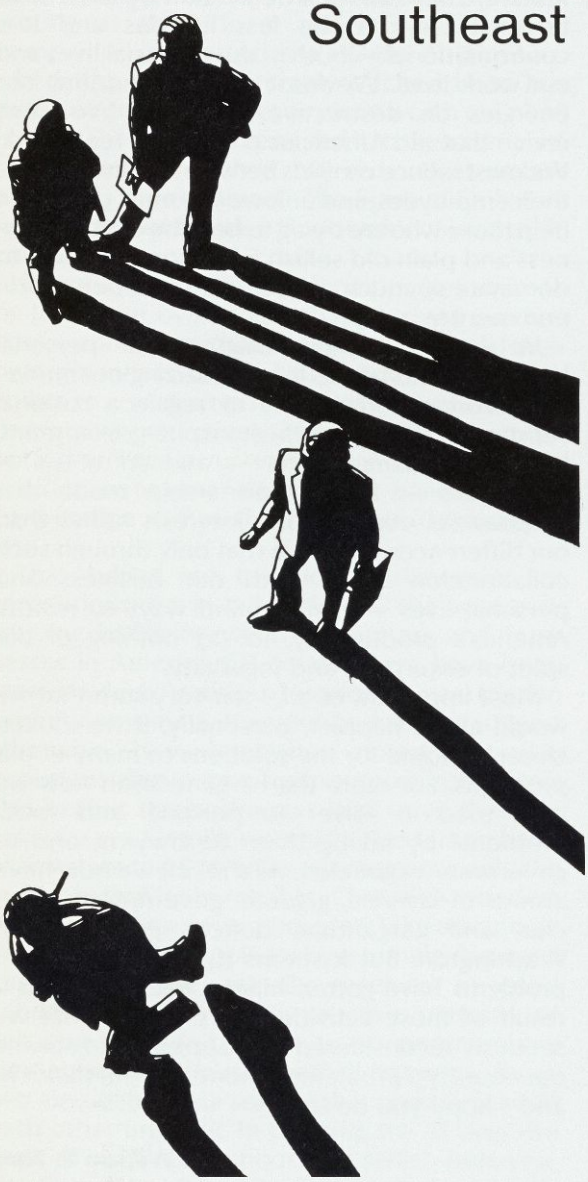
Venture Capital and Economic Growth in the Southeast



Will difficulty in obtaining capital choke off the growth of dynamic young companies that generate most of the nation's new jobs? Here's a look at the venture capital firms and government entities that step in to take business risks that conventional investors shun.

American industry is in the midst of profound changes. Heavy foreign competition in many traditional industries, such as textiles, steel and autos, as well as rapid technological change in office and factory automation, have shifted industry employment patterns dramatically. One effect of these changes has been intensified competition among states and among urban areas to attract plants in the industries expected to grow in the near future. These growing sectors often are identified, rightly or wrongly, with high-technology industry. Courting high-tech firms has replaced "smokestack chasing" in most states' approach toward industrial development.

Nonetheless, for several reasons high-tech employment alone seems unlikely to fulfill most states' need for employment growth and economic development. First and foremost, there simply is too little of it to go around. According to some forecasters, high-tech industry is expected to add only one million or fewer new jobs in the next decade, far fewer than the number lost in recent years in other manufacturing sectors. The promise of technology lies more in increasing the productivity of other industries and thus raising living standards.

Many areas will be unable to lure technology-based enterprises because these industries are relatively concentrated. Much of the employment is located in relatively few states—principally Massachusetts, New York, Florida, Texas, Illinois and California. High-technology firms engage in a large amount of research and development and use relatively new, state-of-the-art techniques and processes. By their nature, they require the diverse resource base of other industries, research universities and technical and professional personnel available in the states mentioned. Much of what passes for high-tech employment outside the major centers is mainly production employment rather than what could be construed strictly as high technology.

Another reason high tech holds little growth potential for many areas is that most job growth is being produced not by large existing firms but by small new enterprises. David Birch studied the employment patterns of U. S. business establishments and found that small firms with 20 or fewer employees created 66 percent of all new jobs, and single-establishment firms accounted for 52 percent.[1] Two-thirds of the new jobs are created by firms less than five years old (young firms have a high death rate too, but the

[1]David Birch, **The Job Generation Process**, MIT, 1979.

excess of births over deaths is substantial). Many development planners are concluding that it is wrong to focus only on large firms considering branch plant locations; most job creation is home-grown. Politically, the large relocation may look attractive, but the real potential lies with smaller firms.

