also term lenders. The assets purchased by the proceeds of the loan usually act as security.

Conditional Sales Contracts

A conditional sales contract is a means of granting credit whereby the vendor of the asset retains legal title until the purchaser has made full payment. A conditional sales contract is advantageous to the financier in if the purchaser cannot complete payment, retaining title to the goods facilitates repossession. Therefore, conditional sales contracts are a useful financing alternative when the seller doubts the ability of the purchaser to pay.

Commercial Mortgages

Commercial mortgages can finance the purchase or renovation of real estate through debt that uses the property as security. They are usually of one to five years term, but with amortizations of up to 25 years. Interest rates are usually fixed for the term and they reflect current levels of interest rates. Fees are additional, involving an initial negotiation fee and possible account management fees. Principal repayment is usually restricted during the term of the loan. While specialized asset-based lenders have a presence in the market for commercial mortgages, this is a market dominated by life insurance companies.[45]

Leasing from the SME Perspective

A lease is an agreement between the “lessor”, who owns the asset and provides the right to use the equipment, and a “lessee”, who makes periodic payments for use of the asset. The agreement involves a series of contractually specified payments for an agreed period of time. Leasing offers several important advantages, especially to small- and medium-sized companies:

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[45] Conner, C. (1995).

- Leasing provides use of equipment without the need to pay for it at the time of purchase. Potentially, the business can then redeploy capital to finance working capital or other resources.
- Leases often provide flexibility in their terms. Up-front payment of the asset is not required. Future earnings offset the cost of the asset.
- Certain tax benefits, that may allow owners to write-off the full cost of leasing, compared to claiming capital cost allowance on the value of purchased assets.
- Lease terms usually reflect fixed interest rates. Knowing, with certainty, the cash flows associated with the lease facilitates planning.
- Reduced risk of obsolescence to the user.

Leasing also entails several disadvantages:

- The firm does not own the asset, thereby eroding the value of fixed assets.
- The per-dollar cost of lease financing often exceeds that of borrowing funds to purchase the asset; however, this varies widely by type of asset and also depends on taxation effects.

Motives for leasing vary and depend on each situation. For most small businesses, the cash flow considerations are often dominant.[46] Leases allow firms to acquire assets that would otherwise require a considerable outlay of cash. In other instances, convenience or obsolescence risk is primary. Certain types of equipment such as heavy industrial or commercial equipment, medical instruments, and computers are more amenable to leasing than other types of equipment.

The specific terms of leases vary with the type of equipment. Leases are generally for three to six years. In financial terms, leases tend to be more expensive than bank loans after accounting for all fees and costs on a before-tax basis. Lease payments, however, can be suited to the lessees' situations. The lease contract can often be arranged at the point of asset acquisition, and leases do not require the full up front capital cost of the asset.

Legal and Regulatory Impediments

The Conference Board of Canada (1995) identified four categories of barriers to the growth of non-bank debt financing. These categories included taxation and securitization.

Taxation Impediments

As noted previously, the Capital Cost Allowance treatment of leases and borrowing-to-purchase differ. For important categories of equipment, lessors may not claim CCA at as high a rate as are

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[46] Garety, V. (1995).

users of the equipment who finance the item by debt. This seems to be a clear example of "policies and regulations that create inconsistencies among segments of the capital markets".

A second taxation-related disadvantage faced by lessors relates to the Large Corporation Tax (LCT). The LCT applies to businesses with a capital base that exceeds $10 million. Most leasing firms are subject to the LCT; hence lease payment revenues must provide for the LCT. SMEs that opt to purchase the equivalent equipment are not subject to the LCT. While it may not disadvantage lessors relative to lenders, the LCT provides a small advantage to SMEs that purchase equipment rather than leasing it.

Barriers to Securitization

Asset-based financing companies have been leaders in the use of securitization as a means of financing. The Conference Board (1995) notes two impediments with respect to securitization:

1. According to CICA accounting standards, transactions must be structured around a maximum recourse amount of 9.9%, otherwise the CICA deems the transaction a loan and the assets in question must remain on the balance sheet. This leaves the lessor-lender with the risk of default (up to the recourse level). According to the Conference Board, this limits expansion of securitization products into riskier loan portfolios.

2. The 10/50 rule restricts equity ownership of subsidiaries by federally chartered financial institutions to either less than 10% or more than 50%. The Conference Board argues that this rule limits the flexibility with which non-bank lenders can enter into joint ventures with such financial institutions.

It seems quite clear that securitization is an important addition to the tools available to all suppliers of finance – whether the capital is for SMEs, individuals, or consumers. Through securitization, banks and non-bank financial institutions can materially augment the supply of capital. This can only benefit small business that are seeking financing.

SMEs and Access to Equity Capital: Legal and Regulatory Hurdles

This section reviews sources of early stage equity capital for SMEs. To do so, we identify three segments of the market for equity: sources of start-up financing; the formal and informal markets for venture capital; and initial public offerings. We will find that regulatory and legal hurdles are largely common to all three segments and arise primarily from provincial securities legislation. At the outset, we note, for the most part, that markets for equity capital fall under provincial legislation. As such, many of the barriers that we identify fall beyond the mandate of the Task Force. This section will also review the efficacy of initiatives that various governments have undertaken in attempts to improve access to equity financing for SMEs.

Start-Up Capital

Financing Start-Ups

Two studies have documented the financing needs of start-ups. One was the “Young Companies Study” conducted by the Ontario Ministry of Economic Development and Trade (1993). The second is the annual survey research conducted by Thompson Lightstone & Company on behalf of the Canadian Bankers Association (1996, 1997).

According to the 1997 Thompson Lightstone study, individuals in 9.3 % of Canadian homes attempted to start a business during the preceding 12-month period. Of these, approximately 37% did not successfully enter business within the first year. According to the study (p. 134), most of the new businesses (74%) did not seek external financing. Moreover, among the businesses that did seek external financing, “owners of new businesses were just as likely (31%) to have sought financing from a financial institution during the past year as were SMEs in total (32%)” (p. 131). The size of the loan requests made by the new firms were smaller (84% requested less than $50,000) than loans sought by SMEs in general. The study also documented that “the loan turndown rate reported by new businesses start-ups is higher (41%) than for SMEs in general (13%)”. The high loan turndown rate is consistent with the findings of Riding and Haines (1994) who found that new firms represent a very small minority of bank business borrowers (less than 5%).

The Ontario Ministry of Economic Development and Trade (1993) also examined the financing arrangements of new Ontario firms. The average start-up investment was approximately $75,000 so most firms’ needs for start-up capital were modest. In keeping with the Thompson Lightstone results, two-thirds (68%) of respondents did not require additional external capital and 47% of start-ups required less than $50,000. Of those owners of new firms who raised additional external capital, 53% did so from a bank or financial institution. The other firms raised the additional funding from private investors in 19% of the cases and 18% obtained the necessary capital from friends or relatives.

These studies of start-ups identify several sources of capital most often used by new businesses: owners' personal capital; loans from financial institutions; and funds invested by family and friends. Further comments on these sources are in order.

Personal Capital, Credit Cards, and Loans from Financial Institutions

Obvious components of personal capital include the owners' accumulated savings and other assets. Less obvious is capital raised as debt secured by owners' personal assets and use of credit cards. Owners may perceive loans secured by assets as equity financing! For example, a business owner who has mortgaged the family home to raise start-up capital may comprehend this as a means of drawing on the equity accumulated in the home. Research has not established the extent to which loans secured against personal assets provide early-stage business financing.

We review debt financing of SMEs in more detail in the previous section of this study. However, formal term loans or operating credit facilities from institutional lenders is problematic from the perspective of start-ups. As noted, the Thompson Lightstone (1997) research found that turndown rates were of the order of 41 % for business start-ups. Moreover, of the new firms that needed external capital to support start-up, 11% did not approach financial institutions because of fear of a turn down (Thompson Lightstone, 1997, p. 134). Another 9% of start-ups either did not want debt financing or they thought there would "be too much red tape" (Thompson Lightstone, 1997, p. 134).

There is further evidence than banks eschew loans to start-ups. Wynant and Hatch (1991, p. 67) examined the attributes of more than 1,500 bank loan files and found that fewer than 10% represented firms that were less than one year old. Riding and Haines (1994) reviewed almost 1,400 bank loan files and found that fewer than five % of non-SBLA bank borrowers were firms less than one year old.[47] Alternatively, lease and other forms of asset-based financing provide an alternative to borrowing.

A variation on this theme is the use of credit cards as a means of business financing. On this issue, the Thompson Lightstone (1997) study found (p. 35) that 54% of all SMEs

> "use either business (24%) or personal (41%) credit cards to finance their operations … [of whom] about one-third (29%) report that they at least sometimes carry over a balance from month to month".

Most respondents cited convenience as the reason for use of credit cards; however, a significant proportion needed them for short term financing (15%), additional financing (4%), or because credit cards were the only means of financing available to them (3%). That is, almost one in four businesses resorted to financing their business operations from [expensive] credit cards as a matter of necessity. Research has not established whether start-ups are more or less reliant on credit card financing than are more established SMEs.

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[47] For firms that are looking to finance plant or equipment, however, loan guarantees available through the SBLA provide comfort to institutional lenders such that debt capital that qualifies for the SBLA guarantee is more forthcoming.

Love Money

MacIntosh (1994a, p. 57) asserts, "The vast bulk of early stage financings of under $1 million comes from love sources [money that comes from the entrepreneur, family, friends, and neighbours]". In spite of the importance of this source of capital, there does not appear to be any published research about the Canadian experience. Recent work by Freear, Sohl, and Wetzel (1995) has documented some aspects of the place of love money as a source of "bootstrap financing". They documented the frequencies with which a sample of entrepreneurial businesses in the software industry employed several of the financing approaches discussed. They found that a particularly important form of love money was reduced or foregone compensation provided by the firms' employers and by alliances with suppliers. Chart 6 uses data from Freear et al. to illustrate the extent to which firms used the various approaches to bootstrap financing.

Chart 6
Sources of Bootstrap Financing

There does not appear to be any research published in the Canadian context regarding the use and terms of love money. In particular, there does not seem to be any published research that relates to the use of delayed or foregone compensation as a means of financing start-up (or even ongoing) operations. Conceivably, use of this type of employee financing would have implications under labour regulations, bankruptcy and insolvency regulations, and perhaps under the securities act.

Legal and Regulatory Barriers

MacIntosh (1994a) identified several legal and regulatory issues associated with the use of love money in its various forms. He asserts (p. 59) that "Anecdotal evidence suggests that most love investments are made without compliance with securities laws." In Ontario,[48] for example, love

[48] The securities acts of other provinces are generally similar to those of Ontario, although they may differ in several salient respects. For example, prospectus exemption of the Ontario Securities Act is echoed by such exemptions in other jurisdictions although the dollar limit may differ from the $150,000 stipulated in Ontario.

money investments would not qualify for either the $150,000 exemption, nor the "private company" exemption, nor the "seed capital" exemption. MacIntosh goes on to argue that the illegal nature of most love money investments places entrepreneurs in (p. 59) "an invidious position". Compliance with the law would make it virtually impossible for the firm to raise the capital. Yet non-compliance makes the entrepreneur liable to legal risks including the risk that the investors may be able to "take advantage of the illegality to back out of the investment" (p. 59).[49]

Informal Venture Capital

Once the firm has survived the start-up stage, the two main sources of additional equity capital are informal investors and institutional venture capital firms. These sources are complementary to each other. Informal investors, also known as "business angels", are individuals who invest their personal capital directly in businesses owned by others. Formal venture capital investors are generally institutions that raise investment funds from the pooled capital of high-net-worth individuals, financial institutions, mutual and pension funds, or from public solicitations for capital. Generally, informal investors invest relatively small amounts of capital ($10,000 to $500,000) in early-stage enterprises. Institutional venture capital firms invest larger amounts, usually more than $1 million, in firms that are further along in their development cycles.

The Informal Market for Risk Capital[50]

While almost invisible in terms of media coverage and research, informal investment accounts for the largest, oldest, and most frequently-used source of external equity finance for small businesses.[51] Collectively, informal investors represent a large pool of capital, capital directed primarily to early-stage firms. DalCin et al. (1993) estimated the annual rate of informal investment to be between $200 and $400 million for Canada, mostly invested in early-stage businesses. Riding and Short (1988) arrived at similar estimates and found that among individuals who report levels of financial wherewithal similar to that of angels, fewer than 5% — one in 20 — are active informal investors. Thus, the potential of the informal investment market remains largely untapped. This finding prompts the need to identify deterrents that limit the pool of informal capital. Legal and regulatory barriers are almost surely among these barriers.

Role of Informal Investors

Informal investors play an important part in financing businesses in Canada as well as in other developed economies. The profile of these individuals is consistent across country of origin.

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[49] MacIntosh (1994a, p. 59), recognizing that love capital will continue to be invested, recommends reform of the securities laws allowing exemption for sales of up to $1 million in a single year along with reduced disclosure requirements for small offerings.

[50] Much of this section is drawn from the research study of DalCin (1993) and her colleagues.

[51] Survey research conducted by the Canadian Labour Market and Productivity Centre (1995) documents that twice as many businesses have relied on investments from angels, at some point in their development, as on any other form of external equity investment, including institutional venture capitalists.

Informal Investor Profile

The prototype informal investor:

- has previous small business experience;
- is about 50 years old;
- is male;
- has high income and wealth.[52]
- is a late career investor;
- is well educated;[53]
- has succeeded as entrepreneurs and is looking for the next success; and,
- is willing to invest across all sizes and sectors of businesses.

Most angels invest nearby their home or office. Therefore, angels tend to be at ease with the nature of local industry. The average investment made by Canadian angels is slightly more than $100,000; however, angels often invest as little as $10,000. To take advantage of larger investment opportunities, angels frequently form syndicates among themselves. This allows a group of informal investors to invest much larger amounts, often of the order of $500,000. Syndication also spreads risk and allows individual angels (and the owners of the firms in which they invest) to gain the expertise and contacts of a larger group.

Informal investors reject 19 out of every 20 opportunities presented to them. They expect to hold their investments from 5 to 8 years over which they seek an after-tax return equivalent to a 30 to 40% annualized rate of return. This rate of return reflects investors' awareness of the risk associated with early-stage deals. Because of the high risk angels prefer to invest in businesses in which they have experience. The most frequent reason they reject a proposal is their sense that the candidate firm lacks the managerial ability necessary to successful growth of the business. In turn, angels and their syndicates provide financing, mentoring, contacts, and other forms of resourcing to new firms.

In addition to individual informal investors, some large firms provide both financial and logistical support for new businesses. Corporate angels are a growing phenomenon in Canada. In the past, employees with an innovation typically had to leave employment with a large firm if they hoped to commercialize their creation. More often, now, employers realize that by providing support to these innovative ideas, they retain, if not the employees, the fruits of their creativity. The innovative employees do not have to dilute their efforts seeking logistical or

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[52] They report annual incomes that average more than $150,000 and personal net worth more than $1 million.
[53] Most informal investors are university graduates and a high proportion have advanced degrees.

financial backing. The support of the corporate angel is likely to enhance dramatically the chances of successful commercialization.[54]

In summary, research has found that most informal venture capital investors have significant experience with small firms and are well-educated and capable individuals. They are not reluctant to invest in technology-based firms. Their investment patterns witness that they are generally able to be discerning as they reject the vast majority of investment proposals. Informal investors typically have familiarity with the sectors in which they invest and lever this knowledge through syndication with other investors. They usually are able, therefore, to conduct a reasonable level of due diligence before they invest. They comprise an important source of early stage capital, a source that governments are increasingly recognizing.

Government Initiatives

Governments at all levels are increasingly recognizing the importance of informal capital. One of the problems that limit the effectiveness of the informal market is its fragmented nature: no central meeting place exists at which entrepreneurs and investors can meet. The market operates by means of networking among professionals such as lawyers and accountants. All levels of government have attempted to ameliorate this situation.

At the community level, several municipalities maintain services that attempt to facilitate entrepreneur-investor linkages. Such offices also provide advice about preparation of the business plan and introductions, when warranted, to potential investors.[55] At the provincial level, efforts to marshal informal investment capital include various forms of community investment pooling vehicles.[56] In Canada, the first national attempt to complete the informal market was COIN, the Canada Opportunities Investment Network. Several levels of government as well as by the private sector supported COIN financially. However, it was never able to attain self-sufficiency.

Riding and Blatt (1995) investigated the failure of COIN. Among other reasons, Riding and Blatt found that the national, computer-based COIN concept was at variance with the local, personal nature of the informal market. According to its own financial statements, COIN was unable to attract sufficient numbers of investors to allow it to operate effectively. The securities laws did not help matters. As was the case with love money, businesses seeking to sell equity to informal investors must comply with securities legislation. Informal investors usually invest less than

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[54] For example, Newbridge Networks has established a remarkable record of backing innovative ventures. Most of these ventures arose from creative people within Newbridge but who have pursued — with Newbridge financing and support — separate business entities.

[55] For example, the Ottawa-Carleton Economic Development Corporation [OCEDCO] has maintained, for several years, an office tasked with linking businesses with informal investment capital. The staff maintain working relationships with local investors and work with emerging businesses to help make them “market-ready”. Once qualified, businesses list in periodic publications of opportunities and staff provide introductions them to potential investors In 1995, the project was instrumental in arranging early-stage financing of almost $5 million for Ottawa businesses.

[56] For example, the Government of Ontario recently introduced the Small Business Community Investment Fund concept and has encouraged universities and municipalities to become more proactive in assembling informal capital.

$150,000 and they would therefore not be eligible for the private placement exemption. Moreover, as MacIntosh (1994a, p. 59) notes, the private company exemption is unavailable to arm's-length investors and the seed capital exemption implies the need for an expensive offering memorandum. Thus, the cost of compliance is high.

Mason and Harrison (1995) reviewed the implementation of a variety of entrepreneur-informal investor matching approaches. Based on their analysis, they identified the following attributes of successful implementations.

1. A critical mass of investor clients. Private investors are a diverse, hard-to-reach group. They usually need convincing as to the value of the service. It is essential in this process to establish standards that will winnow out the investments that are likely to be "lemons". Poor quality opportunities will drive investors away and investors must benefit from being associated with the facility.

2. Financial support. Financial support is important for business introduction services. It is not possible to run a business introduction service based on fees. Such facilities must rely on public and private sector support.

3. Proactive management. Matchmaking must not be limited to passive efforts. It is a hands-on, pro-active process, one that requires involved professionals who can provide initial vetting of the businesses.

4. Credibility. This demands that respected, independent, third parties mange the service and that it enjoy broad community support. Ideally, the host organization should also have a high profile in the community and be free from the perception of personal stakes.

The federal government has recently initiated the Canadian Community Investment Program [CCIP]. This program subsidizes local governments or institutions that form facilities for investor-entrepreneur matchmaking. Until governments amend securities acts, such efforts are handcuffed.

Legal and Regulatory Issues

The Securities Acts of Ontario and most other jurisdictions normally requires a prospectus for public distributions of securities. Preparing a prospectus is a costly process. If it were not for several legal exemptions from the prospectus requirement, most informal investors would be breaking the law.[57] Fortunately, there are several exemptions, which, if followed, allow entrepreneurs to avoid the prospectus requirement when seeking financial help from angels. Three are most common.

1. The "private placement exemption" (in Ontario), exempts a firm from prospectus requirements if a single purchaser invests a minimum of $150,000. Two assumptions

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[57] For a more detailed and comprehensive review of these issues, readers are referred to Jeffrey MacIntosh, *Legal and Institutional Barriers to Financing Innovative Enterprise in Canada,* University of Toronto, 1994.

underlie this exemption. First, it presumes that an investment of this scale motivates the investor to conduct a careful evaluation. Second, it expects that the investor is sufficiently qualified, or has with adequate access to expert advice, to evaluate properly the prospective investment.

2. According to the "seed capital" exemption, issuing firms are exempt from prospectus requirements if they solicit from fewer than 50 potential buyers and end up selling securities to no more than 25 investors. However, the Act requires that each prospective investor have access to the same information about the issuer that a prospectus would contain.

3. Under the "private company" exemption, issuers are exempt from prospectus requirements so long as the securities "are not offered for sale to the public". Here, law defines a private company as one for which the right to transfer common shares is restricted and the number of common shareholders is limited to less than 50, both according to the terms of the company's charter.

Given the uncertainties in terms of the legal interpretation of these exemptions as applied to specific cases, most deals involve legal counsel. Normally, an offering memorandum accompanies an investment agreement and essentially replaces a prospectus. The cost of preparation of an offering memorandum, however, is significant.[58] According to MacIntosh (1994a, p. 59), informal investors "will typically be unable to find an applicable prospectus exemption". He recommends that the exemptions need to be "redrafted to permit investments by informal venture capitalists" and that in doing so would (p. 60) "Financing for smaller companies would … be greatly facilitated".

Institutional Venture Capital

The venture capital market embraces institutions, governments, and individuals that invest funds in risky enterprises. This section focuses on the formal side of the market for risk capital: the institutional market for venture capital. There is a large and dynamic Canadian market in which institutional investors operate.

Members of the Canadian Venture Capital Association [CVCA] account for the majority of venture capital activity in Canada, but not all of it.[59] The industry has grown quickly. In 1980, the industry managed $400 million. By 1985, institutional venture capital companies managed $1.4 billion. This had grown to almost $3 billion by 1990, $6 billion in 1995, and approximately 7.1 billion in 1996.

In 1996, Canadian institutional venture capital companies made 881 investments in 525 companies, placing $1.1 billion.[60] The 1995 and 1996 investment rates were both record

[58] The significant compliance cost associated with offering memorandum may be the reason that Canadian informal investors invest in fewer firms than US counterparts and invest larger amounts.

[59] In addition to members of the association, merchant banks and, occasionally, institutions such as insurance companies will invest directly in small firms.

[60] The comparable figures for 1995 were 455 investments in 364 businesses for more than $669 million.

volumes for the industry. Nonetheless, the supply of venture capital increased by approximately $1 billion during 1995. At the end of 1995, the venture capital industry held $2.3 billion available for investment.[61] The $1.1 billion invested during 1996 was approximately equal to the 1996 additional capital under management. Therefore, the $2.3 billion available for investment at the end of 1995 remains available as of the end of 1996.

Two trends are apparent in venture capital activity: increases in the amount and share of capital to early stage firms and increases in investments in the technology sector. The following charts show the long-term shift in shares of investments by stage of investment. In the more recent term, the amount of capital going to early stage firms has increased threefold since 1994, with $344 million going to 204 early-stage companies in 1996.

[61] Source: Canadian Venture Capital Association Annual Reports, Macdonald and Associates Limited, Toronto.

Chart 7
Breakdown of Venture Capital Investments by Stage, 1984-1988

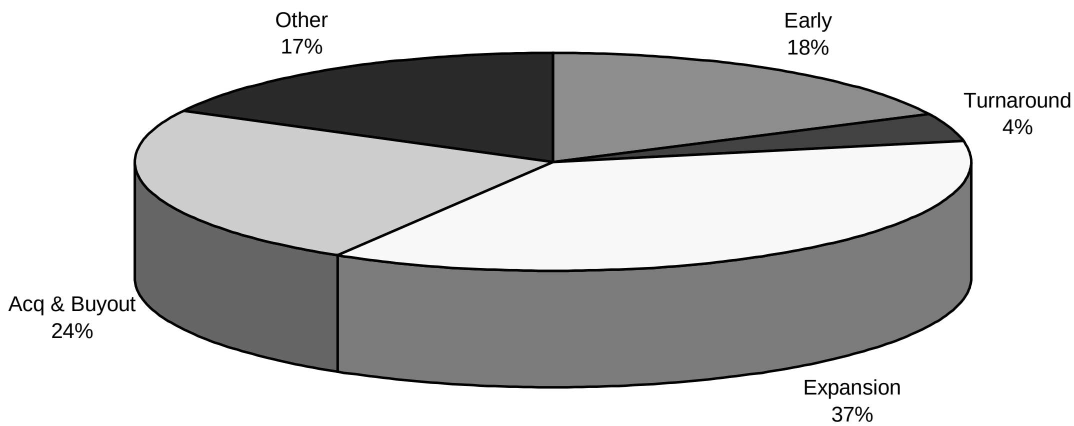
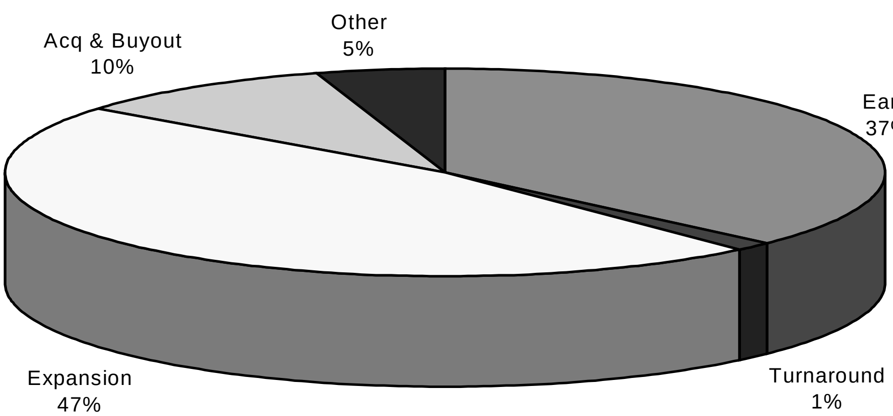
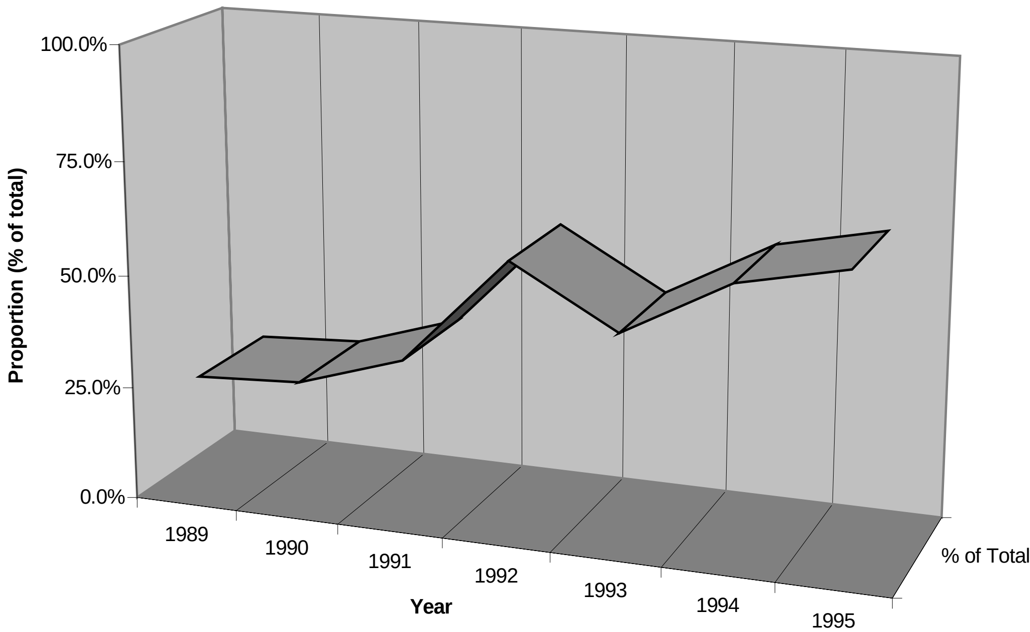


Chart 8
Breakdown of Venture Capital Investments by Stage, 1995



In 1996, more than two-thirds of venture capital investments were in technology-based enterprises. Chart 9 traces the increased share of institutional venture capital invested in technology-based firms. Technology-based firms account for approximately 10-12% of all SMEs. While many SMEs, particularly those in the retail and services sectors are not oriented towards growth, technology-based firms may receive a disproportionate share of institutional venture capital.

