ACCESSIBILITY AND ECONOMIC GROWTH: A STUDY OF SPATIAL DIFFERENCES IN FOREST INDUSTRY FINANCING IN BRITISH COLUMBIA

by

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ABSTRACT

The availability of sufficient finance for long term capital investment is generally conceded to be a prerequisite for economic growth. The present thesis questioned whether friction of distance hampers entrepreneur-borrowers and lending institutions during negotiations which precede long term loan agreements. It was reasoned that if the distance handicap were significant, then a study of growth experiences of similar capital intensive firms should show an association between slow growth and low accessibility to financial intermediaries. A literature review and discussions with officials at different financial institutions suggested various factors which could intervene in the hypothesized relationship, so the key hypotheses were modified accordingly.

An interview survey was undertaken of principals of fifty small and medium-sized forest industry firms distributed over various regions of the province of British Columbia. In addition to data collected on formal questionnaires, a record of verbal comments made by respondents was compiled after each interview. Information from the questionnaires was processed by computer. In nearly all checks for association, rigorous tests of significance could not be applied because of the small sample and number of meaningful categories.
within variables. The questionnaire data and interview records were used in a qualitative appraisal of the key questions of the study.

The findings were that there was little difference in growth experiences of similar firms with greater spatial separation from financial intermediaries, at least for distances less than 250 miles. For longer transaction distances there was evidence of friction of distance. The limited evidence suggested distance constrained borrowers of capital more than institutions, although indirect evidence suggested that institutions were not completely unaffected by distance. The conclusion was that accessibility was a factor affected patterns of finance, but did not exert profound influence. Businessmen were able to overcome distance in search of credit if sufficient effort were applied. Financial institutions require particular information concerning proposed investments and the question of whether the institution had personnel capable of interpreting such information was of more importance than difficulties of information collection posed by distance. The thesis examines the relevance of the hypotheses in the context of other major changes affecting the British Columbia forest industry.
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Chapter 1

INTRODUCTION TO THESIS PROBLEM

This thesis examines whether physical accessibility affects private entrepreneurs when they want expansion loan capital. The thesis seeks answers to two basic questions: does distance constrain businessmen to request capital loans from only the most accessible financial institutions? Secondly, does distance adversely affect procedures used by financial institutions for granting loans?

An affirmative answer to either question would mean that capital availability is a factor which causes spatial variations in economic development.

There were compelling reasons for the choice of topic. Firstly, regional disparities are a simmering political issue which has commanded public attention in Canada for over thirty years. Despite a variety of regional development programs, areas of chronic unemployment and low incomes have stubbornly persisted. Political pressure drives forward the search for solutions, resulting in a shifting kaleidoscope of different federal government programs.

A second reason for concern is that the theoretical relationship between capital markets and regional development is still the subject of unresolved controversy.
The proponents of an important regional economic growth model offer one view, since they simply assumed that "(b)y any reasonable standard, the capital market in the United States is almost a perfect one." However, other writers objected to that assertion and offered contrasting opinions. For example, Richardson wrote: "(t)he determinants of inter-regional capital flows in the real world are, however, widely at odds with the abstract assumptions of the perfectly mobile capital market." Another economist agreed:

"Whether long-term regional growth models should be based on the assumption of a perfect capital market or whether there is some more direct causal role for the capital market in regional growth has not been critically examined. Whether or not capital markets exhibit significant regional compartmentalization, and if so, the extent to which this inhibits growth in particular regions, remain unanswered questions."

The unsupported assertions and counter-assertions clearly indicate the need for case study documentation. It is likely that government policy could benefit from such directed research, even though concrete government actions could not have waited for theoretical classifications. The present thesis hypothesized several types of spatial imperfections in the Canadian capital market, and the study was designed to avoid unproven argumentation since a field study compared the hypotheses to actual experiences.

The first hypothesis was that businessmen are constrained by the real effects of distance to request capital loans from financial institutions in their vicinity.
Because individual institutions specialize and serve only a limited range of possible capital loan needs, a businessman should have access to complementary types of institutions for a full range of services to be available. His interests are also best served when there exist sufficient numbers of any particular type of institution to compete for loans. Where poor access limits a businessman to a small set of institutions, there is a greater chance that his capital needs will be inadequately served. The result would be retarded economic growth.

The second hypothesis was that the procedures used by financial institutions for evaluating loan requests are adversely affected by distance. Thus, information required by the institution to reduce uncertainty about repayment becomes more difficult to collect with increasing distance. Given poor access, uncertainty about loan requests may remain at high levels and the institution may have to either charge a higher risk premium, offer a loan at reduced scale, request greater security, or just refuse the requested loan. Any of these effects occurring systematically over time and space would distort patterns of growth, by making it harder for remote businesses to expand as fast as those more accessible.

The two hypotheses reinforce one another, with the predicted result being significant spatial differences in the availability of loan capital. The relative
accessibility of various locations can be largely predicted from knowledge of the distribution of financial institutions. In fact, their distribution closely follows the hierarchy of central places. Metropolitan centers have the widest range of financial services and the most depth, in terms of competing institutions. In progressively smaller centers, both the range of financial services and the number of institutions of each type decrease markedly. According to the hypotheses presented here, economic growth will be slowest in remote areas and smaller communities.

The foregoing hypotheses formed a crude model which predicted certain financial experiences, depending upon the relative distance of a business enterprise from financial institutions. The purpose of the thesis was to elaborate and justify this initial model, and then collect field information to permit its evaluation.

SCOPE OF THE RESEARCH

Various constraints limited the scope of the study. Foremost was the limited time and funds available for collecting field information. Although the topic seemed to require original data, by necessity this would be an economical phase. To facilitate data collection, it was decided to restrict the study to within the province of British Columbia.

A sample which would test the hypotheses had to be derived from different types of locations; both from
areas accessible to large urban communities and from more isolated places. Also, to ensure that sampled establishments had demonstrably strong need to borrow funds in order to expand, it was reasoned that they had to be from industries with high overhead costs for fixed capital assets or equipment. Preliminary appraisal of the hypotheses indicated that very large corporations would likely be immune from the predicted effects. Therefore, it was pragmatic to draw the sample from industries which had a large number of small and medium-sized firms.

Consideration of various industrial and commercial sectors showed that the British Columbia forest industry fulfilled most of the requirements. The original information concerning financial experiences was therefore collected from small and medium producing companies in the forest industry.

Once the decision was made to collect information from forest industry firms, the question of which financial institutions to study was narrowed, since only those active in forestry lending were relevant. Chapter Two describes in detail how the lending operations of selected financial institutions could be adversely affected by distance. However, before proceeding, the terms "capital market" and "financial institution" require closer definition to indicate how they pertain to this thesis.

The capital market has three basic components, as shown schematically in Figure 1: saving groups,
borrowing groups, and financial institutions. The institutions perform intermediation or brokerage functions, or provide financial counselling. A general function of the capital market is to facilitate efficient allocation of a scarce good, savings, amongst borrowers of varying credit-worthiness.

The intermediation function involves, firstly, collection of funds from ubiquitous saving units in both large and small amounts. In return, saving units receive indirect securities, or financial claims issued against the intermediary receiving the funds. Indirect securities are offered in various forms to facilitate ready acceptance by saving groups. The second part of financial intermediaries' function is fulfilled when the funds have been dispersed to borrowers. In return for the funds, borrowing units issue primary securities.
Figure 1

SIMPLE MODEL OF CAPITAL MARKET

Symbols:
- Flow of funds
- Issue of Primary Securities
- Issue of Indirect Securities
The intermediation function is bypassed when a saver directly purchases a primary security of satisfactory risk and yield. This occurrence is common since of course not all savings are channelled into financial intermediaries. However, intermediaries create efficiency in the capital market since certain advantages permit them to invest funds profitably in situations which are inconvenient, unknown or unacceptable to the individual saver, particularly those lacking investment expertise. Competition between financial institutions and the profit incentive induces them to tap all possible savings and to fully allocate these funds into suitable investments. Since so much real capital investment flows through them, financial intermediaries are of central concern to the thesis.

The brokerage function overcomes time and place constraints for buyers and sellers of primary securities, and provides a market where exchange and resale can take place. However, despite their overall importance, brokerage functions were excluded from the study. Businesses able to use this borrowing means are normally very large and well-established.

Invested savings may bypass the financial sector completely, as shown by Flow A in Figure 1. For example, in real estate or motor vehicle sales, the seller may accept installments instead of a full cash payment. The seller may have expertise in credit evaluation, government regulations and securing the loan to safeguard his
investment. Particularly when a business dealership is involved, the services provided may be indistinguishable from those of financial intermediaries. However, non-institutional sources of credit were excluded from the terms of reference because of the difficulty of studying them systematically.

A basic difference between the foregoing private financing and institutionalized finance is noteworthy: 
"...given the risk that people attach to the unknown, it is only the very sophisticated saver who would be willing to place his funds in investments far removed in distance or experience from his own environment." Individuals able to make direct investments probably invest in projects in their immediate vicinity, and could be called "local lenders".

One objective of the field study was to evaluate the hypothesis that distance adversely affects financial intermediaries' lending operations. Therefore, there had to be a number of forestry companies of varying degree of accessibility which had dealt with each type of financial institution. There was little purpose in detailed study of particular types of intermediaries unless their forestry investments were significant. To choose which institutions were relevant before the field study took place, judgement and a priori knowledge was applied.

Of those types selected for preliminary study, chartered banks were deemed the most important single
type of financial intermediary. Although banks obtain funds from short term deposits and have inherently limited capability for term lending, they nevertheless have demonstrated increasing interest in longer term lending. Removal of the interest rate ceiling with the 1967 revision of the Bank Act probably assisted this trend, as did the popularity of term deposits.

Government sponsored lending institutions were a second type of intermediary expected to be prominent. Examples include the economic development corporations established by many provincial governments to extend grants or loans to qualifying industries. The federal Department of Regional Economic Expansion (DREE) gives similar assistance to industries providing new jobs through expansion in designated regions. Also, the federal Industrial Development Bank (IDB) is an important publicly-financed lending institution, from which small businesses can request medium and long term loans if unable to obtain credit elsewhere under reasonable conditions.

Common to government sponsored institutions is the absence of profit maximization as the prime corporate objective. Instead, they attempt to foster industrial or commercial development in particular regions and to provide capital when it is justified, but private intermediaries are unable or unwilling to lend to the extent deemed adviseable. The purpose is not to enrichen
entrepreneurs as much as it is to provide spin-off benefits through direct and indirect employment, taxation, et cetera. By examining whether spatial differences in credit availability exist despite the operation of government lenders, the present thesis could be viewed as a practical evaluation of the rationale and effectiveness of government-sponsored lending institutions.

Term finance companies were another type of institution expected to be represented. By obtaining funds via bonds or debentures sold in the capital market, these specialized lenders are freed of short term creditor obligations which affect chartered banks. Several Canadian examples of this type of institution are subsidiaries of domestic chartered banks or bank consortiums, and may obtain business clients referred from these banks.

Commercial finance companies would also be involved. These lenders are similar to the newer term lending institutions, except that they usually have substantial consumer finance portfolios. Some commercial finance companies are lucrative subsidiaries spun off from parent companies in the manufacturing field. For example, many large truck and equipment manufacturers have founded such financial intermediaries partially to help market their products. Usually equipment dealerships can arrange financing for a sale through the affiliated commercial finance company, or if none,
through another commercial finance company which maintains a close working relationship for mutual advantages.

In the field study, forestry firm managers were to be questioned regarding their financing experiences with the foregoing common types of institutions. From the answers, and from information on the relative location and other characteristics of the businesses, an evaluation would be made of the hypothesis that financial intermediaries are constrained by distance in their business lending. It was noted earlier that the rationale for expecting institutions to be affected by distance was that information need be collected concerning the prospective borrower. This activity is affected by distance.

The next chapter presents the hypotheses in detail and reviews relevant literature. The nature of the information required by institutions is examined, as well as real world factors which act in the opposite way, that is, to reduce the friction of distance in business borrowing patterns.
REFERENCES


Chapter 2

SPATIAL ASPECTS OF THE FINANCIAL SYSTEM: A CRITICAL REVIEW OF THE LITERATURE

INTRODUCTION

The purpose of the second chapter is to report more of the background considerations which affected the interview survey and subsequent analysis. The question to be answered from this chapter was whether the initial thesis hypotheses were compatible with descriptions and conclusions of other writers on the subject.

The findings, from the literature review and first-round discussions with specialists in finance and the forest industry, were that a case could be made for the thesis hypotheses, but support was not unanimous. This stage of the work was difficult because so much of the literature on finance is essentially descriptive and even laudatory in tone (the view from within). Actually, very little objective analytical work has been done in Canada.

Given the lack of a close-knit body of relevant research, it was necessary to compare the thesis problem with concepts abstracted from a wide range of sources. Although the diversity of source material broadened the perspective from which the problem was viewed, the
trade-off was to have a much less concise research proposal than was initially visualized. The following sections of the present chapter indicate how the original hypotheses were expanded. Chapter Three shows how the expanded hypotheses were incorporated into a design for collecting relevant data.

CANADIAN GEOGRAPHERS ON THE FINANCIAL SYSTEM

Geographers do not seem very interested in the topic of economic development. It is not surprising then, that literature relating the domestic financial system to regional economic development is almost non-existent. Fortunately, there have been several exceptions.

Donald Kerr was the first Canadian geographer to express interest in the financial system. Kerr's primary purpose was to further explain urban growth processes. He distinguished between general financial services (for e.g., those of neighbourhood branch banks), and primary financial functions, such as trade in financial assets and large scale lending. It was recognized that general service functions are provided within well-defined market areas. However, Kerr did not speculate on whether the sectoring of markets was due to real effects of distance or merely administrative decisions of the institutions. By using employment statistics, Kerr signalled his interest in direct growth caused by expansion of the financial sector and linked support industries.
This factor undoubtedly is important to larger urban centers and intermediate-sized regional centers.

Insofar as it affected the present thesis problem, Kerr's article was disappointing. The difficulty stems from his failure to speculate on various effects of space and distance on the financial system, (or a too-ready acceptance that space is irrelevant). This shortfall is provocative, since it meant that no comments could be made on possible indirect regional impacts of the financial sector—particularly from uneven availability of loan capital.

Another Canadian geographer studied the financial system in more detail in a doctoral dissertation. Using a qualitative approach, Code traced the evolution of the main Canadian financial centers from their beginnings to their modern statue. His purpose was to explain "the geography of higher-level financial decision-making, largely in terms of the need for financial intelligence." Code suggested factors which helped explain the spatial evolution of centers in which higher level decision-making takes place:

"(1) The relative sizes of the individual financial communities at any given time.
(2) The nature of the investment opportunities with which the financial communities are dealing, and:
   (a) whether there is a great deal of uncertainty involved in the investments.
   (b) whether this high uncertainty industry if (sic) localized in a fairly narrowly defined region.
(3) The mass of information required in relation to its value."
(4) The inherent need for uncertainty reducing information.
(5) The savings incurred from agglomerating.
(6) Sustaining power in the local economy.
(7) The state of the communications system."

Code viewed finance from a different perspective than the present thesis. However, the above relationships have implications for the availability of finance for small forest industry companies. The first relationship predicts that if there is a possible choice in a financial decision-making location between a large or small center, the decision would be made in the larger center. To achieve such result, the whole decision-making process must be transferred from the rural site of the proposed forestry investment into the larger center. If the transfer is as simple as that there can be no friction of distance affecting lending, an hypothesis in sharp contrast to those of the present thesis. The partial consistency of Code's hypothesis with actual internal decision-making of chartered banks is discussed below.

The second relationship could be rephrased to state that high uncertainty investments require lending decisions to take place near the industry requiring capital. This relationship aligns very well with the hypotheses of the present thesis, in that lenders should require good accessibility to any forestry investment which has high uncertainty of success.

The third relationship is complex. Basically, it means that high value investments can take place from long distances away because the information transfer
costs are more negligible relative to the total loan value. The merit of this relationship is more questionable than the others, as is discussed further in the description of bank loan administration, below.

The fourth relationship is similar to the second, except that Code elsewhere referred to contact between institutions in the financial center as the source of uncertainty-reducing information. The fifth relationship deals with quasi-administrative decisions on weighting monetary and non-monetary costs when not in contact with other financial institutions, a factor of little relevance here. The sixth relationship raises the question of whether there will be enough loan business generated in outlying regions for it to pay to have permanent branches or loans officers in those areas.

The seventh relationship refers to the state of the communications system, an obviously important consideration in both seeking and granting loans.

