ECONOMIC DEVELOPMENT: THE CASE FOR
PUBLIC FINANCING OF SMALL BUSINESSES

by

JEFFREY ALAN DAVISON

B.A., Hampshire College
(1978)

Submitted to the Department of
Urban Studies and Planning
In Partial Fulfillment of the
Requirements of the Degree of

MASTER OF CITY PLANNING

at

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

June 1983

© Jeffrey A. Davison 1983

The author hereby grants to M.I.T. permission to reproduce and
to distribute copies of this thesis document in whole or part.

Signature of Author:

Department of Urban Studies and Planning

May 1983

Certified by:

Belden H. Daniels, Thesis Supervisor

Accepted by:

Langley Keyes, Chairman, Urban Studies and Planning Departmental Committee

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

JUL 21 1983
TABLE OF CONTENTS

Abstract ................................................................. 1.

Acknowledgements ...................................................... 2.

Introduction ............................................................. 3.

   The Contribution to Employment ................................. 6.
   The Quality of Small Business Employment ................. 8.
   The Ability to Develop New Products ...................... 9.
   The Profitability of Small Businesses ................... 10.
   Conclusions ....................................................... 12.

II. Problems Small Businesses Experience Obtaining External Financing ........................................ 15.
    Market Efficiency, Completeness, and Perfection ........ 16.
    The Capital Structure of Small Businesses ............. 18.
    The Market for Publicly Traded Equity ................. 19.
    The Market for Privately Traded Equity ............ 27.
    The Market for Publicly Traded Debt ................. 30.
    The Market for Privately Traded Debt ............ 33.
    The Relative Importance of Supply and Demand Factors in Small Business Development ..................................... 41.
    Conclusions ....................................................... 42.

    Government Motivations for Promoting Small Business Development ..................................................... 51.
    Reducing the Cost of Capital vs. Improving Access to Capital Markets ........................................... 52.
    Conclusions ....................................................... 55.
IV. New York City's Economic Capital Corporation: An Example of a Public Sector Intermediary That Promotes Small Business Development with Capital Subsidies ........................................ 58.

   Objectives of Economic Development Corporation ... 60.

   Investment Selection Criteria of Economic Capital Corporation .......................... 62.

   The Loan Portfolio of Economic Capital Corporation ......................................... 67.

   The Use of Capital Subsidies to Offset Land Costs ........................................... 73.

   Private Sector Sources of Funds ................................................................. 75.

   The Measurement of Project Costs and Benefits .............................................. 76.

   Conclusions ......................................................................................... 80.

Bibliography .......................................................... 87.
ECONOMIC DEVELOPMENT: THE CASE FOR PUBLIC FINANCING OF SMALL BUSINESSES

by

JEFFREY A. DAVISON

ABSTRACT

This paper describes the problems that small businesses confront when they must obtain financing in the nation's capital markets and evaluates government sponsored financial intermediaries' attempts to promote small business development. Most government programs do not address the problems faced by businesses in the capital markets but use capital to influence the location decisions of individual firms by offering capital subsidies. State and local governments' motivations for adopting capital subsidy programs and the effectiveness of these programs is discussed. The choice between adopting a program that proposes to stimulate small business development by improving capital market function and a program that achieves the same objectives by offering capital subsidies is a difficult one. The advantages and disadvantages of each type of program are considered. In order to provide some insight into the operations issues involved in implementing a capital subsidy program, a study of New York City's Economic Capital Corporation is presented. This organization provides direct loans to small businesses at below market interest rates for the purpose of retaining and creating employment within New York City.

Thesis Supervisor: Belden H. Daniels
Acknowledgements:

This thesis could not have been written without the assistance of many people. Belden Daniels and Richard Schramm provided valuable criticism, suggestions and encouragement as thesis supervisors. Without their help, this project would not have been the demanding and rewarding experience it has proved to be. Sandy Kantor and Peter Jordan devoted considerable time to reading and editing the successive drafts of the thesis. Mel Margolies, Gary Kesner, Ann Dorfman, and Andy Gordon of the Economic Capital Corporation generously shared their thoughts about ECC and provided me with access to their files. Hopefully, this thesis will be useful to them in their future work at ECC. My family and friends also helped see me through the highs and lows encountered along the way. A special acknowledgment goes to Andi Pollinger who provided emotional and intellectual support throughout this project, and to whom this thesis is dedicated.
INTRODUCTION

Business leaders, advocates of social reform, economic development professionals and researchers from the academic community all have expressed interest in the potential social and economic benefits which might be created if government financial assistance were given to the small business sector. Those who support such assistance, however, are not united by a common purpose. Some proponents of small business development, for example, would like to stimulate new product development to improve the competitive position of the United States in the world economy, particularly in high technology industries. Others want to create networks of small, neighborhood-owned firms that produce goods and services for the local economy and provide jobs for local residents. A third group supports small business development in order to save existing jobs in basic industries, although the United States' comparative economic advantage in these industries is declining.

This paper describes the problems that small businesses confront when they must obtain financing in the nation's capital markets and evaluates government sponsored financial intermediaries' attempts to promote small business development. Most government programs do not address the problems faced by businesses in the capital markets but use capital to influence the location decisions of individual firms by offering capital subsidies. State and local governments'
motivations for adopting capital subsidy programs and the effectiveness of these programs is discussed. The choice between adopting a program that proposes to stimulate small business development by improving capital market function and a program that achieves the same objectives by offering capital subsidies is a difficult one. The advantages and disadvantages of each type of program are considered. In order to provide some insight into the operational issues involved in implementing a capital subsidy program, a study of New York City's Economic Capital Corporation is presented. This organization provides direct loans to small businesses at below market interest rates for the purpose of retaining and creating employment within New York City.

Chapter I summarizes the major arguments and counter-arguments regarding the importance of the small business sector for state and local economic development. Although the issues deserve detailed consideration, they are presented briefly to give the reader a general idea of the benefits that could be created through government intervention on behalf of the small business sector.

Chapter II examines difficulties that small businesses have obtaining funds in the capital markets. The problems encountered in each segment of the capital market are described; the discussion assumes that firms are willing to compensate investors with a return which is commensurate with the risks associated with a given project. The relative importance of
land, labor, capital, and the demand for goods and services is also discussed.

Chapter III describes state and local governments' motivations for promoting small business development as well as the problems that are involved in achieving this goal. The advantages and disadvantages of providing capital to improve market function and providing capital subsidies are discussed in the conclusion to this chapter.

Chapter IV describes Economic Capital Corporation's Revolving Loan Fund, a capital subsidy program that attempts to counteract the market system's allocation of economic activity by financing small manufacturing firms in New York City. The chapter provides a summary of the structural changes that have occurred in New York City's economy during the post-war era and the impact these changes have had on local employment. The objectives, investment selection criteria, and approved loan portfolio of Economic Capital Corporation are then discussed.
CHAPTER I

THE SMALL BUSINESS SECTOR’S ROLE IN ECONOMIC DEVELOPMENT

The role of the small business sector in the larger economy must be understood in order to evaluate the potential benefits of public financing of small businesses. This chapter summarizes the evidence currently available regarding the small business sector's contribution to job creation, new product development and its ability to operate profitably. Although these issues deserve detailed consideration, they are presented briefly to provide the reader with a context for viewing the benefits which could result from government intervention in support of small business.

The Small Business Sector's Contribution to Employment

Proponents of small business development programs frequently cite the need for new employment as a justification for government assistance. David Birch, using Dun and Bradstreet credit data, concluded that between 1969 and 1976, 66% of the new jobs in the United States were created in firms with fewer than twenty employees. The small business sector's contribution to new job creation, Birch argues, is disproportionately high since it employs only 33% of the private sector workforce. Birch's study has been influential, but the extent to which his findings can be generalized is unclear. The study identifies which firms experienced rapid employment growth but does not explain why small firms generated more
jobs than large firms. Birch speculates that the small business sector may have been favored by secular changes in the national economy. The events responsible for this change and the permanence of the situation, however, are not explored by Birch. For example, the business cycle's influence on the small business sector is unknown as is the corporate sector's influence on the small business sector. Birch's study represents the first step in an analysis needed to understand the small business sector's function in the national economy.

A more recent study of job creation in the small business sector has been conducted by the Brookings Institution and the Department of Labor. The study claims that between 1978 and 1980 approximately 37% of all new employment occurred in small firms. This percentage is closer to the small business sector's contribution to total new employment (33%) and well below the employment creation levels found by Birch. There are two possible explanations for the difference in findings: 1) although both researchers used Dun and Bradstreet credit data, the Brookings study defined a firm as an independent corporate entity while Birch defined a firm as a discreet operating entity irrespective of corporate affiliation; 2) the studies do not examine the same time period. Macroeconomic events beyond the scope of either study may influence employment trends in the small business sector in different ways at different times.

If the Brookings and Birch methodologies were applied to the Dun and Bradstreet data over the same time period,
the influence that the business cycle and research methodology have on the findings may be better understood. It is impossible to compare the results of the two studies given current knowledge. The major limitation of both studies is their emphasis on describing employment without formulating hypotheses which attempt to explain the small business sector's significance in creating new employment.

Although the number of jobs created, or the reasons why most new jobs seem to be created in the small business sector is unknown, approximately 33% of the private sector workforce is employed by small firms. The small business sector's contribution to the economy is therefore significant and as such, should be considered explicitly in the formulation of economic policy.

The Quality of Small Business Employment

An evaluation of the potential benefits of small business development includes an examination of the quality of employment provided by the small business sector. Some have argued that small business employment is synonymous with low quality employment; small firms often rely on old or obsolete equipment that increases occupational hazards for employees. The willingness and ability of marginally profitable firms to comply with costly safety regulations may be limited. For these reasons, the small business sector may not be the most appropriate recipient of major efforts to promote economic development. Wages, health care benefits, and pensions offered by
small firms are also not as generous as those offered by large corporations. Although no one's employment is entirely secure, the frequent liquidation of small firms provides little job security.\textsuperscript{9,10}

The Small Business Sector's Ability to Develop New Products

The recent proliferation of small, technologically oriented manufacturing, trade, and service firms has been hailed as the beginning of an employment growth trend.\textsuperscript{11} These industries typically export goods and services to national and world markets, generating a flow of income to the areas where such industries are located that benefits local economies.

Small firms have been able to exploit growing markets in high technology industries for a variety of reasons. In some cases, larger firms delay their entry into new product areas although they have the technological capability to do so.\textsuperscript{12} The complex organizational structure of large firms may reduce their ability to exploit quickly changing markets for goods and services; there appears to be some relationship between firm size and willingness to innovate.\textsuperscript{13} Those who wish to provide assistance for small firms claim that employment will be created and products which are competitive in national and world markets will be developed. Support for small businesses that are net exporters deserves consideration although state and local governments probably will have very little leverage over the location decisions of such firms as they mature.
is likely that high technology firms will either increase capital spending as they mature or move overseas to reduce labor costs. Digital Equipment Corporation illustrates this trend; it has located most of its new production facilities overseas.\textsuperscript{14}

State and local governments should be prepared to lose some of the benefits associated with small business development in high technology industry over the long term. As firms become less dependent on their immediate surroundings for product markets and supply factors, their ability to move operations to less costly locations increases.

The Profitability of the Small Business Sector

Since small businesses experience some difficulty obtaining financial capital, it is important to determine whether small businesses are profitable enough to attract funds from the capital markets. In the only empirical work completed regarding the aggregate profitability of the small business sector, Daniels and Kieschnick used Federal Trade Commission data to explore the relationship between firm asset size and rate of return on equity.\textsuperscript{15} The researchers found that as a class, firms with less than $1,000,000 in assets have a return on equity which is comparable to that of firms with more than $1 billion in assets.\textsuperscript{16} The study concludes that the small business sector is as profitable as the corporate sector and that increased capital market investment in the small business sector is justifiable. However, after tax return on equity may not illustrate the relative profitability of small and
large firms. Book value of firm assets is not necessarily a guide to the market value of a firm's assets since it is based on historic rather than market values; arbitrarily chosen depreciation allowances and leasing arrangements also reduce the book value of a firm's assets. The asset data studied by Daniels and Kieschnick may not represent the profitability of the small business sector accurately due to arbitrary accounting procedures. Unfortunately, the after tax cash flows described in financial statements do not necessarily represent the cash available to a firm. Non-cash charges such as depreciation allowances and investment tax credits reduce book profits, and therefore reduce book return on equity. Firms which depreciate their asset base rapidly also arbitrarily reduce their book return on equity. Since large firms usually have more fixed assets than small firms, the return on equity for large firms may be higher than the data indicate. Finally, in focusing on return on equity, the study does not account for the return of all capital invested in firms, eliminating the debtholders' return on investment. Highly leveraged firms have more debt capital than equity capital. The smaller the equity contribution, the easier it is to obtain a high return on equity. Since small firms are typically more highly leveraged than large firms, the study's conclusion that small firms yield high returns on equity may be overly optimistic. Additional research is required to determine the relative profitability of the small business sector.
Conclusions

The small business sector plays a substantial role in the national and subnational economy; the labor force depends on the small business sector for a significant amount of employment and the sector is conducive to the development of new products and technologies. State and local government promotion of small business may result in the retention or creation of employment. These firms may not be competitive in world markets, but they are a significant source of employment nevertheless.