Chart 9
Share of Venture Capital to Technology-Based Firms



The Canadian Venture Capital Industry

Macdonald and Associates Limited monitors activity of the members of the Canadian venture capital industry. They group venture capital companies into five categories.

1. **Private independent** funds are those investor firms that raise the capital they invest from institutions such as pension funds and insurance companies. In turn, the venture capital firms invest the funds in risky enterprises. These venture capital firms are accounting for a declining share of the industry.
2. **Corporate subsidiaries** are branches of industrial or financial corporations that receive their investment capital from a parent business. Recently, several of the major industrial participants have withdrawn from the industry (for example, Noranda). Banks are active in the industry through their venture capital subsidiaries.
3. **Labour-sponsored funds**, which their capital from public solicitations. Individuals who invest their capital in labour-sponsored funds receive significant tax benefits. Prime examples include Fonds Solidarité and Working Ventures. The former, located in Quebec, is the original, and largest, of the LSVCCs. Working Ventures, based in Ontario, is the second largest and is the only national fund.

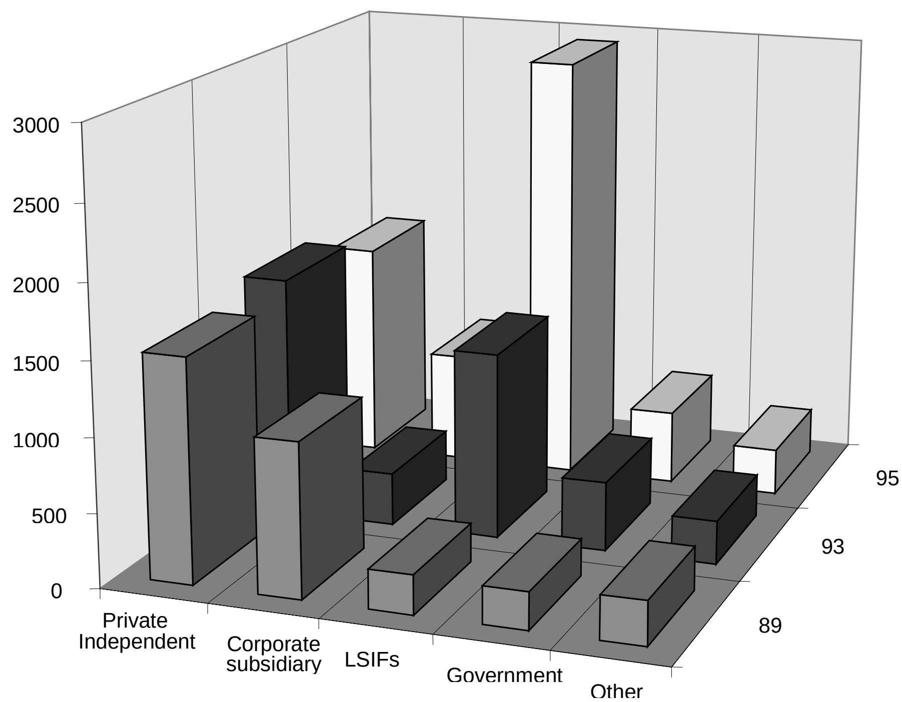
4. Federal and various provincial governments establish **public sector funds**. The venture capital investments of the Business Development Bank of Canada are in this category.

5. **Hybrid funds** include those supported by government, but administered privately. Venture capital funds in this category include those set up by provincial governments, but managed at arm's length. Hybrid funds include a few of the funds established specifically because of immigrant investor programs.

Chart 10 shows the funds under management by firms in each of these categories for three selected years. Clearly, much of the growth in the industry is attributable to the expansion of tax-subsidized labour-sponsored venture capital funds.

Chart 10

Venture Capital in Canada: 1989-1995



Source:Canadian Venture Capital Association, Various years

Historically, the primary sources of funds to the venture capital industry have been institutions such as pension and mutual funds, financial institutions such as insurance companies, and industrial corporations. Labour-sponsored funds [LSIFs], however, now provide a medium by which individuals can invest in the venture capital industry indirectly, and receive material tax benefits for doing so. Until early 1996, investors in LSIFs received a 20% tax credit from both the provincial and federal governments on a maximum investment of up to $5,000. Moreover, the investments are eligible for RRSPs. In spring of 1996, the federal - and some provincial - governments reduced the tax credit to 15% and the annual maximum to $3,500.

The tax subsidies are significant in two ways. First, they are costly to governments: lost tax revenues to Ontario alone increased from $6 million in 1991 to $130 million in 1995. Second, tax subsidization reduces LSIFs' cost of funds with respect the cost of funds to private independent funds. The result is that the tax subsidy allows individual investors to be satisfied with lower returns than those expected by institutional investors in private independent funds. This distortion of the marketplace reflects that the uninvested pools of venture capital are chasing the same basic set of opportunities, possibly resulting in lower returns to the industry.

The performance of LSIFs is in question. The Canadian Labour Market and Productivity Centre (1995a) concluded that there "is some evidence of the relative success of the funds in addressing public and private requirements" (p. 13). Further, they noted that this evidence (p. 13) "draws on the performance of the *Fonds de solidarité* given its comparatively long history". Conversely, Vaillancourt and Brulé (1997) find that the existence of LSIFs "is not well justified." According to the research team, investments made by the *Fonds de solidarité* in small- and medium-sized enterprises "had no significant impact on the level of employment" of the respective sectors in spite of significant foregone tax revenues to government.

Patterns of Venture Capital Investment

Venture capital investors invest in firms at most stages of business development. However, individual venture capital firms usually specialize according to particular stages of development, by industry sector, or by other guidelines. The following graphic outlines terminology often associated with the various stages in the venture capital process.

Stages of Venture Capital Investments
Seed financing are investments made very early in the development cycle of the business. Typically, little more than a prototype of the product exists at this stage and additional product and market development work remains.
⇓
Start-ups relate to those firms exhibiting few, if any, commercial sales but in which product development and market research are reasonably complete. Management is in place and the firm has a business plan.
⇓
First stage financing occurs when the firm has begun commercial production but requires additional financing to increase production materially.
⇓
Second stage financing relates to additional expansion of both productive capacity and markets.
⇓
Mezzanine Financing is investment intended to provide for further expansion or to bridge working capital and market expansion needs before a public offering of stock or before a buyout.
⇓
Buyout financing involves investments that might assist management or an outside party to acquire control of a firm.

Venture capitalists are reluctant to invest amounts of less than $1 million. Even for early stage firms, the 1996 data suggest an average investment of ($344 million / 204 companies) almost $1.7 million. This reluctance stems from the high costs of due diligence and monitoring. Venture capitalists do, however, make deals for less than $1,000,000; however most of these smaller investments were "follow-on" in which the investment was one that followed from an earlier deal with the firm.

Exit Patterns

Exit is a crucial part of the investment process. According to one venture fund manager, "if I can't get out, I won't get in". Exit is also important for the business owner. The owner has usually given up some degree of control in return for the equity venture capital. When the venture capitalist wishes to sell this equity, owners often want the opportunity to buy back control. Therefore, the investment contract usually specifies liquidity provisions that satisfy both the investor and the owners.

The most profitable means of exit for venture capitalists are initial public offerings (IPOs)[62] by firms in which venture capitalists had previously invested (McIntosh, 1997). In 1995, venture capitalists sold, via IPOs, $231 million of shares of firms in which they had originally invested $45 million (McIntosh, 1997). This provided them with more than a five-fold return. A vibrant market for IPOs is an important element in encouraging early-stage venture capital investment because other means of exit are not as profitable, nor do other alternatives provide the liquidity associated with IPOs.

The Immigrant Investor Program

The federal Department of Immigration created the Immigrant Investor Program in 1986 to encourage foreign nationals to invest in Canada. In its original form, individuals obtained landed immigrant status if they invested a minimum of $150,000 in Canada (increased to $250,000 in 1990) for a period of three years. The program allowed an immigrant to use the investment to start a business or to purchase existing operations. In the first two years alone, approximately 6,000 immigrant entrepreneurs entered the program, creating more than 8,000 jobs. It was also a means of attracting talented and highly educated people to the Canadian business environment.

The program also allowed Canadian businesses with less than $35 million in assets to set up funds and for syndicates to manage a portion of these funds, subject to the approval of both federal and provincial governments. By 1990, more than 270 immigrant investor funds resulted, administering $1.1 billion invested by 5,000 immigrants. Unfortunately, in its original form it was too easy for fraudulent investment brokers to relieve new Canadians of their funds. Complaints that brokers charged exorbitant administration fees, directing money to their own businesses, and stealing resulted in suspension of the program in 1994. It was then redesigned, and re-introduced in early 1997.

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[62] Other, less profitable, means of exit include: secondary sales of stock of investee firms that had previously had an IPO; liquidation of assets; the acquisition of investee firms by third parties; and company or employee buy-backs.

According to its new provisions, immigrants must invest at least $350,000 in the six smallest provinces or $450,000 in Quebec, Ontario, Alberta, or British Columbia. Immigrants must invest at least 60% of the capital in SMEs. In addition, the re-designed program provides for regulation of the brokers who assist immigrants.

The Future of the Venture Capital Industry

This sector of the capital market, facing competing forces, is changing rapidly.

First, pension and mutual funds have traditionally been suppliers of funds for private independent venture capital firms. These sources of capital supply are meeting with considerable growth. This growth stems from the increased savings of an aging population and the likelihood that governments' financing needs will diminish in the near future.[63] However, concomitant growth of the venture capital pool also requires additional competent venture capital investment managers and a commensurate expansion in the number of viable commercial opportunities. Otherwise, diminishing returns to venture investment will result and suppliers of venture capital will seek other alternatives.

A second factor within the formal venture capital industry is the role of labour-sponsored investment funds. These funds hold significant amounts of venture capital; however, LSIFs raise their funds directly from the public on a tax-subsidized basis. Because of the tax benefits to investors, LSIFs have become the dominant category of institution in the venture capital industry. Most of the current supply of uninvested venture capital rests with LSIFs.

The emergence and growth of labour sponsored funds has masked the decline in importance (in both relative and absolute terms) of private independent funds. For example, the 1997 Ontario budget (p. 155) noted that labour sponsored investment funds

> "… have filled the gap created by the exit of traditional institutional and corporate investors in the late 1980s and early 1990s. The exit of these institutions caused a decline in Ontario's capital under management from $1.7 billion in 1989 to $1.2 billion in 1992."

This decline in importance of private independent funds raises two regulatory issues.

The first issue relates to the future of tax incentives associated with LSIFs. These are already contentious. For example, the following Editorial from the *Globe and Mail* illustrates some of the concerns:

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[63] Because institutions such as pension and mutual funds will have fewer opportunities to invest in government securities, both venture capital and securitized investments are likely to grow further in importance.

Excepted from:

"Labouring Under Venture Capital Myths"[64]

"Politicians … [seem] convinced that private capital systematically ignores small, innovative enterprises [and] labour-sponsored venture capital funds survive as one of the most wasteful by-products of this political blind spot... Until this spring, investors received a 20% tax credit from each of the federal and provincial governments on a maximum investment, generally of $5,000 … and further tax sheltering if they put the investment in an RRSP... Several provincial governments … have just reduced the credit to 15% and the maximum to $3,500. They haven't gone far enough.

What have investors got besides the tax break? Generally, little more than a mediocre money market fund. The average return on Working Ventures … in the five years to April 30 was 4.1%, compared to the average money market fund's 5.7%.

What has small business gained from these funds? Precious little. As of Dec. 31, of Working Ventures' $525-million in assets, just 24% was invested in business ventures; the remainder consisted of bonds and treasury bills. … It is hard to argue that Canada is short of venture capital. Indeed, venture capitalists report that the flood of labour-fund money has created competition for a limited supply of investment opportunities...

If governments want to do something … they should pull the plug on labour-sponsored venture-capital funds.

To raise a supply of capital for investment in SMEs, the independent venture capital funds rely on institutions that require a reasonable rate of return on the funds they advance. Because of the tax incentives, the cost of capital to LSIFs is less than that for private independent firms. Yet, private independent funds are in competition with the LSIFs for the same set of investment opportunities. In a competitive situation, the private fund is at a significant cost disadvantage: the labour-sponsored fund can offer better terms. From the viewpoint of a private independent fund, this makes competing an uphill battle. According to the *Globe and Mail:*

One consequence of the large and increasing supply of venture capital is that institutional investors are withdrawing from the venture capital market. What has happened is that the once-attractive venture capital returns in the high 20-per-cent range have dropped to barely above zero. According to Mary Macdonald, president of venture capital adviser Macdonald and Associates, "Institutional investors are not particularly active. Many are sitting on the sidelines." Peter Forton, president of the Canadian Venture Capital Association, adds that "The industry needs to generate the returns to bring institutional investors back" and that the amount of liquidity in the market, now $2.9 billion, stands in the way of higher returns."

"Deal-making is a growth industry" by Catharine Mulroney
Special to *The Globe and Mail*, April 23, 1996, page B29

Governments have recently reduced the tax benefits associated with investments in labour sponsored funds. Nonetheless, any remaining tax incentives create a distortion in the marketplace. If governments continue to withdraw the tax benefits, the relative importance of

[64] Editorial, The Globe and Mail, May 20, 1996 Page A10

LSIFs will decline as the supply of capital and the supply of investment reach a balance. The danger in the meantime is the further withdrawal of private independent firms.

The second issue is that it is not clear that the supply of viable, high-potential businesses has kept pace with the increased supply of capital. In this event, each additional dollar of venture capital supply is chasing an incrementally less promising firm than the previous dollar. Over time, this will drive down rates of return in the industry, discouraging institutions, and even individuals, from providing capital.[65]

Given the impact of tax-subsidized competition and potentially decreasing returns on investment, it becomes essential not to discourage further private independent venture capital firms. In this context, it seems appropriate to retain those measures that currently protect access to capital for private independent funds.[66] Given the imbalance of subsidized competition from labour sponsored investment funds, retention of regulations that preserve private independent firms' access to capital seems well advised.

In summary, it seems unlikely that the expansion of labour sponsored funds will continue at the recent pace. The apparent surplus of capital in the industry, while good news for business owners, will ultimately drive down returns throughout the industry. This will discourage further entry and perseverance of private independent firms. From this perspective, it is not clear that the distortion of the industry by the short-term tax-driven capital surplus will be beneficial in the longer term.

Mezzanine Financing and Private Placements of Debt and Equity

Private Placements

In a private placement, firms raise capital by selling securities directly to one or more investors, bypassing the process by which they might sell securities to the public. For a private placement, the investor(s) must have agreed to take up the entire offering of the issued securities as an investment (that is, not for immediate resale or redistribution). Although the buyer does not usually require the protection of a prospectus, an offering memorandum is still frequently used. The issuer and purchaser either arranges the transaction directly between them or an investment dealer or limited market dealer acts as the issuer's agent. Private placements can be either debt or equity securities. There is very little published research on the Canadian market for private placements.

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[65]**A Lesson from the South?** During the late 1980s, the venture capital industry in the United States experienced a material expansion. Encouraged by the spectacular successes such as Microsoft, Apple Computer, etc. additional numbers venture capitalist companies entered the US venture capital arena. The additional supply of funds, coupled with incrementally less experienced fund investor managers, with no increases in the supply of good prospects, led to poor returns. Each additional dollar of venture capital was chasing the same set of investment opportunities and was experiencing a lower incremental return. During the early 1990s a severe shake out in the industry resulted. For more detail, see Bygrave and Timmons (1992).

[66] For example, one regulatory measure that is currently in place is the so-called "3 for 1 rule". This rule links institutional investors' ability to invest in foreign markets to their investments in domestic venture capital.

Participants in the marketplace for private placements must comply with provincial security legislation. Because the private placement market is generally institutional in nature, certain exemptions to the provisions of the [Ontario] Securities Act apply. In general, banks, loan or trust corporations, insurance companies, and certain other institutions may purchase securities on an exempt basis.[67] However, other potential investors must generally comply with the Act. For an individual to obtain an exemption, he or she must demonstrate both significant pools of investment capital (usually at least $5 million) and investment expertise. In addition, exemptions are available based on a minimum acquisition cost of $150,000 to the purchaser or through the "seed capital" exemption[68], or through the "private company" exemption[69]. The costs of compliance with securities legislation limit the availability of the private placement market to larger SMEs.

Investors who are eligible to buy a private placement of securities are usually institutions such as insurance companies or pension funds or existing significant shareholders of the firm. Securities regulators deem such investors "exempt" purchasers who, because of their level of knowledge, investment sophistication, or close relationship with the issuer, do not need the protection afforded by a prospectus. In Ontario, purchasers may not usually resell the securities for a minimum holding period.[70] Securities acts established the hold period to prevent so-called "back door underwriting".[71] Therefore, securities issued through private placement lack liquidity. The private placement purchaser, aware of the hold period requires a discount on the issue price (Srivastava, 1993), thereby increasing the cost of funds to the issuer.

Issuers can circumvent the hold period in at least two ways. First, the ongoing globalization of financial markets has made it possible for Canadian issuers to raise funds through international private placements. MacIntosh (1994a, p. 60) notes that "A lively Euro-equity private placement market has now developed in which Canadian issuers can raise as little as $1,000,000, while avoiding most of the regulatory burdens associated with domestic offerings. A second means of avoiding regulatory requirements is by obtaining a stock market listing through a reverse takeover bid (see section on Initial Public Offerings). In view of these alternatives, MacIntosh (1994a) advanced three recommendations. He recommends:

1. reducing the hold period to a maximum of 90 days;
2. eliminating the provision whereby the hold period remains in effect even after the issuer has assembled a prospectus; and,

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[67] Clause 72(1)(a) of the Securities Act. Also 35(1)3 identifies registration exemptions.

[68] Applies when the issuer solicits no more than 50 prospective purchasers and sells securities to no more than 25 investors.

[69] Applies when the issuing firm's charter either: prohibits public subscriptions for securities; limits transferability of shares; or, limits the number of shareholders to a maximum of 50.

[70] The McCallum task force established by the Ontario Securities Commission has recommended establishing that an "accredited investor exemption". According to their proposal, accredited investors would subsume those already identified as exempt and would extend to individuals whose wealth or incomes exceed specified levels.

[71] A "back door underwriting" is a transaction whereby an exempt investor buys an issue of securities and then re-sells them to non-exempt investors without the issuer ever providing a prospectus.

3. allowing private companies to raise relatively small amounts of capital with no resale restrictions at all.

Mezzanine Financing

A mezzanine issue occupies intermediate positions in the corporate capital structure between senior debt and common equity. Mezzanine financing usually takes the form of subordinated debt (occasionally preferred equity) with maturities of 5-10 years. The term to maturity of subordinated debt is usually longer than that of senior debt. Subordinated debt also generally involves restrictive covenants similar to those associated with the firm's senior debt. The subordination agreement that accompanies mezzanine financing typically specifies what happens in case of default, so that control of the disposition of the firm rests with the senior lender.

The subordinately debt is usually privately-placed and, as a rule, includes some form of participation in the firm's equity (frequently warrants, options, convertibility, or equity of the existing equity purchased at a nominal cost. Mezzanine financing may also involve royalty arrangements or even a fixed dollar bonus at maturity.). Mezzanine financing is a type of "venture lending" that usually accompanies a significant restructuring of a firm. Often, mezzanine financing follows institutional venture capital and precedes a buyout or an initial public offering.

The debt aspect of mezzanine financing provides the investor with the protection of a debt instrument. The relatively high interest rate motivates the firm to eliminate the debt as soon as possible, ideally through an issue of shares on the stock market. The equity features allow the lender/investor to gain in the event that the firm performs well. This combination of features provides owners of the business with significant motivation to perform well and to increase the value of the firm's equity.

Subordinated debt is the most common form of mezzanine financing. Firms sometimes use subordinated debt financing if collateral cannot secure conventional financing. In addition, subordinated debt makes sense for firm that are highly levered but which have high cash flows. Emerging high growth companies that need to conserve cash flow for expansion and working capital may use equity as mezzanine financing. Firms use both equity and subordinated debt to recapitalize, to make changes in share ownership, to facilitate a management buyout, to expand, to acquire another firm or to improve liquidity.

Suppliers of mezzanine financing embrace various categories of firms. These include merchant bankers, bank venture capital subsidiaries, and venture capital companies. In addition, several specialized mezzanine-financing firms syndicate capital from life insurance companies, pension funds, and other financial institutions. Like other categories of investors, those engaged in mezzanine financing look for firms with solid management, a proven record of accomplishment, and an established cash flow. This type of financing, then, is not for most small early-stage firms. Mezzanine financing is more for so-called "mid-market" firms in need of $3 to $12 million. Firms most likely to qualify for mezzanine financing must demonstrate good prospects for the firm and the industry, ample working capital, a prudent level of equity, and a strong Board of Directors (or Board of Advisors).

Costs of various types of long term investment in mezzanine-stage firms:

	Underwriting and other fees (% of issue)	Investor pre-tax ROI (%)
Senior Debt	0-2%	Prime to Prime+2%
Subordinated Debt (Mezzanine)	3-5%	15 to 25%
Equity	3-5%	More than 25%

At the other end of the deal, mezzanine investors are typically patient, and do not expect an exit for five to seven years. Exits typically take the form of an IPO, a buyout, or by a refinancing through senior debt at maturity. While expensive in terms of interest payments and fee requirements, subordinated debt mezzanine financing is cheaper than raising public equity. Mezzanine financing also provides flexibility in that the term, coupon, and covenants can suit the issuer's needs. In addition, unlike dividends, the interest payments and fees are tax deductible. Apart from cost, disadvantages are that the firm is more highly levered and can appear more risky.

Initial Public Offerings

With an initial public offering, a company owned by relatively few founders and investors offers common shares for sale to the public for the first time. The securities are an initial public offering [IPO]. Normally, a listing on one or more Canadian or international stock exchanges accompanies an IPO. IPOs afford the firm several advantages.

- Going public provides the only means of accessing large amounts, usually more than $5 million, of equity expansion capital.
- Going public provides private investors and venture capital investors with a means of cashing out on their investment.
- Going public provides the founders with the ability to convert their equity into cash.
- Going public allows employees to take part in the success of the firm through stock options or employer-subsidized share purchase plans. Businesses often use such arrangements as means of providing compensation and incentives to employees.
- Going public provides credibility to suppliers, potential managers, and customers.
- An IPO and the associated stock exchange listing allows the firm access to a pool of capital that is much larger than had the shares of the firm remained held by a relatively small group of original owners and investors.
- The firm is able to tap into more investors as well as a broader range of investors.

Thus, an IPO provides the firm with equity capital of a greater magnitude than would ordinarily be available from other sources. Investment analysts, brokers, and other investors monitor the firm's performance. The information they uncover enters the public domain and reduces problems associated with informational asymmetry. This facilitates raising additional capital through future seasoned offerings and through sales of debt or equity securities directly to institutional investors [“private placements”].

From the point of view of founders and early investors, an IPO reduces personal risk. Until the public offering, founders' personal wealth is often concentrated in the firm. With a public offering, founders can convert some of their holdings to cash and use the proceeds to diversify their holdings. An IPO is also venture capitalists' favored means of exit (MacIntosh, 1996).

There are, of course, drawbacks to an IPO. Some business owners believe that loss of control is a disadvantage (however, founders often retain a controlling interest in the firm). Going public also formalizes the management structure of the firm. The owner-managers must report to the representatives of the public ownership of the firm, the Board of Directors. Considerable costs are also associated with an IPO. These include the significant investment of management time associated with both the initial process of issuing shares (Andrews, 1995) as well as with the ongoing requirements for disclosure and shareholder relations. These costs are especially high for small-scale public financing transactions.