Overall, Code's relationships did not give a clear indication of what to expect regarding spatial variations in credit availability. The general sense of his theory is that given modern communications, lending should be friction-free and feasible from centralized large urban communities. However, this prediction is hedged by recognition that high-uncertainty investments require more information. At the outset of the present study, the extent of intuitive disagreement with Code's evaluation was large, but this diminished as the survey
results became known. At this point, it is relevant to indicate some of Code's weaker relationships, which remain as minor points of disagreement. The critical evaluation is accomplished by comparing Code's theory to the administrative procedures for granting bank loans.

The hierarchial nature of decision-making in Canadian chartered banks is reasonably well-documented. Branch managers collect background data on a loan application, and make a recommendation to approve or deny the request. If the loan is approved and within the "discretionary lending limits" of the particular manager, the funds are granted. Basically, the discretionary lending limits are set according to the size and location of the branch, the manager's ability, and the type of loan (how fully secured, etc.). Approved loan requests above the manager's limits are referred to regional office, where the loan officers have higher discretionary limits. Loans above this level are transmitted to head office, where senior loan officers have relatively high limits. Loans above their level are referred to the Board of Directors for approval. No application is considered at a higher level unless it was previously recommended by all officers at subordinate levels.

The relationship hypothesized by Code, between the value of the mass of particular information and the distance it will be transmitted, is superficially consistent with the foregoing description. However, it is not sufficient as a causal explanation and other
important factors affect this relationship. For example, there is incentive to carefully ration the more valuable time of the few loan evaluation officers at head office, whose extensive experience and training enable them to make sound judgements on very large investments. Naturally, this is accomplished by delegating some authority to others with less experience or skills but who can handle lower-risk investments. Also, the loan approval methods provide physical dissociation of the senior investment officers from the principals requesting the loan. This social insulation reduces the possibility of personal persuasion influencing the judgement of the financial officer. Losses through poor investments would be greater for large loans, therefore large loans in particular are shielded in this manner. This bias factor is also one reason for the frequent transfer of branch personnel who are directly exposed to the principals in investment situations.

Costs of transmitting loan information are not a convincing causal explanation of the location of financial decision-making. Instead, the significant information-related costs are felt to be in collecting and verifying the information, and most importantly, correctly interpreting it. A more convincing explanation of decision-making location is to ask where the qualified loans officers are located who can interpret information so as to reduce risks to the institution. This criticism is not a blanket condemnation of Code's work, because
he does concern himself with the location factors of key credit officers.

Considerable decentralization of decision-making has recently occurred, primarily due to the forces of increased regional competition and a significant political backlash against the propensities of banks to make the more important loan decisions in central Canada. However, with increasingly efficient communications, greater centralization of decision-making would have been predicted by Code's theory. It seems obvious that the location of high level financial decision-making is influenced more by strategic management decisions on where to locate key personnel, than by the costs of transmitting information.

Code made relevant observations on the differential importance of distance in the various levels of decision-making. The operation of a chartered bank is illustrated graphically in Figure 2-1, which traces the flow of information from a possible investment site to decision points at branch, regional and head-office levels. Distances of unknown lengths are signified by broken lines between the nodes, with internal communications (dotted lines) differentiated from external communications (dashed lines) of the intermediary.
In describing the internal linkages of major financial districts, Code concluded that a strong friction of distance was observable (see distance d). As a result, the financial districts tend to be compact. Institutions such as insurance companies, which show little affinity for such districts, were explained in terms of lesser needs for uncertainty-reducing information. His theory describes the situation for this type of spatial environment reasonably well.

Code's theory predicts that as communications technology increases in efficiency, friction of distance decreases, until "...distance from a financial community becomes irrelevant as a factor influencing the quality of service which it is able to provide." If one separates the distance components as has been done in Figure 2.1, then Code's prediction may be only partially correct. Efficient technology will provide easier internal communications for a financial intermediary, that is, distances 'b' and 'c'. However, it is not obvious that
external communications involved in distance 'a' will benefit.

Code stressed that the fundamental reason for friction of distance within central financial districts was the sustained need for uncertainty-reducing information. Because much of the information is derived informally, it is unstandardized and difficult to transfer. Between members of a financial community, close and frequent contact develops a bond of trust and good will. While other factors may also be important, it is worthwhile to underline the stated relationship between personal communications and friction of distance. Code completely overlooked the importance of this relationship in contacts between branch personnel and people requesting loans.

It is argued in the present thesis that friction of distance is just as pronounced in the relationship between a prospective borrower and the loans officer of an intermediary. Smaller businesses have high uncertainties associated with their operations. One common source of uncertainty is the relative dependency of the success of the business on the skills and competence of the owner. Intermediaries dealing with such businesses require sufficient current information to be able to reduce their uncertainty. The data which have to be gathered for the loan are initially unstandardized, and effort is required by both parties to produce this data in a standard manner. Communications requiring personal travel such as interviews and field inspections will occur. Similarly,
because it is difficult to quantify all factors involved, 
a degree of trust and good will is essential for many 
types of loans. Better personal relationships are 
fostered by more frequent contact, institutional policy 
on transferring loans officers notwithstanding.

In his perspective of the geography of finance, 
it is clear that Code understated the importance of general 
financial services, as did Kerr previously. Both geog­ 
raphers were essentially preoccupied with explaining 
the growth and distribution of high level financial 
functions. However, especially in terms of decisions 
regarding bank loans, the loans officers in the field 
are all-important. As one writer noted, (even before the 
period of greater decentralization of bank decision­ 
making):

"Less than 10 percent by number of all loan 
requests have to be referred to district offices for 
authorization and less than 1 percent of all loan requests 
have to be referred all the way up to head office for 
authorization."

Much remains to be learned in the geography of finance, 
therefore, particularly by exploring the relationships 
between general financial services and economic growth 
outside the core financial districts.

Aside from the foregoing work on the Canadian 
financial system, incidental contributions to the 
geography of finance have appeared in location theory. 
For example, Hoover suggested in an early work that 
differences in sources of finance influence industrial 
location patterns and the degree of corporate
concentration. In his example, credit was extended by eastern manufacturers to retailers in the capital-short west and south. This caused a concentration of large manufacturers in the east, as the burden of retail trade financing was too much for small scale competition. Canadian banks are able to shift credit to which ever branch requests it, but the concept may still be useful since large tracts of Canada are undeveloped. Resource extraction and similar activities may have to be supported by financing extended within the industry, particularly where field operations are small and inaccessible to financial institutions. In the British Columbia forest industry, the logging contractors who cut and transport timber for the mills seem to fit the description ideally. As timber exploitation pushes further into inaccessible areas, the implications for corporate concentration in forestry are obvious. Therefore, an additional question for the thesis to answer was whether small operators receive financing from another forest company.

Hoover also pointed out implications of the leasing form of financing. Leasing allowed operators more freedom from financial institutions and placed the onus for finance on the equipment dealership. Also, overhead costs are minimized, and men with little capital could get into business and at least make good wages as operators. Together, these effects caused the industry to be less concentrated. Again, application to the forest industry seemed likely, since there are so many independent
contractors cutting and hauling logs for companies operating saw mills or pulp mills.

The hypotheses of the present thesis are largely consistent with modern central place theory. However, it is relevant to point out one difference between the lending function and the other general functions of retail and service industries for which central place theory has application.

In particular, the lending function seems fundamentally different because the informational requirements give rise to a two-way friction of distance in the relationship between customer and supplier. In contrast, when a customer requests a consumer good from a retailer and has the required payment, he normally receives the good on demand and the transaction is completed. In other than a strong buyers' market, the costs of selection, delivery and servicing of physical goods are borne by the customer. Hence the friction of distance of the transaction is entirely on the customer's side. Unless some form of credit is requested, there is no information which the supplier of the good or service must collect in order to complete the transaction.

The financial institution protects its self-interests by imposing informational requirements sufficient to allay the risks involved:

"...of course, the lending process is a two-way arrangement. It is one thing for prospective borrowers to request an advance of funds. The lending bank has to be sure of getting its funds back. The act of lending
money, again, is not like a final sale, once completed to be forgotten about. The money lent is expected to be returned. Hence, negotiation between customer and bank is necessary during which the ability and willingness of the prospective borrower to repay has to be assessed and the credit risk considered.

The financial institution is responsible for overcoming the friction of distance associated with its investigations, but no comparable costs exist for retailing and service functions.

More than anything else, the preceding discussion has isolated information factors as being crucial to the geography of finance. As Allan Pred has commented, recognition of the relevance of information to geography is recent, but broadly based:

"Perhaps the most telling inadequacy of classical theory is its neglect of information as a location factor. In recent years many writers have commented both on the declining role of transportation as a locational determinant and on the growing impact of information, especially as an influence on the location of administrative units within industrial and non-industrial organizations. ...Information costs are of growing importance to the calculus of industrial location partly due to the increasing volume of executive and clerical time allocated to intraorganizational and interorganizational face-to-face contacts. Another factor is the mounting monetary allocations to the tasks of gathering, processing and beneficiating information for operational and innovative decision-making purposes... Locational variations in the availability of information also influence locational choices insofar as they bias the range of known opportunities and permit uncertainty to be reduced more easily in some places than in others."
Before undertaking the field survey, the writer discussed the hypotheses of this thesis with persons experienced in finance or forestry financing. These discussions helped to reveal factors that could cause aberrations in the availability of finance, but which had little to do with distance or accessibility. These factors are not mentioned to any extent in the literature, even though it is necessary to be aware of their effects to determine what actually was causing any deviations found in the availability of finance.

1. Lending on Weight of Character

In assessing business loan applications, loans officers tend to weight highly the character of the principals. This practice is described only vaguely in the literature, but seems to require close access between the loan officer and the businessman. Given good access, the credit officer is also in a position to supplement direct observations by indirect information gained from the community at large, for example, the businessman's suppliers or customers. Once the businessman is shown to possess good character and business acumen, some relaxation of loan policy may result such as less restrictive security provisions and a more generous line of credit.

The effect of 'lending on weight of character' is to increase the stability of existing financing
patterns, at least over the short term. However, disruptions can cause uncertainty, as was noted in an early study of one banking system:

"A sound banker who knows a district of twelve or fifteen hundred square miles is surely in a better position for a considerable time to carry on business than an equally sound banker who enters upon the field as a stranger."

"...(When a manager is transferred), if a bond of confidence that should exist between a banker and his client has been formed, it is broken and must be recreated. This necessarily takes time. Reading the record of a client's transactions with the branch may give a new manager some clue to the nature of his customer but it is a poor substitute for personal knowledge. Moreover, the bond to be true and of value to each must be reciprocal. The customer has not the advantage of a study of the new manager's record. In uncertainty and doubt he must wait and learn by experience."

Businessmen unhappy with banking arrangements can switch banks. In the past this procedure may not have been welcomed, since there was mistrust of such 'renegade' businessmen fostered by the history of little competition between banks. Such an attitude would not be as common now given the greater degree of competition. At any rate, a businessman changing banks would lose his good character status (if he had achieved this), since at the latest bank he would be a new customer about whom nothing would be on record.

2. Personality of Loans Officers

Variations in quality of loan service could arise from the personalities of the loans officers. Some are more conservative in evaluating the subjective aspects of loans, while others would take a more optimistic view.
Related to personality is how well loans officers like their job, and whether they are willing to put out special effort to look after a borrower's needs. The matter was put rather succinctly by one observer of Canadian banking:

"Granted, there is a good deal of variation with respect to individual managers and what they will do for their customers. However, it remains that a 'good manager' will always take care of his regular customers. If it means going back to the office in the evening and taking off his coat and working into the night, a good manager will do it, if that is what is necessary to straighten out a customer's problem. Some guys, of course, are 'nine-to-five' workers and just do the job for the money. These latter managers are not all that helpful to clients needing advice and so on."  

Commenting on much the same aspect of banking, a recently-retired branch manager (with over 40 years of service), went several steps further:

"There is a saying amongst bankers that there are two kinds of managers; the 'counter-jumpers' and the 'bookworms'. As far as running a branch completely by the book goes, if you followed all the rules you would crack up. The people who live by the rule-book don't last, except in head-office, which is where they should be. The rules are made to be winked at."

Enthusiasm which loans officers carry into their work would be reflected in the relationships with customers. It seems probable that businessmen would even base their choice of financial institution solely on this factor.

3. Inter-institution Competition

One other reason why a borrower may not patronize the most convenient institution is related to competition. If a financial institution is aggressive and will grant more favorable loans, then customers should be drawn
from a larger market area. Admittedly, there is controversy regarding competition in finance, with critics charging that there is competition in terms of service but no real price competition (that is, cheaper loans or higher deposit interest rates). An extreme view regarding competition was given by Sears: "(t)he competition between financial institutions in lending to small business is so miniscule as to be irrelevant to the subject of small business financing."²²

Sear's conclusion could not be valid for all times and places. His information relates to Nova Scotia in the early 1960's and it probably is different in British Columbia during the 1970's. There have been changes in the financial system in the intervening decade; for example, regarding government regulations,²³ and new entries in banking and other fields such as term lending. Moreover, British Columbia's regional economy is more growth-oriented than Nova Scotia's.

SUMMARY

If indeed it is not premature to suggest there is a 'geography of finance', then it surely must be acknowledged that underlying theory is only roughly hewn. Reviewing the literature was difficult because most references to the thesis problem were brief and trivial. Code's work was more substantive but even he touched upon the thesis problem only in passing. The present author disagreed with portions of his arguments and attempted
to clarify the points of contention.

In Chapter Two, new relationships were inter-meshed with the core hypotheses on regional growth developed in Chapter One, to provide a more comprehensive perspective on forest industry finance. Chapter One set out the description of 'what' the thesis problem was. Chapter Two can be viewed as an attempt to provide a priori answers to the question of 'how' spatial variations in availability of loan capital arise. Chapter Three indicates the methods of data collection to evaluate all of these questions.
REFERENCES


2"Though one always wishes for more explorations of the interrelationships between the history of capital markets and financial intermediaries on the one hand and the process of economic development on the other, the overall worth and quality of recent work on this (money and banking) aspect of Canadian history has been impressive.": G. Porter, "Recent Trends in Canadian Business and Economic History," Enterprise and National Development, eds. G. Porter & R. D. Cuff (Toronto: Hakkert, 1973), p. 14.


4Ibid., p. 199.


6Ibid., p. 2.

7Ibid., p. 10.


11Code, op. cit., p. 318.


14 Ibid., p. 200-1.

15 Galbraith, op. cit., p. 189.


17 The factor is mentioned obliquely in most descriptive studies of Canadian banking, but its relative importance was not apparent until after the author had conducted several preliminary interviews of persons who had had extensive first-hand experience in Canadian financial intermediaries. The first was a wide-ranging interview of a retired branch bank manager, and the second interview was with a senior officer at the British Columbia regional headquarters of the Industrial Development Bank.


19 Ibid., p. 31.


23 From the viewpoint of a banker, Galbraith wrote: "Before the 1967 Bank Act, much of this competition among the banks emphasized the quality and variety of service, with the competition being largely in the form of offering better or more services rather than in terms of interest paid or charged. The reason is that until the 1967 Bank Act the banks were severely restricted, by the old 6 per cent ceiling on bank loan rates, in the rates they could charge for loans and, hence, in the rates they could pay on deposits. Now all that has been changed." Galbraith, op. cit., p. 47.
Chapter 3

METHODS OF DATA COLLECTION

INTRODUCTION

The techniques of data collection are described below. The rather extended treatment may be of value to anyone considering similar work, but was intended more to help the reader understand how circumstances influenced the research.

The thesis problem, as described in Chapters 1 and 2, required that data on financing experiences be collected from a widely distributed sample of small and medium forest companies. It was important that remote firms be included and that the sample be large enough to permit statistical evaluation.

Considering the sample requirements, it was initially felt that direct mail questionnaires would be appropriate for collecting the data. Therefore, some time was spent developing a self-administered questionnaire form. When completed, the questionnaire was evaluated by a number of people who had experience either with survey techniques or forest industry company principals, or both. As a result of their evaluations, the mail survey approach was abandoned. The reasons were that the questionnaire was too long and complex and included questions too sensitive to be casually answered through
the mail.

A telephone survey was briefly considered as an alternative but was rejected as well. It was ultimately decided that data collection would be by personal interviews, and the questionnaire already constructed would be useful to standardize responses.

THE INTERVIEW SURVEY

Once the decision was made to conduct an interview survey, other constraints became important. Student activities initially restricted trips to one day's duration, but time was later available for extended field trips. The major constraint was the problem of limited funds to cover the cost of travelling.