The evidence supporting small business development policy is qualified by conflicting evidence regarding how much new employment actually is created by small firms. Uncertainty surrounding the impact that the corporate sector and the business cycle have on the small business sector makes it difficult to predict how important small business will be in the nation's economic future. Small firms may create more new employment than the corporate sector, but the low quality of many of these jobs may make them less desirable. Nevertheless, selective governmental promotion of small business development deserves serious consideration.
FOOTNOTES

1. Birch's work is cited in Michael Kieschnick, Venture Capital and Urban Development; Derek Hansen, Banking and Small Business; and hearings before the House and Senate Subcommittees on Small Business

2. David L. Birch, The Job Generation Process, MIT Program on Neighborhood and Regional Change (Cambridge, Ma., 1979), 9

3. Catherine Armington and Marjorie Odle, "Sources of Job Growth: A New Look at Small Businesses' Role," Economic Development Commentary, Vol. 6, No. 3 (Fall, 1982), 4

4. David L. Birch and Susan MacCracken, Corporate Evolution: A Micro-Based Analysis, MIT Program on Neighborhood and Regional Change (Cambridge, Ma., 1981), 43; Kieschnick, Venture Capital, 17

5. Armington and Odle, "Sources of Job Growth"

6. Ibid., 4


8. Ibid., 14


11. Susan Saiter, "Everyone's Trying to Start the New 'Silicon Valley','" The New York Times (March 27, 1983) Section 12, p.6


16. Ibid., 80-87

CHAPTER II
PROBLEMS SMALL BUSINESSES EXPERIENCE WHEN OBTAINING CAPITAL

This chapter examines one factor which is critical to the success of small business development, financial capital, and describes the difficulties that small firms encounter when they attempt to secure financing in the nation's capital markets. Many other factors influence the prospects of small firms, and an analysis of their relative importance is needed to assess the effectiveness of government sponsored programs that either provide capital at market interest rates when it is otherwise unavailable or provide capital at subsidized interest rates. Therefore, this chapter concludes with a brief discussion of the importance of capital in the small business development process. Although little information about the capital needs of small business is available, the significance of small businesses' presence in the capital markets can be inferred from the wealth of data available about publicly and privately traded securities. The financial economics literature has focused primarily on the capital needs of large firms. It is not surprising, therefore, that the literature characterizes the capital markets as relatively efficient, complete and perfect. From the perspective of corporate financial managers, the capital markets function relatively well. Small firms unfortunately do not operate in the same financial environment as large corporations but the unique difficulties that small firms encounter in the capital markets need to be understood to develop small business
development tools. These problems are described through an analysis of the public and private equity and debt markets.

Market Efficiency, Completeness and Perfection: Some Definitions

Before proceeding with a discussion of capital markets, some explanation of terms is warranted. An efficient market provides adequate and accurate information as a basis for pricing financial assets; the price of financial assets therefore reflects the value of the real assets backing them. A complete capital market provides investors with a large number of potential financial instruments to buy and sell. A perfect market is defined as one with no trading costs, no tax distortions which influence the behavior of investors, no regulatory influences on investors, and no traders large enough to influence prices.

Financial economists discuss problems related to market efficiency in terms of the "efficient markets hypothesis;" three levels of market efficiency are postulated: weak, semi-strong, and strong. Proponents of the weak form of the hypothesis claim that all past information concerning a security is reflected in its price. The proponents of the semi-strong form claim that all past and current information publicly available to investors is reflected in security prices. Proponents of the strong form of the hypothesis argue that all past and current information available to insiders and the public is reflected in security prices.
There is some debate among economists about which form of the efficient markets hypothesis most accurately describes the level of efficiency found in capital markets.

The capital markets are considered relatively complete markets because investors supplying funds have an extended variety of securities to choose from. New forms of financial instruments are frequently created to satisfy unmet investor demand. The financial industry's continued development of new securities is indicative of the completeness of capital markets.

From the viewpoint of large corporations, the capital markets are relatively perfect even though tax and regulatory policy influences capital market function. Transactions costs usually do not prevent corporate issuers from raising funds; the fixed cost component of transactions costs is large, enabling large issuers to achieve economies of scale when obtaining capital. Consequently, transactions costs are not explored in the financial economics literature as an obstacle to obtaining capital.

The growing importance of large, institutional investors in capital markets has not been investigated extensively by financial economists but the preferences of large traders influence the types of firms able to obtain financial capital. Since large corporations are usually not affected adversely by the preferences of large investors, the growth of the institutional presence in the marketplace has not been viewed as a problem from the standpoint of the corporate sector.
For the most part, small businesses finance their operations with retained earnings, suppliers' credit, and privately placed debt obligations that are usually purchased by commercial banks. Few small firms have the liberty to choose from the variety of financial options available to large corporations, especially those in the publicly traded equity and debt markets. Since most small firms obtain external financing in the form of debt, they have no choice but to leverage themselves when undertaking expansions. High leverage increases the risk of default and investors require a premium to compensate for this increased risk. If more equity financing were available for small firms, the firm's leverage and financial risk could be reduced. Not only are small firms limited to privately placed debt, but the form that the debt takes may not match the life of the assets financed. The asset and liability structure of the banking industry often prohibits banks from purchasing long term debt. While large corporations can structure the maturity of a debt issue with considerable flexibility, small businesses cannot do so.

The lender that purchases the debt of a small firm is exposed to greater risk than the lender that purchases the debt of a well know creditor. Small firms are frequently poor collateral risks; these firms either have few tangible assets or their assets are already pledged as collateral to other lenders. Although small firms may be willing to provide
investors with a return commensurate with the risk of the debt, the variance in expected returns often discourages investment.  

The private equity market provides suppliers of funds with an alternative to the above problems, but the amount of funds invested in private equity is quite small compared with funds invested in other segments of the capital market. In addition, many small firms cannot provide the expected returns required by private equity investors. Given this brief overview of the problems faced by small firms in the capital markets, the problems encountered in each market segment are now examined in detail.

The Market for Publicly Traded Equity

The market for publicly traded equity is a significant source of funds for the corporate sector. (see table 2-1) This market provides investors with the opportunity to provide funds in return for a share of the future earnings of a firm. Equity holders are exposed to greater risk than bond holders, but are compensated for that risk with expected returns that are greater than those expected by bond holders. With the exception of preferred stock, equity contracts enable the firm to operate without the cash flow drain required by debt contracts. Equity financing is "patient money;" it provides expected returns commensurate with risk but eliminates the need to repay investors in regular installments from operating and non-operating sources of cash. Investment in product
development or expansion of a poorly collateralized firms is best accomplished with equity financing. Consequently, small firms could benefit from entry into the market for publicly traded equity.

**TABLE 2-1**

<table>
<thead>
<tr>
<th>Year</th>
<th>Publicly Traded Equity Issued (Millions of Dollars)</th>
<th>Total Debt and Equity Capital Raised (Millions of Dollars)</th>
<th>Publicly Traded Equity/Total Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>$26,349</td>
<td>$72,503</td>
<td>36%</td>
</tr>
<tr>
<td>1980</td>
<td>21,913</td>
<td>78,900</td>
<td>28</td>
</tr>
<tr>
<td>1979</td>
<td>10,546</td>
<td>53,086</td>
<td>20</td>
</tr>
<tr>
<td>1978</td>
<td>9,519</td>
<td>48,217</td>
<td>20</td>
</tr>
<tr>
<td>1977</td>
<td>9,978</td>
<td>53,925</td>
<td>19</td>
</tr>
<tr>
<td>1976</td>
<td>10,649</td>
<td>52,165</td>
<td>20</td>
</tr>
<tr>
<td>1975</td>
<td>10,266</td>
<td>52,536</td>
<td>20</td>
</tr>
<tr>
<td>1974</td>
<td>5,690</td>
<td>37,725</td>
<td>15</td>
</tr>
<tr>
<td>1973</td>
<td>10,006</td>
<td>31,681</td>
<td>32</td>
</tr>
<tr>
<td>1972</td>
<td>12,738</td>
<td>39,705</td>
<td>32</td>
</tr>
</tbody>
</table>

*Source: SEC Monthly Statistical Reviews, United States Securities and Exchange Commission (October, 1982)*

Small businesses require less capital at any one time relative to the needs of large corporations, making the transactions costs associated with publicly traded equity issues prohibitively expensive. Many of the professional fees incurred in such transactions are fixed costs. Therefore, small equity issuers cannot take advantage of the economies of scale associated with equity security issues. (see table 2-2)
TABLE 2-2

Cost of Issuing Publicly Traded Equity Securities Using Underwriters: 1971-1975

<table>
<thead>
<tr>
<th>Issue Size (Millions)</th>
<th>Cost As Percentage of Issue Proceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 0.5</td>
<td>--</td>
</tr>
<tr>
<td>0.5 to 0.99</td>
<td>13.74%</td>
</tr>
<tr>
<td>1.0 to 1.99</td>
<td>15.29</td>
</tr>
<tr>
<td>2.0 to 4.99</td>
<td>9.47</td>
</tr>
<tr>
<td>5.0 to 9.99</td>
<td>7.03</td>
</tr>
<tr>
<td>10.0 to 19.99</td>
<td>5.55</td>
</tr>
<tr>
<td>20.0 to 49.99</td>
<td>4.67</td>
</tr>
<tr>
<td>50.0 to 99.99</td>
<td>4.18</td>
</tr>
<tr>
<td>100.0 to 500.0</td>
<td>3.95</td>
</tr>
</tbody>
</table>


In addition, transactions costs for small firms have increased over time. If we assume that firms issuing publicly traded equity for the first time are small firms, (see table 2-3) documents the increased costs.
TABLE 2-3

Expenses Incurred In Firm Commitment Underwritings of First Time Issuers of Public Equities

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Offerings</th>
<th>Average Registration Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>24</td>
<td>$229,805</td>
</tr>
<tr>
<td>1977</td>
<td>19</td>
<td>188,368</td>
</tr>
<tr>
<td>1976</td>
<td>21</td>
<td>217,745</td>
</tr>
<tr>
<td>1975</td>
<td>5</td>
<td>253,000</td>
</tr>
<tr>
<td>1974</td>
<td>9</td>
<td>199,359</td>
</tr>
<tr>
<td>1973</td>
<td>89</td>
<td>116,817</td>
</tr>
<tr>
<td>1972</td>
<td>478</td>
<td>120,486</td>
</tr>
</tbody>
</table>


Securities and Exchange Commission regulatory policy attempts to insure uniform disclosure of information on registered exchanges to provide quality information which, in turn, maintains market efficiency. Publicly traded companies must therefore prepare audited financial statements and notify the Securities and Exchange Commission of any extraordinary events which may affect the value of the company. The information provided to the Securities and Exchange Commission is also available to the public at a minimal cost, insuring the free flow of information. Small firms wishing to raise capital in the publicly traded markets incur a hidden cost in producing information that meets the accounting standards enforced by the SEC. Small, privately held companies do not need to prepare audited financial statements and prefer to prepare examined, compiled, or reviewed statements to
reduce costs. As will be shown later, however, it is difficult and expensive to obtain information about investment opportunities in the markets for privately traded securities.

The small firms that are willing and able to pay for the issue of publicly traded equity face the additional problem of underpricing. Underpricing is largely the result of the institutional structure of the securities industry, particularly the investment banking industry. When a company issues securities in publicly traded markets, investment banks usually underwrite the securities; investment banks purchase the securities from the issuing company at a price agreed upon by the firm and the investment banks. The investment bank, or group of investment banks known as a syndicate, then sells the securities to the investment public as quickly as possible. This arrangement guarantees the issuing firm a fixed amount of cash in return for its securities, putting the syndicate at risk since the market price of the securities is unknown until the securities are sold in the public market. The investment bank attempts to sell the stock in the market at a higher price than the price the bank pays to the issuing firm. The difference between the underwriter's purchase and sale price is the "spread," i.e. the return required to compensate the underwriter for the risk involved in purchasing securities before they reach the market.