Costs of Issuance

There are three categories of costs associated with going public:

1. the immediate and direct issuance and underwriting costs of the issue;
2. the immediate indirect costs; and,
3. ongoing direct and indirect costs.

Immediate Direct Costs

Issue and Underwriting Costs

Going public entails significant costs. The first major expense of an IPO is associated with preparation of the prospectus. Legal and accounting costs are a substantial component of the total cost of prospectus preparation, a total that can range from $200,000 to $400,000. In addition to the cost of the prospectus, the underwriter receives a commission in return for their involvement. The commission is larger, as a %age, for small issues and decreases with issue size. Jog (1996), estimates the expected cost of an IPO to have a fixed component that averages $340,000 and a variable amount equal to seven % of the value of the offering. For IPOs of the size usually issued in Canada, Jog documents the average cost components as:

Issuing Expenses = $170,000 + 2% of IPO Value

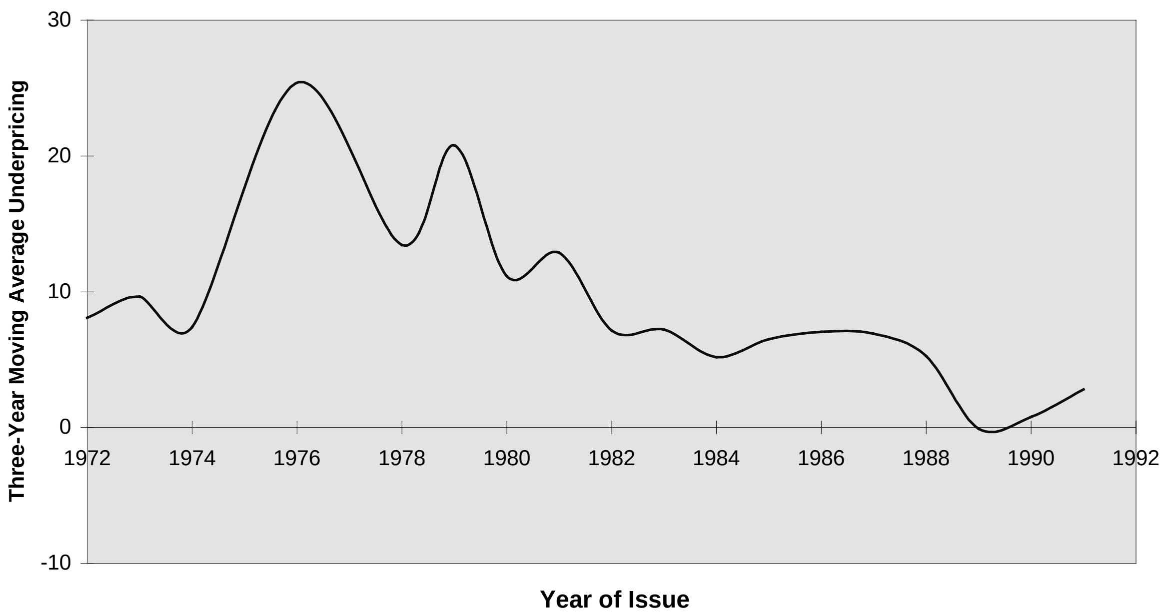
Underwriting commission = $170,000 + 5% of IPO Value

Underpricing

On average, it appears that the subscription price for new securities is set a little lower than the price the new securities fetch within the first few days of trading, a difference known as "underpricing". Underpricing shows up as an immediate increase in the selling prices of the IPO shares (often within minutes of the initial availability for purchase). For IPOs issued between 1984 and 1992, underpricing averaged 5.67 % (Jog, 1996). This means that issuer firms received less than their shares were actually worth. However, as the following chart illustrates, the amount of underpricing has decreased in recent years.

Chart 11

Average Underpricing of Canadian IPOs
(Data Drawn from Jog, 1996)



It is not clear why underpricing has diminished. The finding that underpricing has diminished indicates that Canadian underwriters are better gauging the underlying values of the new issues than historically. Nonetheless, the high cost of new issues, costs that are disproportionately high for smaller issues, represents a significant barrier to financing by means of public issues through the organized capital markets. The indirect and ongoing expenses of stock exchange listing exacerbate immediate costs of issuance.

Indirect and Immediate Costs of IP's

The financial expenses of going public are not the only costs. In addition, the firm faces indirect costs that include:

Diversion of management time. The task of prospectus preparation requires that company personnel redirect time and energy away from their usual work to cooperate in the accumulation of the information necessary to prepare the prospectus. Top management spends significant amounts of time working with underwriters, lawyers, etc. According to Andrews (1995), the cost of diversion of management time during the pre-listing period is equivalent to the full-time commitment of at least one senior executive!.

Disclosure Costs. One of the requirements of becoming a publicly listed company is the requirement of the exchange and the regulatory bodies for full financial disclosure. This requires putting into the public domain information which was once private. This is a requirement that entails both cash expenses as well as additional demands on management time and energy.

Loss of privacy. The reporting requirements noted above places the firm under continuous public scrutiny. Professional security analysts will follow the firm and actively seek out private information. The disclosure requirements, intended to protect the public shareholders, means that competitors can also more easily identify the firm's strategies and other information.

Ongoing Direct and Indirect Costs

Once the firm lists on the stock exchange, it must continue to abide by the ongoing disclosure requirements of the stock exchange, the securities commission, and other regulatory bodies. In addition, maintaining shareholder relations frequently represents a material financial cost. Some of these are obvious: the costs of preparing, printing, and mailing annual and interim reports; the costs of annual meetings, and the attendant documentation; and the costs of maintaining careful records. Other costs are less obvious and less direct. These include: the significant quantities of management time dealing with the public and institutional investors; the costs of monitoring insider trading activities; and, the indirect cost associated with diversion of management time.

Higgins (1994) compared the costs of Canadian IPOs with the costs of IPOs in the US. He concluded that transaction costs for IPOs appeared to be lower in Canada than in the US. However, small- and medium-sized firms in both countries paid proportionately higher transactions fees than larger firms. He also observed that the Vancouver and Alberta stock exchanges focused on start-ups firms while the TSE and Montreal Exchange attracted larger more established businesses.

Alternatives to an IPO

Businesses can make use of two alternative methods of going public: a reverse takeover and the Junior Capital Pool Program within the Province of Alberta.

Reverse Takeovers

Reverse takeovers occur by means of the amalgamation of two firms: a private company seeking to go public and a so-called “shell company”. A shell company is an inactive firm that has retained a listing on the stock exchange.[72] According to the transaction, the two firms combine by means of the shell company’s purchase of the assets of the private business. It effects this takeover by issuing shares to the shareholders of the private firm. Consequently, the shareholders of the private firm now control the shell, which continues to trade and the once-private firm can raise capital by a subsequent offering of shares of the shell company. This process avoids prospectus costs and immediate disclosure requirements associated with an IPO. However, this saving is partially offset by the cost of purchasing the shell company.

Alberta’s Junior Capital Pools

Initiated in 1986, the explicit objective of Alberta’s Junior Capital Pool [JCP] program is to provide junior start-up companies with “an enhanced opportunity to become listed on the Alberta Stock Exchange”.[73] Under the current regulations, the founders of the firm must make a minimum cash investment of $100,000 in the shares of the firm. The firm can then make a JCP IPO on the Alberta Stock Exchange by selling additional shares to the public. The JCP listing differs from a regular Alberta Stock Exchange listing in that it is transitory. The listing expires within 18 months unless the firm makes a “major transaction”. A major transaction is usually the acquisition of a significant asset purchase. A further offering of shares through the JCP market finances the major transaction. Once a major transaction is completed, the firm’s listing status changes from a JCP to a regular listing. Firms that fail to complete a major transaction within the 18-month window lose their listing.

The Alberta Stock Exchange, in enacting the JCP concept, has also established a variety of regulations designed to protect public investors. These include escrow requirements that forbid the founders of the JCP firm to trade until the initial listing, and a provision whereby only one third of the escrowed shares may trade annually for the subsequent three-year period. In addition, the exchange places requirements on the firm for complete and timely disclosure. Robinson (1996) in his research on JCP issues found that:

- more than $77 million was raised in 405 JCP IPOs between 1986 and 1992;
- JCP firms have raised more than $475 million by means of post-IPO issues between 1986 and 1992;
- almost 86 % of firms that used the JCP to go public between 1986 and 1992 had completed a major transaction by the end of 1992.

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[72] For such firms, the price listed on the exchange reflects its potential value in a reverse takeover.
[73] Alberta Stock Exchange Circular No. 7, p. 7-1.

Government Initiatives to Encourage IPOs

Governments recognize that a viable capital market for SMEs requires a favorable environment for IPOs. IPOs

- encourage individuals to start a business because they can then envision a profitable exit (Andrews, p. 4).

- Encourage greater investment activity by venture capitalists and informal investors. Without the potential for exit through an IPO, venture capitalists and informal investors are reluctant to endow SMEs with risk capital.

- IPOs provide a means of access to significant amounts of equity capital.

Therefore, governments have undertaken several initiatives intended to stimulate IPOs.

Stock Savings Plans

Patterned on the Quebec Stock Savings Plan, several provinces have implemented or are considering stock savings plans. The first such initiative, the Quebec Stock Savings Plan [QSSP] was instituted in 1979.[74] Its primary objectives included:

- encouraging equity investment by offering tax savings to Quebec investors who purchased newly-issued shares of qualifying Quebec-Based companies;

- reducing the cost of equity capital;

- increasing the accessibility of equity financing to small- and medium-sized firms;

- reducing tax burdens for high-income tax payers;

- reducing firms' reliance on debt capital;

- encouraging more Quebeckers to participate in the equity market; and,

- generating growth in the provincial economy.

Initially, the media hailed the QSSP as a major success.[75] This prompted other jurisdictions to emulate or consider emulating the approach. Evidence that is more recent challenges the efficiency of these initiatives. Two groups of researchers have examined the efficacy of the

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[74] The plan allowed individuals who purchase the shares of specified securities to receive (sometimes-substantial) tax concessions on provincial income taxes. The write-off proportion varied by firm and over time. For example, investors could at one time write off as much as 150 % of the purchase price of the stock of small firms. Typically, the tax benefit is greater for small firms than for large.

[75] "Quebeckers Flock to Tax Shelter", The Globe and Mail, October 13, 1984; "QSSP a Big Hit", Financial Times of Canada, April 15, 1985.

QSSP. Jog and Riding (1990,1991) recognized that issuing firms were aware that, under the terms of the QSSP, investors who purchased a share of QSSP-eligible stock were in fact receiving both the security and a tax saving. Jog and Riding argued that rational issuers would therefore price the shares at a premium, appropriating all or part of the tax benefit. Jog and Riding provided empirical evidence consistent with this premise. Subsequently, Suret and Cormier (1997) reviewed the performance of the QSSP. Like Jog and Riding, Suret and Cormier also found evidence of overpricing of QSSP-eligible securities when compared with a benchmark of Ontario IPOs. Suret and Cormier also noted that while the plan

> "had the short-term effect of generating a stream of primary issues from small companies … a large proportion of the small companies that floated primary public issues under the Plan have now disappeared [with the result that] … investors who put money into [them] … have suffered keen disappointment and their opportunity losses total hundreds of millions of dollars."

They conclude,

> "… listing securities on the Stock Exchange via tax incentives has been a very ineffective stimulant in the case of small companies. Moreover, the Plan has probably had a perverse effect, driving many disappointed investors out of the market forever … [and] the hundreds of millions of tax dollars poured into the QSSP do not seem to have had the desired effect in terms of financing small companies".

Barriers to Public Financing

The McCallum Task Force (Ontario Securities Commission, 1996) identified the following among constraints on raising SME equity capital:

- information asymmetry, whereby insiders of SMEs, particularly in the case of high tech enterprises, are much better informed than outside investors about the quality and potential of the business;

- the relatively high cost of small scale public financing transactions [whereby] … the costs of due diligence, prospectus preparation, meeting continuous disclosure requirements and other costs outweigh the potential benefits;

- the perception that SMEs may be unable to generate the high returns required by investors;

- some entrepreneurs' negative perception of venture capital and unwillingness to share ownership;

- lack of a developed distribution network in the Canadian market place for offerings of less than $10 million.

Consequently, the McCallum Task Force has advanced a variety of recommendations that, if adopted, would mitigate some of the barriers to equity formation. Among the recommendations were several that related specifically to small public offerings. These included "the development and adoption of a revised prospectus form (the 'Small Business Prospectus Form')" that would simplify the issuance process for qualifying SMEs. In addition, disclosure requirements would be oriented to SME investors, would relax the requirements for audited statements, and would exempt SME issuers from the requirement to file quarterly financial statements. The gist of the recommendations is consistent with the earlier suggestions of MacIntosh (1994a).

However, securities legislation – which forms the primary barrier to small scale public equity financing – remains a matter of provincial jurisdiction and is not directly subject to the mandate of the Task Force on the Restructuring of the Financial Services Industry. Nonetheless, the dichotomy of responsibility whereby federal laws largely govern *debt* capital formation and provincial laws govern formation of *equity* capital presents a significant barrier to harmonization of efforts to ensure an adequate supply of financing for SMEs. Harmonization appears to be an idea consistent with the goals of the Government of Ontario (Government of Ontario Budget Speech, May 7, 1996):

> "To make it easier for companies to raise funds in Canadian equity markets, Ontario will pursue an agreement with the federal government and with other interested provinces to delegate responsibility for securities regulation to a Canadian Securities Commission."

Harmonization and redrafting of securities legislation could ease significantly the task of financing for SMEs. As an example of the kind of initiative that might become feasible, many states the US have been allowing SCORs for several years

A North American Market for SCORs?

SCORs, or Small Corporate Offering Registrations, are available in most states in the US. The intent of SCORs is to allow small US enterprises to raise up to $1 million of new capital per year from the public equity market. SCORs are not available to Canadian SMEs, primarily because of Canadian securities regulation. Initiated in the mid-1980s, SCORs are an attempt to remove regulatory burdens from small US businesses and to make acquisition of capital less costly. According to Sargent (1990, p. 100) they balance

"the needs of investor protection and capital formation by removing the blanket application of full-scale registration and disclosure requirements thereby providing relief to non-threatening issuers who need the relief, while denying that relief to those issuers who might pose a threat to investors."

As of February 1995, 42 states accepted SCOR filings and the Pacific Stock Exchange provided a secondary market in which investors can trade SCOR stocks.[76] They enable owners of SMEs in

[76] Listing requirements include a minimum of $500,000 in net tangible assets, $750,000 in net worth, and have a minimum of 150,000 shares and at least 250 shareholders.

the US to raise up to $1,000,000 of equity capital in a 12-month period by originating their own offering with their regular lawyers and accountants.[77] Issuer firms must file SCORs in the particular state in which potential investors live. Only non-public companies are eligible to use SCORs.[78]

SCORs have two important benefits that prompt their consideration for adoption in Canada. First, the secondary market for SCOR stocks provides informal investors and venture capitalists with a means of trading in (and exiting from) their investments – even before the firm issues an IPO. This provides investors with the potential for liquidity, liquidity that is lacking under the current regulatory regime. Second, SCORs provide an institutionalized instrument by which small firms can achieve many of the benefits of a public listing at a fraction of the costs of an IPO. In particular, SCORs provide firms not yet sufficiently established to go public by the traditional route with an early means of raising equity capital from the public.

SCORs are a means of facilitating access to equity funds in amounts that fall between venture capitalists and angels. This gap remains unfilled in Canada, a situation exacerbated by the impediments imposed by securities regulation. If the Ontario Securities Commission (and other provincial securities commissions) implement appropriately the recommendations of the McCallum task force, small Canadian firms might also be able to use SCORs to raise equity financing.

[77] The condition is that the firm has at least 10 % equity capital equal to the amount of capital being raised.
[78] Firms must be exempt from the reporting obligations of the Securities Exchange Act (1934) under Rule 504 of Regulation D. Only nonpublic companies can qualify for this exemption from prospectus requirements. See Osteryoung (1996).

References

Arend, R., R. Amit, J. Brander, K. Hendricks, T. Ross, D. Whistler (1997). “The Market for Entrepreneurship: Theory and Empirical Evidence”, Entrepreneurship, Proceedings of the Administrative Sciences Association of Canada, Vol. 18, No. 21, St. John’s, NFLD: 12-20.

Andrews, M., (1995). Initial Public Offerings: The Experience of Eight Canadian Growth Companies, The Conference Board of Canada, Ottawa.

Belcourt, M. (1991). "From the Frying Pan into the Fire: Exploring Entrepreneurship as a Solution to the Glass Ceiling," Journal of Small Business and Entrepreneurship, Volume 8, Number 3, April-June: 49-55.

Belcourt, M., R. Burke, H. Lee-Gosselin, (1991). The Glass Box: Women Business Owners in Canada, Canadian Advisory Council on the Status of Women, Ottawa, Ontario.

Benston G. (1979). “Redlining Research: A Review and Critical Analysis Discussion," in Proceedings of a Conference on the Regulation of Financial Institutions (Federal Reserve Bank of Boston Conference Series No. 21, October): 144-195.

Bérard, J., and D. Brown, (1994) Services to Women Entrepreneurs: The Western Canadian Case, Western Economic Diversification Canada, Winnipeg, Manitoba.

Buttner, E. H. and B. Rosen, (1988) “Bank Loan Officers' Perceptions of the Characteristics of Men, Women, and Successful Entrepreneurs”, Journal of Business Venturing, Vol. 3, No. 3: 249-258.

Buttner, E. H. and B. Rosen, (1989), "Funding New Business Ventures: Are Decision Makers Biased Against Women Entrepreneurs?" Journal of Business Venturing 4: 249-261.

Buttner, H. and B. Rosen, (1992), "Rejection in the Loan Application Process: Male and Female Entrepreneurs' Perceptions and Subsequent Intentions", Journal of Small Business Management, v. 30, (1).

Bygrave W. and J. Timmons, (1992). Venture Capital at the Crossroads, Harvard Business School Press, Boston, Mass.

Canadian Community Reinvestment Coalition [CRCA] (1997). “Background Information and Invitation to Join”, submission to the Task Force on the Restructuring of the Canadian Financial Services Sector, February 1997.

CFIB, Canadian Federation of Independent Business, (1995). Double Standard: Financing Problems Faced by Women Business Owners, CFIB, Toronto.

Canadian Labour Market and Productivity Centre (CLMPC) (1995). Access to Capital: Results of a Business Survey, Ottawa, Canada.

Canadian Labour Market and Productivity Centre (CLMPC) (1995a). The Role and Performance of Labour-Sponsored Investment Funds in Canada, Ottawa, Canada.

Canner G. (1982). Redlining: Research and Federal Legislative Response. Staff Studies 121. Washington: Board of Governors of the Federal Reserve System.

Canner G., S. Gabriel, J. M. Woolley (1991). "Race, Default Risk and Mortgage Lending: A Study of the FHA and Conventional Loan Markets," Southern Economic Journal, Vol. 58: 249-262.

Conference Board of Canada (1995). A Financing Revolution: The Growth of Non-Bank Lending, Summary Report, Ottawa.

Conner, C. (1995). Alternative Sources of Debt Financing for Small and Medium-Sized Enterprises, The Conference Board of Canada, Ottawa.

DalCin, P., L. Duxbury, G. Haines, A. Riding, and R. Safrata, (1993).. Salient Characteristics of Informal Investors. Industry Canada and the Ministry of Economic Development and Trade (Ontario).

Dunkelberg, W., J. Scott, and E. Cox, "Small Business and the Value of Bank-Customer Relationships," Journal of Bank Research, Vol. 14, No. 5, Winter 1984.

Economist, The "Working for Yourself", August 29, 1992, page 61.

Fay, M., and L. Williams, (1993), "Gender Bias And The Availability Of Business Loans", Journal of Business Venturing, Vol. 8, No. 4: 363-376.

Fabowale, L., (1992). An Empirical Investigation of Financial Institutions' Terms of Credit to Female Owners of Small Businesses, Unpublished Masters of Management Studies Thesis, Carleton University, Ottawa, Canada.

Fabowale, L., Orser, B., Riding, A.L., Swift, C., 1995, "Gender, Structural Factors, and Credit Terms Between Canadian Small Businesses and Financial Institutions", Entrepreneurship: Theory and Practice, Vol. 19 (4): 41-66.

Freear, J., J. Sohl, W. Wetzel, (1995). "Who Bankrolls Software Entrepreneurs", Frontiers of Entrepreneurship, Vol. 16: 394-406.

Garety, V. (1995). "Understanding the Equipment Leasing Marketplace", Journal of Equipment Lease Financing, Vol 13 (1).

Garwood, G. and D. Smith (1993). "The Community Reinvestment Act: Evolution and Current Issues". . Federal Reserve Bulletin, Vol. 79 (4): 251-267.

Haines, G., Riding, A.L. (1995). “Loan Guarantee Programs For Small Firms: Recent Canadian Experience On Risk, Economic Impacts, And Incrementality”, Frontiers of Entrepreneurship, Vol 16: 422-436.

Haines, G., Riding, A.L., Thomas, R., (1991)."The Bank-Small Business Relationship: A Model and Some Canadian Experience", Proceedings of the 36th Annual World Conference of the International Council for Small Business, Vienna, Austria.

Haines, G., Riding, A.L., and Thomas, R., (1991). "Small Business Bank Shopping in Canada", Journal of Banking and Finance, Vol. 15: 1041-1056.

Haines, G., Riding, A.L., Thomas, R., (1994). "The Bank-Small Business Relationship: A Recursive Model ", Entrepreneurship Theory and Practice, Vol 18 (4): 5-24.

Haines, George, Allan Riding, Catherine Swift (1992). "Small Businesses' Satisfaction with Canadian Lending Institutions", Carleton University Working Paper, Ottawa, Canada.

Higgins, J. (1994). Financing Emerging Businesses: Canada and US Cost Comparisons of Initial Public Offerings, Conference Board of Canada #119-94, Ottawa, 1994.

Jog, V. and A. Riding (1990). “Tax Assistance and the Performance of IPOs in Canada: The Case of the Quebec Stock Savings Plan”, Proceedings, ENDEC Conference, Nanyang Technical University, Singapore.

Jog, V. and A. Riding (1990). “On the Valuation of IPOs on the Toronto and Montreal Equity Markets”, Frontiers of Entrepreneurship, Babson College, Babson Park, Mass.

Jog V, (1997). “The Climate for Canadian Initial Public Offerings”, in Capital Market Issues, P. Halpern, ed., Industry Canada.

Kalymon, B. (1995). Preliminary Study on the Implications of an Extension of the Small Business Loans Act to Capital Leasing, Industry Canada, Ottawa.

Lacker J. (1995). “Neighbourhoods and Banking," Federal Reserve Bank of Richmond Economic Quarterly, Vol. 81 (2): 13-38.

LaCour-Little, M. (1996). “Application of Reverse Regression to Boston Federal Reserve Data Refutes Claims of Discrimination” Journal of Real Estate Research; Vol. 11 (1): 1-12.

Languedoc, Colin, "Women Have Tougher Time Getting Bank Credit: Study," Financial Post December 19, 1988: 3.

Lindsey, L. (1995). Statement to the US House Subcommittee on Financial Institutions and Consumer Credit of the Committee on Banking and Financial Services. Federal Reserve Bulletin, Vol. 81 (5): 424-430.

Macey J. R., G. P. Miller (1993). "The Community Reinvestment Act: An Economic Analysis," Virginia Law Review, Vol. 79 (2): 291-348.

MacIntosh, J. (1994a). "Regulatory Barriers to Raising Capital for Small Firms", Canadian Financial Services Alert, Vol. 6 (8): 57-64.

MacIntosh, J. (1994). Legal and Institutional Barriers to Financing Innovative Enterprises in Canada, Government and Competitiveness School of Policy Studies, Queens University, Kingston, Ontario.

MacIntosh, J. (1997). "Venture Exits in Canada and the US", in Capital Market Issues, P. Halpern, ed., Industry Canada.

Mary McDonough Research Associates (1996). Annual Survey: Asset-based Financing & Leasing in Canada, Fiscal Year 1995, Canadian Finance and Leasing Association, Toronto.

Mason, C. and R. Harisson (1995). Informal Venture Capital. Prentice-Hall International, London, UK.

Munnell, A., L. Browne, J. McEneaney, G. Tootell (1992). "Mortgage Lending in Boston: Interpreting the HMDA Data," Working Paper 92-7. Boston: Federal Reserve Bank of Boston as cited by Lacker (1995).

Ontario Securities Commission (1996). Task Force on Small Business Financing, Final Report, Toronto.

Ontario Ministry of Economic Development and Trade (1993). Young Companies Study. Government of Ontario, Toronto.

Osteryoung, J., (1996). "An Empirical Investigation of SCORs: Do Geographical Region and Amount Offered Affect the Success of Offerings", Frontiers of Entrepreneurship, Babson College, Babson Park, Mass. (p. 413).

Mallet, T. (1991). "A Profile of Self-employment Earnings", The Journal of Small Business and Entrepreneurship, Vol. 8 (3).

Orser, Barbara and Mary Foster, (1992). Home Enterprise, Canadians and Home-Based Work, Department of Employment and Immigration, Ottawa, Canada.

Orser, Barbara J., (1991). "Macroenvironmental Factors and Myths of Home-Based Work", Proceedings, 36'th World Conference, International Council for Small Business, Vienna, Austria.

Orser, B, A. Riding, and C. Swift, (1994), "Banking Experiences of Canadian Micro-Businesses", Journal of Enterprising Culture, Vol. 2, No. 1.