For the first section of the survey, interviews were restricted to firms located within a few hours' drive of Vancouver. Samples were drawn from a listing of small and medium forest industry firms whose offices were located in the lower mainland or Fraser valley districts. The haphazard rather than random selection process is a theoretical drawback and caution must be used in drawing inferences from the data.

The first group of interviews yielded twelve completed cases. There were several refusals to cooperate and six firms were rejected as samples for such reasons as not being engaged in production or being affiliated with larger corporations. The principals of four other firms (apparently suitable samples) were elusive, and a
mutually satisfactory appointment could not be arranged even after four or five return calls. In one instance, the executive was interviewed but the questionnaire not completed.  

A series of field trips was undertaken to conduct interviews with a more widely distributed sample. There were four trips: to the north-central interior (centered on Prince George), south Vancouver Island, north Vancouver Island, and a longer trip through the east and west Kootenays as well as the Okanagan region. The trips varied in duration from three to ten days and resulted in an additional thirty-seven completed interviews.

The spatial distribution of the samples was somewhat unsatisfactory, as a greater number of more inaccessible firms would have been desirable. The weather was partially a factor, since extremely heavy snow falls made off-highway travel difficult. The survey required a high degree of mobility. An appointment often could not be secured except for a time several days in the future, and it was necessary to retrace the route at that time to conduct the interview. There was a limit to the amount of efficiency which could be imposed in scheduling interviews. Quite often unexpected circumstances forced a prospective subject to postpone an appointment at the last minute, and the author spent numerous hours waiting in outer offices.

The size distribution of firms in the sample was also unsatisfactory, since smaller firms are not represented
in relative proportion to their numbers in the industry. The master listings of firms included truck-logging con-
tractors, whose capital assets are generally far less than other production firms (sawmills, planermills, plywood mills, etc.). It early became apparent that special effort would be required to include truck-loggers. The owners often personally operated equipment or supervised on-site logging operations and were completely inaccessible during working hours. This sector issued the largest number of outright refusals to cooperate. It was noticed that if the company did not maintain a permanent office (that is, detached from living quarters), then it was more difficult to secure an interview. Loggers often use their chartered accountant's office to maintain the channels of mail and financial record-keeping, however, few accountants were willing to discuss their clients' operations (unless they were part-owners). Attempts to interview small contractors in the evenings or on weekends usually ended with a rebuffal that pre-
cluded further contact.

Other subjects interviewed were asked to describe the financial relations of logging contractors. While the responses were of uncertain validity, a tentative picture of typical truck-logger financing was obtained. The findings are reported in Chapter Four. Next, the procedures followed during the completed interviews are explained.
THE INTERVIEW PROCEDURE

The author explained the survey purpose at the outset of each interview. The introductory comments varied little from one interview to the next, with any variation caused by questions from the respondent. A brief discussion would usually follow to answer all curiosity involving the purpose of the interview. The respondents were given a copy of the questionnaire, and its function in collecting responses to standard questions was explained. It was requested that the questionnaires be answered in the author's presence, to ensure all were promptly completed. The respondent was invited to point out ambiguities or to question the purpose behind any question.

The questionnaires were self-administered. In nearly all interviews, the respondent would supplement written answers to some questions with verbal comments. After completing the questionnaire, many respondents were willing to engage in an unstructured discussion, usually initiated by the author asking questions not in the questionnaire. In cases of closely scheduled interviews, or where the respondent indicated he could not spare further time, the interview was closed. Usually however, the respondent relaxed and related interesting anecdotes and opinions regarding the forest industry and finance. At the close of each interview, the respondent was promised a summary of the survey results. The interviews
ranged in duration from about twenty minutes to one lasting almost four hours, with the average probably being about three-quarters of an hour.

Immediately following each interview, a private written report was made. These reports (which concealed the identity of respondents) included significant comments made by the respondent as well as the circumstances which prompted these comments. The questionnaire was also checked and omissions or contradictions were filled in correctly where possible on the basis of verbal comments during the interview. The decision to not tape-record or otherwise directly record respondents' statements was made before the survey began. Some previous experience in interviewing had shown that when comments were directly recorded, people tend to make only neutral and superficial statements. While the method of recording the interviews introduced the possibility of bias, it did have apparent success in producing candid responses. The interview reports provided an additional documental source from which appraisal of the survey hypotheses could be made.

CONCEPTUAL BREAKDOWN OF THE QUESTIONNAIRE

This section explains each question of the questionnaire form. The purpose is to show how the hypotheses were incorporated into questions. It was also desirable to illustrate how the optional categories of answers to each question were meaningful divisions.
Certain questions did not involve hypotheses in themselves, but ensured that a respondent answering the next hypothesis-testing question actually had personal experience in the particular matter. Where the respondent lacked experience, the qualifying question directed him around the questions he was not qualified to answer. If he did have experience, he was reminded of it for his next answer. Because of unpredictable variation in respondents' experiences, it was not desirable to use an inflexible format where each respondent answered every question. Therefore, although it added greatly to the complexity, the design was necessary to prevent spurious answers. The question bypass instructions and other details are shown in the copy of the questionnaire found in the Appendix.

1. **General type of business organization?** The presumption was that the wider the distribution of ownership, the less should be the dependence on financial intermediaries in achieving growth, since increased equity capital can replace external borrowing.

   a. **sole proprietorship** The lowest scale of ability to raise equity capital, hence the most dependence on financial intermediaries.

   b. **partnership** A degree of expansion of equity capital has taken place, but the addition of further
equity capital is probably more difficult.

c. **corporation**

(1) **less than ten shareholders** While the company has been incorporated for tax or legal considerations, it does not have apparent wide appeal to outside equity investors, or else shares have not been offered for public sale. The company may have further capacity for financing growth through equity investment than firms characterized by the two preceding options.

(2) **more than ten shareholders** The company has been incorporated and probably already has had some expansion in the base of equity capital, and access to further equity capital for purposes of expansion should be good. This response is judged highest on the implied scale of relative independence from financial intermediaries.

2. **Affiliations of the firm with other companies?** The question is based on the hypothesis that a subsidiary can borrow expansion funds from parent corporations, an alternative not available to independent firms who may otherwise be of similar size and circumstances.

   a. **independent** No option to borrow from parent companies.

   b. **firm owns one or more subsidiary companies** Since
the firm may be called upon to lend to subsidiaries to finance their expansion, its access to intermediaries and equity investors should be excellent.

c. subsidiary of another company  The firm may be able to supplement external borrowing, with funds borrowed internally through parent corporations; or in another way, by borrowing from intermediaries when the parent corporation guarantees the loan.

3. Scale of peak employment? This question crudely measures the size of the firm. The reason for measuring the size was the possibility that certain hypotheses would be valid only for certain size groups.

4. Does the firm have more than one division? This question measures the distribution of the firm. Firms may operate from a single location or from a number of distributed sites. A firm operating in only one location could be handicapped if access to financial intermediaries were poor at that site, while a widely-distributed firm would be more likely to enjoy good access at at least one site. However, no clear relationship was expected because, given a widely distributed firm, a financial intermediary may find it more difficult to obtain information concerning all divisions of the firm.

a. no
b. yes

(1) where divisions are vertically integrated
This response indicates that the firm had grown by adding divisions in the intermediate stages of production.

(2) where divisions are horizontally integrated
In this case growth had been towards broader spatial exploitation of the resource.

5. Is the head-office location shared by production operations? The hypothesis is that if the head-office (the work place of key executives, principals) is accessible to a range of financial intermediaries, financial relations will be better. The question will reveal those firms whose head offices are separated from field operations (necessarily resource oriented), and which have sought higher access instead with central urban services such as finance.

6. What is the residential location of the principals?
This was to determine the extent of reliance on foreign ownership and to determine "whether some firms in remote locations are in fact supported by principals who maintain high personal access with larger urban centers, thus giving their firms greater access to financial institutions than would otherwise be the case."9
7. Distance from company headquarters to patronized bank? This measure was to evaluate the friction-of-distance hypothesis.

8. Are there other branches of any chartered bank located appreciably closer to the firm? This question filters out respondents who had made their choice of bank for reasons other than spatial convenience.

9. What are the reasons for using the chosen branch, given the alternative bank branches which are closer? Persons answering had already indicated a willingness to travel further than was necessary, and the reasons are required, to understand why.

   a. the branch patronized is quite convenient, considering travel routes of executives This answer is not a denial of the importance of distance, since it involves high accessibility not apparent without closer inspection.

   b. the banking relationship was established in the past, and it is not deemed worthwhile to sever this relationship to gain a more convenient banking point This response indicates that the respondent was insensitive to the travel costs associated with his inconvenient choice of bank. The banking relationship may be continued out of habit, or for past reasons not recently evaluated. The respondent does not believe his banking relationships could be improved upon, and there is an inference that his 'character' has been satisfactorily
established at the present bank.

c. the patronized branch is a large one, and the branch manager is a senior man with relatively more authority This response implies awareness of the internal decision-making structure of banks, and a belief that a senior branch manager can better handle the business than a junior branch manager.

d. the manager of the patronized bank is an active and capable man to deal with, compared to other branch managers in the area or that one has known This response indicates a favorable reaction towards the personality and ability of the present manager, and suggests contrasting past experiences with at least one manager who lacked those qualities.

e. a standing policy of the firm is to deal with a particular chartered bank and the branch currently patronized is the closest branch of their organization This response indicates the attitude that banking relations, once established, should endure for a lifetime at the same bank.

10. Has the firm ever approached a second bank with the same loan proposal after receiving an unsatisfactory loan offer from the firm's usual bank? A filter question for the one following.
11. Where it was possible to consider loan offers from two bank organizations for the same lending situation, were there significant differences in their offers, considering such aspects as term, maximum principal, required security, interest charges or other factors? This question was designed to measure the degree of competition between different chartered banking companies.

12. Are you one of the persons who are qualified to represent your firm in negotiations for business loans from banks or other financial institutions? This question had a dual purpose. Firstly, it provided a check that the respondent answering the questionnaire was of sufficient standing in the firm to provide valid answers without drawing upon guesses or hearsay. The question was placed in its immediate context by its second purpose, to filter out respondents not qualified to answer the second following question.

13. Have you represented the firm in business loan negotiations with different branch managers of the same banking organization? This was a filter question for the one following.

14. In your opinion, were there noticeable differences in the way these managers viewed lending situations, such that one man would grant the loan under a certain set of conditions that would not have been acceptable to another manager? This question was intended to measure the
significance of possible differences between branch managers' credit-granting criteria.

a. yes, such differences were noticed

b. no, any differences between managers' lending criteria were not that pronounced

c. no opinion, cannot recall similar loan situations that were put forward to different managers. All are self-explanatory.

d. no opinion, comparable loan proposals were made to different managers, but not at times when the external monetary conditions (which affect tightness of credit) were similar. This option allows for the possible differences which were due to quite different external monetary conditions. The differences could not be attributed to variations in the credit-granting criteria of managers since changes of monetary policy could have caused these effects.

15. Specify the regional center which is closest to the firm's headquarters. This question shows the region of British Columbia in which the firm maintains its executive offices.

16. What is the highway mileage from company headquarters to the selected regional center? One purpose was to indicate the remoteness of the company, where remoteness
was measured in terms of distance to the nearest regional center. A second purpose was to give the distance to the nearest regional center. A second purpose was to give the distance to the nearest Industrial Development Bank office.

17. The respondent is requested to indicate his general knowledge of the following institutions which grant medium-term loans. While the question is not meant to require any research, the respondent is urged to include knowledge that he has himself or knows to be possessed by his executive colleagues in the firm. This question had two purposes; firstly to find out how comprehensively the various types of financial intermediaries advertised for business. Several types of institutions were used to evaluate this concept: commercial finance companies; Roynat Ltd., (an example of a specialized term-lending institution); the Industrial Development Bank; and domestic chartered banks. The strength of advertising was to be checked by three categories which indicated a different source of knowledge, and an increasingly greater depth of knowledge. The second purpose of the question was to measure the attention the respondent paid to the various institutional sources of finance. This would be useful for estimating the contribution of borrowers to friction-of-distance, since a businessman seeking a medium-term loan would base his search for finance on his knowledge of the capital market.
18. Did the firm formulate any plans for expansion of fixed assets during the past two years? The term "growth of fixed assets" is the pivotal linkage of the questionnaire with the concept of economic development. This definition of economic growth ignores other types of growth such as increases in the number of persons employed. Employment growth was ignored because employment figures are subject to short-term fluctuations, and the maximum number is more or less related to the capacity of the production equipment. In this schema, long-term growth in employment is made possible by an expansion of fixed assets. It was felt that the planning perceptions of the businessmen would be a practical source of evidence in testing for spatial variations in growth. For example, if a businessman had not formulated plans for growth of assets over the two year period, then his business would not provide a sample for evaluation of spatial differences in availability of credit (unless spatial bias to such no-growth companies suggested that the conservative attitude towards growth had been conditioned by poor receptions of past expansion plans by financial institutions). In other cases, perhaps plans were dropped explicitly because of poor financing prospects.

19. To what level were the expansion plans of the previous two years actually carried? If the plans were carried to the level of planning financing, then what had happened to these plans? It was decided that the course of events
for one plan of each respondent was to be followed through to its eventual disposal. In each case, this was to be the last expansion project taken to the stage of planning finances.

20. What general source of financing had been originally planned? This was a filter question to identify respondents who planned to employ internal funds to finance the expansion. All respondents of this category were directed past following questions dealing with financial institutions.

21. Did the firm ever approach a financial institution for a loan in order to carry out the plan? This was another filter question to separate those firms which had not attempted to borrow from a financial institution, but instead sought to raise capital by selling shares or bonds, or otherwise had borrowed from non-institutional sources. The question was not combined with the one preceding, to determine the prevalence of each of the alternatives to borrowing from intermediaries.

22. Indicate all financial institutions which were approached for a loan regarding the last set of plans for which external financing was sought. This question was given separate status from the one following to emphasize the need for a complete listing of all intermediaries approached. It was feared that without this emphasis, respondents would only mention those
institutions which favorably received their loan proposal.

23. In each case, what was the outcome of the approach to the institution? This question determines what had happened to the expansion plans after the approach to financial institutions for credit. The ultimate disposal of each inquiry was traced as one of three alternative answers for each institution approached.

a. a satisfactory loan resulted and the plan proceeded without modification

b. the institution did not want to make the loan
   Unless alternative sources of funds were found later, the expansion plan was placed in jeopardy.

c. the loan offer of the institution was somewhat unsatisfactory In this case, the respondent either may not have been offered sufficient funds to carry through his entire project, or perhaps the full amount was authorized but other loan conditions bothered him. A following question had to determine whether the dissatisfaction was related to any impact felt on the growth of the company.

24. As indicated by the preceding question, an approach to an institution resulted in a loan offer that was unsatisfactory to your firm. The reasons for the dissatisfaction were:

   a. the high cost of the loan A high cost loan would
diminish the expected return on the project, but growth would have still taken place.

b. some sacrifice of managerial control would have been involved This option might seem of personal importance to the principals of the company, but other than possibly injecting a more conservative attitude towards later expansion projects, any restrictive effects on company growth would be difficult to predict.

c. the full amount requested would not be forthcoming This option indicates that the loan offer of the institution would have reduced the expansion plans.

d. loan collateral or security required was somewhat excessive This option indicates that the loan was acceptable in terms of amount, but future options would be affected. In case of temporary failure of earnings, the firm would undergo more serious risk of failure, since the assets used as security would be lost. As well, later expansion plans would be affected because assets which otherwise could be offered for security would already have liens on them.