Fostering the growth of small young enterprises and the birth of others has confounded policymakers in recent years. What can city and state governments do to promote economic growth from this source? Two kinds of suggestions have been put forth so far: first, improve the economic environment by reducing the state and local tax burden and reducing the regulatory requirements on small business and, second, provide resources that are in short supply for small firms, principally trained labor and capital. The former approach, especially tax policy by states, has been much discussed, but many feel that changes in tax rates would do little to help the growth of most areas. Studies of business location decisions and the birth of new firms generally show that differing tax rates between alternative locations have no measurable effect on these decisions. Recent studies by the authors indicate that environmental regulation is also a minor factor in most location decisions.[2]

It is in the second policy area, making resources available to small business, that attention is increasingly focused. Job-training programs, either of a general nature or directed towards the needs of a particular firm, have become widespread. For the most part, however, these programs involve relatively few workers and therefore have a limited impact.

The other resource small businesses need is capital, both for start-up and for expansion. David Birch's work demonstrated that all regions of the country have about the same business death rate, indicating that the more rapidly growing areas grew mainly as a result of dramatically higher birth rates. Providing capital for promising new enterprises is an effective way to stimulate the local economy. In addition, capital markets seem reluctant to provide start-up financing for entrepreneurs who have no assets to back up a loan except their ideas, inventions or business ability. Lack of capital is seen as a barrier to the emergence of new business, which produces most of the net growth of jobs. As a result, there is increasing interest in private sector sources of venture capital, in providing public funds to promote economic development directly by providing equity financing for new business, and in supporting the development of new venture capital sources, often through a public-private partnership.

Where Venture Capital Is Used

The U. S. venture capital industry provides financing to young firms for three principal purposes, generally described as "early stage," "expansion" and "acquisition or management buyout." Together they comprise a portion of the capital market not fully served by the traditional sources, the stock and bond markets and commercial banks. Early state activities are of two kinds: seed financing, which supplies a small amount of capital for an individual entrepreneur to prove a concept or develop a new product; and start-up financing, provided to a company to begin developing and marketing an established product.

Most early stage financing comes from "informal investors"—individuals of means, most often friends or relatives of the firm's founder. Informal investors may represent the largest single source of venture capital in the country, although the actual extent of their investments is unknown. Professional venture capital firms are less interested in small-scale investments in start-ups, because the risks are quite high and the amount of oversight and management per dollar invested are too great. As a result, most early stage financing goes the informal route.

Venture capital firms prefer the next level of investment, expansion financing. This is divided into stages according to the level of development reached by a new business. The first and second stages refer to the initial marketing of a product, when working capital is needed. Third-stage financing is for a major expansion when a business already shows promise and is generating some cash flow and possibly making a profit. Fourth-stage financing is for a company expecting to go public within six months or a year. It can also involve restructuring the positions of major stockholders through secondary transactions, if early investors want to reduce or liquidate their positions. Venture capitalists participating in such financing seek profits from an equity (and/or debt) position that typically is liquidated in a subsequent public offering.

Venture capital also is used for acquisition or management buyout of a business at any stage of

[2] John Hekman, Mike Miles, Roger Pratt, "Impact of Environmental Regulation on Industrial Development in North Carolina." Center for Urban and Regional Studies, 1981.

Table 1. The Venture Capital Pool, 1981

Type of Firm	Investments (Billions)	Percent of Total
Independent	$2.320	40
SBIC	1.798	31
Corporate	1.682	29
	5.800	100

Source: "Special Report—Venture Capital Disbursements 1981: A Statistical Overview," **Venture Capital Journal**, June 1982.

development. Many buyouts involve the acquisition of a closely-held or family-owned business. The purpose often is to revitalize a stagnant or slow-growing operation. This use of venture capital holds less potential for producing dramatic growth in a business, and therefore it is undertaken mainly by private venture capital firms, while public agencies are more concerned with funding new businesses.

Private Sources of Venture Capital

The three major types of private sector venture capitalists are the independent firms (mainly venture capital partnerships), the government-fostered Small Business Investment Companies (SBICs) and the corporate subsidiaries. Table 1 presents the size of these three sectors in 1981 in relation to the total pool of privately-invested venture capital.

The independent firms number about 250 at present, although only 100 or so are very active. The first of the modern type was American Research and Development (ARD), established in Boston in 1946. ARD created the image of tremendous growth potential by its success with a small investment in Digital Equipment Corporation when DEC was just getting off the ground. Before ARD, most venture capital came from wealthy families such as the Rockefellers and the Whitneys. Today these have been succeeded largely by partnerships and corporations funded by pensions, insurance companies, endowments, foundations and bank trust departments as well as wealthy individuals. The ten largest firms, located in New York, Chicago and California, have between $50 million and $100 million of paid-in capital. Representing about 40 percent of the venture capital pool, the independents typically make equity investments of from $250,000 to $1 million in five to ten projects a year.