Parliamentary Standing Committee on Industry, (1994). Minutes, various meetings held during 1994, Government of Canada, Ottawa, ON.

Parliamentary Standing Committee on Industry, Taking Care of Small Business, Second Report, Government of Canada, Ottawa, 1994.

Petersen, R. and Shulman, J. (1987). “Capital Structure of Growing Small Firms: A 12-Country Study on Becoming Bankable”, National Centre for Management Research and Development, Working Paper Series #87-06. School of Business Administration, the University of Western Ontario, London, Ontario.

Picot, G., Baldwin, J. and P. Dupuy (1996). “Job Creation by Company Size Class: Concentration and Persistence of Job Gains and Losses in Canadian Companies”, Business and Labour Market Analysis Group, Statistics Canada, Ottawa, ON.

Reynolds, Paul and Brenda Miller Minnesota New Firms Study: An Exploration of New Firms and Their Economic Contribution", Center for Urban and Regional Affairs, 330 Hubert H. Humphrey Center, Minneapolis, Minnesota, 1987.

Riding, A. and B. Orser (1996). “Dimensions of Access to Equity Capital in Canadian SMEs: Implications and Findings from Multiple Data Sources”, presented to Babson Entrepreneuship Research Conference, Seattle, April 1996.

Riding, A. and C. Swift , (1990), "Women Business Owners and Terms of Credit: Some Empirical Findings of the Canadian Experience" Journal of Business Venturing, Vol. 5, No. 5: 327-340.

Riding, A., and with R. Blatt (1995). " '... Where Angels Fear to Tread': Some Lessons from the Canada Opportunities Investment Network Experience", in Informal Venture Capital, C. Mason and R. Harisson, ed., Prentice Hall International, London, UK.

Riding, A. and G. Haines, (1994). Access to Credit: Lending Priorities and SMEs, Industry Canada, Government of Canada, Ottawa.

Riding, A. and D. Short, (1988). “On the Investment Potential of Informal Investors: A Capture-Recapture Approach”, Journal of Small Business and Entrepreneurship Vol 5 (5): 26-40.

Robinson M., (1997). “Raising Equity Capital for Small and Medium Sized Enterprises Using Canada’s Public Equity Markets”, in Capital Market Issues, P. Halpern, ed., Industry Canada.

Sargent, M. (1990). “Blue Sky Law: The SCOR Solution”, Securities Regulation Law Journal, Vol. 18 (1): 93-102.

Schill M., S. Wachter (1994). “Borrower and Neighbourhood Racial and Income Characteristics and Financial Institution Mortgage Application Screening,” Journal of Real Estate Finance and Economics, Vol. 9: 223-239.

Srivastava, A. (1993), “Price Discounts on Equity Private Placements”, Carleton University Working Paper 93-11.

Star, Alvin "The Proliferation of 'Quasi Businesses'", Journal of Small Business, January 1981, pp. 57-61.

Statistics Canada "The Daily", November 15, 1994.

Stevens, J., (1986) Applied Multivariate Statistics for the Social Sciences, Hilsdale, New Jersey: Lawrence Erlbaum Associates, Publishers.

Stevenson, L., (1986), "Against All Odds: The Entrepreneurship of Women", Journal of Small Business Management, Vol 24 (3): 30-36.

Storey, D. J. (1994). Understanding the Small Business Sector, Routledge Press, London, UK.

Suret, .J-M., and E. Cormier, (1997). "Le Régime D'épargne-Actions du Québec: Vue D'Ensemble et Évaluation", in Capital Market Issues, P. Halpern, ed., Industry Canada.

Thompson Lightstone & Company (1996, 1997). Small and Medium Sized Businesses in Canada: An Ongoing Perspective of their Needs, Expectations, and Satisfaction with Financial Institutions, Vol. 1 and 2., Canadian Bankers Association, Toronto.

Vaillancourt, F., A. Brulé, M. Jovanovic, J. Trottier, (1997). "Labour-Sponsored Venture Capital Funds: Analysis and Lessons from Quebec", ", in Capital Market Issues, P. Halpern, ed., Industry Canada.

Wetzel, W. and I. Wilson, (1985). "Seed Capital Gaps: Evidence from High Growth Ventures", Babson Entrepreneurship Research Conference, Wharton School, University of Pennsylvania, Philadelphia.

White, L. (1993). "The CRA: The Bad Results of Good Intentions," Journal of Retail Banking, Vol. 15 (3): 13-19.

Wynant, L. and J. Hatch, (1991). Banks and Small Business Borrowers, University of Western Ontario, London.

Appendix A:

A Primer and Annotated Bibliography on Credit Rationing

What is Credit Rationing?

A basic tenet of the theory of economics is that the price of a good is a regulator that ensures the quantity supplied will equal the quantity demanded. When there is too much of a good available, the price drops, enticing more consumers to demand the good and discouraging suppliers from providing more of it. When consumers demand larger quantities of a product than the market is supplying, prices rise. This discourages consumers from purchasing more of that product (and may abandon their decision to purchase a product in the first place), and additional suppliers are lured into the market. If a market is functioning properly, the demand for a product will always be satisfied because price will balance the needs of the consumers and suppliers.

When the good in question is a bank loan, some small business owners complain that they cannot find the funds they need to satisfy their financing needs. In the Canadian context, when institutional lenders do loan to small firms, the “price” is almost universally between prime rate and prime plus three percent. Prices of credit do not seem to increase beyond the prime plus three threshold; instead, applicants appear to be turned down for bank credit. Price does not appear to be doing its job to clear the market. If loan applicants denied credit are assumed willing to pay higher economic costs for financing, credit then appears to be ‘rationed’ from an apparently finite supply of credit. This is a phenomenon known as credit rationing.

Credit rationing affects many issues, including national economic development, unemployment in the labour market, and farm financing. Economists and financial theorists have offered a variety of theories about situations that might lead to credit rationing, whether it happens, if it is a significant economic occurrence, and its effects on borrowers. The studies outlined here deal primarily with credit rationing in the context of small business borrowing. If present, credit rationing could mean that small or new businesses do not have access to financing and, therefore face obstacles to their development, growth, and survival. Credit rationing might also disadvantage financially businesses that compete with firms that are part of industrial groups or that are owned by larger businesses. Credit rationing can also result in levels of investment that differ from optimal levels, thereby affecting economic growth, inflation, employment, and a variety of other factors.

The Basis of Credit Rationing

Theories about credit rationing are based on informational asymmetries between lenders and borrowers. Informational asymmetries refer to the disparity between the information a potential borrower has about the project for which funds are being sought and the information held by the potential lender.

One aspect of informational asymmetry is *adverse selection.* Theoretical models often assume that an entrepreneur has private knowledge about success probability of a project or expected profits that is not shared with the lender. Consequently, lenders cannot differentiate between a 'high-quality' borrower and a 'low-quality' borrower and adverse selection can result. The lender will typically structure credit contracts to deal with adverse selection, potentially leading to credit rationing.

Moral hazard is a second factor that can lead to credit rationing. Moral hazard refers to the lender's inability to control fully how the entrepreneur uses funds loaned by the bank. Borrowers can conceivably benefit economically by taking actions that hurt the bank (for example, using borrowed funds to invest in higher risk projects than those approved by the lender). To avoid this situation, banks can implement lending practices that discourage borrowers from acting against the interests of the bank, and these precautionary actions can lead to credit rationing.

Finally, costly monitoring problems, the economic costs incurred by a bank to verify the performance or 'financial states' of entrepreneurs, can lead to credit rationing. Certain types of moral hazard play a role in the costly monitoring problem, but these moral hazard problems do not affect the outcome of the entrepreneurs' projects. Instead, moral hazard affects costly monitoring problems by adding the risk that entrepreneurs will lie about their returns and profit at the expense of the bank. Even in models without adverse selection or certain types of moral hazard problems, banks might find it beneficial to ration credit.

Primary Theories of Credit Rationing

Jaffee and Russell (1976, herein referred to as J-R) influenced thought on many credit rationing studies. Prior to their work credit rationing was thought to be a temporary dis-equilibrium in the credit markets[1] or caused by market inefficiencies due to regulation, risk, and other factors. J-R, drawing on the earlier work of Akerlof (1970) showed that the credit market might be characterized by an oscillating equilibrium between rationing and no rationing. They used a model with two types of borrowers, one more preferable and another less preferable to the banks, that could be sorted[2] by offering contracts that are rationed in terms of size[3]. Alternatively, all clients could be offered full loans. When banks are offering no-rationing contracts, a new bank could earn profits in a competitive market by rationing contracts with lower interest rates, because rationing would reduce bad debt expenses and would not have to be subsidized by 'preferable' borrowers. As preferable borrowers rush to sign rationing contracts, no-rationing

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[1]Stigliz and Weiss (1981), 393.

[2]Sorting refers to method a bank uses to distinguish 'types' of borrowers in a market characterized by information asymmetry. Usually, the banks construct different contracts that would appeal to different types of borrowers. Imagine, for instance, a market characterized by entrepreneurs with a high risk of default and large potential profits, and others with a low-risk of default and lower profit potential. If the banks could not readily distinguish between the two, they could offer a set of two contracts, one that offers a higher expected profit for high-risk entrepreneurs and another that offers higher expected profits for low-risk entrepreneurs. By using this 'sorting' method, the banks theoretically can overcome informational asymmetries.

[3]Borrowers would be willing to pay more interest or post more collateral to borrow more money, but cannot.

contracts become unprofitable and disappear from the market because only less preferable borrowers accept no-rationing contracts and a no-rationing contract yields an expected loss. Eventually, all credit contracts are of the rationing-type, become unprofitable, and disappear from the market. This allows no-rationing contracts to reenter the market as a profitable option for banks. The process goes on continually, with the credit market being characterized alternatively by rationing and no-rationing equilibria.

Stiglitz and Weiss (1981, S-W) extended theories on a credit market characterized by adverse selection and moral hazard in two ways. First, they showed that a credit rationing situation can be a stable equilibrium. Second, S-W showed that rationing could take the form of complete denials of credit to certain types of borrowers. They considered problems caused by moral hazard and adverse selection separately, and showed that incurring economic costs like collateral requirements or interest rates on borrowers to achieve market-clearing levels may not be a profitable lending strategy for banks. The study considers using the interest rate as a screening device to sort borrowers and to deal with the adverse selection problem but S-W demonstrate that expected profits do not always rise with interest rates. If the interest rate is too high, it is only be profitable for risky projects – those with higher potential payoffs - to borrow funds. Thus, the bank will face more bad debts and a lower expected profit. Likewise, high interest rates can encourage borrowers to take actions that are contrary to the interests of the bank. S-W then shows how higher collateral demands can make the loan portfolio of the bank riskier because of adverse selection and moral hazard.

Williamson (1987) argued that in a market without adverse selection and certain types of moral hazard credit rationing could still exist. In Williamson's model, information is distributed symmetrically (no adverse selection problem exists) and the actions of the entrepreneurs do not affect the project outcome (no moral hazard is present). The bank must monitor entrepreneurs to verify their performance after project h completion. Otherwise, the borrower could maximize returns by claiming that the project proceeds were zero, regardless of the actual return. In Williamson's study, a bank monitors an entrepreneur if it is not paid, and the cost of monitoring can be interpreted as the cost of the borrower's bankruptcy. In this study, Williamson shows that monitoring costs can make credit rationing a more profitable option for lenders.

Other studies have varied the assumptions in, and extended the works of, J-R, S-W, and Williamson. For example, Allen (1983) shows that if borrowers must settle previous debts to access the credit market in the future, banks can increase profits by limiting credit. Koskela (1983) finds that markets without adverse selection can ration credit in the J-R sense because rationed contracts are less expensive for borrowers. Watson (1984) supplements S-W by producing a model in which 'hard working' individuals (those who would have the least risk of moral hazard problems) can be enticed to start a business instead of becoming wage workers if the interest rate is kept low. Plaut (1985) argues that credit rationing is a necessary characteristic of all credit market equilibria, because fixing all the characteristics of a loan contract (maturity, collateral, interest rate, repayment schedule, and loan size) yields a fixed 'ration' of credit. Stiglitz-Weiss (1992) rework S-W to consider collateral and interest rate decisions simultaneously, and show that credit rationing is still a possible result of their model. Olekans and Sibly (1992) argue that credit rationing is an optimal response to banks and borrowers dealing with each other over an uncertain horizon. The study concludes that rationing can only be overcome through the unrealistic assumption of complete insurance.

Bester (1985) theorizes that banks can achieve perfect sorting, and eliminate credit rationing. Bester contends that perfect sorting can be achieved by manipulating both the interest rate and collateral requirements to create contracts that are incentive-compatible. That is, each risk-type has a contract that is more attractive to her because it is tailor-made to her needs. In his model, collateral is a costless instrument. Besanko and Thakor (1987a) create a model in the spirit of Bester with a constraint on borrowers' collateralizable wealth and an assumption that collateral is costly to use. They conclude that the perfect sorting found in Bester is limited to a situation in which borrowers have unlimited amounts of collateral. Otherwise, banks can use rationing as an alternative, though it is a less efficient sorting device. Calomiris and Hubbard (1990), who find that a critical level of collateralizable wealth exists beyond which no borrower is rationed, also support Bester's findings.

Is Credit Rationing a Problem?

As noted earlier, the effects of credit rationing are far-reaching. Three studies have examined the effects of credit rationing on firm investment in relation to Modigliani and Miller's (1958) theory that a firm's investment and financing decisions are made separately. Fazzari, Hubbard, and Petersen (1988), Hoshi, Kashyap, and Scharfstein (1991), and Schaller (1993) grouped samples of firms into classes arguably expected to encounter differing levels of informational asymmetry. One class of borrowers, because they are a well-recognized firm, are publicly traded, or well-established, share more information with lenders. As a result, lenders are more confident of extending credit to them as the risks of the problems that can lead to credit rationing are lower. Investment behaviour across classes was then compared, with the finding that financing constraints affect corporate investment. However, Faroque and Ton-That (1995) criticize these studies on methodological grounds, arguing that the basis on which these firms are classified affects the conclusions about the significance of liquidity constraints on investment. Using a series of non-nested tests on a sample of Canadian corporate data, Faroque and Ton-That conclude that no convincing evidence exists of over- or under-investment theories.

Other studies that support the significance of credit constraints encountered by the private sector include those of Martin (1990) and Calem and Rizzo (1995). The former showed that U.K. firms experience excess demand for bank loans. The latter study uses hospital industry data to show that small, unaffiliated American hospitals are constrained due to borrowing costs. Berger and Udell (1990) used a very large sample of loan contracts to evaluate if 'stickiness' in interest rates was consistent with predictions of credit rationing theory. They found that most of the stickiness observed in credit contracts cannot be attributed to credit rationing, because, for example, it affects borrowers who are contractually protected from rationing. Evans and Jovanovic (1989) found that borrowers cannot find as much credit as they want, but are provided with socially optimal levels of credit. Hillier and Worrall (1994) conclude that, if credit is rationed, it should be rationed more tightly!

In addition to Evans and Jovanovic and Hillier and Worrall, others argue that banks are not hurting social welfare by limiting loans. De Meza and Webb (1987) create a model that shows that, if expected returns on project differ, socially excessive levels of investment will occur without rationing. Likewise, de Meza and Webb (1992) argue that credit rationing may benefit society. By limiting the size of loans, banks ensure that entrepreneurs will not go bankrupt in a bad state of the economy. Finally, de Meza and Southey (1996) supplement de Meza and Webb's earlier studies by citing psychological factors that could lead investors to be overly-optimistic about their prospects, and demand too much money.

Collateral and Loan Contracts

The role of collateral is another issue debated in the literature of credit rationing. Collateral serves two possible purposes for banks in making lending decisions. First, it can serve as a risk-reducing mechanism, by which banks can mitigate the risks of providing loans by sorting borrowers and 'hedging their bets.' Second, collateral serves as an incentive mechanism: it overcomes the problems of moral hazard, by providing a disincentive for borrowers to default. Issues regarding the use of collateral include the association between the amount of collateral and borrower risk, the levels of collateral present in an optimal lending contract, and the other roles of collateral in lending practices. This section outlines some of these debates.

Stiglitz and Weiss (1981) argued that banks would not raise collateral to discourage borrowing and clear the market because higher collateral requirements attract high-risk borrowers and encourage more risk-taking behaviour. In their study, they contend that high collateral requirements attract high-income individuals, who are less risk-averse than those with smaller levels of wealth do. Likewise, more collateral encourages borrower action that can decrease the expected profits of the borrower. However, Bester (1985, 1987) finds that riskier borrowers are extended unsecured credit, while less risky borrowers will post collateral. Besanko and Thakor (1987b) agree with Bester, provided the market is a competitive one. Chan and Kanatas (1985) examined the relationship of risk and collateral in an economy without moral hazard. They found that, when information asymmetries are present and collateral acts as a signalling device, low-risk borrowers will offer more collateral.

Igawa and Kanatas (1990) found that lower quality borrowers (borrowers who have a lower expected return to the bank) will be granted unsecured credit. Finally, Boot, Thakor and Udell (1991) reached a different conclusion, and found that 'bad' borrowers would be given a secured loan. Berger and Udell (1990) attempted to arbitrate the debate by using a large sample of loans to determine the relationship between collateral and different risks encountered by banks. They found a positive association between collateral and risk, with higher levels of collateral suggesting riskier firms, loans, and bank loan portfolios.

It is widely believed that the need for collateral hinders both banks and borrowers. The effects of collateral constraints are theorized to lead to less corporate financing opportunities and investment (Schaller (1993), Besanko and Thakor (1987b), Igawa and Kanatas (1990) and Calomiris and Hubbard (1990)). Igawa and Kanatas contend that information asymmetry leads to over-collateralization of high-quality firms, resulting in underinvestment relative to the first-best solution with the assets pledged. Some have also argued that collateral is a costly instrument for the bank to use. Besanko and Thakor (1987b) conclude that banks, in optimum, would charge no collateral because it is an inefficient means of extracting borrower wealth. Boot, Thakor and Udell (1991) support this hypothesis, and conclude that collateral imposes a deadweight loss to the bank. Overall, the weight of evidence appears to support that collateral act as a sorting device that outweighs losses to lenders.

Lender-Borrower Relationships

Collateral is not the only means by which lenders can overcome information asymmetries. The history of the borrowers also provides useful information that banks use to assess credit applicants. Essentially, these studies argue that more information leads to preferable borrowing terms. Stiglitz and Weiss (1983) conclude that a Nash equilibrium can exist in a credit market if lenders do not lend to applicants who did not pay off loans from earlier periods. This result obtained even though the expected profits from lending to new borrowers are lower. Similarly, Allen (1983) showed that making a firm's record of accomplishment a factor in the loan decision can create a situation in which borrowers are induced to settle older debts. By doing so, borrowers can avoid the costs of being excluded from the credit market in the future. Diamond (1989) created a model to show the value of information accumulation to borrowers, by finding that borrowers who exhibit good track records are granted favourable credit terms in the future.

Berger and Udell (1995) conducted an empirical investigation into relationship lending and small businesses, and found that bank customers who successfully repay debts pay lower interest rates and pledge less collateral. Berger and Udell's finding were consistent with those of Boot and Thakor (1994) who applied the concept of infinitely-repeated games to the credit market and found that borrowers who successfully complete a contract are supplied favourable credit terms subsequently. Webb (1991) created a model in which borrowers could be sorted based on their track records, and was able to sort perfectly in his model. He concluded that information accumulation leads to a superior allocation of investment. Finally, Pagano and Jappelli (1993) showed that information sharing between institutions leads to an increase in the volume of lending when safe borrowers are priced out of the market because of adverse selection. Membership in an information sharing organization brings both benefits and costs to the bank.

Government Intervention in Credit Markets

What role should government take in a credit market characterized by credit rationing? Some governments have tried to address the problem of credit rationing. A sample of the very large literature on this topic follows,

According to Jaffee and Russell's (1976) model, when banks were given monopoly power credit rationing did not occur. They suggest that the government endow banks with monopoly-type powers to solve the credit rationing problem. Smith (1983) created a model similar to that of Jaffee-Russell (1976) yet found that governments should meet excess demand by providing loans. He predicted the model would be deflationary, Pareto-improving, and would influence credit market rates. Lombra and Wasylenko (1984) developed an analytical framework by which they examined U.S. government efforts to subsidize small business. They found that solving financing problems faced by American small business is best resolved through the tax system. They also argue that loan guarantees, although they help resolve the market imperfection, are a clumsier intervention, difficult to evaluate, and have an ambiguous net impact. Innes (1991) argues in favour of government subsidization of low-quality firms as the best strategy.

Tests of Credit Rationing Theories

In addition to Faroque and Ton-That (1995), other studies have examined the effects of model specifications on the predictions of theories of credit rationing. Hellwig (1987) compared different games used by previous studies on credit rationing to see if game specifications affect conclusions about the form credit rationing might take. The different specifications involved the number of stages involved in the game, and the timing, and means that agents in the economy presented and decided upon contracts. He concluded that different game specifications can lead to different results. Chan and Thakor (1987) compared J-R and S-W-type model specifications, and found

J-R type models do not show rationing if borrowers were given unlimited collateral,

S-W-type models show allocative distortions regardless of the type of collateral levels held by borrowers, and,

rationing explanations in existing literature seem to depend heavily on any assumptions about the nature of competition in the market.

Summary

Debates continue in the credit rationing literature. They include whether credit rationing is a significant economic occurrence, whether it hurts the economy or prevents more severe problems, and whether the problem is surmountable by better sorting, government intervention, information sharing, etc. There appears to be some agreement about that credit rationing can occur because of the three major problems of adverse selection, costly monitoring, and moral hazard. Also, there appears to be agreement that it benefits successful entrepreneurs to alleviate lenders' fears of businesses acting in a way that is contrary to lenders' interests. Reputation and other means of information transmission (like better sorting), seem to improve lending by tailor-making lending contracts to certain groups and preventing high-quality borrowers from subsidizing low-quality borrowers.

Annotated Bibliography: Credit Rationing

Allen, Franklin (1983) "Credit Rationing and Payment Incentives" Review of Economic Studies, 50, 639-646.

The author provides a theory, in the context of individual borrowing for production, where default costs are also endogenous. Borrowers cannot borrow more money if they have not settled older debts, and will repay old debts if the value of the debt payment is less than the value of future access to the credit market. Because the benefit of default is a linear, increasing function, and the value of future access to credit markets is concave, reducing credit ensures that it remains profitable for businesses to repay their debts.

Beaudry, Paul and Michel Poitevin (1995) "Competitive Screening in Financial Markets when Borrowers can Recontract" Review of Economic Studies, 62 (3, 212), 401-423.

The authors examine how the possibility of recontracting affects the financing of projects when an entrepreneur is privately informed about the distribution of returns. If recontracting is introduced, the predicted separation of low- and high-risks in equilibrium cannot hold because high-risk individuals can mimic and solicit new contracts that would diversify their risk. A game is considered in which an entrepreneur solicits initial financing from uninformed financiers. Once the project is undertaken, the entrepreneur can seek more financing, but banks are informed about existing contracts and consider debt seniority. The study finds that: (1) the equilibrium is characterized by separation but the modalities of financing depend critically on the market's priors about the project's riskiness, (2) when the market is optimistic about the project, a separating equilibrium exists but standard compatibility constraints are not binding, (3) even if the market is very pessimistic about a project, there always exists an equilibrium in which a good project receives sufficient financing, and (4) the entrepreneur's inability to promise not to recontract may be considered Pareto improving in certain situations.

Berger, Allen N. and Gregory F. Udell (1990) "Collateral, Loan Quality, and Bank Risk" Journal of Monetary Economics, 25, 21-42.

Using a database of over 1 million loans made by 340 banks across the United States from 1977 to 1988, the authors attempt to investigate empirically the correlation between collateral and borrower, loan and bank risk. The article first presents cross-sectional data on individual loans to estimate differences in risk premiums between secured and unsecured loans as ex ante indicators of risk. Then, the study uses pooled time-series cross-section data on ex post measures of borrower risk and loan risk to analyze differences associated with the use of collateral. The authors find that for the three types of credit risks studied: firms, loans and banks, a positive relationship exists between collateral and risk. Riskier firms tend to borrow with more collateral, secured loans tend to be riskier and banks with more unsecured loans in their portfolios tend to have riskier portfolios.

Berger, Allen N. and Gregory F. Udell (1992) "Some Evidence on the Empirical Significance of Credit Rationing" Journal of Political Economy, 100 (5), 1047-1077.

This paper attempts to test empirically the significance of credit rationing using a sample of over 1 million loan contracts. In this analysis, the authors attempt to tie incidences of loan rate 'stickiness' to credit rationing theory. The statistical test performed found that nearly half of the observed stickiness occurs on loans made to commitment borrowers, who are contractually protected from rationing. Some of the remaining stickiness involves loans whose rate premiums actually becomes negative when open-market rates are high, which also cannot be symptomatic of credit rationing. The authors conclude that information-based equilibrium credit rationing is not a significant macroeconomic phenomenon.

Berger, Allen N. and Gregory F. Udell (1995) "Relationship Lending and Lines of Credit in Small Firm Finance" Journal of Business, 68 (3), 351-379.

The authors attempt to test empirically theories about interest rates behaviour, collateral requirements, and business relationships with banks. Using a data set of about 3,400 telephone surveys conducted by the Federal Reserve Board and the SBA, the study focused on the duration of a business-bank relationship as a measure of strength and observed the influence of 'stronger' relationships and contract terms. This study focused exclusively on lines of credit, because they represent a formalization of a relationship. The data set used five categories of variables: credit line characteristics, firm financial characteristics, firm governance characteristics, and information/relationship characteristics. A joint hypothesis that (i) banks gather valuable information about a borrower over time, (ii) this information is used to refine contract terms, and (iii) this refinement is reflected in loan rate and collateral requirement terms. The study found that borrowers with longer banking relationships pay lower interest rates and are less likely to pledge collateral. These findings are both statistically and economically significant. The findings are consistent with the theoretical predictions of Petersen and Rajan (1993) and Boot and Thakor (1994) and support the literature on the role of banks as information producers.