25. Did your firm accept the loan offer, although it was not completely satisfactory? This was a filter to identify respondents who considered the "unsatisfactory" loan offer but decided to not take it.
26. What changes in the plan occurred, that were solely due to the unsatisfactory financing arrangements? The purpose was to determine the effects of the financing on the expansion project. The responses are self-explanatory, and probe the immediate effects on growth of the company.

   a. no modifications to the original capital-allocation planning were necessary

   b. original expenditure plans were scaled down

   c. original scale of plans was kept, but economies were effected on the actual expenditures, by substitution of cheaper units, etc.

   d. the offered amount was taken, and the plans were carried out by combining the amount with some external alternative to financing directly through a financial institution

   e. the original scale of plans was maintained by taking the offered amount and applying a squeeze on the other internal capital allotments of the firm

27. Given the difficulty in obtaining external financing, what course of action did the firm take regarding the plans which were being considered? This question was related to the internal complexity of the questionnaire, and ensured that all respondents had indicated the ultimate fate of their plan.
28. In this final question, all respondents are requested to check off any of the following features that have been or are now characteristic of his firm. The information is necessary for an assessment of the prevalence of alternatives to the external financing of expenditure plans directly through a financial institution. The intention was to discover whether there were significant spatial patterns in these alternative means of expansion.

a. the firm has sold shares or bonds to the general public, investment dealers or others While there were to be no firms in the sample who had direct access to the stock or bond markets, it was recognized that when medium-sized companies first undertake these steps, their relative success may be more limited than that of large corporations. Such medium-sized firms would be suitable samples for the present survey.

b. the firm has contracted to other firms or individuals, a portion or all of the work of supplying raw materials for production The concept was that by having contractors do certain portions of work, the company would be able to escape direct costs associated with purchasing and maintaining the capital equipment required by the contractors to complete their job. A sub-question asked whether the raw materials were assets of the company or the contractor, a matter of importance since such assets may act as security for short-term operating loans.
c. *capital goods required for production, such as buildings, machinery or equipment, have been financed for medium-term periods through the vendor of the capital goods, rather than by a financial institution.* In such cases the financing is arranged where the equipment is purchased and the company is relieved of the necessity for a credit search. The retailer has a standing arrangement for a financial intermediary to provide financing. A sub-question determined the frequency of employing this type of financing.

d. *capital goods required for production, such as buildings, machinery or equipment are sometimes leased or rented for medium or long-term periods.* Leasing is comparable to medium term financing since the cost of leased assets can be distributed over the useful life of the asset by means of lease payments. A sub-question determined the frequency of this alternative.

e. *the firm has in the past merged with another firm that previously operated separately in the same general industry.* Strictly speaking, growth may not have occurred because of mergers, but there is a possibility of real growth because of scale economies. Also, the consolidated unit should be more economically viable, thus at least preserving the status-quo situation and preventing decline. The question was not meant to include take-overs, which are similar except that the assets of one company are purchased by the other, and a
financial transaction occurs.

SUMMARY

The foregoing indicates the rationale for the questionnaire, and the reader undoubtedly will have been struck by its complexity. In fact, however, the questionnaire does not completely account for financing experiences and is a coarse measuring device.

The process of data collection was very much a learning experience. At times, the author felt that the topic of financial experience was simply too complex to be adequately treated in any survey method. Therefore, a case study approach would have been more successful in eliminating many areas of uncertainty.

On the other hand, it is questionable that the thesis problem would have been resolved significantly by a handful of cases, given its general nature. Many of the interviews did contribute the type of insight which could be expected from the more detailed case study approach. These contributions were recorded in the interview reports, and used extensively in the evaluation, as reported in the next chapter. In that respect, the author attempted to keep the best of both worlds. Given the thesis topic and resources, there was no correct choice which would have resolved the methodology dilemma.

Chapter Four presents the data from the field survey and evaluates the thesis hypotheses in view of this information.
REFERENCES


2 The basic problem with a telephone survey was that this medium of communication could not provide a uniformly satisfactory degree of privacy for the interviews, and privacy was an elemental requirement for obtaining responses. If calls were placed to any forestry operations reachable only by radio-phones, for example, there could be no assurance that virtually hundreds of other individuals with radio-receiver units would not be monitoring the telephone calls.

3 Circumstances were inopportune. The interview took place in a hotel lounge at the 1975 Truck Loggers' convention in Vancouver.

4 In one notable instance, the executive twice postponed the interview at the last minute and was not eventually available for another twenty-four hours. The interview was especially interesting though, as the man had been in the midst of negotiations for a business loan.


6 Exceptionally large contractors, of course, have assets with an apparent value of millions of dollars and would in fact be larger in terms of assets than many small and medium sawmill companies.

7 Uncertainty arises because the information is second-hand. However, it probably has some validity because the persons divulging the information had had reasonable opportunity to have acquired knowledge of the financial affairs of small contractors. In most cases, the respondents were the ones who made out the paychecks for the contractors affiliated with their company. In this position they could gain considerable insight, as for example, some respondents mentioned having had
credit officers from one or another financial intermediary call for credit references whenever a contractor was about to arrange financing for the purchase of capital equipment.

8Sears made the practical observation that reading from a prepared list of questions had seemed to make his interview subjects visibly uncomfortable, so he had even discontinued that practice. Sears, *Institutional Financing of Small Business in Nova Scotia*, op. cit., p. 9.

9Quoted from preamble to Question 6, Appendix.
Chapter 4

PRESENTATION OF SURVEY RESULTS

INTRODUCTION

The results of the interview survey are described in two sections. A quantitative analysis of the standard questionnaire data is followed by a presentation of qualitative findings. The reason for the quantitative analysis was that the questionnaire had been constructed for the application of statistical methods. However, problems with the smallness of sample made this first section of the analysis a non-rigorous appraisal.

A compelling reason for the qualitative assessment was that most information collected was non-standardized, and its basic form resisted use in rigorous analysis. As suggested earlier, this second type of information was more characteristic of a case-study approach than the survey method. Unquestionably, the qualitative data contributed most to the knowledge acquired during the survey.

QUANTITATIVE ANALYSIS OF STANDARD QUESTIONNAIRES

1. Basic Components of the Analysis

Fifty-two variables were developed from the 28 questions on the questionnaire. Most questions were of
the closed variety, such that the answer of any particular respondent would fall into only one category of a multiple-choice range of possible answers. To simplify the analysis, variables whose measurement could have been taken to interval level were also divided into discrete categories, thus treating all of the data as if only of nominal level of measurement. Every interview in which a questionnaire was completely filled out yielded one set of measurements for each relevant variable, and the unique set of measurements is termed a "case". There were 43 usable questionnaires, thus 43 cases.

The analytical problem was to determine whether selected pairs of variables were associated, and if so, how strongly. In this situation, two variables are associated if subgroups of the one variable differ in their proportion in various subgroups of the second variable. A test of the significance of such differences was desirable. Also, since the variables were of nominal level (such that categories did not occur in systematic order), even the statement that two variables are significantly associated could not be interpreted unless a description was given of how the categories of each variable occurred together. Therefore, the expected association between subgroups had to be conceptualized and compared to what was found in the hypothesis test.

While the selection of relevant pairs of variables to test for association (and the hypothesized association) was based upon previously developed theory, the numerical
calculations were carried out by computer. The degree of association between any crosstabulated pair of variables was established by several nonparametric statistical measures: chi-square, Fisher's exact test, Cramer's V, and phi. Chi-square and Fisher's exact test are similar in that both test the statistical independence of crosstabulated variables, but do not show the degree of association. The Cramer's V and phi measures were included for the latter purpose.

The statistical measures are based on the chi-square statistic, which is a two-tailed test of significance. For this reason, the directional nature of associations is not revealed by an examination of only the final test statistics. Hence, it was necessary to also display the contingency table produced by each crosstabulation so that inspection would show how the variables were associated. Inspection was made easier by computing the row and column percentages for the frequency value of each cell of a table, thus allowing comparisons of percentage differences between all columns of any row category, and similarly between all rows of any column category. Percentage differences are a simple measure which conveys the concept of association by emphasizing any differences in the categories of one variable in their proportion of various categories of the second variable. The disadvantage of the percentage difference is that by itself, it cannot test the level of significance of observed differences.
2. Logic of the Quantitative Analysis Phase

It was desirable to evaluate the core hypotheses before seeking other associations which would suggest new hypotheses. To accomplish this, the list of variables was first divided into several groups. There were four primary independent variables (BANKDIST-A, BANKDIST-B, REGION, REMOTNES), each of which involved important hypotheses when crosstabulated with certain dependent variables. As well, there were six secondary independent variables (TYPORG, CORPAFLN, EMPLOYMT, PRELDIVN, SITEHQ, RESIPRIN), and each of these variables measured specific characteristics of the firm which could cause differences between cases with respect to financing experiences. There was a larger third group of variables which could be described as financial experiences, and these were the dependent variables.

The main hypotheses are tested when the primary variables are crosstabulated with selected variables from the financial experiences. The secondary independent variables play an intermediate role, and are brought into the analysis after a primary and a dependent variable have been tested. The question is whether they intervene in the association between the other crosstabulated variables. If any secondary variable is not independent of the variables involved in a test, then the hypothesis becomes conditional upon the association of that secondary variable.
The secondary variable may be strongly associated with the primary variable. In the present survey, this could be called a 'sampling error' since the restricted number of cases meant that one could not test the influence of the secondary variable by holding it constant. In these cases, one could not discern between the two independent variables in any test involving a dependent variable.

The other type of intervention concerns situations where the secondary variable is associated with the dependent variable. Once again, the hypothesis relating the two other variables is not being tested according to the implicit assumption that all other things are equal. This latter type of interference is less serious in that only the one relationship with a dependent variable is placed in doubt, whereas in the situation outlined above, all relationships of the primary variable with dependent variables are uncertain. In either case, more data would be required to tell which factor actually was the significant causal force of the financial experience.

3. Interpretation of Statistical Results of Crosstabulations: Table 4.1

The results of the crosstabulations are summarized in Table 4.1 by means of the statistics described earlier. To use the table, one must remember that the hypothesis being tested is the hypothesis of "no differences", that
is, no association between the affected variables. If this test hypothesis can be rejected with a high confidence level (customarily taken to be .05 or less), then the alternative hypothesis of association is accepted. In preliminary research of the present sort, there seems to be no reason why the .05 significance level should be insisted upon, since a significance level of .10 or even .15 may indicate weaker associations which deserve further study. In Table 4.1, the level of significance is given by the topmost of the two groups of figures entered in each cell of the table. The bottom figure indicates the strength of the association.

The use of Table 4.1 is illustrated in the following example:

(1) Hypothesis (alternate): The further a businessman from an IDB branch office, the less likelihood that past loan discussions would have been held with them.

(2) Variables: independent (REMOTNES), dependent (Q17DIIDB).

(3) Test result significance = .95. The test hypothesis of no association (of past loan discussions with accessibility) is accepted (see row 26, column 4 of Table 4.1). Note that if association had been found, reference would have had to be made to the contingency table (not shown), to inspect the nature of the association.
(4) Check for intervening variables

(a) Association between test independent variable and other independent variables (sample error): inspect column 4, rows 1-10 (Table 4.1). This shows four associations (REGION, EMPLOYMT, FRELDIVN, SITEHQ).

(b) Association between test dependent variable and independent variables other than test variable: inspect row 26, which shows two intervening variables (TYPORGN, CORPAFLN).

(c) Conclusion: the hypothesis (Q17DIIDB, REMOTNES) was not strictly tested, due to the unknown influence of intervening variables.
Table 4.1  
LEVEL OF SIGNIFICANCE OF TEST HYPOTHESES, AND  
STRENGTH OF ASSOCIATION, FOR  
CROSSTABULATIONS OF  
SURVEY VARIABLES

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**KEY**

- The space following each numerical entry is coded to identify the test statistic:
  1) blank or " - Chi-square
  2) (2) - Cramer's V
  3) (2) - Phi
  4) (3) - Fisher's Exact Test
  5) nt - relation not tested

- More than 20 per cent of expected values were 5 or lower.

- For categorical variables with more than 20 per cent of expected values of 5 or lower, only one category was identified in the following cases:
  1) blank or " - Chi-square
  2) (2) - Cramer's V
  3) (2) - Phi
  4) (3) - Fisher's Exact Test
  5) nt - relation not tested
Table 4.1 (continued)

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4. Summary of Problems in the Quantitative Analysis

A check of whether minimum requirements of the chi-square test statistic had been violated showed that most of the tables should not be evaluated with the chi-square statistic, because of the rule that the expected cell frequency should not fall below 5 in more than 20 per cent of the cells. Most violations of the rule were gross (e.g.; 33 per cent or more cells affected), and for this reason the alternative of Yate's correction was not applied.

An alternative was to combine categories of the offending variables to reduce the number of cells with low expected frequencies. The number of variables which could have been collapsed without obscuring the meaning of remaining categories was limited (see Appendix A). Further, regarding those variables which could be collapsed slightly without a loss of meaning (EMPLOYMT, BANKDIST, REMOTNES), the effects on the level of generalization made this partial solution of dubious value.

A review of alternative tests of significance suitable for nominal data was unfruitful. The statistics applied appeared most suitable even though the problems associated with the smallness of the sample could not be overcome. The rigorous analysis could not proceed further. Parts of this analysis were very useful in the qualitative appraisal of the survey results, reported in the next section.
QUALITATIVE SURVEY FINDINGS

1. Introduction

The purpose of this section is to answer the central thesis questions:

(a) Are businessmen handicapped by distance when they search for finance for capital projects?

(b) Are the lending methods of financial institutions adversely affected by distance?

The evaluation was based on all of the information available. This information generally does not yield firm conclusions or proven relationships, however, it does provide insight on the above questions. As well, a description is given of the general economic environment affecting forestry, particularly the surveyed firms, and this discussion should place in perspective the relative merit of the thesis hypotheses.

2. General Results for Various Institutions

(a) Chartered banks

The businessmen interviewed without exception were familiar with loan policies of chartered banks, so there was no tendency for their knowledge to diminish with increasing distance from banks. However, the businessmen further away from bank branches showed a lesser tendency to approach a chartered bank when requiring a loan. On
the whole, 63 per cent of the respondents indicated that they used the most accessible bank branch, and both facts lend support to the friction of distance hypothesis.

Those businessmen who did not patronize the most accessible branch obviously did not consider distance as important as other factors. The reasons for their behavior are relevant.

Six businessmen (of sixteen) indicated that a significant reason for bypassing closer branches was that their relations at one branch had been established for a long period of time. If the branch routinely grants them a good character rating, the selection of banking point is justified in terms of the favorable treatment received. Another factor which this response brings up is that once relations are established, the passage of time permits an accumulation of knowledge, good will, etc., which overcomes distance problems.

Nine principals indicated that they chose a branch with high discretionary lending limits. These respondents believed therefore, that there were benefits from dealing with a branch having an experienced manager with higher levels of authority. Two others felt that their branch manager was more proficient than managers at other branches, and three respondents reported that because they dealt with a particular banking company, they could not utilize a closer branch without switching banks. Finally, six out of seven other reasons cited involved competition between banks: the patronized bank gave a more favorable
deal. In summary, the exceptional cases to the contention of a friction of distance in banking demand patterns can largely be rationalized in terms of theory presented in Chapter Two. Those cases dealing with competition accounted for most situations where large distances and many intervening branches were bypassed.

Over 46 per cent of the sampled firms had tried at least once to get a better loan deal by going to a second or third bank with the same proposal. The data indicated that the further the firm from the nearest branch, the greater was the propensity to attempt to switch (Table 4.2). This relation supports the hypothesis of a friction of distance of supply in banking.

Bank competition was notably influenced by activities of the Mercantile Bank. This bank caused some of the longer distances in relation to the patronized bank. In various respects, Mercantile differs from other Canadian banks. Although now largely Canadian-owned, it is affiliated with a large American bank which has vast international experience in business lending. As well, Mercantile does not exercise its right to take deposits, but instead raises money for loan disbursements by marketing large issues of securities in the capital market. This give the bank a lower proportion of short-term liabilities, an obviously important consideration in term-lending.
Table 4.2

CROSSTABULATION: WHETHER TWO BANKS WERE EVER APPROACHED WITH SAME LOAN PROPOSAL, VERSUS HIGHWAY MILEAGE TO NEAREST BRANCH BANK

| COUNT | BANKDIST-B | | | | | | | | | |
|-------|------------|---|---|---|---|---|---|---|---|
| ROW PCT | UP TO 4 MILES | 5 TO 24 | 25 TO 60 | TOTAL |
| COL PCT | | | | |
| TOT PCT | | | | |
| QUALCOMP APPROACHED 2 BK | 9 | 11 | 0 | 20 |
| | 33.3% | 73.3% | 0.0% | 46.5% |
| ONE BANK ONLY | 18 | 4 | 1 | 23 |
| | 66.7% | 26.7% | 100.0% | 53.5% |
| COLUMN TOTAL | 27 | 15 | 1 | 43 |
| | 62.8% | 34.9% | 2.3% | 100.0% |

CHI SQUARE = 7.09188 WITH 2 DEGREES OF FREEDOM
SIGNIFICANCE = 0.0288
CRAMER'S V = 0.40611
Indications were that Mercantile Bank was an aggressive competitor for medium-term loans. At the time of the study, this bank had only one office in British Columbia, and from this central location (Vancouver), a specialized team was dispatched to investigate investment proposals anywhere in the province. An implicit prediction of foregoing theory was that institutions of this type would have higher loan standards because of lower probability of shading risk through improved appraisals of character. This apparently was not the case, as is suggested by a paraphrasing of comments made by one of several subjects who mentioned dealing with Mercantile:

"The company had been dealing with ... [bank], but they were dragging their feet on the proposal. IDB had let seven or eight months go by without a yes or no answer. The firm approached Mercantile, who gave an answer within six weeks of the first contact. IDB wanted quite a bit by way of security, but they would likely had taken it if they hadn't been so slow."