To insure the sale of the entire issue, the investment banking industry has been known to sell new issues for less than their market value, i.e. less than the market value of
the firm issuing securities. The amount of capital raised by the issuing company is therefore less than the amount which would be raised if the underwriter's role were eliminated. First time issuers do not have the option of issuing their securities without underwriters because they lack a distribution network to sell their stock in the marketplace.

Large firms whose stock is actively traded in the public equity market can issue additional securities to their existing stockholders without the involvement of underwriters even though most companies prefer to use underwriters to raise capital.

Institutional Investors in the Market for Publicly Traded Equity: The Political Economy of Investment

During the last decade, the presence of institutional investors as buyers and sellers of equities has steadily increased. The major institutional investors include life and non-life insurance companies, open and closed-end investment funds, pension funds, and nonprofit institutions such as universities. Institutional investors' increasing share of equity holdings and trading enables them to act as market makers. (see Table 2-4)
TABLE 2-4
Estimated Holdings of New York Stock Exchange Listed Stock by Selected Institutional Investors

<table>
<thead>
<tr>
<th>Year</th>
<th>Market Value of Holdings (Billions)</th>
<th>Holdings as % of Total Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>$230.5</td>
<td>33.6%</td>
</tr>
<tr>
<td>1974</td>
<td>171.0</td>
<td>33.4</td>
</tr>
<tr>
<td>1973</td>
<td>229.7</td>
<td>31.8</td>
</tr>
<tr>
<td>1970</td>
<td>175.4</td>
<td>27.6</td>
</tr>
<tr>
<td>1965</td>
<td>122.1</td>
<td>22.7</td>
</tr>
<tr>
<td>1960</td>
<td>57.3</td>
<td>18.7</td>
</tr>
<tr>
<td>1955</td>
<td>33.6</td>
<td>16.2</td>
</tr>
<tr>
<td>1949</td>
<td>11.1</td>
<td>14.5</td>
</tr>
</tbody>
</table>


If data were available on the amount of stock owned or managed by bank and non-bank trust funds, the New York Stock Exchange estimates that the holdings of institutional investors would include 50% of the market value of shares listed on the New York Stock Exchange.11 (see Table 2-5)

TABLE 2-5
Institutional Trading as a Percentage of Volume and Dollar Value of Shares Traded on the New York Exchange

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of Shares Traded</th>
<th>Percentage of Value Traded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>57.3%</td>
<td>70.3%</td>
</tr>
<tr>
<td>1974</td>
<td>56.9</td>
<td>69.0</td>
</tr>
<tr>
<td>1969</td>
<td>55.9</td>
<td>61.9</td>
</tr>
<tr>
<td>1966</td>
<td>43.0</td>
<td>47.5</td>
</tr>
<tr>
<td>1965</td>
<td>39.3</td>
<td>47.0</td>
</tr>
<tr>
<td>1963</td>
<td>30.9</td>
<td>35.3</td>
</tr>
<tr>
<td>1961</td>
<td>33.3</td>
<td>38.7</td>
</tr>
</tbody>
</table>


Institutional investors are increasingly able to influence the prices of issues already traded on the market and, more
importantly for small businesses, influence the size and type of firms that can raise funds in the market. The portfolio strategies of institutional investors may discriminate against small, relatively unknown firms. This phenomenon, more than any other, contradicts the neoclassical view of perfect markets. Although each investor is entitled to a bias toward investments tailored to specific needs, concentration of financial assets may exacerbate the already formidable problem of market entry by small businesses. A survey of institutional investment managers revealed that 67% of those responding followed either a formal or informal policy of excluding companies with less than $50 million in assets from their investment portfolios.\textsuperscript{12}

Regulatory Initiatives to Improve Small Businesses' Access to the Market for Publicly Traded Equity

The Securities and Exchange Commission has adopted a number of regulatory policies aimed at improving small businesses' access to the market for publicly traded equity by reducing registration costs. The Commission adopted a new registration form that allows a firm to make a public offering up to $5 million using less narrative information than is required in Form S-1.\textsuperscript{13} The extent to which the new form, S-18, has encouraged small businesses to raise capital creation in 1978 is unknown.

The Regulation A offering allows firms to issue up to $1,500,000 in securities with unaudited financial statements
and a brief narrative of the issuing company. Prior to 1978, the maximum Regulation A offering was $1,000,000.14

The amount of capital raised through Regulation A offerings is an extremely small percentage of total equity raised annually in the capital markets. Since the extent to which small firms would issue publicly traded equity if all barriers to market entry were removed is unknown, the effectiveness of the Regulation A program cannot be ascertained. (see Table 2-6)

TABLE 2-6
Capital Raised Through Regulation A Stock Offerings

<table>
<thead>
<tr>
<th>Year</th>
<th>Funds Raised (Millions)</th>
<th>Average (Mean) Issue</th>
<th>Percentage of Total Equity Capital Raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>$253</td>
<td>$805,732</td>
<td>0.9%</td>
</tr>
<tr>
<td>1980</td>
<td>219</td>
<td>737,373</td>
<td>1.0</td>
</tr>
<tr>
<td>1979</td>
<td>182</td>
<td>774,468</td>
<td>1.5</td>
</tr>
<tr>
<td>1978</td>
<td>61</td>
<td>383,646</td>
<td>0.6</td>
</tr>
<tr>
<td>1977</td>
<td>47</td>
<td>376,000</td>
<td>0.4</td>
</tr>
<tr>
<td>1976</td>
<td>47</td>
<td>382,114</td>
<td>0.4</td>
</tr>
<tr>
<td>1975</td>
<td>49</td>
<td>376,923</td>
<td>0.5</td>
</tr>
<tr>
<td>1974</td>
<td>78</td>
<td>349,776</td>
<td>1.3</td>
</tr>
<tr>
<td>1973</td>
<td>154</td>
<td>391,858</td>
<td>1.4</td>
</tr>
<tr>
<td>1972</td>
<td>256</td>
<td>393,846</td>
<td>1.8</td>
</tr>
</tbody>
</table>


The Market for Privately Traded Equity

The market for privately traded equity is small in comparison to the market for publicly traded equity. Suppliers of private equity financing are often referred to as venture capitalists; they include individual investors, closed-end investment trusts, institutional investors, and non-financial
corporations. Each group of venture investors has its own preferences and reasons for participating in this market. Individual investors may be willing to accept more risk but their financial resources are typically smaller than those of other venture capital investors; they usually attempt to realize capital gains within four years.\textsuperscript{15} Closed-end investment trusts are reputed to be the most patient investors. They have been known to invest two or three rounds of equity financing and wait up to ten years to realize capital gains.\textsuperscript{16} Institutional investors include endowment funds, pension funds, and insurance companies; a very small percentage of their total assets is committed to this market.\textsuperscript{17} Non-financial corporations have participated in the privately traded equity market to obtain proprietary rights for new products that might compete with their existing products. Private equity investment also may enable large corporations to pursue vertical or horizontal acquisition strategies.\textsuperscript{18}

All venture capital investors share a willingness to tolerate considerable risk in exchange for rapid growth, price appreciation, and the opportunity to realize capital gains. For this reason, firms which do not have the potential to capture a new product market are generally not prime candidates for venture capital investment. The following sample of recent venture capital investments indicates that small firms in only a limited number of industries are able to obtain private equity financing.\textsuperscript{19} (see Table 2-7)
TABLE 2-7

Distribution of Recent Venture Capital Investment by Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Related</td>
<td>25%</td>
</tr>
<tr>
<td>Electronics</td>
<td>13</td>
</tr>
<tr>
<td>Medical Related</td>
<td>11</td>
</tr>
<tr>
<td>Consumer Products and Services</td>
<td>11</td>
</tr>
<tr>
<td>Communications</td>
<td>9</td>
</tr>
<tr>
<td>Electronic Measurement, Sensing and Control</td>
<td>5</td>
</tr>
<tr>
<td>Medical Diagnostic Equipment and Services</td>
<td>5</td>
</tr>
<tr>
<td>Energy Related</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>


Small firms which do not emphasize new product development may not provide the level expected returns desired by venture capital investors. Whether the lack of venture investment in other sectors of the economy is simply due to preference or on the basis of expected returns, a significant number of small firms cannot count on venture capital as a source of funds. Venture capitalists often invest in firms that are well-organized, have developed a product, and have demonstrated an ability to expand in an orderly fashion. Before a firm reaches this stage, entrepreneurs must invest their own capital and the capital of friends or associates in order to finance a new company.20
Regulatory Initiatives to Improve Small Businesses' Access to the Market for Privately Traded Equity

In an effort to improve the flow of funds to small firms, the federal government passed the Small Business Investment Act of 1958 to introduce Small Business Investment Companies into the capital markets. SBICs are able to leverage capital contributions from private sources with loans from the federal government. Since SBICs must generate cash flow to service their debt obligations, they invest largely in convertible or straight debt securities. The capital structure of SEICs prevents them from making extensive equity investments. While SBICs have increased the flow of capital to the small business sector, private equity financing of small firms remains problematic.

The Market for Publicly Traded Debt

The market for publicly traded debt, like its equity counterpart, is a significant source of funds for the corporate sector. During the past decade the amount of publicly offered debt has exceeded the amount of publicly offered equity. (see Tables 2-8, 2-1) Historically, the publicly traded debt market has provided investors with the opportunity to receive principal and interest payments at regular intervals for predetermined periods of time. Bondholders do not receive the benefits of the company's future growth in the form of higher stock prices or increased dividends; their primary
concern is the firm's ability to service its debt with some margin of safety.

TABLE 2-8
Publicly Traded Debt Offerings as Percentage of Total New Offerings (Millions of Dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Public Traded Debt Issued</th>
<th>Total Debt and Equity Capital Raised</th>
<th>Public Traded Debt/ Total Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>$38,615</td>
<td>$72,503</td>
<td>53%</td>
</tr>
<tr>
<td>1980</td>
<td>44,650</td>
<td>78,900</td>
<td>57</td>
</tr>
<tr>
<td>1979</td>
<td>26,468</td>
<td>53,086</td>
<td>50</td>
</tr>
<tr>
<td>1978</td>
<td>20,466</td>
<td>48,217</td>
<td>42</td>
</tr>
<tr>
<td>1977</td>
<td>24,206</td>
<td>53,925</td>
<td>45</td>
</tr>
<tr>
<td>1976</td>
<td>25,262</td>
<td>52,165</td>
<td>48</td>
</tr>
<tr>
<td>1975</td>
<td>31,492</td>
<td>52,536</td>
<td>60</td>
</tr>
<tr>
<td>1974</td>
<td>25,335</td>
<td>37,725</td>
<td>67</td>
</tr>
<tr>
<td>1973</td>
<td>12,889</td>
<td>31,681</td>
<td>41</td>
</tr>
<tr>
<td>1972</td>
<td>16,922</td>
<td>39,705</td>
<td>43</td>
</tr>
</tbody>
</table>


The publicly traded debt market is strongly influenced by an institutionalized system of credit evaluation that enables investors to compare the risk associated with various debt issues. The ratings are therefore used to price bonds according to their risk. Although credit ratings are not a formal requirement of market entry, the market is dominated by issuers with credit ratings. Companies with the best credit ratings are able to obtain capital in the publicly traded debt market. Financial economists have determined that the best bond ratings are correlated with low debt to equity ratios, high profitability, a large amount of fixed assets, stable earnings history, and senior collateral claims on firms' assets. Not surprisingly, the firms with the best
bond ratings are large corporations; investing in the debt of small firms is simply riskier than investing in the debt obligations of large firms.