Besanko, David and Anjan V. Thakor (1987a) "Competitive Equilibrium in the Credit Market under Asymmetric Information" Journal of Economic Theory, 42 (1), 167-182.

The authors develop a model of a credit market under asymmetric information. A single-period, risk-neutral economy is considered, in which borrowers know ex ante about their quality as a loan applicant and have only one attribute: their default risk. Lenders create incentive-compatible contracts to encourage borrowers to signal their type. The authors conclude that, under asymmetric information, low-risk borrowers obtain more credit, pay higher interest rates, and post more collateral than high-risk borrowers. In addition, although asymmetric information induces the allocational distortion of suboptimally high investments by some borrowers, there is no credit rationing. The results of this study, the authors note, rely on the assumptions that the credit market is not dynamic and there is no moral hazard.

Besanko, David and Anjan V. Thakor (1987b) "Collateral and Rationing: Sorting Equilibria in Monopolistic and Competitive Credit Markets" International Economic Review, 28 (3), 671-689.

The authors model two credit markets, one characterized as a monopoly and another as perfectly competitive, to examine credit rationing and the role of collateral. A model is created in which banks offer different sets of contracts to potential borrowers that are structured to overcome informational asymmetries. On the role of collateral, the study finds that collateral is an inefficient tool for extracting borrower surplus, and will not be used under a monopoly. Rationing occurs under a monopoly in a market characterized by information asymmetry only if the expected social surplus of a high-risk borrower is not sufficiently large. Under these circumstances, high-risk borrowers are priced out of the market (the authors describe this as 'price rationing'). If a market is competitive, optimal loan contracts take the form similar to Bester (1985), in which collateral requirements and interest rates will be inversely related. Although collateral is an inefficient device, competitive banks use it because it is a valuable sorting tool. In equilibrium, credit is rationed to low-risk borrowers to deter high-risk borrowers from pursuing low-risk contracts.

Bester, Helmut (1985) "Screening vs. Rationing in Credit Markets with Imperfect Information" The American Economic Review, 75 (4), 850-855.

The author argues that no credit rationing will occur in equilibrium if banks compete by choosing collateral requirements and the rate of interest to screen investor's riskiness. In this model, there are two types of entrepreneurs, who have equal wealth endowments and expected returns but different expected rates of success. Banks are in perfect competition, and decide on interest rates and collateral requirements simultaneously instead of separately. The article concludes that no borrower will be denied credit in equilibrium if banks use the collateral requirement of their loan contract as a signaling mechanism.

Bester, Helmut (1987) "The Role of Collateral in Credit Markets with Imperfect Information" European Economic Review, 31, 889-899.

This article shows how banks may use collateral as a sorting device under asymmetric information. Low-risk investors reveal themselves by accepting high collateral requirements that would be unattractive to high-risk investors. The author constructs a model with several entrepreneurs, all endowed with the same level of initial wealth, whose projects are differentiated by their probability of success. Banks are in perfect competition, and offer a range of contracts that sort borrowers by requiring different levels of collateral. The article concludes that no rationing will exist as long as an increase in the collateral requirements can better sort borrowers or induce safer projects. Rationing persists under competition only is the borrower's collaterizable wealth is too small to allow perfect sorting or to create sufficiently strong incentives.

Bester, Helmut (1994) "The Role of Collateral in a Model of Debt Renegotiation" Journal of Money, Credit and Banking, 26 (1), 72-85.

The author constructs a model of borrowing under asymmetric information while considering the impact of the possibility of future debt renegotiation. Gale and Hellwig (1985) and Diamond (1984) inspire the model. Information is ex ante symmetric, but creditors cannot observe the firm's revenue streams unless the firm defaults. Two games are considered: (1) a game in which the creditor commits not to renegotiate contracts in the event of borrower default, and (2) a game in which creditor do not pre-commit not to recontract. Without the prospect of renegotiation, the threat of bankruptcy becomes a mechanism that induces entrepreneurs to reveal truthfully their type and their return realizations, but these bankruptcies can be costly to the creditor. If the prospect of renegotiation is added, the threat of bankruptcy costs is reduced but entrepreneurs have an incentive to lie about their returns in hopes of renegotiating lower payments. This motive for cheating can be reduced, though, through outside collateral requirements. Bester finds that a higher degree of outside collateralization allows the creditor to believe that the firm is actually in a poor state when it defaults. The study claims to provide an explanation of why debt renegotiation is frequently observed in practice, but warns that its assumption of ex ante information symmetry is necessary to receive this result.

Boot, A.W.A., A. V. Thakor and G. F. Udell (1991) "Secured Lending and Default Risk: Equilibrium Analysis, Policy Implications and Empirical Results" The Economic Journal, 101 (406), 458-472.

The authors seek conditions under which there is a positive association between collateral and borrower risk, the role of collateral under asymmetric information and moral hazard, and how monetary policy affects the cross-sectional dispersion of secured and unsecured lending. A model is constructed in which banks compete for borrowers and deposits are elastically supplied. Borrowers being able to take ex post unobservable actions to affect project payoffs cause moral hazard. The authors add some pre-contract private information of some exogenous parameter of the borrower's payoff distribution. The authors find that collateral is a powerful instrument for dealing with moral hazard, although it imposes a deadweight loss to the bank. Private information increases collateral usage in contracts, although the association between collateral and borrower risk under moral hazard may be strengthened or weakened by private information. Moreover, borrower risk is endogenous and an outcome of the equilibrium.

Boot, A. W. A. and A. V. Thakor (1994) "Moral Hazard and Secured Lending in an Infinitely Repeated Credit Market Game" International Economic Review, 35 (4), 899-920.

The authors use an infinitely repeated bank-borrower relationship with moral hazard and universal risk neutrality to explore the benefits of credit contract duration when two major benefits of long-term contracting — learning and improve risk sharing — are absent. In doing so, the authors: (1) analyze an infinitely repeated game with discounting in a credit market context and to issues of moral hazard and collateral-related distortions, and (2) understand traits of credit markets, like durability in credit relationships, lower borrowing costs for established borrowers, and different collateral demands for different borrowers. These investigations are presented in a context where learning is not essential to rationalize these behaviours. The model uses a credit market that is competitive and has risk-neutral agents. Borrowers, who are subject to limited liability, maximize their surplus on financing subject to a variety of bank constraints. All borrowers have the same projects, but the success of their projects is influenced by a private-observed 'action' factor. A single-period model is first examined, and finds that the first-best outcome, in which no collateral is posted and the entrepreneur exerts the best amount of effort, is unattainable. Without collateral, the bank cannot force entrepreneurs to exert maximum effort. When an infinitely repeated game is used, the game is no longer time-independent — previous actions of the entrepreneur influence subsequent dealings with the bank. If the borrower defaults, he forfeits his collateral and can reenter the credit market in the next period. In each period, the borrower is assumed to be able to post sufficient collateral. With long-term contracting, the entrepreneur has an additional incentive device: the promise of below-market financing if he is successful in the present. This additional incentive allows the bank to require less collateral. The paper finds that, despite universal risk neutrality and the absence of learning, a durable bank relationship benefits the borrower. Long-term contracting enables the bank to efficiently tax and subsidize the borrower through time to reduce the need for collateral. In addition, the average welfare loss due to moral hazard is positive each period into infinity. Third, when a borrower is successful in his first project, he is awarded an unsecured, below spot market rate perpetually. The optimal contract only asks whether the borrower has experienced a project success. If the answer is 'yes', he is a awarded a certain type of contract; otherwise he gets another type.

Calem, Paul S. and John A. Rizzo (1995) “Financing Constraints and Investment: New Evidence from Hospital Industry Data” Journal of Money, Credit and Banking, 27 (4, 1), 1002-1013.

The authors claim to depart from existing literature on the relationship between investment and financing constraints by examining data from hospitals instead of the manufacturing sectors. The study shows that financing constraints affect firms outside the manufacturing sector and, by focusing on only one industry, avoids the problem of attributing observed differences in liquidity/investment relationships to financing constraints or industry differences. A large data set of 1400 hospitals is analyzed. The study finds that liquidity is much more weakly related to large, chain-affiliated hospitals, in comparison to each of the other cohorts. Moreover, liquidity appears to be most strongly related to investment among small, freestanding hospitals. The results show that small and free standing hospitals face borrowing constraints due to agency costs.

Calomiris, C. W. and R. G. Hubbard (1990) “Firm Heterogeneity, Internal Finance, and ‘Credit Rationing’” The Economic Journal, 100 (1), 90-104.

The authors show that the terms on which different groups of borrower-entrepreneurs obtain credit depends on individual and aggregate levels of net worth. To do this, the authors set out to examine three topics: (1) assessing the role of collateral in the allocation of credit under asymmetric information, (2) examine the allocation of credit under symmetric and asymmetric information, and (3) develop a general equilibrium model of credit allocation in which lenders do not have an elastic supply of funds. The authors develop a model in which lenders are supplied funds by risk-neutral investors. Borrowers are indexed by their internal net worth, returns on project opportunities, and observability by potential lenders. Three project types exist: two are indistinguishable and one is observable, with the observable project’s expected returns lying between the two unobservable projects. Likewise, there are three classes of borrowers: one whose information is symmetrically shared by lenders, one who is asymmetrically informed and has a high level of wealth, and one who is asymmetrically informed and has a low level of wealth. The lender will order its opportunities so that all loans earn an equivalent profit (otherwise, competitors would bid away potential lenders). At sufficiently low collateral levels, a rise in the interest rates prompts ‘good’ borrowers to drop out first. There exists a critical level of collateral, though, beyond which will reduce the incentive for ‘bad’ borrowers to drop out and pooling occurs. If individual wealth is set at a level beyond the critical level of collateral, and informational asymmetries are no longer important. This implies that rationing will not occur if individuals’ wealth is sufficiently high. The study outlines three types of ordering that can be pursued by the lender: (1) When levels of internal net worth are low, lenders prefer symmetrically-informed applicants, and information-intensive applicants will be rationed, (2) When one group of information-intensive borrowers have a high level of internal net worth, the highly endowed information-intensive entrepreneurs can be sorted and funded first, then the symmetrically-informed borrowers, then the low-endowment asymmetrically informed applicants, (3) If asymmetrically-informed borrowers have high levels of wealth, then credit is distributed in the same order as if lenders were symmetrically informed.

Campbell, Tim S. and Yuk-Shee Chan (1992) "Optimal Financial Contracting with Ex Post and Ex Ante Observability Problems" The Quarterly Journal of Economics, 107 (2), 785-795.

This paper studies the optimal use of debt and equity under both ex ante and ex post-observability problems. The ex ante problem is moral hazard regarding the firm's investments, which generates an incentive cost of debt [as in Stiglitz and Weiss (1981)]. The ex post observability problems generates monitoring costs that lead to a cost advantage for debt [like Williams (1987)]. In this model, a firm has two investment projects: a risky one and a risk-free one. Its decision is controlled by risk-neutral inside equity-holders, who can choose combinations of the interest rate and allocate funds between both projects. Lenders supply funds in competitive markets, cannot observe the allocation between the two projects of a firm, and can only observe the state of the firm at a cost. The study finds that, when the incentive costs are taken as given, then debt will be preferred if incentive costs are less than monitoring costs should the firm become insolvent. In addition, at an optimum, the firm will overinvest in a risky investment relative to a riskless investment.

Chan, Yuk-Shee and George Kanatas (1985) "Asymmetric Valuations and the Role of Collateral in Loan Agreements" Journal of Money, Credit and Banking, 17 (1), 84-95.

The authors examine the role of collateral in two types of lending relationships without moral hazard. Collateral is used in this model to resolve asymmetric valuations of loans by lenders and borrowers. When information asymmetry is not present, collateral serves as an observable variable on which both lenders and borrowers can base a credit contract. If information asymmetries are present, the authors show collateral plays a role as a signaling device about the borrower's quality to the lender. The study first models a situation in which information is distributed symmetrically, and collateral is used as variable on which to reach an agreement. The authors find that, under this type of situation, a less optimistic lender will demand more collateral and a lower loan rate. If the lender and the borrower have the same valuation of the loan, then no collateral will be posted and the optimal interest rate will be charged. In situations where collateral acts as a signaling device, higher quality borrowers will offer more collateral. The article shows that collateral improves lenders' estimates of their expected returns when the parties to a loan agreement have different information. Collateral can serve as a signaling device when informational asymmetries are present, and can serve to solve asymmetric valuations when lenders and borrowers are equally informed.

Chan, Yuk-Shee and Anjan V. Thakor (1987) "Collateral and Competitive Equilibria with Moral Hazard and Private Information" The Journal of Finance, 42 (2), 345-363.

The authors compare two approaches to characterizing competition in equilibrium in the credit market in credit allocation literature, and see if these differing notions of competition lead to different conclusions. Two concepts of competitive equilibria are defined: (1) a Jaffee-Russell (1976)-type equilibrium, in which banks compete for loans facing a perfectly elastic deposit supply schedule at some market-determined rate, or (2) a Stiglitz-Weiss (1981)-type equilibrium in which banks compete for a limited quantity of deposits. The authors compare both types of competition with a model in which borrowers have access to unlimited amounts of collateral and private information. The study makes these findings: (1) rationing explanations in existing literature seem to depend heavily on assumptions about the notion of competition and the market, (2) in a type 1 (Jaffee-Russell) equilibrium, there is neither rationing nor any other distortion even with private information and moral hazard as long as collateral is unconstrained, (3) type 2 equilibria can see allocative distortions, even with unlimited collateral, and (4) in a type 2 equilibrium with moral hazard and private information, high-quality borrowers may post more collateral.

de Meza, David and David C. Webb (1987) "Too Much Investment: A Problem of Asymmetric Information" The Quarterly Journal of Economics, 102 (2), 281-292.

The authors argue that asymmetric information leads to more investment than is socially efficient under certain circumstances. They construct a model in which all investors have equal endowments of initial wealth, require the same amount of capital to invest in their projects, and will yield the same returns. Each marginal investor in this model faces a decreasing probability of success. Banks are identical competitive, risk-neutral profit maximizers. The study concludes that, in the presence of asymmetric information, the financial structures of firms and the efficiency properties of the level of investment depends upon the distribution of project returns. If all projects offer equal expected returns, but different risks, then equity is the favoured means of finance, and social efficiency obtains. If only debt finance is feasible, there will be underinvestment. If the expected returns on projects differ, then debt is the equilibrium financial contract, and socially excessive levels of investment occur.

de Meza, D. and D. C. Webb (1992) "Efficient Credit Rationing" European Economic Review, 36 (6), 1277-1290.

The authors attempt to show that credit rationing is not a hindrance to social efficiency in the credit market and that no government intervention is necessary. A model is created in which entrepreneurs are exposed to limited liability must borrow from risk-neutral, competitive banks who are symmetrically informed about the entrepreneurs' quality. Because entrepreneurs expect a zero payoff regardless of how much capital was invested into a project, they do not consider the probability of bankruptcy in their requests for funds. Their profit is maximized by asking for more credit than borrowers, who consider the probability of bankruptcy, are willing to extend and is efficient. Therefore, credit rationing occurs in terms of loan size. The restricted loan size ensures that the entrepreneur will not go bankrupt in a bad state. The study also finds that credit rationing becomes more severe for projects of medium risk and decreases the more costly it is for creditors to recover bad debts.

de Meza, David and Clive Southey (1996) "The Borrower's Curse: Optimism, Finance, and Entrepreneurship" The Economic Journal, 106 (435), 375-386.

This article argues that credit rationing is better explained by a model in which banks are better informed about a project's probability of success than entrepreneurs. The authors base this argument on two premises: (1) banks have a wealth of case histories to draw on, and (2) entrepreneurs have biased expectations of their project's potential for success. A model is constructed in which banks can accurately assess the true probability distribution. In contrast, potential entrepreneurs carry biased expectations (each is characterized by some degree of optimism or pessimism) about their project's prospects. All projects, in reality, have the same distribution of returns. The article determines that self-selection means disproportionately optimistic entrepreneurs will start up projects. This leads to excessive entry and makes the average project an expected loss-maker. In contrast to previous studies, this model concludes that credit rationing by banks prevents too many optimists from engaging in ventures that are expected losers.

Diamond, D. W. (1989) "Reputation Acquisition in Debt Markets" Journal of Political Economy, 97 (4), 828-.

The author studies the effects of reputation and lending in debt markets. A model is constructed in which a group of observationally identical borrowers with no track record can undertake a risky project with a high maximum payoff or a safe project with a larger expected payoff. The model lasts over several periods, and the banks lending contracts, and banks cannot observe the outcome of the projects (making information accumulation more difficult). Banks can eventually assess borrowers based on their history of default. The study finds that as borrowers accumulate track records, successful entrepreneurs are offered lower interest rates. The benefits of success and the cost of default accumulate over time.

Dowd, Kevin (1992) "Optimal Financing Contracts" Oxford Economic Papers, 44, 672-693.

The authors surveys the literature of optimal contract structures and financial security design. He shows how the optimal contract structure changes as certain assumptions are related. The article discusses many factors, including costly state verification, moral hazards, monitoring costs, adverse selection, wealth constrains and risk aversion and their impact on contract formulation.

Evans, D. S. and B. Jovanovic (1989) "An Estimated Model of Entrepreneurial Choice under Liquidity Constraints" Journal of Political Economy, 97(4), 808-827.

This study investigates the importance of liquidity constraints on individuals' choices to become entrepreneurs. Liquidity constraints are a parameter in this model, and people are endowed with different ability and initial wealth attributes. At the start of a period, an individual decides whether to work for him(her)self or become a wage worker. This decision is based on which career choice brings the largest expected profits to the individual, which is based on entrepreneurial ability, amount of capital invested in the business and a random variable. The potential entrepreneur is aware of his ability and wealth, but is not aware of the value of the random factor. Borrowers cannot default in this model, and can only borrow an amount that is proportional to his initial wealth (which serves as the model's liquidity constraint). The authors test this model against a sample of 1,500 white males who were wage workers in 1976 and either wage workers or entrepreneurs in 1978. The study finds that liquidity constraints are binding, and restrict potential entrepreneurs to a capital stock that does not exceed 1.5 times their wealth. Most people are not constrained, though in that they can find sufficient financing to start a business with the optimal amount of capital for an average-sized business with average amounts of education and experience. As a result, entrepreneurs devote less capital to their business than they would like to.

Faroque, Akhler and T. Ton-That (1995) "Financing Constraints and Firm Heterogeneity in Investment Behaviour: An Application of Non-nested Tests" Applied Economics, 27 (3), 317-326.

In response to the difficulty in studying firm's limited access to credit because credit-rationed firms are not directly observable in available data sets, the authors propose a new empirical research strategy to avoid estimation biases due to incorrect sorting. Each specification is built with different sorting criteria and evaluated against each other, then the best specification is chose by applying two members of the existing family of non-nested hypothesis test (p- and j-tests). These results are then compared to see if they are consistent with rationing theories. The study applies this methodology to Canadian corporate panel data of 300 public companies to determine the significance of financing constraints in Canada. Study of the panel found that, using the methodology outlined by Fazzari et al. (1988), the nature of the evidence assembled regarding the existence of credit rationing may hinge on the choice of sorting criteria. Using the non-nested tests, the authors found that the data do not support critical predictions of either the underinvestment or overinvestment theories. The study concludes that the practice of conditioning tests of financing constraints on the a priori sorting of firms into constrained and unconstrained groups may lead to spurious inferences about the existence of credit rationing.

Fazzari, S. M., R. G. Hubbard and B. C. Petersen (1988) "Financing Constraints and Corporate Investment" The Brookings Papers on Economic Activity, 141-205.

The authors study the effects of liquidity constraints on investment, and compare current theories on capital market imperfection to established theories on the separability of financing and investment decisions [i.e. Modigliani and Miller (1958)]. The study uses data from firms with different financial characteristics (they are divided by their ratio of dividends to income) and examines their investment behaviour in relation to liquidity constraints. In a capital market with imperfections that make internal funds much more expensive than external financing, firms that exhaust nearly all of their low-cost internal funds should be more sensitive to fluctuations in their cash flow. In contrast, the study finds that firms who retain nearly all of their income have shown a greater sensitivity of investment to cash flow and liquidity. Younger firms, who have yet to establish themselves with creditors, appear to feel the effects of liquidity constraints more severely.

Gale, Douglas, and Martin Hellwig (1985) "Incentive-Compatible Debt Contracts: The One-Period Problem" Review of Economic Studies, 52 (1), 647-663.

The authors analyze a model of credit contracts to determine the optimal contract under asymmetric information. In this model, asymmetric information takes the form of the firm knowing its 'state of nature' costlessly, while the lender can only observe the firm's state at a positive cost. All agents in this model are risk-neutral, and interact with each other over two periods. The study arrives at the following findings: (1) under certain conditions the optimal credit contract takes the form of a standard debt contract with bankruptcy, (2) optimal investment levels never exceed and typically fall short of first-best investment levels, (3) equilibrium contracts will usually involve credit rationing, (4) lack of liquidity lies at the root of the credit rationing problem.

Gale, William G. (1991) "Economic Effects of Federal Credit Programs" American Economic Review, 81 (1), 133-152.

This paper develops a model of the credit market and simulates the effects of federal credit intervention. The model is a variant of Stiglitz and Weiss (1981) and analyzes a competitive loan market characterized by a particular type of information asymmetry. Here, information asymmetry is such that banks know a borrower's "group identity" (ex. farmer, student, consumer, etc.) but do not know locations within that group (firm's particular probability of repayment). The economy is competitive and free, but banks care about the identity of the applicant. In equilibrium, banks sort borrowers by their maximum rate of return and serve them sequentially. Consequently, a target group may be redlined or rationed while other groups are left unaffected. In addition, this article examines the effects of federal credit programs on social welfare. The study finds that, depending on the elasticity of supply, existing credit subsidies raise aggregate investment 0-4% and crowding out is bounded to a maximum of 5% of the original borrowing by nontargeted sectors. Effects on specific groups sampled are outlined.

Hellwig, Martin (1987) "Some Recent Developments in the Theory of Competition in Markets with Adverse Selection" European Economic Review, 31, 319-325.

Most of the literature on markets with adverse selection has not been specific about the game-theoretic structure of the strategic interaction between informed and uninformed agents in a market. Most narrow the concept of 'competition' to one specific game-theoretic model. The author attempts to show that the conclusions reached by this study are very sensitive to the details of the game-theoretic specifications one considers. This study compares different specifications and tries to show why the details of the game-theoretic modeling of competition are important. Studies on information-asymmetrical markets are compared using three games: (1) Rothschild and Stiglitz (1976) or Wilson (1977)-type games, characterized by two stages, in which uninformed agents offer contracts then informed agents choose among contracts, (2) a Hellwig-type, three-stage game, which extends the model in (1) to consider a accept-reject decision by uninformed agents after the second stage, and (3) a Cho and Kreps (1986), three stage game, in which informed agents signal the desire to enter a contract, uninformed agents offer a contract, and informed agents choose among their contract offers. The study finds that different games lead to different conclusions.

Hillier, Brian and Tim Worrall (1994) "The Welfare Implication of Costly Monitoring in the Credit Market" The Economic Journal, 104 (423), 350-362.

This article examines the welfare implication of asymmetric information in the credit market and asks whether credit rationing per se provides a rationale for government intervention. The authors use a model similar to Williams (1986), in which the optimal contract is derived with costly monitoring, and has two periods. Entrepreneurs are risk-neutral, without endowments, and privately know their ex post return. Capitalists have an endowment they can put in the bank, invest themselves or lend to an entrepreneur. Banks operate much in the same way as Williams (1986), without any information about the firm's ex post returns unless costly monitoring is undertaken. It concludes that if credit is rationed, it should be rationed more tightly. In equilibrium loan applicants bear average monitoring costs. However, they should bear marginal monitoring costs for efficiency because average monitoring costs increase with extra loans because extra loans are accompanies by a rise in the interest rate which increases the number of defaults.

Hoshi, T., A. Kashyap and D. Scharfstein (1991) "Corporate Structure, Liquidity, and Investment: Evidence from Japanese Industrial Groups" The Quarterly Journal of Economics, 106 (1), 33-60.

The study explores the empirical relationship between corporate structure and investment. In particular, firms with information asymmetry problems must rely on liquidity for investment to overcome difficulties in the capital market. The authors focus on Japanese 'keiretsu', which are industrial groups that often negotiate financing with banks for all of its members. Presumably, independent firms fact much more significant information asymmetry problems than keiretsu-affiliated firms, because they do not benefit from the familiarity banks and industrial groups share with one another. They study is conducted in a manner similar to Fazzari et al. (1988), in which firms are divided into two groups: firms who are expected to encounter more or less problems with internal financing. Then, the authors compare data on the importance of liquidity constraints to the firm's classification. They study finds that information asymmetry plays a significant role on corporate investment, because firms who are part of industrial groups have investment fluctuations that are much less sensitive to their liquidity than non-affiliated firms.

Igawa, Kazuhiro and George Kanatas (1990) "Asymmetric Information, Collateral, and Moral Hazard" Journal of Financial and Quantitative Analysis, 25 (4), 469-490.