Mercantile Bank was able to move quickly into totally new investment situations and to make loans which other institutions had avoided. Character assessments could not have played a significant role in their decisions. What is suggested, perhaps, is that when an institution knows what information is required to appraise an investment, it can move in, collect the information and make a positive decision without undue procrastination.

It seems reasonable that Mercantile would have charged a higher risk premium than other banks because in none of the cases surveyed was it a matter of choosing between offers from two banks — it was either take
Mercantile's offer or not expand. However, Mercantile did develop a market area encompassing the entire province and therefore operated in apparent contradiction of the thesis hypotheses.

The foregoing dealt with effects on market areas of banks caused by competition. On another scale, where distances involved were not as extreme, the differences in the credit-granting criteria of bank managers offer another explanation for variations in the attraction of particular branches.

Question 14 requested subjects who had negotiated loans with different bank managers to give an opinion on whether there were noticeable differences in the managers' criteria for extending credit. Overall, two-thirds of the subjects indicated they had perceived such differences, and there was little variation in these results over the various regions. The following paraphrase from an interview report was typical of many subjects' attitudes:

"He said he hasn't dealt with several branches of the same bank, but at his branch he sure has noticed a difference in the managers they put in every two years. He said one guy will be half-way reasonable, and then you get another guy who tightens it right up."

The author's uncertainty about businesses' knowledge of the operating environment of banks was dispelled during the survey. Surprising insight into factors affecting service from banks was encountered, as the following paraphrase demonstrates:
"The respondent said that the truckers he has working for him cannot seem to get a nickel out of his own bank at [____]. He felt that the problem was that the [two large corporations] community is 90 per cent [____]. These are very stable accounts and the manager does not really have to be very alert for the branch to show a profit. He will not take a chance on anything small like the loggers. What the respondent does is send them to [another community]. He said it is a little further to drive, but they are treated well, and usually get what they want. The [second] manager, at the same banking company, has a quite different set up; his branch has no single large account and he is sharp because he has to deal with hundreds of small accounts who are in all sorts of businesses. By contrast, the other manager has it easy, and won't put out much effort or interest."

In addition to recognizing the effect of the local business environment on branch operations, there was no mistaking some businessmen's awareness of differences in the personalities and business attitudes of managers:

"He said that even though the banking environment was the same for the various banks, you had to realize there was a world of difference in what the various men would do for you. Some guys will be very polite, fill out all the forms and ship the request away very efficiently, and when the answer comes back 'no', they will just explain this to the customer. Other guys would be pushing your case, bending this or that rule to try another approach, and will get the loan made even under the same regulations. He said that their banker was one of the pushers and shovers, and that if he were otherwise, they would change banks promptly. About ten years ago the manager of their bank, who was an older man, had questioned: 'Why do you want to expand more? You're big enough now.' He said: 'Bang, that was it for him!'"

The comments showed as well that there were differences in what was expected of their branch managers. One subject commented on the transfer of the former manager by noting the loss of financial advice which had been used by the company:
"The respondent commented that there is a terrible difference between managers. For years they had a manager whose name was [redacted], and he knew logging, sawmilling, the market for forest products, and also about financial matters which were out of the lumberman's scope. He was a good manager and they depended on his advice an awful lot. When they were wrong on something or other, he would tell them so, and why they were wrong. The respondent said that no matter how smart you are, and experienced in the lumber industry, there are times and occasions when you can start a bad project. At these times it helps to have a knowledgeable banker on hand. The present manager is not the same. He doesn't understand forestry, and whatever they say is okay with him. It is the same with the regional office, they will okay it as well. The financial advice they used to get just isn't there now, and they have to put up with the uncertainty."

Reliance upon good branch managers for financial advice was not common to all firms. For example, the financial director of one of the largest companies in the sample felt that people in the branches lacked understanding of the problems faced by large businesses, and it was better to deal with the banks' regional head-offices.

Perhaps the most consistent criticism of banks (and other institutions) came from the ranks of the logging companies in the sample. The loggers were uniformly critical of the degree of knowledge of their industry perceived to be held by nearly all branch bank managers. A particularly articulate account of the reasons for this attitude is revealed by the following segments of one interview report:

"He said he looks at it this way; in the beginning a logger starts off with some basic equipment, say $50,000 worth. He may not be an inexperienced man in logging, but he will not have credibility yet with financial institutions, large forestry companies, or other loggers. By credibility is meant that the operation is sound, run fairly efficiently and most of all, that the logger pays his bills on time and can be depended
upon to do so. After time goes by he might get bigger and will have established himself as an operator, but in the beginning he has to go to the higher cost money sources and pay on the order of 14-15 per cent for his capital.

If the logger can avoid a major pitfall, namely committing too large a portion of his earnings to equity payments, he might be able to survive the initial difficult expansion period. He said that time and time again he sees this happen, when a company commits itself heavily (for example, during good years), and doesn't survive the bumps that are ahead.

He said that the position of the logger improves considerably if he has established credibility as an operator, and can go to a financial institution with a solid contract which will ensure use of his equipment for five years or so. He said the contract has to be a sound one, with clauses built in which allow for the increased costs to the logger, and so on. With this contract and credibility, the banks will loosen up and give a better line of credit. However, he said you are never really safe. The matter of negotiating a contract is a tricky thing in itself. Well-established companies will sometimes go into situations where they really shouldn't have. The profitability of a logging show depends on a lot of different things: the geography of the site, slope, size of trees, cost of making roads, and so on. It is very difficult to judge all of these factors and some people aren't very good at it. From the viewpoint of banks and other financial institutions, the whole matter is completely in the dark, and they really don't know whether the deal is a reasonable one or a poor one. ... Sometimes, not knowing anything of the logging show it will involve, an institution will encourage capital investment on the basis of a contract, and if the show was less profitable than expected, the operator will be in trouble in due time. ...

He said that the banks are very hit-and-miss in their understanding of the logging business. He deals with [bank] at a main branch, where the manager is extremely knowledgeable about the logging business and knows the factors which can affect it."

The foregoing quotations illustrate an important relationship: the credit officer must have a high degree of knowledge on the industrial sector to be able to discern relevant information and to correctly interpret it. Distance considerations were only of secondary
consideration, provided the knowledgeable credit officer remained in the same general region.

The need for high knowledge is not particularly beneficial for growth of the logging industry, since relatively few credit managers are capable of providing an optimal balance between credit and restraint. Given inability to cope with the uncertainty, other managers would make more errors. These errors occur particularly in the direction of undue restraint, assuming that what was learned about the sources of financing for logging contractors is valid.

Before passing from banking, it is worthwhile to note that even though some competition was evident, several respondents were strongly critical of the degree of competition between banks in British Columbia. These opinions are important because of their recurring political expression. The following abstractions from one interview record illustrate the nature of these opinions:

"He felt that the bankers were going to have to change their method of operation. He said that at the Western Premiers' Conference the major issue was that bankers were going to have to pay more attention to the west, or other banks were going to have to come in. He said that these things probably contribute to the easing of the situation for the west. ... He said that is the situation we have. It was exactly the same way in early California.... The businessmen in the west had to deal with banks centered in the east, and the situation was found to be unsatisfactory. Over time, another institution grew up which satisfied people in the west...."
He said that in his mind there was no doubt that banking was too centralized in the east, and the good people who are able to make decisions are soon sent down there as well. He felt that the bankers did not take one step on this side of the Rockies unless they really had to, and much preferred to invest in the east, closer to the central locations, where investments are probably easier to keep an eye on. He said the banks have to get more people who can make decisions and put them in the west. He said it is ridiculous that your loan application should have to be sent all the way to... [a large eastern city] for consideration. He said that just a couple of years ago this was the case for a credit of $75,000. He said that amount is nothing.

It would be difficult to evaluate the hypothesis of there being broad regional investment preferences of chartered banks. There are differences in the underlying regional economies, and varying levels of investment by banks could be related to uncertainty of investment in higher risk industries concentrated in particular regions. The present study could not evaluate banking patterns at such a broad scale of generalization.

(b) Industrial Development Bank

An active and sometimes controversial supplier of medium and long-term credit, this government-sponsored institution supplements credit available from banks and other sources. The degree of accessibility offered by their limited number of branch offices is supplemented by periodic promotional visits of representatives to smaller outlying communities.
1) Friction of distance of demand

The contention that a friction of distance would affect potential customers of this institution was assessed by several different questions. First, Question 17 dealt with knowledge of the loan policies of IDB. While there was a degree of ignorance (16.3 per cent of the cases neither knew where the IDB offices might be nor had read the loan literature), this did not vary with distance from IDB branch offices. Surprisingly, the independent business firms were consistently less aware of IDB. With regard to regional variation of knowledge of IDB, there was markedly less interest in IDB displayed by the firms located in the Lower Mainland and Fraser Valley region. This difference may have been due in part to the greater satisfaction these firms received from their relations with other sectors of the capital market located in Vancouver.

Another method of measuring the friction of distance of demand was to see whether or not the propensity to approach IDB for loans was related to distance from the nearest IDB branch office. The data showed no relationship between these factors.

2) Friction of distance of supply

The contention that distance would affect the IDB in granting loans was assessed in Question 23. Table 4.3 shows the findings with respect to these two factors.
## Table 4.3

CROSSTABULATION: OUTCOME OF APPROACH TO INDUSTRIAL DEVELOPMENT BANK (IDB) FOR A LOAN ON MOST RECENT EXPANSION PROJECT, VERSUS DISTANCE TO NEAREST IDB OFFICE

<table>
<thead>
<tr>
<th>ROW PCT</th>
<th>REMOTNES</th>
<th>1 TO 10</th>
<th>11 - 100</th>
<th>101-250</th>
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<tr>
<td>TOT PCT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q23IDB SATISFACTORY LOAN</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>75.0</td>
<td>50.0</td>
<td>50.0</td>
<td>60.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOAN REFUSED</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>0.0</td>
<td>25.0</td>
<td>0.0</td>
<td>10.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNSATISFACTORY OFFER</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>25.0</td>
<td>25.0</td>
<td>50.0</td>
<td>30.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLUMN TOTAL</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>40.0</td>
<td>40.0</td>
<td>20.0</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CHI SQUARE = 2.08333 WITH 4 DEGREES OF FREEDOM
SIGNIFICANCE = 0.7204
CRAMER'S V = 0.32275

NUMBER OF MISSING OBSERVATIONS = 33
There was not a large enough sample to draw firm conclusions, but no association seems evident. Certain explanations of this finding arose from comments of subjects.

Firstly, IDB was said to have high standards in granting loans, and therefore would be unlikely to shade risk because of confidence in the principals, and so on. It is significant that only 60 per cent of those approaching IDB obtained a satisfactory term loan, compared to 93 per cent for chartered banks.

A second factor mitigating the influence of distance was that the institution takes considerable time to evaluate new applications. Over periods as long as those encountered (up to fourteen months), it is unlikely that many factors, local or otherwise, could have been overlooked. Moreover, IDB also apparently co-operates extensively with chartered banks, who could supply local information, thus further breaking down any friction of distance.

In conclusion, the Industrial Development Bank did not seem to be significantly affected by accessibility considerations. Granted, it is a government-sponsored institution specifically charged with responsibility to eliminate credit gaps, spatial or otherwise. Furthermore, it has a policy of sending travelling representatives to small communities, and while effective in reducing demand-based friction, the scale of this latter practice possibly would be viewed as uneconomical by private
financial institutions.

(c) Roynat Ltd.

There were Roynat branch offices in only two of the regional centers (Vancouver, Prince George), therefore the available distance measures did not accurately reflect the distance of each firm from a Roynat office. In the place of distance measures, variations in credit are discussed with respect to general differences between regions.

Firstly, with respect to friction of distance of demand, knowledge of Roynat's loan policy showed some association to region. In all three sub-questions on this matter (Question 17), the Kootenay region showed a low degree of awareness of Roynat, and the Prince George region showed high awareness. Unexpectedly, Lower Mainland and Fraser Valley firms did not exhibit much interest in Roynat, despite the fact that a main branch is located in Vancouver (see Table 4.4). The situation was similar to that for IDB, where firms accessible to Vancouver showed less interest.

Apart from the exception for Vancouver, Table 4.4 suggests that if there are no permanent branches of an institution anywhere in the general region, the friction of distance of demand will be more apparent. Occasional visits are made to larger outlying centers by Roynat officials, and this may explain why some outlying firms had held discussions with the institution.
The question of whether propensity to approach Roynat varied with accessibility could not be strictly evaluated, since so few firms had demonstrated contact. More loosely evaluated, there seemed to be some relationship to accessibility, since all of the firms recently approaching Roynat in the sample were from the Prince George region, where a branch is located.

The second question was whether there was a friction of distance affecting the supply of Roynat loans. The data would not permit any evaluation, since only three firms had approached Roynat. Only one of these firms obtained a satisfactory loan. It should be noted, however, that Roynat's involvement in the forest industry was more extensive than these few contacts illustrate. Principals of a number of other firms mentioned obtaining Roynat loans in periods prior to that reviewed in the questionnaire. The author gained the impression that Roynat operated throughout the Province in granting loans, but was quite selective in its investments.

(d) Commercial Finance Companies

Finance companies were not quite as dispersed over the province as chartered banks. However, in addition to the branch offices in various regional centers, equipment dealers usually have arrangements with a finance company, giving most businessmen access to at least one institution of this type.
Table 4.4
CROSSTABULATION: WHETHER FIRM HAD AT ANY TIME DISCUSSED BUSINESS LOANS WITH OFFICIALS OF ROYNAT LTD. VERSUS REGIONAL CENTER CLOSEST TO THE FIRM

<table>
<thead>
<tr>
<th>Q17D1SRN</th>
<th>CRANBR'K</th>
<th>KELOWNA</th>
<th>PRINGEO</th>
<th>VANC'VR</th>
<th>VICT</th>
<th>ROW TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COUNT</td>
<td>ROW PCT</td>
<td>COL PCT</td>
<td>TOT PCT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES</td>
<td>1</td>
<td>14.3</td>
<td>28.6</td>
<td>41.7</td>
<td>18.2</td>
<td>0.0</td>
</tr>
<tr>
<td>NO</td>
<td>6</td>
<td>85.7</td>
<td>71.4</td>
<td>58.3</td>
<td>81.8</td>
<td>100</td>
</tr>
</tbody>
</table>

| COLUMN TOTAL | 16.3 | 16.3 | 27.9 | 25.6 | 14.0 | 100.0 |

CHI SQUARE = 4.88230 WITH 2 DEGREES OF FREEDOM
SIGNIFICANCE = 0.3215
CRAMER'S V = 0.32999
The relevant question was whether firms remote from other institutions tended to deal more with finance companies because of their (hypothesized) unsatisfactory relations with lower cost term lenders.

The data on awareness of finance companies' loan policies showed that, as hypothesized, businessmen further away from chartered banks were more informed about finance companies. The same was true for businessmen further away from Industrial Development Bank. However, in neither case was the association strong enough to be statistically significant.

Sampled firms who were less accessible to chartered banks also demonstrated somewhat greater propensity to approach finance companies on their latest project, as Table 4.5 shows. The hypothesis was not supported with respect to accessibility to the Industrial Development Bank, however.

To supplement the data for the current situation, the survey also probed the extent to which firms had historically financed capital goods through vendor-associated finance companies. For both chartered banks and the IDB, the results slightly supported the contention that remote firms would deal more with finance companies.