Investors supplying funds to the publicly traded debt market have increasingly chosen not to purchase the debt of risky firms. For example, Aaa and Aa firms issued 48% of the public debt purchased between 1966 and 1969 while in 1976 the market share of these issuers had climbed to 57%.24 (see Table 2-9)

TABLE 2-9
Estimated Composition of Publicly Traded New Debt Issues

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaa/Aa</td>
<td>48%</td>
<td>54%</td>
<td>61%</td>
<td>67%</td>
<td>57%</td>
<td>57%</td>
</tr>
<tr>
<td>A</td>
<td>21</td>
<td>33</td>
<td>29</td>
<td>29</td>
<td>36</td>
<td>28</td>
</tr>
<tr>
<td>Baa/below</td>
<td>25</td>
<td>10</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Unrated</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>


The market for publicly traded debt is a significant source of long-term debt capital. Bondholders can also find buyers for outstanding bond issues in the secondary market for publicly traded debt. However, trading in the secondary market is limited to the highest quality debt.25 Low quality or unrated debt is relatively illiquid; investors wishing to sell such debt must do so at a substantial discount.26

Even if the small business sector could attract investor interest in the market for publicly traded debt, the transactions costs associated with a public issue are a sig-
significant percentage of the issue proceeds for small debt issues. Small debt issuers cannot take advantage of the economies of scale available to larger issuers. (see Table 2-10)

**TABLE 2-10**

Costs of Issuing Publicly Traded Debt Securities Using Underwriters: 1960-69

<table>
<thead>
<tr>
<th>Issue Size ( Millions)</th>
<th>Issue Cost as a Percentage of Proceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 0.5</td>
<td>19.8%</td>
</tr>
<tr>
<td>0.5 to 0.99</td>
<td>12.9</td>
</tr>
<tr>
<td>1.0 to 1.99</td>
<td>9.4</td>
</tr>
<tr>
<td>2.0 to 4.99</td>
<td>6.3</td>
</tr>
<tr>
<td>5.0 to 9.99</td>
<td>2.5</td>
</tr>
<tr>
<td>10.0 to 19.99</td>
<td>1.8</td>
</tr>
<tr>
<td>20.0 to 49.99</td>
<td>1.5</td>
</tr>
<tr>
<td>50.0 and above</td>
<td>1.1</td>
</tr>
</tbody>
</table>


The Market for Privately Traded Debt

The market for privately traded debt is a major source of capital for the corporate sector as well as the small business sector. The insurance industry supplies most of the capital for privately traded corporate debt while the commercial banking industry provides most of the capital for the small business sector. The insurance industry's participation in this market is concentrated primarily in large, well known issuers who require substantial amounts of capital. (see Table 2-11)
### TABLE 2-11

Estimated Value of Privately Placed Debt Purchased by the Insurance Industry (Millions of Dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Privately Traded Debt Issued</th>
<th>Average (Mean) Issue Size</th>
<th>Privately Traded Debt/Total Capital Raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>$6,992</td>
<td>$14.42</td>
<td>10%</td>
</tr>
<tr>
<td>1980</td>
<td>11,619</td>
<td>14.97</td>
<td>15</td>
</tr>
<tr>
<td>1979</td>
<td>14,383</td>
<td>13.94</td>
<td>27</td>
</tr>
<tr>
<td>1978</td>
<td>16,977</td>
<td>16.28</td>
<td>35</td>
</tr>
<tr>
<td>1977</td>
<td>18,058</td>
<td>13.18</td>
<td>33</td>
</tr>
<tr>
<td>1976</td>
<td>15,808</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>1975</td>
<td>10,172</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>1974</td>
<td>6,160</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>1973</td>
<td>7,796</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>1972</td>
<td>8,706</td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>

Source: SEC Monthly Statistical Reviews, United States Securities and Exchange Commission (October, 1982)

Debt issued in the privately traded market provides corporate issuers with substantial savings in transactions costs. No underwriting fees or Securities and Exchange Commission fees are required in a private debt issue, although legal and other professional fees are significant fixed costs. While the insurance industry represents a desirable source of funds from the small business sector's perspective, the high degree of uncertainty associated with small business ventures has discouraged this source from supplying funds. There is, of course, no institutionalized system of credit rating in the privately traded debt market to facilitate the information gathering process required for investment decisions.

Commercial banks generally provide short and intermediate term financing for fixed assets and working capital.
Term loans typically do not exceed five year maturities and working capital loans are made for shorter time periods. Traditionally, commercial banks have invested in short-term liquid assets and have incurred short-term liabilities, usually in the form of demand deposits. Commercial banks are the small business sector's major link to the nation's capital markets. Since small firms cannot obtain long-term debt from commercial banks, they experience great difficulty obtaining any form of long-term debt financing.

Commercial Bank Access to Information About Small Firms

Although financial information is readily available for publicly traded companies, information about small, privately held companies can be difficult and expensive to obtain. Investment analysts can easily compare a large corporation's performance with other corporations in the same industry. Comparing the performance of one small firm with others in its industry is no easy task; loan officers become aware of the financial characteristics of small firms mainly through personal experience. They must spend more time familiarizing themselves with an unknown firm in an unfamiliar industry than when dealing with small companies in familiar industries. The willingness of banks to gather information about unfamiliar industries varies depending on the overhead costs allocated to this process.

The information received by a lender is usually accompanied by uncertainty. Debt contracts are executed on
the basis of trust in a borrower's ability to repay a loan. The resourcefulness and creativity of a borrower's management team are crucial to a lender's evaluation of a loan application. Borrowers must usually demonstrate their ability to repay based on past accomplishments. For this reason, it is extremely difficult for start-up ventures to obtain financing from commercial banks.

The quality of information provided by a potential borrower is important to a lender. Firms which prepare audited statements provide a guarantee that the applicant's financial reporting practices meet generally accepted accounting principles. Although the cost of preparing audited statements may not appear worthwhile to a borrower, audited financial statements provide lenders with an added measure of certainty. A small firm's cost saving strategy may backfire when a lender denies a loan application because the loan is perceived to be too risky due to questionable financial information.

Commercial banks are also interested in gathering information regarding potential transfers of wealth between stockholders and bondholders. A lender's pricing decision on a loan is made according to specific assumptions about the future officers' salaries and dividend payments of a firm. If a firm increases salaries or changes its dividend policy after a loan negotiation, the funds available for debt service would decrease. This would result in increased risk for the lender without a corresponding increase in expected
returns. In conclusion, the information costs associated with small business loans may be viewed as inordinately high by commercial bankers. Lenders try to minimize these costs by working with familiar firms, familiar industries, or large loan transactions. Consequently, the capital needs of many small firms are not met by the commercial banking industry.

Credit Rationing in the Banking Industry

Credit rationing is defined as a lender's unwillingness to supply funds to a borrower who is willing to provide a lender with a return commensurate with the risk of an investment. One might expect to find small business loans at five, ten, or even fifteen percent above the prime interest rate if banks invested in high risk loans. However, banks often reject high risk investment opportunities, regardless of the potentially higher returns involved. Typically, banks do not lend funds for more than a few percentage points above the prime rate. This pricing strategy reflects the banking industry's unwillingness to lend funds to businesses above a certain level of risk.

A high rate of expected return does not guarantee the lender that a high risk loan is a profitable investment
opportunity. Conventional debt contracts compensate lenders for high risk investments with increased debt service payments. The more debt service required of a borrower, the higher is the probability of a default. For this reason, banks are unwilling to invest in high risk loans. Although the asset management practices of many banks preclude the purchase of warrants or convertible debt, these financial instruments enable lenders to increase the expected rate of return on risky investments without increasing the chances of a default. The insurance industry makes use of such instruments when supplying funds to the corporate sector.

Regulatory Influences on Small Businesses' Access to the Market for Privately Traded Debt

Federal and state regulation has had a significant impact on the ability of small firms to obtain debt capital from the banking industry. Many of these regulations were devised in the 1930s in order to guarantee the solvency of the nation's banking system. Federal bank asset and liability regulations were designed to stimulate the flow of capital to certain sectors of the economy, especially housing, and to make sure that banks could honor their liabilities. Geographic restrictions on banking activity were promulgated in the belief that competition among banks might lead to widespread bank failures. To instill confidence in the banking system, bank operations were confined to local, regional, or state markets through state regulation.
Today, political boundaries have little to do with the solvency of the banking system. In fact, states with the severest form of bank restrictions, unit banking, have been found to experience the highest number of bank failures. States with restricted banking activity also have very few banks in their rural jurisdictions. Without competition, banks have little motivation to invest in risky loans. Artificilly low interest rates paid to depositors before the current wave of deregulation enabled banks to operate profitably without investing in risky loans. Risk averse investment behavior inhibits small business development because small business loans are inherently riskier than other assets available in the marketplace.

The Impact of Deregulation at the Federal and State Level on the Availability of Privately Traded Debt to the Small Business Sector

Federal deregulation of the banking industry recently enabled thrifts to enter the commercial loan market. The introduction of more competition for commercial lending opportunities may result in additional capital for the small business sector. In addition to deregulation of asset management practices, the ceilings on rates of return earned by depositors are being removed. Small firms maintaining account balances with commercial banks or thrift institutions should benefit from this aspect of deregulation. As banks raise interest rates to attract deposits, they may have to
seek out riskier assets which promise higher rates of return than those currently in their loan portfolios. Ideally, more financing of risky assets will benefit the small business sector. However, banks may simply increase the cost of funds for their existing customers or for new borrowers that are comparable risks to existing borrowers. The emphasis deregulation places on increased competition has prompted bank efforts to reduce operating expenses in order to increase profitability. Under these circumstances small firms may find it more difficult to obtain financing because of the relatively high overhead costs associated with small business loans. Therefore, deregulation may not lead to improved capital access for the small business sector.

At the same time that asset and liability management practices are changing due to deregulation, state regulation of banking activities is also being altered; increased intra-state and interstate banking activity has brought about bank mergers. This is resulting in a greater degree of concentration of financial assets in the industry. As in the publicly traded equity market, the market dominance of a few, large sources of funds allows the investment preferences of a few investors to influence the amount and type of capital which flows to the small business sector. Investor preference will probably become a more important factor in the future ability of small firms to obtain external debt financing.
The Relative Importance of Supply and Demand Factors in the Small Business Development Process

Although this chapter focuses on the problems that small firms experience securing capital, an adequate supply of capital is secondary to other factors needed to develop small businesses. The most important requirement for development is an adequate level of demand for goods and services. Without a consuming public's willingness and ability to pay for goods, a firm will not produce products regardless of how attractive the resulting economic benefits might appear to a state or city government. For the most part, the market forces that determine demand are beyond the influence of state and local governments.

The cost and availability of labor is the major supply side consideration for development since labor is the largest input cost of production. Areas with a high percentage of nonunionized labor and/or high unemployment are often favored by firms because labor costs tend to be lower in these areas. The low cost of foreign labor has encouraged domestic firms to shift production to overseas locations, although this practice is of limited importance for small business development.37 The absence of skilled labor may also dissuade firms from settling in an area.

Land plays an important part in small business development, especially for firms that require large or specialized production facilities. Suburban and rural locations are desirable because assembling large parcels of land is

36
37
relatively easy. Urban areas, especially central cities, are at a distinct disadvantage in retaining and attracting land intensive firms because of the high cost of assembling land in these locations. Even when large parcels of land are available, urban areas are often perceived to lack the amenities available at other locations. Traffic congestion and vandalism for example, may be real or perceived problems that discourage firms from locating in urban areas.

Although capital is necessary for small business development, it must be coupled with an adequate demand for goods and competitively priced land and labor if development is to occur. The cost of capital is usually the smallest cost associated with production. The limited evidence available suggests that the cost of capital does not vary significantly across the nation. Therefore, no region has a comparative economic advantage as a result of having lower capital costs. However, capital is not equally available in every region of the nation. Rural areas whose banking markets are controlled by one or a few financial institutions have been found to have reduced access to capital.

Conclusions

The preceding discussion of the capital markets demonstrates that even though capital is only one of the prerequisites for successful development, small businesses experience great difficulty in obtaining external financing. The capital markets, from the perspective of the small business sector are inefficient, incomplete, and imperfect.
The small number of firms that gain access to the market for publicly traded equity find that the market is inefficient because their securities are underpriced. The capital markets are also incomplete; small firms do not have the opportunity to sell the wide array of financial instruments that the corporate sector sells in the marketplace. While transactions costs associated with securities issues usually do not prevent large corporations from going to the capital markets, these costs prevent the small business sector from doing so under certain circumstances. For this reason, the markets are imperfect. Perhaps the most visible market imperfection is the increasing influence that large investors have over what types of ventures are able to obtain external financing.

Small businesses' capital access problems can be documented in various ways. Yet, very little research has addressed the question of how significant the problem is, and how much it influences the overall health of the nation's small business sector. Additional research is needed to determine the magnitude of the problem and its effects on small businesses.

The potential benefits that may be created by selective promotion of small firms have been described in Chapter I and the problems that small firms experience obtaining capital have been described in Chapter II. The following chapter discusses state and local governments' motivations for encouraging small business development as well as the problems they encounter in attempting to promote small business. The
most common financial assistance programs offered to small businesses at the state and local level are also described. These programs are guided by one of the following philosophies: 1) capital should be provided at below market interest rates to stimulate development; 2) capital should be provided at market interest rates to promote economic development, improve market function, and obtain a market rate financial return for the public sector. The advantages and disadvantages of each approach are discussed in the conclusion to Chapter III.
FOOTNOTES


3. A significant amount of empirical evidence has been collected to document the most economical means of issuing securities. however, transactions costs are never acknowledged as a barrier to capital market entry.