The article presents an examination of: (1) the financing of projects while recognizing the borrower's alternatives to secured credit, and (2) the origin of the substantial transaction costs that are observed to be associated with secured credit. The authors consider the moral hazard problem present when firms can be responsible for the costly maintenance of assets on which the bank holds as collateral or is rented by another agent. In this model, a risk-neutral entrepreneur has three options to raise funds to start a project: (1) sell his initial endowment of assets and subsequently rent them, (2) get a secured loan or (3) get an unsecured loan. If the firm rents its assets, the renting agent forces maintenance costs on the firm. If the firm decides to borrow, it can choose a low-interest secured loan that incurs maintenance costs for the collateral or a higher-interest, unsecured loan. The study finds that under symmetric information, unsecured borrowing dominates. Under asymmetric information, the lowest credit quality range is pooled and given unsecured credit. If the costs of asset rental are sufficiently low, intermediate firms sell and rent their assets to finance projects, otherwise they will either borrow secured or unsecured loans. High-quality firms will use secured debt, which will involve over-collateralization. There is an underinvestment relative to first best in maintenance of the pledged assets but overinvestment relative to the level that would be chosen without bank monitoring.

Innes, Robert (1991) "Investment and Government Intervention in Credit Markets when there is Asymmetric Information" Journal of Public Economics, 46 (3), 347-381.

The author presents a case for government subsidization of low-quality firm's loans. He argues that subsidies reduce the incentive for low-quality firms to disguise themselves as high-quality firms and perfect sorting at efficient levels. The model presented in this article involves two types of entrepreneur (low and high quality), and competitive, risk-neutral investors. Investors are endowed with a common initial wealth and require the same amount of financing to start their projects. The study concludes that, under asymmetric information, subsidies are the first-best option to encourage optimal sorting in the credit market.

Innes, Robert (1993) "Financial Contracting under Risk Neutrality, Limited Liability and Ex ante Asymmetric Information" Economica, 60 (237), 27-40.

This article attempts to characterize optimal financial contracts under ex ante informational asymmetries. In this model, financial markets are risk-neutral and competitive. Each entrepreneur has private information about the quality of his ex post return distribution. The model first considers a market in which entrepreneur's investment size if fixed and contract forms are constrained by both statutory liability and a key monotonicity condition that requires investor payoffs to be non-decreasing in firm profits. Then, the paper extends this analysis by: (1) adding a variable of entrepreneur investment choice, which provides a mechanism through which they can signal their type, and (2) the 'monotonic contract' constraint is relaxed, revealing that this restriction is central to the characterization of equilibrium contract forms. This model generalizes de Meza and Webb (1987) by allowing arbitrary profit distributions, arbitrary contract forms, and variable investment choices. The study concludes that when higher quality entrepreneur have 'better' ex post distribution (in the sense of the monotone likelihood ratio property), equilibrium contracts take a standard debt form as long as admissible investor payoff functions are monotone non-decreasing in firm profit. Without the 'monotonic contract' constraint, contracts often take a different 'live-or-die' form, giving investors all of the firm's profits when this profit is less than some critical level and nothing when profit is higher.

Jaffee, D. and T. Russell (1976) "Imperfect Information, Uncertainty, and Credit Rationing" The Quarterly Journal of Economics, 90, 651-666.

The authors develop a model to explain credit rationing using two types of borrowers, 'honest' and 'dishonest', and risk-neutral, competitive banks. 'Honest' individuals are one who will refuse to default on a loan unless they are unable to repay it. In contrast, 'dishonest' borrowers will default on a loan whenever it is economically beneficial for them to do so. In equilibrium, banks earn zero profits and lend 'full size' loans to borrowers and honest borrowers subsidize dishonest borrowing activity. A bank can earn additional profits if it restricts the size of the loans, which will cut bad debt costs (and pass it on to honest borrowers). Jaffee and Russell show that a bank can be enticed to ration credit in terms of loan size, but stress that this equilibrium is not stable. Instead, equilibrium lending is predicted to oscillate between the no-rationing equilibrium and the rationing-by-size equilibrium. This model is also shown to apply to borrowers who differ in their luck ('unlucky' and 'lucky' borrowers instead of 'honest' and 'dishonest' borrowers). The study predicts that banks with monopoly power will not ration credit because it is not as profitable, and suggest government assign monopoly power to banks to remedy credit rationing.

Koskela, Erkki (1983) "Credit Rationing and Non-Price Loan Terms: A Re-Examination" Journal of Banking and Finance, 7 (3), 405-416.

This study attempts to determine the circumstances under which banks would choose to ration credit in terms of the size of the loan. To integrate non-price terms in this model, the author considers the own-funds loan ration as the 'non-price' term in the context of a competitive bank loan market. The authors suppose that borrowers seek to finance investment projects by own funds and by borrowing from banks and interpret the own funds-loan ratio as a non-price term of loans. In this model, all borrowers are homogeneous. The study finds that, in a competitive bank loan market, each bank will ration its loans to borrowers by providing smaller loans and requiring a higher own funds-loan ratio in equilibrium. Default risk means that the banks expected profits depend on how credit is distributed, although borrowers are identical. A trade-off for borrowers exists between loan size and loan rate, and borrowers prefer the rationing equilibrium because smaller loans are more than compensated by a lower rate.

Lombra, Raymond E. and Michael Wasylenko (1984) "The Subsidization of Small Business Through Federal Credit Programs: Analytical Foundations" Journal of Economics and Business, 36, 263-274.

The purpose of this study was to develop an analytical framework dealing with the rationale behind many US government attempts to subsidize small business. Specifically, the study shows that firms facing different costs of capital should be taxed at different rates as an optimal response to credit market imperfections. The model was built on a neoclassical growth model developed by Auerbach (1979) and constructed to examine the investment choices made in an economy characterized by two types of firms (large and small) who use similar capital. The author concludes that resolving market imperfections through the tax system is a first-best solution. They also conclude that other mechanisms (such as credit guarantees) that help resolve the market imperfection are difficult to evaluate and could be "clumsy" substitutes for an appropriate tax system.

Mankiw, N. Gregory (1986) "The Allocation of Credit and Financial Collapse" The Quarterly Journal of Economics, 101 (3), 455-470.

This article sets forth two propositions of credit allocation under informational asymmetry: (1) the equilibrium resulting in an unfettered market is inefficient and can be improved with government intervention, and (2) the unfettered market equilibrium is precarious: small changes in the exogenous risk-free interest rate can cause large and inefficient changes in the allocation of credit. Mankiw constructs a model using student loans. Students have no collateral, are risk-neutral, and privately know the expected return and repayment probability of their investment. To make the model simple, the repayment probability is exogenous. The bank is risk-neutral, and will receive nothing if the student defaults. This paper illustrates that certain types of government intervention can, under reasonable conditions, improve market allocation. A necessary condition for successful intervention is heterogeneity among would-be borrower's probability of default. The greater is such heterogeneity, the greater is the potential for efficient intervention.

Martin, C. (1990) "Corporate Borrowing and Credit Constraints: Structural Disequilibrium Estimates for the U.K." The Review of Economics and Statistics, 72, 78-86.

This study asks whether companies in the U.K. face credit rationing from banks. In addition, the authors investigate the effects of spillovers in demand for corporate borrowing because of credit rationing. The model used in this paper estimates the effective demand and supply of borrowing functions together while considering an interest rate function, which, the authors claim, can help assess the extent of excess demand. Firms are assumed to differ in their characteristics, so borrowing preferences will vary across businesses. The borrowing market is divided into sub-markets, and the amount lent in each sub-market will be the lesser of credit's demand and supply. The study found that credit rationing exists for U.K. companies wishing to borrow from banks. The supply of borrowing depends on the interest rate and level of credit in the economy, but interest rates alone do not clear the market. The spillover effects of credit rationing include shortages of capacity, reduced demand for labour, and reduced supply of goods. The study notes, however, that multi-market disequilibrium models are difficult to estimate.

Milne, Alistair and Daniel Robertson (1996) "Firm Behaviour Under the Threat of Liquidation" Journal of Economic Dynamics and Control, 20, 1427-1449.

The authors study the optimal dynamic decisions of a firm operating in a stochastic environment under an exogenous threat of liquidation. In a similar fashion to Greenwald and Stiglitz (1993) and Gross (1995), , a restriction on the availability of external finance is placed on the firm in this model to investigate the optimal strategy for a firm in these conditions. In this model, the only decision a firm must make is about the payment of dividends. The theory of optimal control of continuous time diffusion processes, instead of discrete time stochastic dynamic programming, is applied. The authors find that the presence of a financial constraint influences firm behaviour well away from the liquidation threshold, that the presence of constraints increases the cost of capital and induces local risk aversion. They also find that the degree of departure from unconstrained behaviour is greater the closer the firm is to the liquidation threshold.

Pagano, Marco and Tullio Jappelli (1993) "Information Sharing in Credit Markets" Journal of Finance, 48 (5), 1693-1717.

This article studies the effects of information sharing that arises endogenously in credit markets with adverse selection. The researchers construct a model comprising several towns and several households who differ in their risk and eagerness to borrow. Households can change towns if they desire. Lenders face a local customer base with turnover — people emigrate from and immigrate to other cities. The bank can distinguish different risk types of borrowers who have previously lived in its town, but knows nothing about immigrants. Then, the model adds the ability of banks to share information. The study finds that information is more likely to be shared when the mobility of households is high, borrowers are heterogeneous, the underlying credit market is large, and the cost of sharing information is low. In addition, the authors find that information sharing leads to an increase in the volume of lending when safe borrowers are priced out of the market (because of adverse selection). Moreover, when membership in a credit bureau entails costs (loss of informational advantages) and benefits (more information) to the bank.

Plaut, Steven E. (1985) "The Theory of Collateral" Journal of Banking and Finance, 9 (3), 401-419.

This paper models a credit market in which collateral plays a central role. The author shows how collateral, in combination with other factors, can affect loan pricing and credit rationing. The model presented is one of a perfectly competitive credit market, in which all lenders are similar in wealth, expectations and tastes. A loan transaction is characterized by five primary factors: (1) the initial size of the loan, (2) the promised interest rate, (3) the rate at which repayment is made, (4) the length of time until the loan is repaid, and (5) the size of collateral. Borrowers default when his liability exceeds the total value of collateral or the cost of default. Plaut assumes that default is a function of collateral alone; borrower equity cannot be a factor in explaining default. The author examines the interrelationships between the five loan variables outlined above within the lender's utility function. On the issue of credit rationing, this study contrasts with Stiglitz and Weiss (1981) in that credit rationing is not a function of the bank's utility in relation to the interest rate. Plaut finds that for a given collateral, repayment rate, or loan size, an interest rate exists beyond which credit will be rationed. But, if one varies one of the three factors outlined above, the maximum rate varies. Other issues are examined, including borrower utility and collateral quality.

Schaller, Huntley (1993) "Asymmetric Information, Liquidity Constraints, and Canadian Investment" Canadian Journal of Economics, 26 (3), 552-573.

The author uses a strategy to investigate the significance of liquidity constraints on firms used by Fazzari et al. (1988a) and Hoshi et al. (1989), which classify companies according to the probable degree of information asymmetry problems and investment behaviour. Firms are grouped into classes in different tests. Groupings are based on: maturity of firms; ownership concentration; industrial; and collateral availability. Each test presents two groups: one for liquidity problems could arguably be expected, and another for which liquidity ought not, arguably, be problematic. Canadian firms are sampled and classified, and their investment behaviours are compared. Schaller finds that firms that are expected to encounter difficulties with information asymmetries feel the effects of liquidity constraints. This is in contrast to Modigliani and Miller's (1958, 1961) theorized separability of investment and financing decisions. The study concludes that liquidity constraints affect investment decisions.

Selby, M.J.P., J.R. Franks, and J.P. Karki (1988) "Loan Guarantees, Wealth Transfers, and Incentives to Invest" The Journal of Industrial Economics, 37 (1), 47-65.

This article deals with the financial economics of government of loan guarantees, loan guarantee valuation, and the wealth transfer from bondholders that may arise out of changes in the capital structure as a result of a guaranteed loan. It proceeds to apply the option-based model to the UK government's guarantee of a loan to ICL and compare the results with the analytical model. The authors attempt to explain why managers permit these wealth transfers to occur, how these wealth transfers affect the incentive structure for investment, and ask whether loan guarantees are the most efficient way of providing funds to prevent corporate contraction.

Smith, B. (1983) "Limited Information, Credit Rationing, and Optimal Government Lending Policy" The American Economic Review, 73 (3), 305-317.

The author attempts to analyze a the effects of credit rationing in an economy and determine the optimal government policy to tackle the problem. A model is presented in the spirit of Jaffee and Russell (1976) , but considers a discrete time world which is populated by agents who live for two periods. Three types of agents exist in this economy, lenders, borrowers who never default, and borrowers who may default. The model requires any interest rate-loan pair offered to be market clearing at the stated interest rate. The model finds no full information equilibria exist, and show that a limited-information monopsonistic equilibrium can exist under certain conditions. The study proposes governments meet excess demand in the loan market by offering credit at market rates, because the policy is welfare-improving. It also notes that this policy can be deflationary, Pareto-improving, and influential on credit market rates.

Stiglitz, J. E. and A. Weiss (1981) "Credit Rationing in Markets with Imperfect Information" The American Economic Review, 71 (3), 393-411.

The authors show that the credit market can by characterized by rationing in equilibrium. First, the authors explain why banks might not adjust interest rates to a market clearing level. As a result of adverse selection, in which banks are asymmetrically informed about an applicant's probability of success, raising the interest rate might discourage low-risk entrepreneurs from seeking a loan. This leaves the bank with a higher-risk loan portfolio and lower expected profits. Likewise, moral hazard, in which the bank cannot control the funds which it has provided a borrower, and higher interest rates might encourage borrowers to undertake riskier projects with higher potential payoffs, which, again, might lower the bank's expected profits. Therefore, although banks compete, the equilibrium of the market may exist at a point where supply does not satisfy demand. Collateral might not be used to clear the market either, because an increase in collateral requirements could make the bank's portfolio riskier by attracting individuals who might be risk-lovers, for example. Moral hazard and adverse selection effects mean that banks in competition can satisfy more demand by raising interest rates or collateral requirements, but these actions might not increase their profitability.

Stiglitz, Joseph E. and Andrew Weiss (1983) "Incentive Effects of Terminations: Applications to the Credit and Labor Markets" The American Economic Review, 73 (5), 912-927.

The authors examine contingency contracts, equilibrium in markets with contingency contracts, and the incentive effects of contingency contracts. The paper begins by examining why banks will not lend to borrowers who have a history of default, and then extends the analysis to include the labour market and the share-cropping market. The model initially assumes that both borrowers and lenders are risk-neutral (borrowers become risk-averse later), all borrowers are identical, exist over two periods, and become better quality applicants with experience. In addition, collateral issues are not considered and a borrower must repay a loan if he can. The bank offers loan contracts to new customers consisting of an interest rate and probability of receiving the loan for period one and two. The authors attempt to show that a Nash equilibrium can exist in which banks do not lend to borrowers who do not repay their first period contract, even though the principal expects a lower return by lending to a new customer rather than a defaulted borrower. In equilibrium, contracts with contingencies in which a principal-agent relationship can be terminated exist although such an arrangement can make both the principal and the agent worse off, even in markets where principals are competing for agents.

Stiglitz, Joseph E. and Andrew Weiss (1992) "Asymmetric Information in Credit Markets and Its Implications for Macro-Economics" Oxford Economic Papers, 44, 694-724.

In Stiglitz and Weiss (1981), sorting and incentive effects were studied in isolation. The model allowed lenders to vary the interest rate or collateral but not both. This paper presents a microeconomic model in which adverse selection and moral hazard problems are both present, and lenders can simultaneously manipulate the interest rate and collateral requirements. In this model, borrowers can use borrowed funds in one of two ways: a risky or safe project. The borrowers is risk-averse with decreasing absolute risk aversion. Banks are risk-neutral, and cannot differentiate between the projects of potential borrowers. Using this type of model, the authors find that rationing can occur when adverse selection and moral hazard are present in the same model. The equilibrium may be characterized by complete or partial pooling, there may be some self-selection and rationing, and there may be rationing to all contracts.

Watson, Harry (1984) "Credit Markets and Borrower Effort" Southern Journal of Economics, 50 (3), 802-813.

This study examines the effects of considering borrower effort in modeling credit markets. The model presented is similar to Stiglitz and Weiss (1981) but considers the amount of effort exerted by a borrower as a factor in a project's success. The author finds that, if the bank sets interest rate and collateral requirements in such a way that the probability of default is zero, borrowers capture all of the benefits of increased effort. This implies that interest rate restrictions alone do not produce inefficient levels of effort, but collateral restrictions will. Other risk-sharing arrangements between lenders and borrowers usually require monitoring borrower effort, which is costly. If potential borrowers have the option of entering the labour market, individuals who tend to exert more effort will be attracted to the labour market, because his potential returns are greater. By lowering the interest rate, hard-working individuals can be kept indifferent about borrowing or working. Credit rationing occurs because returns to the lender are not increasing for all loan rates. As a result, the supply of credit is not necessarily increasing with the loan rate.

Webb, David C. (1984) "Imperfect Information and Credit Market Equilibrium" European Economic Review, 26, 247-258.

The author constructs a model of the credit market in the spirit of Jaffee and Russell (1976), in which informational asymmetries exist, to show that both separating and pooling equilibria are possible in competitive markets. This model differs from J-R in the following ways: (1) borrowers' future incomes are randomly determined, (2) consumption is fixed and the amount received by a lender is a random variable; (3) J-R considers a Nash equilibrium, where this study allows for separating and pooling equilibria. The study finds that separating and pooling equilibria can exist under credit markets characterized by informational asymmetries, banks play an active role in developing contracts which sort borrowers into risk classes, and banks offer the same contracts in equilibrium.

Webb, David C. (1991) "Long-term Financial Contracts Can Mitigate the Adverse Selection Problem in Project Financing" International Economic Review, 32, 305-320.

The article proposes that the adverse selection problem can be overcome with long-term contracts. By making the terms of subsequent contracts conditional on the outcome of the first, it may be possible to sort different types. In this model, each entrepreneur is risk-neutral, has two projects to be completed sequentially, and has a privately know probability of success that makes him "low-quality" or "high-quality." After completing the first project, the entrepreneur can finance the second project with profits from the first project or a loan whose terms have been influenced by the entrepreneur history with the bank. This two-period, two-type model was able to achieve perfect sorting. The authors conclude that it is always possible to separate out the best entrepreneur and lead to a superior allocation of investment.

Wette, Hildregard C. (1983) "Collateral in Credit Rationing in Markets with Imperfect Information: Note" The American Economic Review, 73 (3), 442-445.

This note extends Stiglitz and Weiss (1981). The author shows that lenders may not be willing to use collateral requirements as a rationing device even when borrowers are risk-neutral. This is because increases in collateral can lead to adverse selection effects that decrease the lender's expected return on loans.

Whited, T. M. (1992) "Debt, Liquidity Constraints, and Corporate Investments: Evidence from Panel Data" The Journal of Finance, 47 (4), 1425-1456.

This paper addresses the question of the interdependence of finance and investment by using the Euler equation to isolate the precise role of financial constraints in the investment process. In this model, firms maximize their value subject to borrowing constraints. The model is then set against a sample of panel data. The study concludes that difficulties in obtaining debt financing have an impact on investment. In addition, the effect of the constraint appears to be stronger for firms that do not participate in the corporate bond market.

Williamson, Stephen D. (1986) "Costly Monitoring, Financial Intermediation, and Equilibrium Credit Rationing" Journal of Monetary Economics, 18, 159-179.

This analysis attempts to demonstrate that equilibrium credit rationing can occur in an environment where financial intermediation is motivated from first principles. The study finds that intermediation and rationing are related phenomena, in that the same set of assumptions can produce both. Using models with asymmetric information, costly monitoring, project indivisibilities, and multi-periods, the authors shows that credit rationing can occur in an economy with or without intermediaries. In contrast to previous studies [Stiglitz and Weiss (1981)], the model assets that credit rationing does not occur as a result of moral hazard or adverse selection (though information asymmetries are crucial). Instead, costly monitoring creates an asymmetry in the payoff functions of borrowers and lenders, which creates the possibility of credit rationing.

Williamson, Stephen D. (1987) "Cost Monitoring, Loan Contracts, and Equilibrium Credit Rationing" Quarterly Journal of Economics, 102 (1), 135-145.

The purpose of this article is to show that the equilibrium credit rationing defined in Stiglitz and Weiss (1981) and Keeton (1979) occurs. In contrast to these studies, the author produces these results using a model based on monitoring costs. The two-period model consists of a population of lenders, each with an endowment that can be lent to an entrepreneur or invested elsewhere, and a set of homogenous entrepreneur, with no endowment and identical, randomly determined success potential. Adverse selection is not an issue in this model because no ex ante informational asymmetries exist, nor is ex ante more hazard (in the sense of Stiglitz and Weiss) because the actions of entrepreneur do not affect the outcome of their projects. However, ex post moral hazard is an important factor in this model. A random variable measure monitoring costs expended by the lender is introduced. The model results in two possible outcomes: a credit rationing equilibrium and a no-rationing equilibrium. The article concludes that equilibrium credit rationing can occur without adverse selection or ex ante moral hazard.

Appendix B: Annotated Bibliography

Amit, Raphael James Brander, and Christoph Zott, "Venture Capital Financing of Entrepreneurship in Canada" Initial Report for Industry Canada's Capital Markets Issues – Jan 31- Feb 1, 1996

Purpose:

The main purpose of this article is to provide information about venture capital investment in Canada. In addition, it infers important empirical regularities regarding Canadian venture capital.

Methodology:

The data for this study was provided by Macdonald & Associates Ltd and derived from two major surveys: "The Investment Survey" and "The Economic Impact". All the data used for this report is current, provides information about investee firms, and the decisions and practices undertaken by venture capitalists.

Implications:

Venture capital investment does not seem to be evenly distributed across Canada, which could mean that SMEs in areas where VC is less prominent could be experiencing problems regarding capital formation. Furthermore, start-ups face greater difficulty raising venture capital. It is argued that there is a foundation for conducting further research on the venture capital industry, particularly for public policy analysis.

Andrews, Michael and Mahmood Iqbal, "Issues Related to Provisions of a Small Business Loan Act-Type Guarantee for Leasing" Report - Prepared by the Conference Board of Canada; November 1996

Purpose:

The purposes of this article is to provide a brief overview of the leasing industry in Canada and to identify and present operational issues which would have to be addressed should the government decide to extend an SBLA-type guarantee to leasing.

Methodology:

For the purposes of this report, results were taken from previous Conference Board work on SME financing and asset-based financing. Furthermore, several confidential interviews were conducted with senior industry executives.

Implications:

Although industry executives generally believe that providing a guarantee for operating leases is less likely to stimulate incremental leasing to SMEs, it can be argued that extending a government guarantee to capital leasing would allow SMEs to acquire incremental financing. The author recommends that the operational issues raised by the industry be addressed in a matter that meets their concerns because a guarantee program that is viewed by the industry as practical, easy to work with, and will contribute to achieving policy objectives.

Anonymous, "Canadian Provinces Boost Funding Support for Exports" International Trade Finance - Iss.190; July2, 1993; (pp.4-5)

Purpose:

The purpose of this article is to present how Canadian provinces are becoming increasingly active in financing export ventures.

Implications:

The creation of these programs implies that government is recognizing the problems that SMEs are facing in attempting to acquire financing for the growth of their businesses. Some effort are being made on the government's part to try and fill this gap, but it can be argued that these efforts only marginally solve the problem.

Anonymous, "EDC Eases Access to Finance for Smaller Canadian Exporters" International Trade Finance - Issue 255; Feb.16, 1996, (pp.5-6)

Purpose:

To introduce information pertaining to a new financing tool for Canadian small business

Implications:

That this new program was implemented is indicative of its need was suggested by evidence of insufficient financing for SMEs. This article suggests that SMEs who wish to follow the "globalization" trend can now find it more accessible to acquire financing for further expansion into other markets.

Anonymous, "Support Customers Can Bank On" Canadian Business Review - Vol.23; No.3; (p.19)

Purpose:

This article presents information regarding the new "Master Accounts Receivable Guarantee" program.

Implications:

The need for such a program could be said to have stemmed from the difficulty SMEs are experiencing when in search of financing.

Beach, Sandy, "Under CRA's Shadow" Credit Union Magazine - August 1994, (pp.14,16-17)

Purpose:

The purpose of this article is to present the effects that amendments to the Community Reinvestment Act could potentially have on credit unions.

Implications:

This article underlines the issue of involving credit unions within CRA legislation.

Besanko, David "Banking Deregulation: Allocational Consequences of Relaxing Entry Barriers"

Purpose:

The purpose of this article is to predict what effects banking deregulation will have on both risk and fund allocation in the long run. The article examines and presents results regarding the implications of capital standards and the effects that these standards may have on borrowers and lenders.

Methodology:

An analysis of the banking industry was conducted in the US, Canada, Japan, and Great Britain. The paper presents a theoretical model analyzing the allocation consequences of lowering entry barriers to banking. To study this issue, a spatial model was constructed in which the location and product attributes of a bank distinguish it from its competitors.

Implications:

It is argued that there is an incentive for the consolidation of banks, and therefore, it is expected that fewer banks will exist in the future. Because of this, loan interest rates are expected to increase. Hence, in addition to the barriers to capital formation that are being experienced at present by small business owners, SMEs will find it more costly to acquire financing.

Botting, Dale - Prairie Director (CFIB), "CFIB Presentation on Small Business Lending Issues" Charts and Graphs - Presented to Manitoba Credit Unions Lending Conference, Winnipeg, December 2-3, 1992

Purpose:

The purpose of this presentation provides the Manitoba Credit Union with an overview of small business trends and perceptions in Manitoba.