To review, there was some support for the contention that remote borrowers are more constrained to use finance companies. The probable reason greater support was not found was that a number of subjects
Table 4.5
CROSSTABULATION: WHETHER FIRM APPROACHED A FINANCE COMPANY FOR A LOAN ON LATEST EXPANSION PROJECT VERSUS HIGHWAY MILEAGE TO NEAREST CHARTERED BANK BRANCH

<table>
<thead>
<tr>
<th></th>
<th>BANKDIST-B</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UP TO 4 MILES</td>
<td>5 TO 24</td>
<td>25 TO 60</td>
<td>ROW TOTAL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COUNT</td>
<td>ROW PCT</td>
<td>COL PCT</td>
<td>TOT PCT</td>
<td></td>
</tr>
<tr>
<td>CONTACFC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES</td>
<td>1</td>
<td>5.6</td>
<td>46.2</td>
<td>0.0</td>
<td>7</td>
</tr>
<tr>
<td>NO</td>
<td>17</td>
<td>94.4</td>
<td>53.8</td>
<td>100.0</td>
<td>25</td>
</tr>
<tr>
<td>COLUMN TOTAL</td>
<td>18</td>
<td>56.3</td>
<td>40.6</td>
<td>3.1</td>
<td>32</td>
</tr>
</tbody>
</table>

CHI SQUARE = 7.56903 WITH 2 DEGREES OF FREEDOM
SIGNIFICANCE = 0.0227
CRAMER'S V = 0.48635
NUMBER OF MISSING OBSERVATIONS = 11
suggested that dealing with a finance company was sometimes preferable to dealing with a lower cost loan source.

"He said that the difference between a bank and a finance company was, first of all, the cost of the loan is higher from 'a commercial bank' [finance company], but the chartered banks tend to tie up all of your machinery for security just to finance one new machine. The finance companies never do that. The only way around the problem, he supposed, was to have very good relations with the bank." 18

The foregoing suggests that the strategic benefit from dealing with a finance company may outweigh the higher costs. With so many unexpected downturns in the industry, when things do go bad, the company doesn't lose all of its assets, only those currently financed. Other respondents were pleased with the low degree of interference by finance companies in management affairs of the borrower:

"He said that the situation with the finance companies was different in some ways. As long as you make the payments, they never bother you. The banks, on the other hand, will occasionally step in and request you to take some action or another." 19

"He said that he would never go to a bank for a term loan . . . because banks are by nature a short-term lender. Their liabilities and deposits are short-term and their loans have to be as well. He said that if there was one criticism he were to make of banks, it would be that in times of easy money they will encourage you to make a term loan. However, in a year or two, when money is tight, they will be watching over your shoulder, reminding you and worrying about the loan, even though they do not take the drastic step of calling it in . . . He said it is better to relieve yourself of this pressure by dealing with a term-loan lender. Roynat and the finance companies, IAC, say, do not bother you with changes in credit conditions or anything like that. As long as you meet the payments and loan obligations you are your own boss." 20

Other respondents suggested that high interest rates did not concern them too much because these were business
expenses for income tax purposes.

In the final analysis, though, only 28.6 per cent of the firms approaching a finance company for a recent loan were satisfied with the outcome. This was the lowest ratio for the various types of institutions, and one would infer that finance company loans are not preferred by most businessmen.

(e) Alternative Sources of Finance

The objective of Question 28 was to discover whether firms inaccessible to low-cost lenders had placed greater reliance upon alternatives. The results were inconclusive. There was a tendency for firms further from chartered banks to use contractors, but a decreasing tendency for them to use leasing.

A second measure of accessibility was given by distance to IDB offices. Here there was less reliance on contractors with increasing remoteness, contrary to the hypothesis. Similarly, there was a lower reliance on leasing with increasing distance. The above findings are explained partly by the fact that the more remote firms on average were smaller. They would be less likely to make efficient use of contractors or leased equipment, regardless of accessibility.

3. Overview of Forest Industry Changes

Previous sections of this chapter presented some of the detailed thesis findings. Because the approach
was to examine results of particular questions, these sections as a whole did not provide an overview of the broad forces which have shaped the forest industry. Yet, such an overview is necessary, particularly to evaluate finance problems in the context of other significant factors which are unique to the forest industry.

By the late 1960's, the B.C. forest industry had lost the expansive drive which had characterized its development for over two decades. The trend does not appear to be temporary. The primary cause of slower growth was that the industry had reached the limits of its raw materials. It could not continue harvesting timber at an increasing rate without facing absolute future decline. In recognition that forest reserves were becoming depleted, the forest service instituted a system of sustained yield cutting rights allocation in the 1960's.

The provincial regulations ensured that in aggregate, the industry would be able to operate at given level of activity for an indefinite period of time. One of the side-effects of this policy was that larger, expanding firms became more interested in purchasing smaller saw mills or logging operations, etc., solely for the purpose of acquiring more timber rights. In the mid-1960's, a number of pulp mills were built, creating additional demand for wood fibres particularly in the form of sawmill/planermill byproducts, i.e., sawdust and woodchips. When the pulp mills attempted to secure
adequate wood supplies, another wave of takeovers of smaller mills was set off, once again to secure more cutting rights. During this period, hundreds of small mills literally disappeared. One respondent noted that in the Kootenay region alone, over 60 mills closed during the last decade.

Most of the mills which were bought were simply closed down and the log supplies directed to large forest industry complexes in central locations. This led to a loss of jobs, since the larger mills required far fewer employees for the same production level. It also meant that small outlying communities lost much of their basic industry. In one instance, a respondent pointed out where two mills were bought by a giant forestry firm, then closed out and consolidated into a complex in a larger community. The respondent said there was a net loss of some 100 jobs, and businesses in the small community were soon closing their doors.

Around 1970, provincial regulations were passed which disallowed unconditional private transfer of timber rights. Upon sale or cessation of a company, timber rights would henceforth revert to the crown. In addition, principals wishing to sell their company were required to seek prior approval of the minister. In practice, these regulations meant that the forest service would not approve takeovers if jobs would be lost. It is not surprising that these regulations drastically stemmed the takeovers of small mills. Existing owners could not
guarantee that their timber allotment would be available, and as one principal put it, "without timber supplies, the mill is just a bag filled with hot air."

The government regulations had the desired effect of stopping the decline of forest industry employment through centralization. However, they did not stop all sales of smaller firms and transfers of the timber rights. The author encountered a few cases in various regions where a Canadian owner had recently sold out and the new owners had secured adequate timber leases from the province. Particularly where foreign capital was involved (usually Japanese or American), the mill would be recapitalized (with help of Canadian financial institutions), modernized, and its production considerably stepped up. The result was an increase in employment and a boost to the economy of various medium-sized communities. The production increase was possible apparently because in the forest districts involved, the annual harvest had not yet equalled the allowable cut. Expansion is still taking place, but within more closely prescribed limits than in earlier periods.

There was a significant variation in the forestry environment over the various regions of the province. In the Kootenays, for example, several firms noted that expansion was difficult because they were already at their maximum allowable cut. The more severe limitations of the resource in the Kootenays possibly explains the smaller interest of private financial institutions in the region.
In place of the private intermediaries, it was found that public financial institutions were strongly represented. The federal Department of Regional Economic Expansion (DREE), IDB, and even the local credit unions were very active in lending to forestry firms.

In the Kootenays, there tended to be more financing extended within the industry as well. For example, contract truck loggers were often accommodated by advances from the sawmill company, rather than a financial intermediary. An extreme local shortage of truck loggers had been precipitated by the International Woodworkers Association's initiation of a 40 hour week for employees, and sawmills were forced to replace former operator employees by private contractors to avoid heavy overtime wage payments. The shortage of contractors was alleviated by some mills literally starting up contracting businesses for former employees, and this close relationship has persisted.

The continued viability of the small mills in the Kootenay region, in the face of a limited resource base, is probably explained by the greater accessibility to the U.S. market than is the case for mills in the north central interior.

In the Okanagan region, the limited timber resources were also a major constraint for small mills. Slumps in the market for sawn lumber was a serious concern as well. Over a six month period, the price fell 40 per cent then gradually regained 30 per cent. Under these conditions,
the goodwill of the forest service is seen as important by the principals of small companies. For fear that the province may believe the company does not require its allocated timber, layoffs of men (caused by poor market conditions) are accomplished gradually and without publicity. On the contrary, when a mill is adding another shift, the whole crew is hired at once and the local media contacted, etc., to ensure that the forest service gets the message.

The Okanagan region has strong ties to Vancouver. Equipment parts and other supplies are usually more readily available directly from Vancouver than from the nearest regional center.

Many small firms in the Okanagan region have developed sidelines in product specialties which insulate them from the severe fluctuations in the market for housing construction materials. For example, firms may have contracts to supply railroad ties, mine timbers, wooden boxes, crates, pallets or other products. These contracts allow the small firms to survive the severe demand fluctuations which force many others out of business. Unfortunately, while such contracts permit survival, they are a source of additional financing demand. The large companies whom they supply typically pay the accounts 90 days after receipt of goods. In the interim, the small mill must finance payrolls, etc. through a financial institution. This procedure marginally increases the finance available to the railroads, canneries, etc.,
at the expense of the small entrepreneurs.

Prince George is the hub of the North Central Interior Region, but it was also found that this region has close ties to Vancouver (for e.g., daily jet airplane services link the two centers). The forest reserves are being pushed quite far back, and Prince George has lost its frontier image. While still dependent upon forestry, tertiary employment is becoming significant.

The forest industry in the North Central Interior is very dependent upon the United States' housing market (approximately 95 per cent of their lumber products), and is therefore subject to all of the imponderable fluctuations of U.S. monetary and housing policies and general economic conditions. The pricing system for lumber is FOB (at point of delivery). Mills must absorb the transportation costs, essentially, and this puts the North Central Interior at a disadvantage. Long distances must be overcome by rail and the freight rates are always subject to increase. The only costs which can be affected by management decisions are production costs. The profit squeeze has made the northern mills vocal opponents of provincial stumpage fee increases, and they were found to be very hard-nosed with their contractors compared to mills in other regions.

In the Lower Mainland and Fraser Valley Region, the search for timber resources had been intense. One principal reported spending evenings and weekends over a ten year period, looking up ownership records for
alienated lands and contacting the owners for possible sale of their timber. Many firms buy the logs from lumber brokers, out of the water. Although they must pay premium prices, these companies fare reasonable well. Often, they serve the offshore market and are immune to short-term U.S. price fluctuations. Also, when serving the U.S. market, their option of using cheaper water shipment gives them cost advantages over interior mills in serving western markets.

Even the smaller firms located in the Lower Mainland Region were generally well-established and showed little interest in IDB or Roynat, for example. The chartered banks appeared to give them wholly satisfactory treatment. Various respondents said that there were bank loans officers in the Vancouver area who were extremely competent in forest industry lending, an obviously important consideration.

On Vancouver Island, dominance of large corporations was apparent, and very few independent medium-sized mills remain. Foreign capital has been used to purchase and recapitalize some small but viable operations, and domestic capital has been involved in others. The ease of collecting logs and shipping the finished products by tidal waters explains much of the attractiveness of Vancouver Island production sites. In addition, the forests are very productive on the Island even on a sustained yield basis.
Coastal logging operations were found to be generally inaccessible by car. Many operations are reached only by float-plane, tugboat or radio. Their head-office functions are performed either at their home or accountant's office, which would be located in an urban center. Many respondents said that they had as many contacts directly with Vancouver as with the smaller urban centers located on the Island. As it had in all other regions, Vancouver dominated all other centers as the hub of communications and travel patterns.

SUMMARY

The field work results have been described in this chapter. Much of the insight acquired was the result of discussions with respondents rather than analysis of the questionnaires. The results did not support the hypotheses as strongly as had been anticipated. The review of survey findings was placed in the context of the economic and political environment of the forest industry. The wide perspective of forestry helped to moderate expectations concerning the real growth potential of smaller forestry firms, taking into consideration all of the external forces which are beyond the control of any small firm's management. The uniqueness of the forest industry environment discouraged the author from attempting to generalize the survey results to other industries.

Next, Chapter Five reviews and summarizes the entire thesis.
REFERENCES

1 A listing of the names of these variables together with their marginal frequencies is given in Appendix A.

2 In three exceptional questions (nos. 9, 19, 26), each respondent could have correctly selected more than one appropriate response. It was not foreseen that this design would prevent the application of statistical analysis to these questions. The problem arose because of the stipulation that the number of observations in a contingency table (see reference 7, below) must equal the number of cases in the sample. Thusly, observations had to be independent, and would not be if one case were to count as two observations (see also Appendix B). These types of questions are useful in maintaining rapport with interview subjects however, since responses can be more closely tailored to actual situations.


4 Of course, with interval level data, the degree and direction of association (then termed correlation) can be much more neatly summarized in terms of plus or minus correlation coefficients. In the present case, use of plus or minus figures would be often misleading.


6 A more complete description of these statistics and their present use is given in Appendix B.

7 A contingency table is defined as a joint frequency distribution of two variables showing the simultaneous position of cases on the subgroups of these variables.

8 These variables were independent by definition. That is, they were deduced to be influential upon financing experiences of companies on the basis of overall knowledge of the situation. However, the relationships were still somewhat uncertain, and the design only went as far as including these external factors in the analysis. To evaluate these "hypotheses", more study is required.
It was desirable to sample according to a haphazard quota basis so that the marginal frequencies of the categories of any independent variable would be roughly equal. This even distribution was to make later statistical measures of association more suitable to the small sample. Effort was made to apply this to only a few of the independent variables (REGION, REMOTNES, EMPLOYMT), where for example, the number of firms from each region was to be roughly equal. Given limited resources and difficult conditions, this form of quota sampling was not successfully applied and many independent variables therefore have uneven marginal distributions (see Appendix A). The term "sampling error" was used to describe the situations where inadvertent associations between independent variables appeared because of sampling; for example, if all large firms came from one region. The influence of each variable can not be separated in other associations because of the smallness of the sample. Further, data collected from any quota sampling frame should not be employed to make inferences regarding the actual frequency distributions of the independent variables in the universe population, because these distributions were selected at the sampling stage. (In proper quota sampling, marginal frequencies of the sample are made equal to the marginal frequencies of the universe population, so there data must be available from other sources.)

Paraphrased comments taken from report of Interview #15.

Paraphrased comments taken from report of Interview #34.

Paraphrased comments taken from report of Interview #13.

Paraphrased comments taken from report of Interview #43.

Paraphrased comments taken from report of Interview #49.

Paraphrased comments taken from report of Interview #11.

Paraphrased comments taken from report of Interview #51.

Paraphrased comments taken from report of Interview #49.

These persons possibly were dubious that approaching the institution would be of any use. The reputation of IDB amongst the principals of forest companies who were surveyed seemed to have been that the institution had fairly high standards for granting loans.
Paraphrased comments taken from report of Interview #47.

Paraphrased comments taken from report of Interview #50.

Paraphrased comments taken from report of Interview #30.
Chapter 5

SUMMARY

The purpose of the thesis was to find out whether there are spatial variations in the availability of business expansion loans from financial institutions. The relationship between finance and accessibility, if valid, would help to explain differing regional growth patterns.

Chapter One introduced the problem in general terms, and placed the study in the context of economic development literature. Regional economists have debated the effects of space on finance, but the literature reviewed mostly involved use of deductive constructs and opinions to resolve the issue, rather than field study. Accordingly, the thesis was designed to bring as much field information as possible to bear on the topic.

The financial system is so pervasive in terms of participants and functions that analysis had to focus on a small part of it. Financial intermediaries such as banks achieve efficiency in collecting savings and allocating these funds amongst highest and best uses of borrowers. The profit incentive encourages private financial institutions to fully dispense their funds, to lend at competitive rates ensuring a fair return, and to avoid losses on poor investments. Because of their
importance in the flow of funds, the lending policies and the loan officers of financial intermediaries ultimately bear heavy responsibility for the forms in which economic growth takes place. Governments closely regulate the finance industry. They also direct additional funds into publicly-owned lending institutions to eliminate credit gaps for borrowers not adequately served by private intermediaries. The thesis was concerned only with public and private lending institutions, and the flows of funds into business through brokerage institutions or private investment of savings were excluded from the terms of reference.

Lending institutions have market areas from which customers are drawn. The author theorized that two sets of forces result in the market area phenomenon: firstly, a friction of distance affects the loan demand of borrowers, particularly smaller firms, and constrains their credit search to the most accessible institutions; secondly, distance affects the decision-making ability of the institution on whether to supply any loan requested.

The distribution of financial institutions in the system of central places is uneven, with less of a range and fewer of each type of institution in successively smaller places. Consequently, it was felt that economic activities further from metropolitan areas would be more likely to experience slow growth due to insufficient capital. Therefore, a general model was formulated which could be evaluated by field information.
Chapter Two fleshed out the simple model, and introduced various qualifying relationships which could also affect business lending. These relationships were abstracted from the literature or discussions with people experienced with finance.