5. The probability of obtaining an expected return on an investment is a weighted average of all possible outcomes. Variance and/or standard deviation are used to describe the array of possible outcomes.

6. Total debt and equity capital raised as estimated by the Securities and Exchange Commission does not include privately traded debt purchased by the banking industry.


9. Ibid.


13. Ibid., 45


15. Gordon B. Baty, Entrepreneurship for the Eighties (Reston, VA., 1981), 75

16. Ibid., 80

17. Ibid., 78

18. Ibid., 79


21. Litvak, Pension Funds and Economic Renewal, 72

22. See note 6


25. Ibid., 312

26. Ibid., 320

27. No information was available regarding the standard deviation of the average privately placed debt issue.


29. Ibid., 169

30. Baty, Entrepreneurship for the Eighties, 110


38. David L. Birch, "Regional Differences in Factor Costs: Labor, Land, Capital, and Transportation," MIT Program on Neighborhood and Regional Change (Cambridge, Ma., 1977)

CHAPTER III
STATE AND LOCAL GOVERNMENT SMALL BUSINESS DEVELOPMENT POLICIES
AND MOTIVATIONS FOR PROMOTING SMALL BUSINESS

State and local governments have not always been interested in the small business sector's potential to provide economic benefits. In the past, governments focused on projects involving large corporations either because development prospects could be easily identified or because a large number of jobs could be created in a single project. The political liability associated with the failure of large-scale economic development projects can be avoided by emphasizing small projects involving small firms. Governments minimize the political liability associated with failure by participating in a large number of small projects. Spreading the risk of failure among many projects insures the success of a certain percentage of projects undertaken. Although some economies of scale may have been achieved by concentrating on a few large projects, the political problems associated with large project failures are the more pressing concerns of economic development professionals.¹

Emphasis on small business development may place governments in a better bargaining position relative to the firms they are attempting to attract or retain. The strength of a firm's bargaining position is, to a certain extent, a function of its size; as the size of a firm increases, the economic benefit it provides also increases. Competition between governments to attract large firms is intensive and is usually
accomplished at considerable expense. Larger firms can obtain a substantial amount of assistance from governments because the potential economic benefits are great and these firms can realistically consider many locational options. A multinational corporation negotiating with state and local governments for development incentives may, for example, move its operations overseas if a domestic government's development package is considered unacceptable. A firm with national goods and supply markets may consider sites throughout the United States while a regional firm, because of its need to remain close to its markets, typically limits its locational options to its own region. Finally, a firm whose markets are local has no reason to move outside of the city or neighborhood where it presently operates. Therefore, the social benefit that can be created through small business development is not the only motivation for state and local government interest in this sector of the economy; government's influence over the private sector is also an important consideration.

Unfortunately, the limited mobility of regional firms does not make small business development easier for local governments to undertake than corporate development. The limited evidence currently available suggests that a significant amount of industrial migration occurs within metropolitan regions; small firms move within regions more often than large firms. Roger Schmenner's study of the location decisions of firms in Cincinnati and New England concluded that short
distance movers primarily seek space and production efficiencies while long distance movers attempt to reduce labor costs. Firms in industries that do not require specialized production facilities tend to be the most mobile firms.

While a firm's proximity to its goods and supply markets influences its choice of location, it is not the only factor considered in a location decision. The particular production needs of individual firms, their planning horizons, and their growth strategies also influence location decisions. The owners of small firms invariably have strong personal preferences about the most desirable location for their firms and have the authority to implement their preferences. Each firm's location decision is the result of a complex and dynamic process that most governments are not equipped to respond to. Governments' assessment of economic development prospects is made more complicated by the often bitter competition among governments for industry. Existing efforts to promote small business development at the state and local government level have been conceived in an adversarial environment in which the desire to succeed in the competition often overshadows the costs of winning. Consequently, governments experience considerable difficulties in their attempts to influence industrial location decisions.
The Reasons State and Local Governments Provide Capital to Promote Small Business Development

State and local governments have designed many programs to encourage small business development; all of these programs target geographic areas in order to influence the distribution of economic benefits. Typically, governments reduce the cost of land, labor, and capital needed for production. Land programs include assembling parcels of land, managing and creating industrial parks, and granting property tax relief. Labor programs include job training, employment tax credits, and job matching services. Capital programs include loan guarantees, interest subsidies, direct loans, industrial revenue bond financing, and grants.

State and local government development efforts focus on reducing the cost of capital even though it is the smallest cost associated with production. Governments have focused on capital for three reasons: 1) capital programs are the least expensive means of influencing firms' location decisions; 2) capital programs are less controversial than more dramatic efforts involving land and labor related programs; 3) reducing capital costs effectively reduces land and labor costs since capital is fungible. Government exercise of eminent domain may provide production sites for industry but requires zoning and community approvals that are difficult and time consuming to obtain. By the time such approvals are granted, a firm may choose to move elsewhere. Creating an educated labor force is also a farsighted but difficult
to justify development goal in light of what are perceived to be more pressing economic difficulties. In practice, reducing the cost of capital is rarely thought of as a conscious attempt to offset the cost of one factor of production by reducing the cost of another. However, this is usually the reason for reducing the capital costs of private businesses. Since capital costs have been found to be similar throughout the nation while labor and land costs vary considerably, a reduction in capital costs effectively reduces the cost of other supply factors.

Reducing the Cost of Capital vs. Improving Access to Capital Markets: Which Approach is Most Effective For Promoting Small Business Development?

State and local governments have adopted two fundamentally different approaches to small business development through capital related programs. As noted earlier, capital is usually provided at a reduced cost to compensate firms for operating in locations where land and labor costs are higher than those available elsewhere. Instead of accepting the market system's allocation of economic activity, government sponsored financial intermediaries attempt to change market allocation when the loss or gain of social benefits is potentially large. The second approach used by government sponsored intermediaries improves small businesses' access to capital markets in order to rectify the problems discussed in Chapter II; these institutions solve capital market imperfections rather than subsidize supply factor costs. The firms financed by these...
intermediaries have identified adequate demand for their products and have found locations that offer the land and labor necessary for production. Location decisions are therefore made according to market criteria rather than active government intervention. The advantages and disadvantages of each approach are considered in the following pages.

It is possible and desirable to influence the market system's allocation of economic activity in order to achieve social goals. The major advantage of a subsidization strategy is that the problems of areas that have been neglected by the market allocation process can be addressed. As noted earlier, the fungibility of capital enables governments to offset the cost of any supply factor with capital subsidies. The major problem associated with capital subsidies, however, is that they may not be large enough to influence market allocation decisions unless they are coupled with other forms of subsidy since capital is the smallest cost of production. Governments that make capital subsidies the centerpiece of their small business development programs may waste their resources. If Roger Schmenner's evidence regarding the location decisions of small firms can be generalized, land costs are likely to be the most important supply costs to consider in promoting small business development. Capital subsidies alone may not offset the differences between land costs found within a region.

All subsidy programs must determine who is eligible for a subsidy and how large a subsidy is needed to insure
the success of a project. A considerable amount of effort must be devoted to screening applicants since some applicants represent their projects as unfeasible without a subsidy even though they would proceed without a subsidy. Given the complex nature of an industrial location decision, it is difficult to determine how effective capital subsidies are in influencing industrial location. An overly simplistic view of location decisions has perpetuated the belief that there is a one-to-one correspondence between providing capital subsidies and inducing firms to locate in a given jurisdiction.

The common practice of providing capital subsidies gives rise to further questions regarding their effectiveness. Since most jurisdictions provide capital subsidies, the financial impact that the subsidies have on operating costs is probably neutralized. Although there is a psychological advantage in being known as a community that is sympathetic to business concerns, widespread government attempts to reduce the costs of doing business may provide firms with windfall gains for undertaking projects that would have been completed without government intervention.

State and local governments' attempts to promote small business by improving capital market function are relatively rare although the Small Business Administration has followed this approach at the federal level. The major advantage of providing capital to small firms at market rates when it is otherwise unavailable is that governments receive social benefits and a financial return commensurate with the risk
involved in financing a project. Improving capital market function does not involve the costly bidding wars that can result from aggressive subsidy campaigns.

The major disadvantage of only providing capital at market interest rates is its limited effectiveness in promoting development where land and labor are not competitively priced. Jurisdictions may exploit their comparative economic advantages but cannot correct deficiencies that shift economic activity away from regions experiencing supply factor difficulties.

The choice between these two approaches depends on the problems that a jurisdiction must overcome in order to promote small business development. Areas that experience difficulty attracting development will probably find the subsidy approach most effective, although capital subsidies alone may not be effective. Areas that experience growth may find that improved capital market function may stimulate even more economic activity. In addition, both approaches might be employed simultaneously with subsidies targeted to declining industries and improved capital access targeted to growing industries.

Conclusion

Small firms have the potential to provide states and cities with economic benefits and, on balance, selective promotion of small businesses is worthwhile. The role of capital in the development process is critical, but is of limited importance relative to demand and other supply factor costs.
Nevertheless, small businesses confront significant problems in capital markets when external financing is required. The motivations for state and local government sponsorship of capital related development programs include political considerations as well as the fungible nature of capital subsidies. Two types of capital programs are employed by state and local governments to promote small business development. The effectiveness of the type of program chosen will depend on the economic and political circumstances of a given jurisdiction.

The following and concluding chapter describes a capital subsidy program that counteracts the market's allocation of manufacturing activity in New York City. The Economic Capital Corporation was created by New York City in order to provide loans to firms that could retain and create employment for New York City. Economic Capital Corporation is described to provide a sense of the complex issues that must be addressed in operating a public sector financial intermediary.
FOOTNOTES

1. Personal conversations with various economic development professionals.


3. Ibid., 4-66, 4-74

4. Ibid., 1-6, 1-12, 1-33

5. Examples of such intermediaries are federally chartered Small Business Investment Companies and state chartered Business Development Corporations.

6. Schmenner, The Manufacturing Location Decision, 3-32, 3-36
CHAPTER IV

NEW YORK CITY'S ECONOMIC CAPITAL CORPORATION: AN EXAMPLE OF A PUBLIC SECTOR INTERMEDIARY THAT PROMOTES SMALL BUSINESS DEVELOPMENT WITH CAPITAL SUBSIDIES

This chapter begins with a brief description of the structural changes that have occurred in New York City's economy during the post-war era and the impact these changes have had on local employment. New York City's Economic Capital Corporation, a financial intermediary designed to address some of the social problems created by structural changes in the economy, is then discussed. In particular, the objectives, investment selection criteria, and approved loan portfolio of Economic Capital Corporation are considered. The chapter concludes with a cost-benefit analysis of Economic Capital Corporation's first three years of operation.

New York City continues to lose its manufacturing employment to other cities in the Northeast, other regions, and foreign countries. In order to minimize the social costs associated with the loss of low and moderate income employment provided by the manufacturing sector, New York City has attempted to encourage firms to remain in the city even though more desirable production sites are available elsewhere.