Methodology:

This package contains several charts and graphs used in the presentation to the Manitoba Credit Unions in December 1992.

Implications:

This presentation indicates that barriers to financing small businesses exist in Manitoba, and that the majority of these problems can be attributed to government policy and regulation. Therefore, it is argued that there is room for reform of current Canadian legislation to lighten these barriers for small and medium sized business owners.

The Canadian Chamber of Commerce, "Breaking Down the Barriers Final Report on the "Aim for a Million Project""; (Environics-DRZ), 1994

Purpose:

The "Aim for a Million Project" seeks to determine the barriers that are preventing entrepreneurs from expanding their operations and hiring more people. The purpose of the report is to describe the results of a survey of entrepreneurs to investigate these issues and to present an action plan regarding the role of government in creating jobs, particularly in the small business sector.

Methodology:

A questionnaire was designed based on literature review conducted by Environics-DRZ. The Chamber of Commerce then finalized, presented, and distributed the questionnaire to 6000 businesses. The results are based on the 1238 responses received no later than February 28, 1994.

Implications:

It can therefore be argued that there is much room for government improvement with respect to the negative impact of government deficits, the high cost of doing business in Canada, and difficulties in assessing adequate capital. It is recommended that business, government, labour, financial institutions, and educators all to take the necessary actions required to bring down the barriers and to create the environment for economic growth and job creation.

Canadian Federation of Independent Business, "Capitalizing on Opportunities in the Small Business Market" Document - Annual Meeting of the Credit Union Central of Canada Halifax - October 23, 1995

Purpose:

The purpose of this report is to underline issues related to debt financing for small business in Canada.

Implications:

The small business sector in Canada can only grow and prosper if the policies and support of governments and Canada's financial institutions are substantive and helpful to this growth. The CFIB, therefore, recommends consideration of the needs of small business for access to financing on reasonable terms and conditions.

Canadian Federation of Independent Business, "Financing the Recovery: Measures to Assist Small and Medium Sized Business" Report - Presented to the Standing Committee on Industry May 10, 1994

Purpose:

The purpose of this report is to illustrate how acquisition of debt and equity capital is identified as a significant problem area with regards to small firm financing.

Implications:

The findings of this article indicate that access to capital formation appears to be of major concern to small and medium sized businesses in Canada. As such, it recommends that initiatives be taken to reduce these barriers to allow small businesses to prosper and contribute to the rebuilding of the Canadian economy.

Canadian Federation of Independent Business (CFIB), "1997 Review of Financial Sector Legislation to the Senate Committee on Banking, Trade and Commerce" Report Document - October 2, 1996

Purpose:

The purpose of this report is to present information regarding problems that small businesses are facing in attempts to acquire financing.

Methodology:

The Canadian Federation of Independent Business draws upon the findings of surveys conducted of its members.

Implications:

This reports presents a capital access problem for small businesses looking to acquire debt financing from financial institutions. The CFIB, therefore, welcomes initiatives by the House of Commons to review how banks re currently fulfilling the needs of small businesses. The CFIB further recommends that there be improved access to debt financing for small business, and that a more business-friendly tax and regulatory environment be implemented, one that permits firms to retain more earnings for investment and expansion.

Canadian Federation of Independent Business, The, "Senate Committee Study on Crown Financial Institutions in Canada" Report - To the Standing Senate Committee on Banking, Trade, and Commerce; October 17, 1995

Purpose:

The purpose of this report is to discuss the role of federal financial institutions and agencies, and their functioning in relation to the private sector. Particular emphasis is placed upon small business financing.

Methodology:

Observations made by CFIB are based on surveys the organization conducts from time to time, comments from members, and the insights of CFIB member services officers across Canada.

Implications:

Much of the CFIB's research in the past has been focused on the critical role of banks in lending and tax policy as it affects the financial health of small firms. These imply a problem for small business financing. Although it remains unclear what exactly what the role of the federal financial institutions is or ought to be, financing problems attributed to banks must be addressed.

In doing so, the CFIB argues that SMEs have a fair opportunity to grow and to contribute to Canada's economy.

Casey, Allan "No Pain, Big Gain" Canadian Business - Vol.69; No.3; March 1996; pp.83-89

Purpose:

To illustrate the effects that government legislation is having on small businesses in Saskatchewan.

Implications:

Evidence suggests that provincial sales tax rates in effect in Saskatchewan hinder the opportunities for SMEs to succeed. Furthermore, discrepancies in provincial tax requirements between Saskatchewan and Alberta imply that variation exists with respect to interprovincial allocation of funds for small businesses. In light of these and other related issues, it is argued that conscious efforts be made to reform overall tax requirements in Canada.

Chen, Duanjie and Kenneth J. McKenzie, "The Impact of Taxation on Capital Markets and Competitiveness" Initial Report for Industry Canada's Capital Markets Issues - - Jan 31- Feb 1, 1996

Purpose:

The purpose of this article is to examine the impact of taxation on capital accumulation and to investigate the implications of risk and irreversibility for the impact of taxation on investment.

Methodology:

For the purposes of this research, metrs were calculated on Canada and other selected countries (those belonging to the Group of Seven -G7). In this case, "metr on capital" was representative of the distortion in the rate of return to capital caused by the imposition of personal and corporate taxes.

Implications:

Since the Canadian tax system appears to be discriminating against riskier investment, it is argued that tax legislation causes barriers to capital formation for SMEs. For the most part, SMEs present a higher degree of risk and uncertainty. The inter-provincial and inter-sectoral capital distortions caused by the Canadian tax system indicate that the current system accounts for inefficient allocation of capital across uses and impedes the economic growth of Canada by distorting capital within the economy. The implication is that SMEs in less populated areas across the country can be experiencing additional barriers regarding capital access because of the tax system. Even though the Canadian tax system compares well to that of other countries with respect to capital acquisition, there is still much room for improvement.

Christensen, Sandra L., "Is There a Role for Small Business in the North America Free Trade Area?" Business Forum - Vol.18; No.1,2; Winter/Spring 1993 (pp.44-46)

Purpose:

The purpose of this article is to address public concern over the effects that the North America Free Trade Agreement will have on Canadian small businesses.

Implications:

The article states that the Free Trade Agreement, which currently is in place, does not limit the capital formation abilities of SMEs, as it provides new and less risky opportunities for small business to enter the international economy through exporting. However, what the author fails to mention is the effect that giving SMEs in the US the same privileges will have on Canadian business. Since decreasing barriers to entry for US business owners will have a negative impact on the ability that Canadian SMEs have to form capital through sales, then it is argued that the Free Trade Agreement may not as beneficial to the Canadian economy as intended.

Clark, David, "Lending a Helping Hand to Exporters" Canadian Banker - Vol.102; No.2; Mar-Apr.1995 (pp.28-34)

Purpose:

The purpose of this article is to present information pertaining to new initiatives by the Department of Foreign Affairs and International Trade to improve export financing for small and medium sized enterprises.

Implications:

The implications here are that government recognizes the problems that SMEs are facing and that efforts are being made to try and minimize this burden.

Cooper, A.C., "Initial Human and Financial Capital as Predictors of New Venture Performance" Journal of Business Venturing Vol.9 No.5; Sept. 1994; pp.371-395.

Purpose:

The purpose of this research was to predict the performance of new ventures based on factors that can be observed when businesses start-up. The research is to indicate whether the performance of the new ventures falls under the category of failure, marginal survival, or high growth.

Methodology:

A study of 1053 new ventures of all industry sectors and geographic regions was conducted. In order to do so a model was constructed to examine four categories of initial human and financial capital. These categories are: general human capital, management know-how, financial capital, and industry specific know-how.

Implications:

- The fact that women-owned firms are less likely to grow only emphasize the fact that women are discriminated against with regards to accessing financing for their small business. This barrier to capital formation could have resulted the failure of many Canadian SMEs.

- Having parents with business experience may give insights to new business owners on how to keep their small business alive. However, real growth depends on capital acquisition, and the fact that SMEs are having trouble growing even with the know-how of past family experience, implies that access to capital could be a problem here.

- As the number of business partners increases, so too does the probability of SME growth. This implies that with a strong initial capital foundation brought on by several business owners, the SME has a better opportunity to prosper even if outside financing sources present barriers to capital formation.

- Furthermore, SMEs with more capital at their "start-up" stage have a better chance of survival. This is because they are less in of financing at a later point in time, financing that they may not be able to acquire.

Cowie, Joe, Dave Curtis, Michael Minicola, Christine Nehring, "In search of Angels: Supporting Small Business through the Informal Risk Capital Market" Report of the Royal Bank University of Calgary Informal Investor Project, September, 1995.

Purpose:

The purpose of this report is to illustrate a need for, and to present information regarding, an effective intermediary investment service which will bring new ventures and potential investors together.

Methodology:

A practical investigation was conducted on the workings of the informal capital market. The investigation included literature research and extensive interviews with academics and investors, both private and institutional.

Implications:

Angel investors have a desire to invest. However, there appears to be a communication problem between themselves and potential entrepreneurs. It is argued that there is a need for a "matching service" for SMEs in need of funding. Furthermore, since angels are, for the most part, investing only in businesses or projects which are relatively close to their home base (i.e. within 500km), it inter-provincial or inter-sectoral distribution differentials may exist. Therefore, there may be several SMEs in smaller cities or areas that are experiencing barriers to capital formation.

de Laurentiis, Joanne, "Beyond the Bounds of Traditional Lending:" Canadian Business Review - Vol.21; No.1; Spring 1994; (pp.19-21)

Purpose:

The purpose of this article is to discuss problems associated with non-bank methods for financing small businesses.

Implications:

The findings of this article dictate that availability of equity financing is the main issue revolving around why Canadian SMEs are encountering barriers to financing. However, other research indicates that it is not necessarily the lack of capital that is the problem, but rather the fact that an efficient matching mechanism does not exist for bringing potential investors together with small businesses owners in need. As such, it is argued that equity financing can provide a better alternative for SMEs, but efforts should be made to put such a system in place.

Duxbury, L., G. Haines, A. Riding, "A Personality Profile of Canadian Informal Investors" Journal of Small Business Management, April 1996; (pp. 44-55)

Purpose:

The purpose of this article is to outline the findings of a cross sectional study that seeks to identify psychological characteristics of informal investors (angels), and to compare these characteristics to those of non-investors.

Methodology:

A cross-sectional study was conducted consisting of focus group meetings of investors and non investors; hypothesis development; design, pre-testing, and administration of a questionnaire to a sample of business angels; and analysis of the data.

Implications:

Since other findings have indicated that small business owners are encountering barriers to small business financing, this profile suggests several strategies that could be used by entrepreneurs to maximize their chances of securing informal risk capital. The authors state that entrepreneurs should present the investment as a challenge; offer investors some formal type of leadership position in the organization; and offer non-monetary incentives as well. Personal involvement encourages investors to work harder on behalf of the firm and to bring additional financial and non-financial resources to bear on making the investment a success, thus lessening barriers to capital for the small investee firms.

Fabowale, L., B. Orser, A. Riding, "Gender, Structural Factors, and Credit Terms between Canadian Small Business and Financial Institutions" Entrepreneurship, Theory and Practice Vol.19, No.4, Summer 1995 (pp.41-65)

Purpose:

The purpose of this article is to present an analysis of whether terms of credit differ between male and female business owners.

Implications:

There is a perception of a significant degree of discrimination regarding women business owners trying to acquire commercial financing for their enterprises. However, based on survey data supplied by the CFIB, no gender-related differentials in access to, or terms of, bank credit were identified. It was found, however, that women business owners perceive that bank loan account managers do not treat them with the respect that women owners feel they accord men.

Fay, Michael and Leslie Williams, "Gender Bias and the Availability of Business Loans" Journal of Business Venturing; Vol. 8 No. 5; Sept.1993; pp.363-376

Purpose:

The purpose of this article is to illustrate that women, as business owners or entrepreneurs, are subject to discrimination by financial institutions.

Methodology:

Experiments were carried out to test the belief that women were unfairly discriminated against when seeking a loan to establish a business venture. Loan applications were sent to lending officers of major trading bank branches with the request to seek funds for purchasing a commercial enterprise. Two applications were sent to each lending officer, and the only difference between the two requests was the gender and education level of the applicant. Lenders were asked to comment as to whether or not they would approve the loan, and also to provide factors which contributed to their decision.

Implications:

The findings imply the possibility of gender bias by lending institutions towards women-owned firms.

Fishbein, Allen J., "The Ongoing Experiment with "Regulation and Below": Expanding Reporting Requirements for HMDA and CRA" Housing Policy Debate Vol.3, No.2, (pp.601-636), 1992

Purpose:

The purpose of this paper is to review the early experiences with and the new requirements pertaining to the HMDA and CRA.

Implications:

This publication raises an important issue with respect to capital formation for small and medium sized enterprises in Canada. However, it is questionable whether discrimination on a community level is a contributing factor to financing barriers experienced by small businesses in Canada.

Fogarty, Mark, "Questions Persist Over the CRA" US Banker; August 1996; (pp.68-70)

Purpose:

The purpose of this article is to outline issues pertaining to the revised CRA which question its effectiveness.

Implications:

Along with questioning the relevance of an act similar to that of the CRA in Canada, the concerns raised by several groups in the US imply that the Community Reinvestment Act still has many flaws in it. These need to be addressed before implementing similar legislation in Canada.

Garwood, Griffith L., Dolores S. Smith, "The Community Reinvestment Act: Evolution and Current Issues" Federal Reserve Bulletin - Vol.79, No.4, (pp. 251-267) Date: April 1993

Purpose:

The purpose of this report is to present information regarding the evolution of and current issues surrounding the Community Reinvestment Act.

Implications:

This article introduces several advantages and disadvantages associated with the Community Reinvestment Act. Should a similar form of legislation be implemented in Canada, it can be argued that the effects would not be as detrimental to financial institutions. The Canadian banking industry, for example, is much more concentrated in Canada, and thus better equipped to handle the downfalls that an act like CRA would present. Furthermore, although the advantages that the CRA has brought to the US are very well acknowledged, there is still some doubt as to whether there are enough low income and minority communities in Canada that could benefit from a CRA.

Gopinath, C., "Bank Strategies Towards Firms in Decline:" Journal of Business Venturing; Vol.10 No.5; 1995; pp.75-92

Purpose:

The purpose of this article is to identify and present strategies followed by banks when financially assessing firms in their decline stage.

Methodology:

An exploratory study was conducted to analyze data on bank responses to requests made by client firms. The study included 192 client firms that were classified as being in a state of actual default or in a situation where the bank perceived a potential default payment. Participating banks included six commercial banks in the northwestern United States and three commercial banks in Canada.

Implications:

- Because banks generally prefer to work with clients to help turn the firm around, rather than proceeding to take legal action, firms need to demonstrate their cooperation in order to secure favourable terms. This may be difficult for small business owners if they are concerned about being in financial trouble.

- Because bank strategies are dependent on the bank's perceptions of what the underlying causes of the financial problems are, managers need to recognize the importance of providing appropriate information to create the right perception. This is also difficult because many small business owners don't have the experience or know-how to be able to pin-point these bank strategies or to create finance-seeking strategies of their own.

- Small firms are usually in a constant need of funds. Being in a decline stage puts these SMEs in an even more disadvantageous positions because their chances of being considered for additional capital investment by outside sources declines significantly at this stage. With financial help, it could be argued that some of these firms could have been salvaged, However, on account of the difficulty they experience accessing funds, the majority of SMEs in the financial decline stage went under.

Gray, Brian G., (CFIB), "Getting to Yes: Overcoming the Challenges to Small Business Financing in the 90's" Report - Canadian Federation of Independent Business; November 8, 1993

Purpose:

The purpose of this report is to identifying barriers to small firm financing, and presenting methods in which these challenges can be overcome. Particular emphasis is placed on the Liberal government's platform document, "The Red Book".

Methodology:

For the purposes of this report, the CFIB surveyed its members. The data from these surveys was then shared with and analyzed in collaboration with such analysts such as Allan Riding and Mary Jane Grant.

Implications:

According to the Canadian Federation of Independent Business, three capital availability problems must be dealt with. The first is the maintenance of existing lines of credit. The second is the inability for small businesses to get the necessary funding to invest in new equipment, expansion and renovation. The third is the shortage of venture capital to fund innovation. It is clear that governments and financial institutions should work together to try to solve problems that currently exist between banks and small business owners. By eliminating, or at least reducing, the barriers which prohibit small business from accessing capital, a more financially sound environment will be achieved not only for the small business community, but for the Canadian economy as a whole.

Grimaud, Andrea E., "The Evolution of Small Business Financing" Canadian Banker - Vol. 102; No.3; May-June 1995 (pp.36-37)

Purpose:

The purpose of this article is to present how changes that have come about in recent years are affecting small business financing.

Implications:

Although technology, globalization and deregulation are all factors which are independent of finance, there is an obvious correlation between them and a business organization's ability to acquire capital. Moreover, should the effort be made, the Canadian government is in a position to bring about legislation that can affect all three of these factors to a certain degree. Perhaps through amending current regulation policies and implementing additional barriers to entry, the Canadian government can, at least in part, play a role in providing Canadian SMEs with the financial security they need to grow and prosper.

Gruben, William C., Jonathon A. Neuberger, Ronald H. Schmidt, "Imperfect Information and the Community Reinvestment Act" Federal Reserve Bank of San Francisco Economic Review Vol. 0, No. 3, Summer 1990, (pp. 27-46)

Purpose:

The purpose of this article is to present the effects of the Community Reinvestment Act (CRA) on bank portfolios.

Methodology:

For the purposes of this article, a conceptual framework was developed to test the effects of the CRA. In the model, it is assumed that a bank operates in a geographic lending market comprising of two neighborhoods: rich and poor.

Implications:

The article suggests that eventually a learning curve effect comes into play and high costs associated with lending to low risk users usually even out in the long run. With respect to Canada, however, there is some speculation as to whether or not such an act is necessary. It can be argued that lower income, individuals belonging to an ethnic minority do not seem to be concentrated in any one large area in Canada to the extent that they are in the US.

Hally, Simon, "The Big Issue of Little Loans" Canadian Banker - Vol.103; No.1; Jan-Feb 1996 (p.5)

Purpose:

To present some issues related to microcredit financing for small and medium sized enterprises.

Implications:

Even with the availability of microcredit, this method of financing presents barriers to SMEs because of the high costs associated with the use of microcredit.

Harris, Richard, "Moneycare: Ignoring the Environment is Bad for Business" Canadian Manager - Vol. 18; No. 3; Sept. 1993; p. 11

Purpose:

The purpose of this article is to present information regarding how environmental legislation is affecting business growth in Canada.

Implications:

The 1990s will require financial institutions to address a growing range of housing and community economic development challenges. These institutions that become agents of positive change, will effectively serve the cities, towns, and rural areas across this country, thereby benefiting themselves as well as the communities they serve. It appears as though similar attributes should be taken on by banking institutions in Canada, should such an act take effect. However, once again, the necessity for such legislation in Canada is still questionable.

Hatch, J. L. Wynant, "A Complex Relationship" Canadian Banker - Vol. 98; No. 4; July/Aug. 1991; (pp. 8-15)

Purpose:

The purpose of this article is to comment on the relationship between banks and small business owners, and to provide information regarding the difficulties experienced by small businesses in dealing with banks.

Methodology:

The findings of this article are based on a study conducted for the Canadian Banker's Association.

Implications:

It is recommended that bankers provide clear descriptions to their customers with respect to financing risks they are prepared to take, and techniques they use for evaluating, structuring, and monitoring loans.

Haynes, George W., "Credit Access for High-Risk Borrowers in Financially Concentrated Markets: Do SBA Loan Guarantees Help?" Small Business Economics; Vol. 8, 1996; (pp. 449-461)

Purpose:

The purpose of this paper is to outline the findings of a study conducted to assess credit access for high risk borrowers in financially concentrated markets, and to determine whether SBA Loans are of any benefit to these high risk borrowers.

Methodology:

Based on the potential market failure created by lenders' monopoly power, a model is derived to evaluate the behaviour of lenders and borrowers in financial capital markets. Thee study compares the financial characteristics of small business borrowers with and without SBA loan guarantees, and provides a qualitative assessment of the SBA's ability to correct financial capital market inefficiencies.

Implications:

This study poses an identity crisis for the SBA loan guarantee program, primarily because it fails to clearly distinguish SBA borrowers from other borrowers in the market. While this study should assure policy makers that the program can distinguish between the polar extremes of high risk and high financial concentration and low-risk and low financial concentration, it only tacitly suggests that the program can potentially correct financial market inefficiencies. As such, there is very little evidence to suggest that barriers to capital formation for small and medium sized enterprises will be diminished through loan guarantees.

Lindsay,Lawrence B, "Statement to the US House Subcommittee on Consumer Credit and Insurance of the Committee on Banking, Finance, and Urban Affairs" Federal Reserve Bulletin - Vol. 79, No. 4, (pp. 285-292); April 1993

Purpose:

The purpose of this report is to provide the Federal reserve's perspectives on the current status of the Community Reinvestment Act (CRA).

Implications:

The findings of this report imply that the since the CRA appears to be beneficial in the US, perhaps it might help economic matters in Canada. Should such an act be implemented in Canada, banks and other financial institutions would probably make more of an effort to serve the financial needs of small and medium sized businesses in lower income areas.

Jog, Vijay, "The Climate for Initial Public Offerings" Capital Market Issues, Industry Canada, 1997.

Purpose:

The purpose of this article is to provide evidence on four issues related to the process of "going public" in Canada. These issues are: underpricing of IPOs, long-term stock market performance of IPOs, financial performance of firms in the post-IPO period, and the actual process of going public as seen from the viewpoint of SME entrepreneurs.

Methodology:

A variety of methodologies were utilized for this article. The standard definition of underpricing was used (i.e.: issue price of shares vs. price of shares on the first day of trading). Earned rates of return were also compared to those of a benchmark portfolio. The financial statements of the sample firms were analyzed, and questionnaires were used as well.

Implications:

SMEs are very proud and very protective of their enterprise. For this reason, they prefer not to go public. Therefore since many SMEs are now considering becoming public companies, the implication is that they must be encountering some degree of difficulty in attempting to acquire financing through other means. Furthermore, since SMEs are still considering this type of financing even after being aware that capital formation is limited due to underpricing, there is indication that barriers are being encountered when other types of financing are sought.

Kopeinig, William F., "Helping Foreign Banks Face CRA Challenges" The Bankers Magazine; Nov/Dec. 1996 (99.54-57)

Purpose:

The purpose of this article is to illustrate how foreign banks can meet CRA requirements and increase revenues by lending to small businesses in their communities.

Methodology:

The involvement of the Canadian Imperial Bank of Commerce (CIBC) in the US banking community is examined.

Implications:

Because all of Canada's six big banks conduct business at an international level, and have strong ties with the US community, the US Community Reinvestment Act has had and will continue to have, a direct impact on their bottom lines. As such, although an act similar to the CRA has not been implemented in Canada, Canadian bank subsidiaries located in the US are still expected to conform to the requirements dictated by the CRA. This article demonstrates how CIBC, in particular, has successfully met these responsibilities. It suggests, then, that should CRA-like legislation be implemented in Canada, Canadian banks will be prepared to deal with its effects.

Kutner, Lorne, "Creative Financing for Small Businesses" CMA Magazine - Vol. 68; No.4; May 1994; (p.29)

Purpose:

The purpose of this article is to introduce the implementation of the Small Business Financing Program and to demonstrate how it will be beneficial to Canadian small business owners .

Implications:

The fact that the Canadian federal government is taking initiatives implies that barriers to capital formation do, in fact, exist for small business owners. Although this intervention sounds good in theory, it however, appears to be only of a short-term nature. As such, long-term objectives must be established to work towards permanently resolving the problem, as opposed to just temporarily covering it up.

Lacker, Jeffrey M., "Neighborhoods and Banking" Federal Reserve Bank of Richmond Economic Quarterly, Vol.81, No.2, Spring 1995, (pp.13-38)

Purpose:

To present information on the issue regarding the recent revision made by federal banking agencies to the regulations implementing the Community Reinvestment Act.

Implications:

It is suggested in the article that there is no need for the CRA. Since it would appear that current Canadian geographic and ethnic conditions dictate even less if a requirement for such legislation in Canada, relative to the US, it can be argued that an act similar to the CRA is not needed in Canada.

Lamy, Robert E., and R. Charles Moyer, "Financial Services Marketing and Banking Regulation: The Case of the Community reinvestment Act" Psychology and Marketing - Vol. 12, No.8, (pp.721-733); 1995

Purpose:

The purpose of this article is to examine the marketing issues related to meeting the requirements of the Community Reinvestment Act. Particular emphasis is placed upon the impact of legislation and regulation on the marketing of financial services.

Methodology:

For the purposes of this report, a clinical analysis is conducted of the approaches followed by two bank organizations-Wachovia Corporation, a large regional bank holding company, and Enterprise National Bank, a small community bank located in the same vicinity.

Implications:

The authors have illustrated how different banks can take different approaches and still minimize the negative effects that legislation such as the CRA can have on financial institutions. Because of the concentrating of the Canadian banking industry, if legislation similar to the CRA were to take effect in Canada, it would probably be in the best interest of the banking institutions to follow the same strategy as Wachovia in the US. The CRA appears to restrict consolidation of the banking industry, hence some of its effects may be lost in the Canadian context.

Leonard, Kevin J., "Whose Keeping Score? A Credit Scoring Model for Commercial Loan Applications" Business Credit - Vol.95; No.10; Nov/Dec.1993; (pp.8-12)

Purpose:

The purpose of this article is to comment on a decision making model that has recently been created to be used in one division of a major Canadian bank.