Not much interest in the Canadian financial system had previously been expressed by geographers. Exceptions included Kerr,¹ who had viewed the financial industry as a component of urban growth processes, but was mostly concerned with the primary (head-office) functions of financial districts in metropolitan centers. Similarly, Code had studied longitudinal trends in the spatial evolution of high-level decision-making, in terms of broad underlying factors as the need for financial intelligence, and the communications technology.² Code's work was the first substantive effort to describe the geography of finance in Canada, and was the first to point out that information and information transfer mechanisms are crucial factors in the effect of space on the supply of funds. The author disagreed with Code primarily with respect to emphasis on the difficulty of collecting relevant information on borrowing businesses, and it was felt that Code over-simplified the task of collecting on-site information.

From interviews and published descriptions of the internal administration of lending institutions, other relationships were inferred which could explain why a businessman went to an institution other than the most
accessible one. From the answers to questions on these factors, the relative importance of distance to the demand for finance could be evaluated. The considerations included knowledge and previous experience, lending on weight of character, loyalty to particular institutions or individuals, and competition between institutions.

Chapter Three explains the methods of data collection. Basically, interviews were conducted of a sample of about 50 principals of smaller forest industry companies. The sample was collected over wide regions of the province. The field information was recorded on standard questionnaires and separate interview report sheets.

Chapter Four presents the findings of the field survey. In the first section, an explanation is given of the quantitative methods for analyzing the questionnaires. Statistical evaluation was not possible because of the large number of variables and the limited sample size.

Although the results were not statistically significant, interesting patterns emerged. There was some evidence of a friction of distance affecting demand for bank loans, and some evidence that there was a friction of distance of supply as well. For example, businessmen further from chartered banks were more prone to switch banks for better deals, they tended to know more about higher cost alternatives (finance companies), and also tended to approach finance companies for loans more often. In addition, they tended to finance equipment
through dealers more often and they also tended to use contractors more often than firms who were less remote from banks.

While distance is a factor, it is evidently not of primary importance judging from the reasons found for not patronizing the most accessible bank branch. In the final analysis, a businessman is interested in getting the capital he requires, and to achieve this result distances the breadth of the province were travelled by borrowers (and lenders) to close a loan. Notably though, most of the longer distances involved aggressive lending institutions. Time and again it was found that the most important factor of all was whether a credit officer was competent in evaluating the forest industry. Knowledgeable loans officers are apparently sought out over considerable distances for their interpretative and decision-making skills.

The Industrial Development Bank apparently was not affected by distance. No significant tendency for businessmen's demands for IDB loans to vary with distance was perceived, nor a tendency for the supply of loans to have spatial variations. The institution was active in regions avoided by private institutions and although few investments were made during the study period, a number of respondents reported past loans from IDB. Insofar as elimination of spatial credit gaps is concerned, the field survey found no criticism of IDB's effectiveness.
However, a number of unsolicited complaints were received regarding IDB's willingness to either undertake risk, not interfere with management, or to process applications within a reasonable time. The author has no basis for speculating on the validity of these complaints, but the criticism did indicate a gap between performance and what businessmen had expected.

Roynat Ltd. is a private term-lending institution included in the study to ascertain how well an institution with limited access (only two branch offices) would overcome effects of distance on lending. Demand for Roynat loans varied with accessibility, it was found. The effect of distance on supply of Roynat Loans could not be evaluated. The institution seemed to evaluate investment proposals without delay and had made a number of widely distributed investments in the forest industry.

Generally, the results supported the hypothesis that businessmen would tend to utilize the most accessible institutions. Yet, rather than a compelling force, accessibility was only a light constraint. Many businessmen willingly decided to absorb the higher costs and efforts of looking further afield for adequate capital.

The author had hypothesized that financial institutions would be adversely affected by distance in their lending operations, since they require information to reduce the uncertainty of loan repayment. The results did not support this hypothesis to a significant extent. One factor which seemed to over-ride accessibility was
whether loans officers were competent and able to make decisions even when circumstances were unusual or complex. All of the evidence from respondents suggested that if the individual loans officer recognized key factors regarding forest industry success, distance did not unduly hinder a loan appraisal. Competence was a very personnel-specific factor which all but ruled out friction of distance in lending, provided that the capable loans officer remained in the general region of the borrowing company.

Although outlying firms were generally smaller, access to financial institutions was not a convincing explanation of variation in economic growth. Rather than absence of growth, the study found that more inaccessible firms had different patterns of capital financing. For example, more reliance was placed upon contractors to provide capital equipment, finance was extended through the industry and public agencies or institutions such as IDB, credit unions and the federal Department of Regional Economic Expansion were more involved. In the absence of the public institutions, more significant variations in regional economic growth would have been found.

The British Columbia forest industry has undergone major structural changes in the past decade. Although the study was conducted during a relative upswing when domestic and foreign markets were strong, there was not the potential for rapid expansion which typified preceding years. Many small firms had disappeared, and their
place taken by large well-financed corporations. It would have been interesting to study patterns of forest industry finance prior to the early 1960's, while there were still many small firms struggling to grow larger.

The author can see value in further research, particularly historical research perhaps using as primary data sources retired principals of small forest industry companies. Another aspect which could bear further study are channels of communication. The present study relied upon distance in the sense of highway mileage, which actually only poorly measured the concept of ease of information transfer. In addition, over 90 per cent of the sampled firms were within 25 miles of a branch of a chartered bank. The data collected has limitations with respect to the actual inaccessibility of the sample and different results might have been obtained if more off-highway samples were obtained.

The research suggested that competence of loans personnel was more important than accessibility. Therefore, any future research should, firstly, measure competence; and secondly, trace the constantly shifting locations of key personnel. If certain locations seldom had competent personnel while others always did, there may be spatial stability in financing patterns over time.

The conclusions of the present study may not apply for all industrial sectors or regions of Canada. It is likely that different results would be obtained in other
countries with less developed systems of financial institutions, particularly those which are government-sponsored.
REFERENCES


BIBLIOGRAPHY

1. Economic Development, Forest Industry


2. Banking and Finance


3. Statistics and Analytical Techniques


APPENDIX A

LISTING OF VARIABLE & CATEGORY NAMES, SHOWING MARGINAL FREQUENCIES
<table>
<thead>
<tr>
<th># of Cases</th>
<th>Variable/Category Name (short)</th>
<th>Extended Label</th>
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<tbody>
<tr>
<td>1 43</td>
<td>TYPORGN</td>
<td>GENERAL TYPE OF BUSINESS ORGANIZATION</td>
</tr>
<tr>
<td>3</td>
<td>Prop' or Partner</td>
<td>Proprietorship or partnership</td>
</tr>
<tr>
<td>35</td>
<td>Closehold corp'n</td>
<td>Corporation, less than 10 shareholders</td>
</tr>
<tr>
<td>5</td>
<td>Wideheld corp'n</td>
<td>Corporation, more than 10 shareholders</td>
</tr>
<tr>
<td>2 43</td>
<td>CORPAFLN</td>
<td>AFFILIATIONS WITH OTHER COMPANIES</td>
</tr>
<tr>
<td>23</td>
<td>Independent</td>
<td>No affiliations</td>
</tr>
<tr>
<td>10</td>
<td>Has subsidi-iy</td>
<td>Has at least one subsidiary company</td>
</tr>
<tr>
<td>8</td>
<td>Is a subsidiary</td>
<td>As stated.</td>
</tr>
<tr>
<td>2</td>
<td>Both of preced'g</td>
<td>Both is a subsidiary and has its own</td>
</tr>
<tr>
<td>3 43</td>
<td>EMPLOYMT</td>
<td>SCALE OF PEAK EMPLOYMENT</td>
</tr>
<tr>
<td>4</td>
<td>0-25</td>
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</tr>
<tr>
<td>15</td>
<td>26-75</td>
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</tr>
<tr>
<td>9</td>
<td>76-150</td>
<td>As stated.</td>
</tr>
<tr>
<td>7</td>
<td>151-300</td>
<td>As stated.</td>
</tr>
<tr>
<td>5</td>
<td>301-500</td>
<td>As stated.</td>
</tr>
<tr>
<td>3</td>
<td>over 500</td>
<td>As stated.</td>
</tr>
<tr>
<td>4 43</td>
<td>PRELDIVN</td>
<td>WHETHER FIRM CONSISTS OF ONE OR MORE DIVISIONS</td>
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<tr>
<td>27</td>
<td>More than one</td>
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</tr>
<tr>
<td>16</td>
<td>Only one div'n</td>
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</tr>
<tr>
<td>4 43</td>
<td>NODIVNS</td>
<td>NUMBER OF DIVISIONS</td>
</tr>
<tr>
<td>4 27</td>
<td>INTEGRTN</td>
<td>INTEGRATION OF MULTIPLE DIVISION FIRMS</td>
</tr>
<tr>
<td>12</td>
<td>Vertical</td>
<td>Divisions were vertically-integrated</td>
</tr>
<tr>
<td>13</td>
<td>Horizontal</td>
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</tr>
<tr>
<td>2</td>
<td>Both</td>
<td>Both of above</td>
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*These questions could not be included in the quantitative analysis, hence they have no variable number.
### Questionnaire

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<tr>
<td>5 43</td>
<td>SITEHQ</td>
<td>RELATIVE LOCATION OF COMPANY HEAD OFFICE</td>
</tr>
<tr>
<td></td>
<td>Near prod’tn</td>
<td>Office close to production site</td>
</tr>
<tr>
<td></td>
<td>Separated fns</td>
<td>Office spatially removed from production site</td>
</tr>
<tr>
<td>6 43</td>
<td>RESIPRIN</td>
<td>RESIDENTIAL LOCATION OF PRINCIPALS</td>
</tr>
<tr>
<td></td>
<td>Vicinity</td>
<td>Vicinity defined as within commuting distance</td>
</tr>
<tr>
<td></td>
<td>Not in vicinity</td>
<td>As stated.</td>
</tr>
<tr>
<td>6 7</td>
<td>LOCABSTE</td>
<td>LOCATION OF ABSENTEE PRINCIPALS</td>
</tr>
<tr>
<td>7 43</td>
<td>BANKDIST-A</td>
<td>HIGHWAY MILEAGE TO COMPANY'S BANK</td>
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<td></td>
<td>Up to 4 miles</td>
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</tr>
<tr>
<td></td>
<td>5-24 miles</td>
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</tr>
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<td>25-60 miles</td>
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</tr>
<tr>
<td></td>
<td>over 60 miles</td>
<td>As stated.</td>
</tr>
<tr>
<td>8 43</td>
<td>CLOSBANK</td>
<td>ARE OTHER BANKS CLOSER?</td>
</tr>
<tr>
<td></td>
<td>Not optimal</td>
<td>Yes, patronized branch is not closest</td>
</tr>
<tr>
<td></td>
<td>Most accessible</td>
<td>No others are closer</td>
</tr>
<tr>
<td>9 43</td>
<td>CHOICBNK</td>
<td>REASONS FOR USING LESS ACCESSIBLE BANK</td>
</tr>
<tr>
<td></td>
<td>Conven't to ex'</td>
<td>Branch convenient to commuting executive</td>
</tr>
<tr>
<td></td>
<td>Long relation</td>
<td>Relationship of long standing</td>
</tr>
<tr>
<td></td>
<td>Large branch</td>
<td>Large branch with higher lending limit</td>
</tr>
<tr>
<td></td>
<td>Good manager</td>
<td>Good branch manager</td>
</tr>
<tr>
<td></td>
<td>Nearest of patr'</td>
<td>Closest branch of the patronized bank</td>
</tr>
<tr>
<td></td>
<td>Other reasons</td>
<td>Other reasons for selection</td>
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<td>REMOTNES</td>
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<td>11-100 miles</td>
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<td>Q17LOCFC</td>
<td>17</td>
<td>AWARE OF LOCATION OF FINANCE COMPANY</td>
<td>40</td>
<td></td>
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<td>Q17LITFC</td>
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<td>READ LOAN LITERATURE OF FINANCE COMPANY</td>
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<td>Q17DISFC</td>
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<td>DISCUSSED A LOAN WITH FINANCE COMPANY</td>
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<tr>
<td>21</td>
<td>Q17LOCORN</td>
<td>27</td>
<td>AWARE OF LOCATION OF ANY ROYNAT OFFICE</td>
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</tr>
<tr>
<td>22</td>
<td>Q17LITRN</td>
<td>23</td>
<td>READ LOAN LITERATURE OF ROYNAT LTD.</td>
<td>8</td>
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<tr>
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<td>Q17DISRNN</td>
<td>10</td>
<td>DISCUSSED A LOAN WITH ROYNAT OFFICERS</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Q17LOIDB</td>
<td>36</td>
<td>AWARE OF LOCATION OF ANY IDB BRANCH</td>
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<td></td>
</tr>
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<td>Q17LIIDB</td>
<td>36</td>
<td>READ LOAN LITERATURE OF IDB</td>
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<td>Q17LOCCB</td>
<td>AWARE OF LOCATION OF CHARTERED BANK</td>
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<tr>
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<tr>
<td>EXPNSION</td>
<td>ANY EXPANSIONS PLANNED IN LAST TWO YEARS?</td>
<td>30</td>
</tr>
<tr>
<td>PLANNING</td>
<td>REASONS FOR DROPPING ANY PLANS?</td>
<td>*</td>
</tr>
<tr>
<td>TESTPLAN</td>
<td>ANY PLANS TO LEVEL OF PLANNING FINANCE</td>
<td>31</td>
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<table>
<thead>
<tr>
<th># of Cases</th>
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APPENDIX A: (continued)

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APPENDIX A: (continued)

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<td>Q23ROYNT</td>
<td>RESULTS OF APPROACH TO ROYNAT?</td>
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<td>1 Loan refused</td>
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<tr>
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<td></td>
<td></td>
<td>1 Unsatis. offer</td>
<td>As stated.</td>
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<td>Q23FINCO</td>
<td>RESULTS OF APPROACH TO FINANCE COMPANY</td>
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<td>2 Satisfactory</td>
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<td>1 Loan refused</td>
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<td></td>
<td>4 Unsatis. offer</td>
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<td>Q23OTHER</td>
<td>RESULTS OF APPROACH TO OTHER SOURCE?</td>
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<tr>
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<td>24</td>
<td>REASONS</td>
<td>REASONS WHY THE LOAN OFFER WAS UNSATISFACTORY</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>5 High cost</td>
<td>High cost of the loan Full amount requested not forthcoming</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1 Insufficient</td>
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<tr>
<td></td>
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<td>25</td>
<td>ACCPTUNS</td>
<td>DID FIRM ACCEPT THE UNSATISFACTORY OFFER?</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1 Yes</td>
<td>As stated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 No</td>
<td>As stated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26</td>
<td>PLANCHGE</td>
<td>DID ANY CHANGES IN PLANS RESULT? *</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 Scaled down</td>
<td>The project continued on smaller scale</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 Supplemented</td>
<td>The offered amount was supplemented by other funds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27</td>
<td>POSTPONE</td>
<td>WHAT FINALLY RESULTED FROM DIFFICULTY?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 Other finance</td>
<td>Approached another financial institution successfully</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 No borrowing</td>
<td>Went ahead without borrowed funds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28</td>
<td>BONDSHAR</td>
<td>HAS FIRM SOLD BONDS OR SHARES TO THE PUBLIC?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 Yes</td>
<td>As stated.</td>
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<tr>
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<td></td>
<td></td>
<td>40 No</td>
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### APPENDIX A: (continued)

**Questionnaire**

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<th># of Cases</th>
<th>Variable/Category Name (short)</th>
<th>Extended Label</th>
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<td>CONTRMAT</td>
<td>USE OF CONTRACTORS &amp; OWNERSHIP OF RAW MATERIALS</td>
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<tr>
<td>21</td>
<td>Cont.-firm's</td>
<td>Contractors prepare raw materials owned by the firm</td>
</tr>
<tr>
<td>2</td>
<td>Cont- not firm's</td>
<td>Contractors prepare raw materials not owned by the firm</td>
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<td>3</td>
<td>Both</td>
<td>Both of above</td>
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<tr>
<td>16</td>
<td>No contractors</td>
<td>Ownership of materials not stated</td>
</tr>
<tr>
<td>28 42</td>
<td>CONTEQUP</td>
<td>NATURE OF CONTRACTORS' EQUIPMENT</td>
</tr>
<tr>
<td>0</td>
<td>Only processing</td>
<td>Falling, etc. of trees</td>
</tr>
<tr>
<td>6</td>
<td>Transportation</td>
<td>Skidding, yarding, loading, trucking or water transport</td>
</tr>
<tr>
<td>20</td>
<td>Both</td>
<td>Both of above categories</td>
</tr>
<tr>
<td>16</td>
<td>No contractors</td>
<td>As stated.</td>
</tr>
<tr>
<td>28 42</td>
<td>VENDFIN</td>
<td>ARE PURCHASES FINANCED THROUGH VENDOR</td>
</tr>
<tr>
<td>12</td>
<td>Rarely used</td>
<td>As stated.</td>
</tr>
<tr>
<td>6</td>
<td>Often</td>
<td>As stated.</td>
</tr>
<tr>
<td>24</td>
<td>Not used</td>
<td>As stated.</td>
</tr>
<tr>
<td>28 42</td>
<td>LEASED</td>
<td>DOES FIRM LEASE EQUIPMENT?</td>
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<tr>
<td>14</td>
<td>Rarely lease</td>
<td>As stated.</td>
</tr>
<tr>
<td>7</td>
<td>Often</td>
<td>As stated.</td>
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<td>21</td>
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<tr>
<td>28 42</td>
<td>MERGERS</td>
<td>ANY Mergers in Firm's History?</td>
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<td>Yes</td>
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<tr>
<td>41</td>
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</table>
APPENDIX B

DESCRIPTION OF STATISTICS EMPLOYED IN QUANTITATIVE ANALYSIS
The following statistics were a subroutine option of CROSSTABS, given directly in the output together with the contingency table from which the values were calculated.