The decline of manufacturing in New York City has been dramatic during the post-war era. In 1950, thirty percent of New York's employed labor force worked in manufacturing but in 1980, the proportion had fallen to only fifteen percent. The service sector has become the major source of employment,
providing twenty-four percent of New York's employment in 1950 compared to forty-one percent in 1980. There were 540,000 fewer manufacturing jobs and 492,000 more service sector jobs in 1980 than 1950. New York City also experienced a sharp decline in aggregate employment between 1970 and 1980; approximately sixty percent of the jobs lost during that period were in the manufacturing sector. The nature of manufacturing employment has also changed during the post-war era; the diversity of manufacturing occupations has declined and the number of nonproduction jobs as a percentage of all manufacturing jobs has increased.¹ (see Tables 4-1 and 4-2)

Table 4-1
New York City Employment by Sector: 1950-1980 (Thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Employed</th>
<th>Manufacturing</th>
<th>Trade</th>
<th>Service</th>
<th>Public Sector</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>3,468.2</td>
<td>1,038.9</td>
<td>754.8</td>
<td>843.9</td>
<td>374.4</td>
<td>456.2</td>
</tr>
<tr>
<td>1955</td>
<td>3,476.2</td>
<td>1,019.3</td>
<td>743.2</td>
<td>894.1</td>
<td>390.0</td>
<td>438.5</td>
</tr>
<tr>
<td>1960</td>
<td>3,538.4</td>
<td>946.8</td>
<td>744.8</td>
<td>991.7</td>
<td>408.2</td>
<td>446.9</td>
</tr>
<tr>
<td>1965</td>
<td>3,577.3</td>
<td>865.1</td>
<td>747.7</td>
<td>1,070.9</td>
<td>461.9</td>
<td>467.3</td>
</tr>
<tr>
<td>1970</td>
<td>3,745.5</td>
<td>766.0</td>
<td>735.4</td>
<td>1,244.0</td>
<td>563.2</td>
<td>466.8</td>
</tr>
<tr>
<td>1975</td>
<td>3,284.9</td>
<td>536.9</td>
<td>633.9</td>
<td>1,190.7</td>
<td>572.4</td>
<td>374.6</td>
</tr>
<tr>
<td>1980</td>
<td>3,298.4</td>
<td>498.7</td>
<td>614.9</td>
<td>1,335.0</td>
<td>516.6</td>
<td>358.4</td>
</tr>
</tbody>
</table>

Table 4-2
New York City Employment by Sector as a Percentage of Total Employment: 1950-1980

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Manufacturing</th>
<th>Trade</th>
<th>Service</th>
<th>Public Service</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>100.1%</td>
<td>30.0%</td>
<td>21.8%</td>
<td>24.3%</td>
<td>10.8%</td>
<td>13.2%</td>
</tr>
<tr>
<td>1955</td>
<td>99.9</td>
<td>29.3</td>
<td>21.1%</td>
<td>25.7%</td>
<td>11.2</td>
<td>12.6</td>
</tr>
<tr>
<td>1960</td>
<td>100.0</td>
<td>26.8</td>
<td>21.1%</td>
<td>28.0%</td>
<td>11.5</td>
<td>12.6</td>
</tr>
<tr>
<td>1965</td>
<td>101.0</td>
<td>24.2</td>
<td>20.9%</td>
<td>29.9%</td>
<td>12.9</td>
<td>13.1</td>
</tr>
<tr>
<td>1970</td>
<td>100.8</td>
<td>20.5</td>
<td>19.6%</td>
<td>33.2%</td>
<td>15.0</td>
<td>12.5</td>
</tr>
<tr>
<td>1975</td>
<td>101.0</td>
<td>16.3</td>
<td>19.3%</td>
<td>36.3%</td>
<td>17.4</td>
<td>11.4</td>
</tr>
<tr>
<td>1980</td>
<td>100.8</td>
<td>15.1</td>
<td>18.6%</td>
<td>40.5%</td>
<td>15.7</td>
<td>10.9</td>
</tr>
</tbody>
</table>

Source: Table compiled from Table 3-1. Percentages do not add due to rounding error.

The Objectives of New York City's Economic Capital Corporation

New York City created Economic Capital Corporation (ECC) in 1979 as a non-profit corporation for the purpose of financing firms in order to encourage economic development. Businesses willing to move to New York or remain in New York and provide low and moderate income employment may apply for a direct loan from ECC's Revolving Loan Fund. Loans are granted if a firm is unable to secure the funds necessary to undertake a project that will create or retain jobs within New York City. Typically, ECC provides below market, fixed rate loans to firms that cannot afford external financing at interest rates and terms available in the capital markets. Dramatic increases in the prime rate and increased uncertainty about future interest rates have had an adverse impact on firms that must depend on capital market financial instruments pegged to
the prime rate. ECC's pricing policy was designed to enable such firms to proceed with projects which could create low and moderate income employment in New York City.

The capital structure of ECC allows it to follow an extremely flexible interest rate pricing policy. Since its sources of funds are federal grants, no liabilities are incurred in exchange for the use of these funds. Therefore, ECC is able to provide firms with below market rate financing without incurring operating losses. In fact, financial returns over and above the operating expenses of ECC have been used to increase the principal balance of the Revolving Loan Fund.

New York City has decided that the opportunity cost associated with foregoing market rate returns on ECC's investments is worthwhile if a sufficient number of jobs can be retained or created. The potential employment benefits guide ECC's investment policy although the financial return on investment and the likelihood of being repaid are also major concerns of the ECC.

ECC is also committed to promoting private sector involvement in economic development finance. It requires each borrower to leverage the ECC loan amount with private sector financing by a ratio of at least three to one. Financial commitments from the private sector are guaranteed through this eligibility requirement.

Technical assistance, referrals, and general information are provided at no charge to firms that seek financing from the public and private sectors. Although ECC does not
provide financial consulting services, it attempts to match interested borrowers and lenders in order to promote development.

Investment Selection Criteria of Economic Capital Corporation

ECC's investment selection criteria reflect non-financial as well as financial concerns. In order to qualify for ECC financing, a firm must either create one new job or retain one existing job in New York City per $10,000 loaned. This eligibility requirement was adopted from Economic Development Administration guidelines. In addition, the new or retained jobs satisfying this requirement must have annual salaries that are lower than $15,600. This policy reflects ECC's interest in promoting low and moderate income employment. New employment is expected to be created within three years of the borrower's completion of the project.

Employment projections are arrived at jointly by the borrower and ECC's staff. The borrower's production process is analyzed and, with measures such as sales revenue per employee and number of employees per square foot of floor space, an estimate of the borrower's ability to create new employment is made. The employment projections are included as a performance clause in the loan agreement made with each borrower. If borrowers are unable to generate the requisite number of new jobs, they are technically in violation of the loan agreement.
ECC will lend funds if a firm cannot secure private financing to undertake a project. Usually, a pro forma cash flow statement is developed to determine whether the borrower could afford debt service payments if the project were financed entirely at market interest rates. If the borrower cannot afford such a financing package and can satisfy other ECC requirements, the borrower's request for financing will be considered. As noted earlier, all borrowers are required to obtain some financing from the private sector though not necessarily through capital markets.

ECC's investment activity is limited to loans of $100,000 to $300,000. Since a borrower must leverage ECC's loan by a ratio of three to one, the minimum loan can be obtained with a total project cost of $400,000 while the maximum loan can be obtained with a total project cost of $1,200,000 or more. All borrowers are also required to make an equity investment in the project that is at least ten percent of the total project cost. Therefore, a borrower must contribute a minimum of $40,000 in equity to qualify for the minimum ECC loan. This equity contribution is counted toward the required leveraging of private funds. A minimum equity contribution of $120,000 is required to qualify for the maximum ECC loan amount.

Although ECC does not obtain a return on investment comparable to the return available in the capital markets from investments of similar risk, investment policy is strongly influenced by financial considerations. A prospective
borrower's annual financial statements for three years and the most recent interim financial statement available are analyzed to evaluate the financial condition of the firm and the feasibility of the project. Both spreadsheet and ratio analyses are used to evaluate the firm's profitability, liquidity, leverage and past earnings history. The projected impact that a project will have on the firm's capital structure and cash flow pattern is evaluated with pro forma financial statements for four years following the project's completion. The projections are based on assumptions which ECC and the borrower agree are reasonable ones.

Profitability and liquidity measures are important to ECC's evaluation of risk and return. However, the cash flow available for debt service is of special interest since it measures risk from the lender's perspective. Cash flow available for debt service during the borrower's first full year after project completion is calculated. All of the internal costs and benefits of the project from the borrower's perspective are factored into the calculation except the increase in earnings expected during the first year after project completion. This approach provides ECC with a prudent evaluation of the risk associated with a project. Since many of ECC's loans are made to firms whose sales are expected to grow at modest annual rates (10-20%), the debt service coverage analysis reduces earnings available for debt service by this amount. The calculation's impact on ECC's lending practices would only be significant if borrowers had a
realistic chance of increasing earnings by thirty percent or more during the first year after project completion.

The debt service coverage calculation is important as an indicator of risk, but it is also used to determine the interest rate quoted to a borrower. Although guidelines adopted by ECC's Board of Directors suggest that an attempt should be made to price loans according the return available on United States Treasury notes, the staff is able to adjust that rate up or down depending on the cash flow available for debt service. ECC's loan pricing is a function of the size of the ECC loan, and the size and price of the private sector financing involved in the deal. (see Graph 4 -1)
Graph 4-1
Capital Market Interest Rates and Economic Capital Corporation
Interest Rates: 11/79 to 5/82

---

- ECC Median Loan Rate
- 10 Year U.S. Treasury Note Rate
- Prime Rate
- Long Term Industrial and Commercial Loan Rate for Loans Between $100,000 and $499,999
ECC is a fixed asset lender; loan proceeds may be used to acquire land, buildings, machinery, and equipment, make leasehold improvements, or cover the soft costs associated with fixed asset purchases. ECC attempts to negotiate loan maturities that match the useful life of the assets financed, thereby matching sources and uses of funds for the borrower. However, the maturity of ECC's loan is determined by the term offered by the private sector participant in the project. The maximum loan term for land and improvements is twenty-five years, while the maximum loan term for machinery and equipment is fifteen years.

As a secured lender, ECC attempts to obtain the best collateral coverage possible for its loan. ECC's claim on the assets financed in the project is often subordinated to the claim of the private sector financial institution involved. In order to improve their collateral coverage, ECC attaches assets which have not been secured by other lenders. The personal guarantee of the firm's owners is also routinely obtained.

The Approved Loan Portfolio of Economic Capital Corporation

Most of the firms in the ECC approved loan portfolio are manufacturing firms in basic industries, although some trade and service firms are also included. The major manufacturing activities represented in the portfolio are commercial printing, food processing and distribution, textiles, and paper products. (see Table 4-3)
Table 4-3
Industries Represented in ECC's Portfolio of Approved Loans: 1979-1982

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of Firms</th>
<th>Firms as a Percentage of Total Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Printing</td>
<td>16</td>
<td>19.8%</td>
</tr>
<tr>
<td>Food Processing and Distribution</td>
<td>11</td>
<td>13.6%</td>
</tr>
<tr>
<td>Textiles</td>
<td>8</td>
<td>9.9%</td>
</tr>
<tr>
<td>Paper Products Manufacturing</td>
<td>7</td>
<td>8.6%</td>
</tr>
<tr>
<td>Furniture Manufacturing</td>
<td>5</td>
<td>6.2%</td>
</tr>
<tr>
<td>Plastics Manufacturing</td>
<td>5</td>
<td>6.2%</td>
</tr>
<tr>
<td>Metal Fabrication and Recycling</td>
<td>4</td>
<td>4.9%</td>
</tr>
<tr>
<td>Building Materials</td>
<td>4</td>
<td>4.9%</td>
</tr>
<tr>
<td>Equipment Manufacturing</td>
<td>3</td>
<td>3.7%</td>
</tr>
<tr>
<td>Other Manufacturing</td>
<td>3</td>
<td>3.7%</td>
</tr>
<tr>
<td>Total Manufacturing</td>
<td>66</td>
<td>81.5%</td>
</tr>
<tr>
<td>Trade</td>
<td>6</td>
<td>7.4%</td>
</tr>
<tr>
<td>Services</td>
<td>6</td>
<td>7.4%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>3.7%</td>
</tr>
<tr>
<td></td>
<td>81</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Economic Capital Corporation Loan Applications; data available for 81 of 81 approved loans.