Implications:

If loan approval outcome is based on historical financial data, then it is argued that banks and other financial institutions often overlook these new businesses, resulting in barriers to their growth and survival.

Lindsey, Lawrence B., "Statement to the US House Subcommittee on Financial Institutions and Consumer Credit of the Committee on Banking and Financial Services" Federal Reserve Bulletin - Vol.81, No.5, (pp.424-430); March 8, 1995

Purpose:

The purpose of this report is to provide the Federal Reserve's perspectives on the status of the Community reinvestment Act (CRA) and the status of the board's CRA efforts.

Implications:

It would appear that the Community Reinvestment Act, although often criticized, has proven to be effective. The author points out several major advantages associated with the CRA, and suggests that such an act could be beneficial to the Canadian economy. However, the issue of whether such legislation is, in fact, needed in Canada is yet to be addressed. In addition, it appears that further investigation is needed to determine if the same or similar effects could be said to pertain to the Canadian environment.

Lorinc, John, "The Outlaw Advantage" Canadian Business - Vol.65; No.4; April 1992; (pp.38-43)

Purpose:

The purpose of this article is to discuss the effects of the existing Canadian tax system on Canadian small and medium sized enterprises.

Implications:

The GST and other tax increases are obviously causing small business owners who comply with legislation, potentially facing extinction. Efforts could therefore be made to create tax policies which have less of a negative impact on the profit potential of SMEs, thus enabling these small businesses to better acquire capital through retention of earnings.

Loungani, Prakash and Mark Rush, "The Effects of Changes on Reserve Requirements on Investment and GNP" Journal of Money, Credit and Banking Vol.27, No.2; pp.511-526; May 1995

Purpose:

The purpose of this article is to investigate the effects that changes in the reserve requirements have on investment and GNP. Evidence will also be provided to suggest that the impact of changes on investment are, at least in part, due to the changes in the amount of commercial and industrial lending carried out by banks.

Methodology:

A theoretical model was created to generate a correlation between changes in reserve requirements and real activity. Other literature and theoretical frameworks were consulted as well.

Implications:

Because SMEs are generally unable to borrow directly by issuing securities on the open market, they are dependent on bank credit. Since changes in required reserves affect availability of money for bank lending, levels of SME borrowing are sensitive to changes in reserve requirements. Therefore, in general, shocks to the supply of bank credit can have adverse consequences for investment by depriving SME borrowers of funds.

MacIntosh, Jeffrey, "Venture Capital Exits in Canada and the US" Initial Report for Industry Canada's Capital Markets Issues – Jan 31- Feb 1, 1996

Purpose:

The main purpose of this article is to document how, relative to their US counterparts, Canadian venture capitalists have exited their investments, and how the techniques compare in terms of profitability. The author also emphasizes other differences regarding venture capital industries in the two countries.

Methodology:

The study conducted for this article uses the data from two earlier studies on venture capital exits (Macdonald & Associates; Venture Economics). To update the results found from these two studies, new questionnaires were sent to venture capitalists in Canada and the United States. Note that only the results from the surveys sent to Canadian venture capitalists were available at the time this article was written.

Implications:

Research results would indicate that overall, Canadian SMEs have a much more difficult time acquiring financing than do those of the US, particularly small businesses in early and expansions stages of development. In addition, since the supply of venture capital funds is dependent on current economic conditions, it is argued that more effective budget planning and intervention need to be done on the part of the Canadian government. Reform to current tax clauses is also suggested.

MacIntosh, Jeffrey G., "The Capital Market for Small and Medium Sized High Tech Firms, Chapter 3" Report - Legal and Institutional Barriers to Financing Innovative Enterprises in Canada ; University of Toronto, April 29, 1994

Purpose:

The purpose of this chapter is to provide information regarding the various sources of funding available to small and medium sized enterprises and to illustrate certain barriers that are prevalent to SMEs in search of financing.

Methodology:

Conclusions were drawn in this chapter by consulting previously written literature on the topic, in conjunction with collected data on high-tech financing.

Implications:

- Because evidence suggests that under existing securities law many love capital investments and informal venture capital investments are made illegally to accommodate the financing needs of SMEs. It is argued that current laws should be amended to facilitate capital formation for small business.

- Because of the high risk and low collateral problems facing high-tech SMEs, the optimal capital structure of SMEs should be characterized by higher levels of equity.

- SMEs appear to be experiencing difficulty accessing informal venture capital because of the high percentage of rejected projects by informal investors. Furthermore, it is argued that because informal markets are personal, many SMEs in need of financing have difficulty locating angel investors.

- SMEs may also be reluctant to consider informal investment because of the restrictions that informal investors might place on entrepreneurs.

- Because the average formal capital investment is much larger than the informal capital investment, small high-tech firms experience difficulty in trying to access formal venture financing.

- SMEs also find it difficult to access formal venture capital investments because of current regulations that increase the cost of capital.

- Difficulties associated with entering IPO markets also play a role in preventing Canadian high-tech SMEs from expanding.

- Since retained earnings is a major source of financing for SMEs, efforts should be made to create better tax laws that do not discourage the retention of profits.

MacIntosh, Jeffrey G., "Regulatory Barriers to raising Capital for Small Firms" Canadian Financial Services Alert; Vol.6, No.8; July 1994

Purpose:

The purpose of this paper is to examine the difficulties encountered by small firms attempting to access the capital markets and to suggest reformation of regulations.

Methodology:

The author draws upon the findings of previous research conducted by Professor Allan Riding and colleagues at Carleton University regarding the informal venture capital market, and other anecdotal evidence.

Implications:

This paper further enforces the predictions that small and medium sized enterprises, particularly those in the high tech industry, are encountering barriers to capital formation. For the most part, the majority of these problems can be attributed to legal and regulatory imperfections, and it can be concluded that reform of the regulatory environment is needed in order reduce the negative impact of financial restrictions to SMEs.

Maley, Dianne, "Peter's Principles" Canadian Banker - Vol.101, No.3; May-June 1994; (pp.12-16)

Purpose:

The purpose of this article is to discuss the political hostility that faces the Canadian banking industry and SMEs today.

Methodology:

This article is based on an interview with Doug Peters, Secretary of State for International Financial Institutions.

Implications:

According to the author, it seems evident that banks play a role in limiting financing for small and medium sized enterprises. During the interview, Maley reaffirms his recommendation for the development of new debt instruments that will partially cut borrowing costs for SMEs. However, through deregulation, Canadian banks have incentive to instigate such barriers. Therefore, the Canadian government should consider reform of its deregulation policies, especially those pertaining to the Canadian banking industry. By doing so, potential small business owners will be given more of an incentive to begin new businesses. small businesses owners would be more optimistic regarding the survival of their enterprises. This reform should serve to stimulate the Canadian economy.

Mallett, Ted (CFIB), "Report Card on Bank Service Charges" Document (CFIB) - December 1992

Purpose:

The purpose of this report is to comment on bank service charges as they relate to small business.

Methodology:

For the purposes of this report, the Canadian Federation of Independent Business conducted a survey of 8000 small businesses in the third quarter of 1992 by personal interview.

Implications:

Not only is the acquisition of capital a problem for small business, but rising service charges are stripping small business owners of a significant portion of earnings. Based on their results, the CFIB feels that progress still has to be made by financial institutions to reach out to the smallest members in the business community.

Mallett, Ted (CFIB), "National Business Watch: Results from Our Members' Opinions Survey #26" Report - Canadian Federation of Independent Business; January-June 1990

Purpose:

The purpose of this survey is to explore the key problems facing members of the CFIB and to present these findings in this report.

Methodology:

This issue reports on the surveys of 22,000 CFIB members conducted between January and June 1990. The actual survey contains two parts. The first part is an eight-choice question on the most important problems facing a member's business. the second part of the survey relates to current an specific policy issues.

Implications:

The results indicate that because independently owned firms have to deal with inadequate taxation policies, tedious regulation, inflexible labour force conditions, and high interest rates, they are facing difficulty accessing capital for their business. Instead of trying to rectify the problem, the Canadian government distorts tax methods by introducing the GST, and changing various government payroll and property taxes. According to the CFIB, there is much to be said about the cost and lack of accountability of municipal governments, and as such, there are many policies in need of reform.

Mallett, Ted (CFIB), "Small Business: Banking on Job Creation" Report - Canadian Federation of Independent Business; August 9, 1994

Purpose:

The purpose of this report is to present information and trends regarding financing conditions of SMEs in Canada, as they relate to banking.

Methodology:

Together the information presented within this report, the CFIB conducted a survey f its members. In total, 10,903 responses were received and tabulated.

Implications:

Once again banks are using the power assigned to them by government to restrict financing to small business. Through excessive collateral requirements, high interest rates, and unbearable service charges, the Canadian banking industry is playing a significant role in creating additional barriers to capital formation for small and medium sized businesses. Variation in lending among the provinces also indicates that a certain degree of discrimination exists, allowing wealthy sectors of the country to better themselves through sufficient financing, while other areas continue to struggle. It recommends that financial institutions pay more attention to the needs of small business, and that government implement changes to tax structures and other policies to make financing easier for SMEs. Furthermore, the CFIB recommends that methods must be found to overcome the concentration of power the currently exists among the big banks in Canada, and to provide greater private sector banking competition in SME lending markets.

Marleau,- Martine (CFIB), "Double Standard: Financing Problems Faced by Women Business Owners" Report- Canadian Federation of Independent Business (March 1995)

Purpose:

The purpose of this report is to provide information regarding whether gender of the business owner has an impact on access to credit and, if so, to what extent.

Methodology:

A survey was conducted among 85,000 SMEs in the Spring of 1994 and issues considered were loan refusal rate, interest rate, and amount of collateral required.

Implications:

Based on these results, the CFIB concludes that that many small businesses are at risk of failing because, if owned or managed by women, they face the additional burden of being rejected because of gender. Access to financing is a difficult enough task for small businesses

Mason, C.M.; R.T. Harrison, "Closing the Regional Equity Gap: The Role of Informal Venture Capital" Small Business Economics - Vol.7; No.2; April 1995 (pp.153-172)

Purpose:

To outline the role of informal venture capital investors and problems associated with angel investing.

Implications:

Therefore, the authors argue that the most cost-effective means of closing the equity gap is for the public sector to underwrite the operating costs of business introduction services. This will make it less difficult for SMEs, particularly start-ups and those companies in early development stages, to acquire funding.

Matt Green, "Small Talk" PEM: Plant Engineering and Maintenance Vol.19; No.3; June 1996; (p.18-24)

Purpose:

To present information regarding current financing difficulties experienced by small and medium sized enterprises.

Implications:

It is argued that financial institutions in Canada seem to present significant problems for Canadian SMEs. Furthermore, for SMEs to be given the opportunity to grow and prosper, efforts must be put forth to amend current regulations and tax laws.

McInnes, David, "Can Self-Regulation Succeed?" World of Banking - Vol.15; No.2; Summer 1996; (pp.19-22)

Purpose:

The purpose of this article is to comment on the effects of self-regulation of banks on small business and on the economy as a whole.

Implications:

The underlying issue here is whether small businesses are getting the short end of the stick from banks concerning financing their business needs. The positive effects of self-regulation are, therefore, questionable. One wonders whether giving banks and other financial institutions less flexibility through additional legislation could make access to capital a little less tedious for small and medium sized enterprises.

Mitchell, Andy, "Federal Ontario Liberal Caucus Task Force on Access to Capital by Small Firms" Federal Ontario Liberal Caucus Task Force, August 1994

Purpose:

These hearings examined the capital needs of small business in a rapidly changing economy. Another objective of the conference was to assess the concern that lack of access to capital is a barrier that inhibits entrepreneurs from undertaking new business ventures.

Methodology:

A task force was established to research the capital needs of small business. Hearings were held in sixteen communities across Ontario during which testimony was heard from small business entrepreneurs, financial institutions, equity lenders, government lenders, and small business representatives such as the Chamber of Commerce. Points and testimony from these hearing were then considered in the formation of this report.

Implications:

The findings presented in this report illustrate that both bankers and policy makers are creating barriers to capital formation for SMEs. It argues that there is a need for more competition among financial institutions. This would facilitate financing for SMEs and provide them with lower interest rates. In terms of improving equity capital for small business, a local registry of entrepreneurs and venture capitalists should be created. Small businesses should also be permitted to borrow up to 20% from their RRSP to increase equity of to cover business losses. The government should also make a significant effort to try to change to the Small business Loans Act (SBLA) and create tax incentives which will encourage investing in small business. The government should also allow the FBDB to play a greater role in the financing of small firms. Furthermore, the community should work to try to establish networks among small business entrepreneurs, private sector lenders, and government lenders. Strategies should also be developed to improve the business skills of small business entrepreneurs to make SMEs more attractive to investors.

Peter O'Brien, (CFIB) Executive Director Atlantic, "Financing the Team: Small Business Looks at Financing Difficulties in Atlantic Canada" Report - March 1996

Purpose:

The purpose of this report is to present information regarding financing difficulties experienced by small business owners in Atlantic Canada.

Implications:

Financing is very important for the success of any business, and thus insufficient funding not only prevents the growth of small businesses, but often even their survival. With the growing importance of self-employment and the need for small business to create the jobs needed in the emerging new economy, increasing attention should be placed on overcoming barriers to financing for small business. The government should, therefore, look into reforming current legislation, and partially restrict banks and other financial institutions from establishing lending criteria which further heighten barriers to capital formation for small and medium sized enterprises.

Riding, A., and R. Blatt, ""...Where Angels Fear to Tread:" Some Lessons from the Canada Opportunities Investment Network Experience" Proceedings, International Council for Small Business Canadian Conference, Victoria, BC, 1992.

Purpose:

The purpose of this paper is to review the theoretical rationale for the establishment of intermediaries such as the Canada Opportunity Investment Network (COIN), and to document the history of COIN. The paper also presents the findings of an analysis of the efficacy of COIN.

Methodology:

In order to conduct the external analysis, a survey of informal investors was conducted, the results of which were related to the theoretical requirements for successful intermediation.

Implications:

The COIN system was implemented in Canada to resemble other systems, such as VCN which have been operating in the US. The purpose of COIN is to reduce barriers to equity capital formation for small and medium sized enterprises. However, US systems have remained more local in scope, have operated in a less restrictive legal setting, have usually associated with small business research centres, and have incorporated greater advisory capability than is permitted under Canadian law. The implementation of COIN did not adequately account for the Canadian legal and regulatory environment. Reform of legislation and regulation must be brought about which to reduce the costs of regulatory compliance currently facing growth-oriented Canadian entrepreneurs.

Roberts, Peter J., "OSC Proposal to Promote Small Business" International Financial Law Review - Vol.14; No.10; Oct.1995; (pp.16-17)

Purpose:

The purpose of this article is to address issues raised in a recent report on the raising of equity capital by small and medium sized enterprises.

Methodology:

This article is based on the findings of the Ontario Securities Commission (OSC) Task Force of Small Business Financing.

Implications:

The Task Force provides further evidence of problems regarding capital formation for small and medium sized enterprises. The Task Force strongly advises various amendments to current provisions of the OSA so that capital acquisition be less difficult for SMEs.

Robinson, Michael J. "Raising Equity Capital for Small and Medium Sized Enterprises Using Canada's Public Equity Markets" Initial Report for Industry Canada's Capital Markets: Issues Research Project; (University of Calgary) November 1995

Purpose:

The purpose of this project is to determine whether the Canadian equity markets provide an effective means of accessing capital for small and medium sized enterprises.

Methodology:

An examination of the costs of listing on a public equity exchange was conducted. Particular attention was placed on cash expenses and the degree of underpricing of a firm's equity during the initial public offering. A study of the listing requirements for the Canadian exchanges was also conducted.

Implications:

Start-up companies are particular candidates for equity financing because they don't have enough historical financial data to qualify for debt financing in most cases. However, the findings show high costs associated with taking a firm public. Since most of these costs are relatively fixed, smaller businesses find this type of financing to be inaccessible because they are unable to benefit from economies of scale. Therefore, it is evident that, particularly for start-up SMEs, both debt and equity financing present barriers for the firms. It recommends that regional stock-exchange programs be established to allow SMEs to raise equity.

Rose, Peter S, "The Performance of Outstanding CRA-Rated Banks" The Bankers Magazine, Sept/Oct. 1994, (pp.53-59)

Purpose:

The purpose of this article is to assess the burdens posed on banks by the Community Reinvestment Act (CRA), and to see how bankers are coping with it.

Methodology:

For the purposes of this article, 300 US banks which had received outstanding ratings from examiners on their CRA performance during the period from June 1992 to December 1993. The banks contacted ranged in size from over $5 billion in total assets to as small as $ 15 million. The survey form contained 15 separately numbered questions with many multiple parts.

Implications:

The findings of this article would dictate that implementing legislation in Canada similar to that of the Community Reinvestment Act could serve to be beneficial. It can be argued that because there is significantly less competition within the Canadian banking industry, relative to that of the US, Canadian banks would require some sort of incentive to become more involved in assisting lower-income communities. Should a similar policy be implemented in Canada, it is strongly suggested that some changes be made to it, since US bankers seem to be having some problems with all of the current terms and conditions. Furthermore, one must not forget the issue of whether or not there are high enough concentrations of low-income ethnic minorities in any given area to make the existence of this Act necessary.

Rosman, A.J., "Comparing the Information Acquisition Strategies of Venture Capital and Commercial Lenders: A Computer Based Experiment" Journal of Business Venturing - Vol.8; No.5; Sept. 1993; (pp.371-395)

Purpose:

The purpose of this article is to present information regarding investment strategies of venture capitalists and banks in order to reduce uncertainty that SMEs or new ventures have about obtaining external financing. The article also attempts to clarify how the involvement of external parties will impact these ventures.

Methodology:

A computer software package was used to trace information regarding the acquisition process of venture capitalists and bankers. The researchers compared differences in decision behaviour of venture capitalists with that of bankers.

Implications:

- Owners and financial planners in new ventures prefer using internal sources of capital as much as possible because they are uncertain on how to obtain external financing and how the impact if others will affect their business.
- Since Venture capitalists have a unique decision making process, small firms could increase their ability to gain access to capital if they learned more about this process.
- If venture capitalists and bankers learn that there could be biases in their process, they could improve it and end up giving more capital to small businesses which, under the old process, were being overlooked for funding.
- Since banks are more interested in historical financial data, they maybe bank financing should not be the only source to consider for new start-up companies. SME owners could perhaps use alternative sources of financing until their enterprises become more established and then only turn to banks for additional financing needs.
- The overall implication is that venture capitalists are better providers of initial funding for SMEs than are banks.

Sharwood, Gordon "Financing Your Organization" CMA Magazine - Vol.7; No.7; Sept. 1996; (pp.9-13)

Purpose:

This article illustrates that there are opportunities for SMEs to raise capital. The author discusses issues relating to secured term loans, mezzanine financing, lease financing, software financing, and contract financing.

Implications:

Based on the information within this article, it would appear that the problem does not lie with the minimal availability of capital for SMEs, but rather with the costs that small and medium sized businesses must incur to take advantage of these funding opportunities.

Swift, Catherine (CFIB), "Small Business and the 1997 Bank Act Review: Once More with Feeling" Report to the CLHIA 1995 CEO Seminar - November 16,1995

Purpose:

The purpose of this report is to address access to financing-the most important issue from a small firm perspective.

Implications:

This report addresses how legislation and deregulation of the financial services industry is causing problems for small businesses with respect to financing. The CFIB recognizes that there is much room for improvement for governments, business owners, and financial institutions. It recommends that governments ease up on taxation and regulation, and that small business owners upgrade their skills and investigate new markets. Financial institutions must also play the crucial role of providing the necessary capital and financial services which will allow all of this to take place.

Swift, Catherine (CFIB), "The Growth Financing for Small and Medium Sized Businesses" Speaking Notes - The Financial post Conference; June 14, 1990

Purpose:

The purpose of this speech was to make the CFIB's views of growth financing for SMEs heard at the Financial Post Conference in Toronto.

Methodology:

Much of the evidence presented came from past research conducted by the Canadian Federation of Independent Business.

Implications:

According to the author, small businesses will never be able to prove themselves worthy if banks and other financial institutions will not lessen their barriers to financing. Decreasing competition within the Canadian banking industry means that banks have even more of an opportunity to charge what they want and get away with it. Swift maintains that financial institutions are famous for giving all the breaks to rich clients and large corporations in an attempt to secure future business. They often overlook the aggregate effect that the small business community can have on their balance sheet, and SMEs end up unnecessarily paying the price. According to Swift, it is evident that Canada needs a gradual, controllable increase in the number of financial institutions participating in the market via the reform of financial institution regulation. Furthermore, she recommends changes in tax treatments of RRSP investments in private companies, other legislative changes, and the provision of more information to both sides of the financing transaction.

Task Force on Small Business Financing Report of the Task Force ; iii. 146 p. Toronto Bibliography; 1996

Purpose:

The purpose of this report is to review and make recommendations regarding the Ontario legislative and regulatory framework governing the raising of equity capital by SMEs from sources other than governments and financial institutions.

Methodology:

For the purposes of this report, an examination of SMEs is conducted. The SMEs in question have a maximum of $10 million in gross revenue and a maximum of $35 million in market capitalization.

Implications:

Within this report, several problems were identified regarding Canada's existing regulatory framework and its effect of capital formation for small and medium sized enterprises. The Task Force indicates that small business owners are experiencing serious financing problems which are having detrimental effects on the growth potential and success of their businesses.

Thompson, Gordon "Leasing-Market Overview" Canadian Leasing Review; Canadian Financing and Leasing Association, (pp.3-7); April 1995

Purpose:

To provide a general outline of the leasing market and to discuss some expected breakthroughs in the future of this financing method.

Methodology:

For the purposes of this article, both primary and secondary data are drawn upon, mostly from surveys and previous statistical analysis.

Implications:

Leasing is expected to become a more important source of financing for SMEs. Current tax laws and environmental conditions make it difficult for SMEs to lease; hence, there is room for legislative and taxation changes in Canadian policies. With increasing technology in the workplace, SMEs will be looking for additional financing to be able to survive and prosper. The merging of Canadian chartered banks with trust companies potentially has the effect of having more SMEs turn to leasing and asset-based financing as alternatives to traditional sources.

Thompson Lightstone and Company Ltd., "Small and Medium Sized Business in Canada: An Ongoing Perspective of their Needs, Expectations, and Satisfaction with Financial Institutions" Canadian Bankers Association – 1996 and 1997.

Purpose:

The purposes of this report are:

- to determine and monitor the root cause of loan approvals to identify factors underlying access to financing by SMEs,
- to determine as well as the key drivers of SME satisfaction with respect to bank-SME relationships.

Methodology:

A nationally representative sample of telephone interviews with owners of small and medium sized businesses was undertaken. A nationally-representative sample of 1080 loan account managers was taken from the seven major banks in Canada to provide information regarding SME customer requests for financing and reasons for bank turndowns.

Implications:

- The decline in the percentage of SMEs approaching banks for financial assistance could mean that less financing is required by SMEs. Perhaps many inexperienced SME owners don't know they are in financial trouble until it is too late for financing to make a difference.

- Furthermore, it is a possibility that many SME owners don't think they have enough collateral or backing to even be considered for bank financing, so they may not even be approaching the banks for this reason.

- An increasing percentage of bank loan requests by SMEs are being approved relative to the past year which, according to this research, implies that SMEs are not experiencing difficulties accessing capital. However, some biases are apparent in this research because loans were tracked in the month prior to fiscal year end and during a massive investment campaigning season for banks. Since both of these factors could have contributed to the increasing percentage of approved loans, results drawn from this research are not necessarily accurate.

- A decline in positive attitude towards account managers was also discovered. Since there is increased turnover of account managers, SME owners are finding it difficult to build a relationship with bank lenders because SMEs in general look for quality service and want to be viewed as a "valued client". This implies that SMEs could be looking elsewhere for their financing because of the dissatisfaction they are experiencing with their constantly changing account managers.

Trigger, Leonard, "Seeking the Holy Grail" CA Magazine - Vol.126; No.6; June/Jul 1993; (pp.44-46)

Purpose:

The purpose of this article is to present further evidence regarding barriers to financing experienced by small business owners.

Implications:

The article identifes barriers to financing for SMEs. Since banks are the main source of financing considered by small and medium sized enterprises, the lending and borrowing restrictions they place on small commercial clients can have detrimental effects on the success of their businesses. It is argued that, for the most part, these restrictions have been brought about by the allowance of deregulation in the Canadian banking industry. According to the research, eregulation, in conjunction with minimal competition in this industry has made financing more difficult, especially for SMEs. Therefore, it suggests that government legislation be revised to better meet the financing needs of small business owners in Canada.

White, Lawrence J, "The CRA: The Bad Results of Good Intentions" Journal of Retail Banking - Vol.15; No.3; Fall 1993; (pp.13-19)

Purpose:

The purpose of this article is to outline the negative effects of the Community Reinvestment Act (CRA).

Methodology:

For the purposes of this article, the CRA is examined. Furthermore, other literary works and previous research is consulted.

Implications:

The article talks about the degree of in increasing competition within the financial service sector in the US. What the existence of this high competition factor implies is that the implementation of the CRA basically is sure to affect entry and exit decisions of banks over time. Because the CRA dictates that banks are responsible for the funding of the communities in which they are chartered, it is fairly probable that banks will surely avoid entering into areas where they fear that CRA obligations will be onerous. As far as implementing a similar act in Canada is concerned, there is still some doubt as to whether or not Canadian communities are concentrated in such a way that they are truly in need of such regulation. However, one thing that must be noted is that the Canadian banking industry is dominated by six big players. As such, competition does not present the same barriers as it does in the US, and so the implementation of an act similar to the CRA would probably have very little, if any, effect on entry and exit decisions of Canadian banks.