1. Chi-square- This statistic tests the independence or lack of statistical association between variables. When specified in CROSSTABS, the statistic is presented along with the more useful level of significance (shown as a decimal percentage, e.g. .08). The significance figure indicates the probability of having a distribution as different from statistical independence by chance alone as the observed distribution. The data upon which it is proposed to use the chi-square statistic must fulfill certain requirements:

a. The total number of observations in the contingency table must equal the number of cases in the sample, and cases must be independent. One may not, for example, let one case count as one observation in more than one category of any variable.

b. The chi-square test is properly used only if fewer than 20 per cent of the cells in the contingency table have an expected frequency of less than 5, and no cell has an expected frequency of less than 1. (The expected frequency of any cell equals the product of the corresponding row and column totals, divided by the total number of cases in the contingency table.)
The subroutine automatically substituted the Fisher's exact test statistic in the case of 2 x 2 tables where the number of cases was less than 21. In all other 2 x 2 tables, Yate's corrected chi-square was employed whenever necessary. The correction consists of either adding or subtracting 0.5 in each cell before computing chi-square, and is used when the expected values of one or more cells are too low. The correction can be applied to tables larger than 2 x 2 only if not more than 20 per cent of the expected cell frequencies are 5 or less, as was stipulated above. Finally, because chi-square measures test for lack of association, but do not indicate the degree of association, it was desirable to also compute another statistical measure which would do so.

2. Cramer's V, phi- Phi is used in the case of 2 x 2 contingency tables to correct chi-square for the fact that its value is proportional to the total number of cases. Phi ranges in value from 0, where there is no association, to 1, when perfect association exists. Cramer's V is applied to all tables greater than 2 x 2 (where phi has no upper bound), and has the same range and interpretation of values as phi. These measures satisfy the need for a statistic indicating the strength of the associations.
APPENDIX C

LETTER OF TRANSMITTAL
Dear Sir:

Your co-operation is needed for a student project. An interview is sought with a company representative who bears responsibility in the area of financial management and has represented the firm in contacts with financial institutions.

Research is being conducted on the interaction of a wide sample of forest industry companies with various financial institutions. The point-of-view is to search for relationships between physical accessibility and differences in financing experiences. The study is the subject of a Master of Arts thesis in economic geography being undertaken at the University of British Columbia.

While the questions that will be asked will not require any research, such as into financial records, the questions do call for private opinions and recollections of company experiences that are confidential. Considerable planning has been undertaken to ensure that the identity of respondent companies will not be discernable in the interview record nor the final thesis document. In keeping with a policy of closely inspecting all public surveys to be conducted under its auspices, the university administration has assessed the preparation of this study, and unqualified approval has been given by President Gage's office.

Supporting funds and thesis guidance are being provided by the Department of Geography. Thesis advisors are:

Dr. Robert N. North  
Department of Geography  
U.B.C. Vancouver

Dr. Kenneth G. Denike  
Department of Geography  
U.B.C. Vancouver

I am very hopeful that you will see fit to support this project and be able to spare a half-hour for the interview. I will be in your area the week of and will call for an appointment during that time.

Yours sincerely,

Allan R. Newell, BA
APPENDIX D

QUESTIONNAIRE
Section 1: CHARACTERISTICS OF THE FIRM

1. What is the general type of business organization of your firm?
   - sole proprietorship
   - partnership
   - corporation, with:
     - less than 10 shareholders
     - more than 10 shareholders

2. What affiliations does the firm have with other companies?
   - none, the firm is independent
   - the firm has one or more subsidiary company
   - the firm is the subsidiary of another company

3. What is the general scale of company employment during months of peak operation? (# of full-time employees)
   - 0 - 25
   - 26 - 75
   - 76 - 150
   - 151 - 500
   - over 500

4. Does the firm maintain more than one permanently located division? (A division is defined to be a production operation which functions as a unit, but which is not incorporated separately.)
   - no
   - yes, please specify how many divisions [ ], and whether:
     - divisions are vertically-integrated (products flow between them for processing)
     - divisions are horizontally-integrated (no product flow between divisions)

5. Is the head-office location shared by any major production operation of the firm?
   - no
   - yes

6. What is the general residential location of the principals*?
   - residence in vicinity of head-office
   - residence elsewhere
   - If resident in: Canada...specify city
     - USA...specify state
     - other...specify country

*Definition of principals:
  1. small and medium companies- owners and key financial employees
  2. larger, public companies- director of finance, other executive officers and directors

The above question will be used to evaluate whether some firms in remote locations are in fact supported by principals who maintain high personal access with larger urban centers, thus giving their firms greater access to financial institutions than would otherwise be the case.
Section 2: EXPERIENCES WITH CHARTERED BANKS

7. Could you estimate the distance between the company's headquarters and the branch of the chartered bank which handles the company's banking affairs?
   □ □ miles by highway (rounded off to the nearest 5 miles)

8. Are there other branches of any chartered bank located appreciably closer to the firm than the branch specified above?
   □ no (PLEASE OMIT QUESTION 9)
   □ yes (PLEASE ANSWER QUESTION 9)

9. What are the reasons for using the chosen branch, given the alternative chartered bank branches which are closer? (indicate all applicable answers)
   □ the branch being patronized is quite convenient, considering normal business travel routes of the executives of the firm
   □ the banking relationship of the firm was established many years ago and it is not worthwhile to sever this relationship in order to gain a more convenient banking point
   □ the chosen branch is one of the largest branches in the area and the branch manager has considerable authority in his organization
   □ the manager of the patronized bank is an active and capable man to deal with, compared to other bank managers in the area or that one has known
   □ a standing policy of the firm is to deal with a particular chartered bank and the branch currently patronized is the closest branch of their organization
   □ other reasons (please specify): ...

10. Has your firm, to your knowledge, ever approached a second bank with the same loan proposal after receiving an unsatisfactory loan offer from the firm's usual bank?
    □ no (PLEASE OMIT QUESTION 11)
    □ yes (PLEASE ANSWER QUESTION 11)

11. Where it was possible to consider loan offers from two bank organizations for the same lending situation, were there significant differences in their offers, considering such aspects as term, maximum principal, required security, interest charges, or other factors?
    □ no, differences between offers were not significant
    □ yes, the offers were clearly different

12. Are you one of the persons who are qualified to represent your firm in negotiations for business loans from banks or other financial institutions?
    □ no (PLEASE PROCEED TO QUESTION 13, OMITTING INTERVENING QUESTIONS)
    □ yes (PLEASE ANSWER QUESTION 13)

13. Have you represented the firm in business loan negotiations with different branch managers of the same banking organization?
    □ no (PLEASE OMIT QUESTION 14)
    □ yes (PLEASE ANSWER QUESTION 14)

14. In your opinion, were there noticeable differences in the way these managers viewed lending situations, such that one man would grant the loan under a certain set of conditions that would not have been acceptable to another manager?
    □ yes, such differences were noticed
    □ no, any differences between managers' lending criteria were not that pronounced
    □ no opinion, can not recall similar loan situations that were put forward to different managers
    □ no opinion, comparable loan proposals were made to different managers, but not at times when the external monetary conditions (which affect tightness of credit) were similar
Section 3: REGIONAL AREA ANI REMOTENESS

15. Specify the regional center which is closest to the firm's headquarters:

☐ Cranbrook  ☐ Kelowna  ☐ Vancouver
☐ Grande Prairie  ☐ Prince George  ☐ Victoria

16. What is the highway mileage from company headquarters to the selected regional center? ___ miles (please round off to the nearest 10 miles, for security-of-identity purposes)

NOTE: Because of the possibility that a too small number of firms may fall into each distance classification, detailed data from the above question (16) may not be published. However, the information is quite essential for a spatial analysis of the returns, and a general description in the summary will point out any differences in financing patterns between the different regions.

Section 4: ATTENTION GIVEN TO FINANCIAL INSTITUTIONS

17. The respondent is requested to indicate his general knowledge of the following institutions which grant medium-term loans. While the question is not meant to require any research, the respondent is urged to include knowledge that he has himself or knows to be possessed by his executive colleagues in the firm.

Institution                                  Are aware of the location of an office or a representative, from advertisements, etc. Have read their literature, pamphlets regarding general facts on loan policy and conditions. Have discussed the topic of term loans with an officer of the institution and know what to expect.

any Commercial Finance Company                ☐ Yes ☐ No  ☐ Yes ☐ No  ☐ Yes ☐ No
Roynat Ltd.                                 ☐ ☐ ☐ ☐ ☐ ☐ ☐
Industrial Development Bank                 ☐ ☐ ☐ ☐ ☐ ☐ ☐
any Chartered Bank                           ☐ ☐ ☐ ☐ ☐ ☐ ☐

Section 5: PLANNING FOR COMPANY EXPANSION

18. Did the firm formulate any plans for expansion of fixed assets during the past two years? (For the purposes of this questionnaire, consider expansion of fixed assets to include: major additions of new fixed assets to existing plant and equipment; and replacement purchases for obsolescent or fully depreciated assets, if the replacement has a significantly higher capacity.)

☐ no (PLEASE PROCEED TO QUESTION 28, OMITTING INTERVENING QUESTIONS)
☐ yes (PLEASE CONTINUE, WITH QUESTION 19)

19. To what level were the expansion plans of the previous two years actually carried?

☐ some plans were dropped before reaching the stage of seeking financing, because of:
  (specify reasons with respect to each major set of plans dropped)
  Plan number 1 2 3
  ☐ ☐ ☐ doubts of the feasibility of the project
  ☐ ☐ ☐ doubts that finance would be available
  ☐ ☐ ☐ other factors (please indicate below)
  Plan # 1:
  Plan # 2:
  Plan # 3:

☐ at least one plan was taken to the stage of active consideration and polling of some of the possible internal and external sources of financing
NOTE: If no plans reached the level of planning finances (question 19, last part), PLEASE PROCEED TO QUESTION 26, OMITTING INTERVENCING QUESTIONS. Otherwise, begin the questions below, and choose answers that apply to the latest set of plans for which financing was planned.

The format of the next set of questions has been designed to cope with the variety of financing experiences of all respondents, but only with respect to a single set of expansion plans for each respondent. In order to prevent confusion, the respondent is requested to be strictly conscientious in restricting his answers to those which apply only to the latest set of plans for which the details of financing were at least attempted to be arranged.

---

### Section 6: GENERAL FINANCING SOURCE

20. What general source of financing had been originally planned?

- [ ] wholly internal financing, through reserves of company earnings, borrowing from parent company, or further personal investment by the principals of the company (PLEASE PROCEED TO QUESTION 26, OMITTING INTERVENCING QUESTIONS)
- [ ] financing was to be at least in part supplied from external sources (PLEASE CONTINUE, WITH QUESTION 21)

21. Did the firm ever approach a financial institution for a loan in order to carry out the plan?

- [ ] no (please specify the general nature of the alternative):  
  
  (now, PLEASE PROCEED TO QUESTION 28, OMITTING ALL INTERVENCING QUESTIONS)
- [ ] yes (PLEASE CONTINUE, WITH QUESTION 22)

---

### Section 7: DIRECT CONTACT WITH FINANCIAL INSTITUTIONS

22. Please indicate all financial institutions which were approached for a loan regarding the last set of plans for which external financing was sought. (The survey has interest in any institution which was contacted, whether or not the loan proposal was fully explained to the loan officers, and regardless of whether or not a loan was later taken out from them.)

<table>
<thead>
<tr>
<th>any Chartered Bank</th>
<th>Industrial Development Bank</th>
<th>Royal Ltd.</th>
<th>any Commercial Finance Company</th>
<th>Other sources of term loans</th>
</tr>
</thead>
<tbody>
<tr>
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<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

23. In each case, what was the outcome of the approach to the institution?

<table>
<thead>
<tr>
<th>any Chartered Bank</th>
<th>Industrial Development Bank</th>
<th>Royal Ltd.</th>
<th>any Commercial Finance Company</th>
<th>Other sources of term loans</th>
</tr>
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<tbody>
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<td>☐</td>
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<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

A satisfactory loan resulted & the plan proceeded without modifications. (PLEASE PROCEED TO QUESTION 28 NOW)

The institution did not want to make the loan. (PLEASE PROCEED TO QUESTION 27 NOW)

The loan offer of the institution was somewhat unsatisfactory. (PLEASE CONTINUE, WITH QUESTION 24)

24. As indicated by the preceding question, an approach to an institution resulted in a loan offer that was unsatisfactory to your firm. The reasons for the dissatisfaction were:

- [ ] high cost of the loan
- [ ] some sacrifice of managerial control would have been involved
- [ ] the full amount requested would not be forthcoming
- [ ] loan collateral or security required was somewhat excessive
- [ ] other reasons (please specify):  

---
25. Did your firm accept the loan offer, although it was not completely satisfactory?
   - no (PLEASE PROCEED TO QUESTION 27)
   - yes (PLEASE CONTINUE, WITH QUESTION 26)

26. What changes in the plan occurred, that were solely due to the unsatisfactory financing arrangements?
   - no modifications to the original capital-allocation planning were necessary
   - original expenditure plans were scaled down
   - original scale of plans was kept, but economies were effected on the actual expenditures, by substitution of cheaper units, etc
   - the offered amount was taken, and the plans were carried out by combining the amount with some external alternative to financing directly through a financial institution. (for example, by leasing part of the needed equipment)
   - original scale of plans was maintained by taking the offered amount and applying a squeeze on the other internal capital allotments of the firm. Since then, what have been the effects of subsequent business conditions on the state of flexibility of the internal capital of the firm?
     - increased the squeeze
     - no change
     - alleviated the capital squeeze

NOTE: ALL RESPONDENTS ANSWERING QUESTION 26 SHOULD OMIT QUESTION 27

27. Given the difficulty in obtaining external financing, what course of action did the firm take regarding the plans which were being considered? (choose one option)
   - the firm approached another financial institution successfully (as expressed in Question 23)
   - postponed the plan for the time being
   - altered the approach to financing, and went ahead with the expansion plans without any external borrowing from a financial institution

Section 8: ALTERNATIVE MEANS OF EXPANSION

28. In this final question, all respondents are requested to check-off each of the following features that have been or are now characteristic of his firm. The information is necessary for an assessment of the prevalence of alternatives to the external financing of expenditure plans directly through a financial institution.
   - the firm has sold shares or bonds to the general public, investment underwriters, investment firms or others
   - your firm has contracted to other firms or individuals, a portion, or all of the work of supplying raw materials for production, where:
     - ownership of most or all of the raw materials is already vested in your firm, previous to the handling of these materials by contractors
     - ownership of most or all of the raw materials by your firm only arises after the materials have been handled by contractors
     - some processing of the materials by a contractor is required
     - transportation of the materials by a contractor is required
   - capital goods required for production, such as buildings, machinery or equipment; have been financed for medium-term periods through the vendor of the capital goods, rather than by a financial institution, and this arrangement occurs:
     - only rarely (relative to the other methods of financing preferred by the firm)
     - fairly often (for example, where the firm considers this avenue of financing for each major purchase)
   - capital goods required for production, such as buildings, machinery or equipment are sometimes leased or rented for medium or long-term periods:
     - only rarely (compared to purchasing the required goods)
     - fairly often (as when the company has a policy of leasing equipment whenever possible)
   - the firm has in the past merged with another firm that previously operated separately in the same general industry

END OF QUESTIONNNAIRE