Most of the firms in the approved loan portfolio are small businesses. Although the definition of a small business is somewhat arbitrary, the number of employees, sales revenues, and book asset values suggest that ECC supplies most of its funds to the small business sector. Although ECC was not explicitly created to assist the small business sector, the size of the loans available has probably contributed to the emphasis on small business lending.
The average number of employees in firms with ECC loan approvals is 77. A standard deviation of 69 employees suggests that the average (mean) does not provide a good summary measure of employment by firm. However, 7% of the firms employed 1 to 20 workers, 28% of the firms employed 21 to 40 workers, 22% of the firms employed 41 to 60 workers, 22% of the firms employed 61 to 100 workers, and 21% employed more than 100 workers before loan approvals were obtained. (see Table 4-4)

### Table 4-4
Number of Existing Employees in Firms with ECC Approved Loans: 1979-1982

<table>
<thead>
<tr>
<th>Number of Existing Employees</th>
<th>Number of Firms</th>
<th>Percentage of Total Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 20</td>
<td>5</td>
<td>7.0%</td>
</tr>
<tr>
<td>21 to 40</td>
<td>20</td>
<td>28.2%</td>
</tr>
<tr>
<td>41 to 60</td>
<td>16</td>
<td>22.5%</td>
</tr>
<tr>
<td>61 to 80</td>
<td>8</td>
<td>11.3%</td>
</tr>
<tr>
<td>81 to 100</td>
<td>3</td>
<td>4.2%</td>
</tr>
<tr>
<td>101 to 120</td>
<td>5</td>
<td>7.0%</td>
</tr>
<tr>
<td>121 to 140</td>
<td>3</td>
<td>4.2%</td>
</tr>
<tr>
<td>141 to 160</td>
<td>3</td>
<td>4.2%</td>
</tr>
<tr>
<td>161 to 180</td>
<td>3</td>
<td>4.2%</td>
</tr>
<tr>
<td>181 to 200</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>201 to 220</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>221 to 240</td>
<td>3</td>
<td>4.2%</td>
</tr>
<tr>
<td>241 to 260</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>261 to 280</td>
<td>1</td>
<td>1.4%</td>
</tr>
<tr>
<td>341 to 360</td>
<td>1</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

Source: Economic Capital Corporation Loan Applications; data available for 71 of 81 approved loans.
In the fiscal year preceding ECC loan approval, the average (mean) yearly sales revenue for firms in the portfolio was $5,457,087. As with number of employees, there is a great degree of variation in the portfolio; the standard deviation was $7,152,131. Firms with less than $3,000,000 in sales accounted for twenty-six percent of the firms, forty-six percent of the firms had sales of $3,000,000 to $6,000,000, and twenty-eight percent of the firms in the approved loan portfolio had sales of over $6,000,000. (see Table 4-5)

Table 4-5
Annual Sales of Firms Which Have Obtained ECC Loan Approvals: 1979-1982

<table>
<thead>
<tr>
<th>Annual Sales (Millions)</th>
<th>Number of Firms</th>
<th>Percentage of Total Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 0.99</td>
<td>2</td>
<td>2.8%</td>
</tr>
<tr>
<td>1.0 to 1.99</td>
<td>4</td>
<td>5.8</td>
</tr>
<tr>
<td>2.0 to 2.99</td>
<td>12</td>
<td>17.4</td>
</tr>
<tr>
<td>3.0 to 3.99</td>
<td>9</td>
<td>13.0</td>
</tr>
<tr>
<td>4.0 to 4.99</td>
<td>17</td>
<td>24.6</td>
</tr>
<tr>
<td>5.0 to 5.99</td>
<td>6</td>
<td>8.7</td>
</tr>
<tr>
<td>6.0 to 6.99</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>7.0 to 7.99</td>
<td>4</td>
<td>5.8</td>
</tr>
<tr>
<td>8.0 to 8.99</td>
<td>3</td>
<td>4.3</td>
</tr>
<tr>
<td>9.0 to 9.99</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>10.0 to 10.99</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>11.0 to 11.99</td>
<td>3</td>
<td>4.3</td>
</tr>
<tr>
<td>12.0 to 16.99</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>17.0 and above</td>
<td>3</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>69</strong></td>
<td><strong>99.6%</strong></td>
</tr>
</tbody>
</table>

Source: Economic Capital Corporation Loan Applications; data available for 69 of 81 approved loans.
The book value of a firm's assets provides only a rough estimate of a firm's value. Because it is extremely difficult to estimate the market value of a closely held company, book values are the best available approximation. The limited data available about the asset size of the companies in the Economic Capital Corporation approved loan portfolio suggests that most of these firms are small firms. (see Table 4-6)

<table>
<thead>
<tr>
<th>Asset Value (Millions)</th>
<th>Number of Firms</th>
<th>Percentage of Total Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 0.99</td>
<td>19</td>
<td>47.5%</td>
</tr>
<tr>
<td>1.0 to 1.99</td>
<td>10</td>
<td>25.0</td>
</tr>
<tr>
<td>2.0 to 2.99</td>
<td>6</td>
<td>15.0</td>
</tr>
<tr>
<td>3.0 to 3.99</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>4.0 to 4.99</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>5.0 to 5.99</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6.0 to 6.99</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>7.0 to 7.99</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>8.0 to 8.99</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9.0 to 9.99</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10.0 and above</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>40</strong></td>
<td></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Source: Economic Capital Corporation Loan Applications; data available for 40 of 81 approved loans. Asset values do not include assets financed by Economic Capital Corporation.

Assisting small businesses in high technology or other young industries implies involvement with very young firms. As noted earlier, however, most of the firms in ECC's portfolio are well-established firms in mature manufacturing industries. ECC's lending activity is directed toward industries that have experienced the most dramatic declines
in employment during the post-war era and therefore appears to be an attempt to reverse market allocation of economic activity. (see Tables 4-1,4-2, and 4-3) The average (mean) age of the firms in the portfolio is thirty-two years, with a standard deviation of twenty-one years. Only six percent of the firms in the portfolio are less than five years old while thirty-one percent of the firms are over forty years old. (see Table 4-7)

Table 4-7
Age of Firms Which Obtained ECC Loan Approvals: 1979-1982

<table>
<thead>
<tr>
<th>Age of Firm (Years)</th>
<th>Number of Firms</th>
<th>Percentage of Total Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 2.0</td>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>2.1 to 5.0</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>5.1 to 10.0</td>
<td>9</td>
<td>12.9</td>
</tr>
<tr>
<td>10.1 to 20.0</td>
<td>9</td>
<td>12.9</td>
</tr>
<tr>
<td>20.1 to 30.0</td>
<td>14</td>
<td>20.0</td>
</tr>
<tr>
<td>30.1 to 40.0</td>
<td>12</td>
<td>17.1</td>
</tr>
<tr>
<td>40.1 to 50.0</td>
<td>8</td>
<td>11.4</td>
</tr>
<tr>
<td>50.1 to 60.0</td>
<td>7</td>
<td>10.0</td>
</tr>
<tr>
<td>60.1 to 70.0</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>70.1 to 80.0</td>
<td>4</td>
<td>5.7</td>
</tr>
<tr>
<td>80.1 to 90.0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>90.1 to 100.0</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>100.1%</td>
</tr>
</tbody>
</table>

Source: Economic Capital Corporation Loan Applications; data available for 70 of 81 approved loans.
Using Capital Subsidies to Offset the Cost of Land

Most of the firms that have received ECC loan approvals (85%) rented their production facilities prior to undertaking the project involving ECC. Approximately eighty-one percent of the projects approved included a borrower's acquisition of land and building. After these acquisitions are completed, only fifteen percent of the firms in the portfolio will continue to rent production space.

The firms that obtained loan approvals to acquire land and building will be able to protect themselves from further increases in land prices in New York City, especially in Manhattan. Market rents for industrial space have increased demand for residential and commercial space. Although New York has many competitively priced sites available in the outer boroughs, these locations are often perceived to lack the amenities and advantages of Manhattan and suburban locations. Many of the firms in the ECC approved loan portfolio could have achieved operating efficiencies by moving to other locations within the New York metropolitan area.

Before moving, some of the firms in the approved loan portfolio probably paid below market rents and may have delayed moving to larger, more efficient quarters because of this benefit. (see Table 4-8) In many instances, firms endured the inconveniences of operating from more than one location when a centralized facility would have been optimal, or operating from two or more locations within the multi-story
Most of the firms that have obtained loan approvals, including those that will rent their new facilities, are planning to increase the size of their production space. \(^{16}\)

Before undertaking projects financed in part by ECC, the firms in the portfolio occupied 2,987,350 square feet, an average (mean) of 42,676 square feet per firm. If all approved projects are completed, these firms will occupy 4,756,100 square feet of production space, an average (mean) of 66,987 square feet per firm. The increase of total production space will be approximately fifty-nine percent.

### Table 4-8

Rent Expense Per Square Foot for Firms with ECC Loan Approvals at the Time of Applying for a Loan

<table>
<thead>
<tr>
<th>Rent per Square Foot (dollars)</th>
<th>Number of Firms</th>
<th>Percentage of Total Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 0.50</td>
<td>4</td>
<td>7.7%</td>
</tr>
<tr>
<td>0.51 to 1.00</td>
<td>6</td>
<td>11.5</td>
</tr>
<tr>
<td>1.01 to 1.50</td>
<td>10</td>
<td>19.2</td>
</tr>
<tr>
<td>1.51 to 2.00</td>
<td>5</td>
<td>9.6</td>
</tr>
<tr>
<td>2.01 to 2.50</td>
<td>9</td>
<td>17.3</td>
</tr>
<tr>
<td>2.51 to 3.00</td>
<td>8</td>
<td>15.4</td>
</tr>
<tr>
<td>3.01 to 3.50</td>
<td>2</td>
<td>3.8</td>
</tr>
<tr>
<td>3.51 to 4.00</td>
<td>2</td>
<td>3.8</td>
</tr>
<tr>
<td>4.01 to 4.50</td>
<td>2</td>
<td>3.8</td>
</tr>
<tr>
<td>4.51 to 5.00</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>above 5.00</td>
<td>3</td>
<td>5.8</td>
</tr>
</tbody>
</table>

Source: Economic Capital Corporation Loan Applications; data available for 52 of 81 approved loans.

Although the firms in the approved loan portfolio will remain in New York, most of them could have moved to other locations within the region that were less expensive or pro-
vided more amenities for the same price than New York sites. Many of the firms investigated locations outside of New York prior to committing themselves to remaining in the city.\textsuperscript{19}

The locations considered and reasons for moving that were given by firms in the ECC approved loan portfolio are remarkably similar to those given by firms studied by Roger Schmenner in Cincinnati and New England. Schmenner found that a significant amount of industrial migration occurs within the metropolitan regions; small firms were found to move more often than large firms. According to Schmenner, firms that move short distances typically rent rather than own their production space, lack off-site warehouse facilities, and experience some growth in the markets for their products.\textsuperscript{20} Schmenner concluded that short distance movers primarily seek space and production efficiencies while long distance movers attempt to reduce labor costs.\textsuperscript{21} The non-specialized production processes used by small firms facilitate intraurban migration. None of the firms in the approved loan portfolio moved to New York City from another region while only two firms chose to move into New York from other locations in the metropolitan area.

\underline{Private Sector Sources of Funds in Projects Involving Economic Capital Corporation}

While all borrowers must leverage their ECC loans with private funds, the leverage calculation used by ECC does not require borrowers to obtain private financing from financial
intermediaries. Funds obtained through other economic development finance programs are also counted toward the leverage requirement, notably industrial revenue bond financing. Table 4-9 demonstrates that without the added incentive of some economic development financing program, financial intermediaries contributed only 25.5% of the total funds committed to the projects in the approved loan portfolio. Although industrial revenue bond financing is provided by the private sector, the availability of such funds would be questionable without the additional incentive of tax free income. (see Table 4-9)

Economic Capital Corporation's Measurement of Project Costs and Benefits

ECC creates social benefits in the form of employment, consequently, its performance should be evaluated with a social cost-benefit analysis. A form of cost-benefit analysis is completed for each project considered; the number of jobs created and retained per dollar loaned is used to assess the relative costs and benefits.22 The loan amount is recognized as the cost incurred even though this procedure assumes that the funds invested are sunk costs and will never be recovered. ECC, however, expects to recover its original investment plus interest. In addition, the operating expenses associated with processing and servicing loans are not considered in the ECC analysis. While the number of jobs created and retained is an important accomplishment and an easily understandable
Table 4-9
Sources of Funds for Projects with ECC Loan Approvals: 1979-82

<table>
<thead>
<tr>
<th>Sources of Funds</th>
<th>Total Funds Committed</th>
<th>Percentage of Total Funds Committed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Capital Corp.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Loans</td>
<td>$14,270,350</td>
<td>10.9%</td>
</tr>
<tr>
<td>Economic Capital Corp.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Revenue Bond Purchases</td>
<td>5,255,000</td>
<td>4.0</td>
</tr>
<tr>
<td>New York City Public Development Corp.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34,660</td>
<td>0.4</td>
</tr>
<tr>
<td>New York City Dept. of Housing, Preservation and Development</td>
<td>362,000</td>
<td>0.3</td>
</tr>
<tr>
<td>New York State Job Development Authority</td>
<td>5,291,710</td>
<td>4.1</td>
</tr>
<tr>
<td>New York State Urban Development Corp.</td>
<td>450,000</td>
<td>0.3</td>
</tr>
<tr>
<td>Small Business Admin. Direct Loans</td>
<td>400,000</td>
<td>0.3</td>
</tr>
<tr>
<td>Economic Development Administration Loans and Grants</td>
<td>2,000,000</td>
<td>1.5</td>
</tr>
<tr>
<td>Urban Development Action Grant Direct Loans</td>
<td>5,904,000</td>
<td>4.5</td>
</tr>
<tr>
<td>Urban Development Action Grant Industrial Revenue Bond Purchase</td>
<td>2,715,000</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>$37,202,720</td>
<td>28.5%</td>
</tr>
<tr>
<td>Bank Purchases of Industrial Revenue Bonds</td>
<td>$17,465,000</td>
<td>13.4%</td>
</tr>
<tr>
<td>Individual Investors Purchases of Industrial Revenue Bonds</td>
<td>15,299,000</td>
<td>11.7</td>
</tr>
<tr>
<td>Bank Direct Loans</td>
<td>33,304,000</td>
<td>25.5</td>
</tr>
<tr>
<td>New York Business Development Corp. Direct Loans</td>
<td>405,000</td>
<td>0.3</td>
</tr>
<tr>
<td>Other Loans</td>
<td>900,000</td>
<td>0.7</td>
</tr>
<tr>
<td>Equity Contributions Made by Firms in the Approved Loan Portfolio</td>
<td>25,977,360</td>
<td>19.9</td>
</tr>
<tr>
<td></td>
<td>$93,350,360</td>
<td>71.5%</td>
</tr>
<tr>
<td>Total Funds Committed</td>
<td>$130,553,080</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Sources: compiled from Executive Summaries of Approved Loans
measure of success, the benefits can also be expressed in terms of the increased income generated for those employed. Translating the economic benefits of employment into monetary terms provides additional information about the value of these benefits. Since costs are incurred and benefits received over time, their value should be adjusted for the time value of money through a discounted cash flow analysis. No such adjustment is currently used by ECC.

Although a detailed cost-benefit analysis of ECC's operations is beyond the scope of this study, the following changes to the existing procedure might yield a more complete analysis. Precise measurement of loan servicing and processing costs for each project is a difficult and time consuming process, but overhead costs could be allocated on an estimated basis and discounted. The major cost incurred is the opportunity cost of investing in financial assets that provide below market returns. ECC foregoes its opportunity to invest in financial assets of similar risk which yield market returns. The financial assets of comparable risk that are traded in the capital markets give some indication of the magnitude of ECC's opportunity cost. The long-term industrial and commercial loan rate published by the Federal Reserve is an appropriate benchmark for an estimate of opportunity cost. Calculating the value of the opportunity cost is illustrated in the following example.
If ECC were to have made a $100,000 loan in May 1982, the median interest rate quoted to borrowers was twelve percent.\textsuperscript{23} At that time, long-term commercial and industrial loans between $100,000 and $500,000 averaged 17.6\% according to Federal Reserve statistics.\textsuperscript{24} The opportunity cost of making a below market investment is 17.6\% minus 12.0\% equalling 5.6\% on a $100,000 loan for, say, fifteen years. By discounting the cash flows from this investment at a rate which could have been obtained from a market rate investment with similar risk, the value of the opportunity costs can be determined.

\[
\text{Net Present Value} = C_0 + \frac{C_t}{(1 + r)^t}
\]

\[
= -$100,000 + \frac{$14,682}{(1 + .176)^{15}}
\]

\[
= - $23,910
\]

Annual loan payment=$14,682 on a fixed-rate, self liquidating loan.

The net present value of the opportunity cost involved in making the above investment is $23,910. Similar calculations can be made for the other costs and benefits required to complete a comprehensive cost-benefit analysis.

The direct benefits of ECC's investment activity can be measured by adding the salaries of retained employees to the expected salaries of future employees for each firm. Income benefits for existing employees can be assumed to begin at the time each loan is closed while the income generated through new employment could be spread over the three years
following project completion. Historical information can be used to determine the income benefits provided by retained jobs while an optimistic estimate of income from new employment would assume an annual income of $15,600, the upper salary limit which satisfies ECC's project selection criteria.

Indirect social costs and benefits are also produced by ECC's investment activities. Indirect costs might include increased levels of pollution due to increased industrial activity while indirect benefits might include increased income, property and sales tax revenues for New York City. One might try to estimate these costs and benefits if an exceptionally detailed analysis was desired, although they are difficult to measure accurately.

Conclusions

A rough cost-benefit analysis of ECC's first three years of operation is presented below. The costs incurred and benefits obtained are assumed to occur over ten years, from 1979 to 1989. Operating expenses were obtained from the ECC 1982 Annual Report and are assumed to remain the same over the ten year period. The opportunity cost calculation is based on the total approved loan and industrial revenue bond commitments made through December 1982. This amount represents a total investment of $19,525,400. The average ECC loan rate quoted to approved borrowers between 1979 and 1982 was 10.31 percent while market interest rates for long-term industrial
and commercial loans averaged 17.19 percent. The calculation of income benefits from retained jobs assumes that each retained job provides an annual salary of $15,600 from 1979 to 1989. The analysis is conservative because none of the expected income benefits from new employment have been included. Information regarding the number of new jobs that have been created is unavailable. The analysis is liberal in that none of the costs incurred by New York City in providing property and other tax credits have been included.

The analysis reveals that the employment benefits far outweigh the costs of providing capital subsidies:

\[
\text{Present Value of Operating Costs} = -650,000 + \frac{-650,000}{(1 + .1719)^{10}} = -3,657,300
\]

\[
\text{Present Value of Opportunity Cost Below Market Investment} = -19,525,400 + \frac{3,221,760}{(1 + .1719)^{10}} = -4,619,600
\]

\[
\text{Present Value of Income Benefits Generated from Retained Jobs} = 0 + \frac{83,534,760}{(1 + .1719)^{10}} = 386,481,400
\]

\[
\text{Net Present Value of ECC's Revolving Loan Fund Activity} = +378,204,500
\]

In addition, the present value of the subsidy provided per job retained is extremely low:

\[
\text{Present Value of Capital Subsidy per Retained Job} = \frac{4,619,400}{5,483 \text{ retained jobs}} = 842
\]
The following conclusions about ECC's operations provide a more descriptive analysis of its accomplishments than the aggregate cost-benefit analysis presented above. The large proportion of real estate projects financed by ECC has helped stabilize the manufacturing community in New York. ECC's investment activity has promoted ownership of production space that will enable firms to weather any changes in the land market that might affect them adversely in the future. ECC's policy of providing loans secured by collateral has contributed to the large number of real estate projects financed.

ECC's concentration on financing manufacturing firms may result in the retention and creation of better quality low and moderate income employment. Although data regarding borrowers' union affiliations is incomplete, data available for thirty-six percent of the approved borrowers indicates that twenty of twenty-nine borrowers have some form of union affiliation. 28

ECC's effectiveness in retaining and creating employment is, in part, due to the variety of public sector incentives that are provided through other programs. The property tax credits, industrial revenue bond financing, and employment training programs sponsored by New York City are frequently used in conjunction with ECC loans. 29 New York has therefore combined a number of subsidy strategies in order to promote development.

ECC's financial review process has resulted in an extremely low number of workout situations. When workouts are necessary,
ECC attempts to restructure the firm's debt in a manner that enables the firm to continue operating. This approach reflects ECC's concern with employment retention and creation.

Although this discussion has focused on the Revolving Loan Fund, ECC has created a number of demonstration programs in order to stimulate development. For example, the Sunset Park Industrial Finance program is an interest subsidy program for small and medium-sized business willing to expand or relocate in Sunset Park, Brooklyn. ECC will purchase a certificate of deposit in an amount up to thirty-three percent of the total project cost. The net effective interest rate on the private sector loan may be subsidized up to a rate that is equivalent to seventy percent of the prime rate in any quarter from ECC's earnings on its CD investment. In addition, ECC is now exploring the demand for loans between $10,000 and $50,000 with total project costs not exceeding $300,000 through a Brooklyn Revolving Loan Fund capitalized by the Revolving Loan Fund. ECC recently established a Special Purpose Loan Fund whose resources are equal to twenty percent of the Revolving Loan Fund approved loan portfolio at any given time. This fund was created to supply funds to riskier economic development projects than those financed by the Revolving Loan Fund. Projects eligible for special purpose financing include non-owner occupied real estate development projects, start-up ventures, and service sector firms.
Finally, ECC has applied to operate as a Certified Development Corporation in the Small Business Administration's 503 loan program. ECC has therefore continued to seek out new financing techniques to promote development and to respond to the demand for development financing as it evolves over time.
FOOTNOTES


2. Contract between Economic Capital Corporation of New York City and the City of New York, Office of Economic Development (New York, 1979), 1-2

3. Economic Capital Corporation, Revolving Loan Fund Loan Justification Worksheet, Schedule I (New York)


5. Contract between Economic Capital Corporation and the City of New York, Exhibit B: Revolving Loan Fund Criteria as Adopted by the Economic Capital Corporation Board of Directors (New York, 1979), 1

6. Ibid., 1

7. The Economic Capital Corporation recently created a Special Purpose Loan Fund and Operates the Brooklyn Revolving Loan Fund, both of which can provide smaller loans. The maximum loan amount in designated Economic Development Administration target areas is $600,000.

8. Economic Capital Corporation, Loan Justification Worksheet, Schedule V

9. Contract between Economic Capital Corporation and the City of New York, Exhibit B (New York, 1979), 1

10. Ibid., 2


12. Ibid.

13. Data available for 72 of 81 approved loans

14. Data available for 81 of 81 approved loans

15. Data available for 77 or 81 approved loans.


17. Ibid.
18. The calculations for production space include only the increased space to be used by the borrower. Space within acquired buildings which is to be occupied by other tenants is not included in the calculations.


21. Ibid., 4-66 to 4-74

22. Economic Capital Corporation, Loan Justification Worksheet, Schedule I

23. Economic Capital Corporation, Executive Summaries of Approved Loans (New York, May 1982)


26. Loan-term industrial loan rates for loans between $100,000 and $500,000 were obtained from the Federal Reserve Bulletin, Domestic Financial Statistics (September, 1982), A26; ECC loan rate based on the median interest rate quoted for approved borrowers between 1979 and 1982; data were taken from ECC Executive Summaries of Approved Loans.

27. The number of jobs retained between 1979 and 1982 is 5,483; income benefits=5,483 x $15,600.


29. Property tax credits are made available through the New York City Industrial and Commercial Incentive Board; industrial revenue bond financing is approved through the New York City Industrial Development Authority; employment training programs are operated by the New York City Department of Employment and the Private Industry Council.
BIBLIOGRAPHY


American Bar Foundation, Commentaries on Indentures (Chicago, 1971)


Baltensperger, "Credit Rationing," Journal of Money, Credit, and Banking (May, 1978)


Birch, David, The Job Generation Process (Cambridge, Ma.: M.I.T. Program on Neighborhood and Regional Change, 1979)

Birch, David, Regional Differences in Factor Costs: Land Labor, Capital, and Transportation (Cambridge, Ma.: M.I.T. Program on Neighborhood and Regional Change, 1978)


Bravenec, Lorence L., Taxation of Subchapter S Corporations and Shareholders (New York: Practising Law Institute, 1978)


Business Week, "A Counterattack in the War Between the States," No. 2437 (June 21, 1976), 71-74

Business Week, "The Second War Between the States," No. 2432 (May 17, 1976), 92-98


Daniels, Belden and M. Kieschnick, Theory and Practice in the Design of Development Finance Innovations, working paper (Cambridge, Ma., Department of City and Regional Planning, Harvard University, 1978)


Dizard, John W., "Do We Have Too Many Venture Capitalists?" Fortune, Vol. 106, No. 7 (October 4, 1982), 106-117

Donaldson, G., "Corporate Debt Capacity: A Study of Corporate Debt Policy and the Determination of Corporate Debt Capacity," (Division of Research, Graduate School of Business Administration, Harvard University, 1969)

Donaldson, G., "Strategy for Financial Mobility," (Division of Research, Graduate School of Business Administration, Harvard University, 1969)


Duggan, Dennis, "Agency Repays $600,000 Grant; Koch Stunned," Newsday, (July 16, 1981), 6


Economic Capital Corporation, Approved Loan Applications (New York, 1979-1982)

Economic Capital Corporation, Approved Loan Executive Summaries (New York, 1979-1982)

Economic Capital Corporation, Contract Between the City of New York's Office of Economic Development and Economic Capital Corporation of New York City (New York, 1979)


Fraser, Donald, P. Rose, "Bank Entry and Bank Performance," Journal of Finance (March, 1972), 65-78

Fried, Joel and P. Howitt, "Credit Rationing and Implicit Contract Theory," Journal of Money, Credit and Banking, Vol. 12, No. 3 (August, 1980)

Goodman, Robert, The Last Entrepreneurs, America's Regional Wars for Jobs and Dollars (Boston: South End Press, 1979)


Matz, Central City Businesses: Plans and Problems, prepared for the Joint Economic Committee (Washington, D.C., 1979)


New York City Office of Economic Development, New York City Guide to Business Assistance (New York, undated)

New York City Office of Economic Development, Policy Analysis Division, Capital Financing Programs (undated)


Schellhardt, Timothy D., "War Among the States for Jobs and Business Becomes Ever Fiercer," The Wall Street Journal (February 14, 1983), 1


Schon, Donald, Beyond the Stable State (New York: Norton Books, 1971)


Timbers, Stephen, "The Non-Efficient Market is Not for Institutions," Journal of Portfolio Management (Fall, 1977)


96.