SBICs were the second important component of the new venture capital industry to arrive on the scene, following the Small Business Investment Act of 1958. As vehicles for small business financing, SBICs enjoy certain tax advantages as well as the ability to borrow from the government to provide attractive financial leverage. An SBIC is a private company owned by investors who contribute at least $150,000 in equity capital. This makes it eligible to borrow up to three times the amount of its capital from the Small Business Administration; if the SBIC has over $500,000 of capital, it can borrow up to four times its equity. The SBIC program has created millions of jobs and has been called an ideal combination of public policy and private enterprise, despite early problems.

Between 1960 and 1962 some 585 SBICs were licensed, leading to shakeout. Many firms suffered from inadequate capitalization, inexperience with government regulation and general lack of ability to deal with risky ventures. However, the SBICs (along with other venture capital firms) rebounded strongly in the late 1970s. Today there are about 340, of which about half make equity investments and half make loans. These firms represent about 31 percent of the venture capital pool and typically make about five to ten investments per year in the neighborhood of $100,000 to $1 million.

The MESBIC (Minority Enterprise SBIC), now referred to as the Section 301(d) SBIC, is similar to the SBIC. About 120 such firms provide financing for small businesses that are at least 51 percent owned by socially or economically disadvantaged persons. They are eligible for SBA purchases of their 3 percent preferred stock and a subsidized rate on their debentures in the first five years. They also may be organized on a nonprofit basis to obtain additional tax benefits for themselves and their investors. This part of the venture capital industry has grown slowly, largely because it has not been very successful in raising capital. As of mid-1980, the 120 firms had raised only $84 million.

Corporate venture capital firms are mainly subsidiaries of large companies such as Exxon and General Electric. Most have started since the late 1970s, when corporate liquidity was high, to invest in the new products and technologies that frequently come from new firms. Clearly, some corporations have found it difficult to combine the large corporate structure with a risk-taking venture capital subsidiary. Problems often arise if the subsidiary is managed by corporate personnel

who are not venture capital professionals, if corporate goals do not match those of the subsidiary and if the corporation is not patient enough to allow for the long development period of many of the young firms in which it has invested.

Today most corporate venture capital firms are subsidiaries of large financial institutions or industrial corporations. About 50 are making investments today, comprising 29 percent of the venture capital pool. They range in size from $5 million to $100 million and commit about $1 million to $5 million to each project, although individual investments have ranged as high as $15 million. An investment often aims toward a possible acquisition as well as earning capital gains.

The Growth of Venture Capital

Venture capital investments have expanded rapidly in recent years, from just over $300 million in 1979 to $1.3 billion in 1981. The accumulated pool of funds has about doubled in the same period. Three reasons often cited for this growth are the reduced capital gains tax rate since 1978, the interest in emerging technologies and the entry of large pension funds into the market. The capital gains tax reduction helped spur a 300 percent increase in investments between 1978 and 1979 alone.

Does such growth pose a danger of too much capital chasing too few opportunities? Competition among investors has increased, increasing investor prices (measured as a multiple of earnings). It has also encouraged venture capitalists to look toward start-ups in addition to traditional expansion financing, and this increases risk substantially. Some believe that an increased supply of capital relative to the number of qualified entrepreneurs may hurt the risk-adjusted return performance of venture capital funds in the coming years; however, such a trend is not yet evident.

Increased participation by large pension funds has fueled the growth of venture capital. Pension funds were responsible for about 37 percent of the funds committed to the industry in 1981. They have been attracted by the high expected rates of return, by the poor performance of the stock market and, most recently, by the lower returns earned on real estate investments. However, even with the large increase in venture capital investments, the pension funds have committed less than one percent of their total assets (currently over $800 billion) to this area, so they represent the largest potential pool of venture capital for the future.

The other major reason for venture capital growth is the upsurge of interest in technology-related ventures. Venture capital firms favor high-technology investments almost to the exclusion of other types, judging from the pattern of recent investments and the firms' preference in the ventures they are willing to consider. According to Stanley Pratt, editor of the **Venture Capital Journal:**

> applications of technology innovation continued to be the main focus of professional venture capitalists last year. Combined investment in the computer, communications, other electronics-related industries and industrial automation accounts for more than 60 percent of the total number of recorded investments in 1981. In addition, technology-related aspects of genetic engineering and medical equipment bring the total to more than two-thirds of industry activity.[3]

When energy-related projects are included, the total rises to 80 percent of the investments and 87 percent of the dollars invested. Table 2 presents the percent distribution of venture capital investments by industry for 1980 and 1981. The share going to each technology-related sector except medical and health (and this is not exclusively high tech) increased in 1981. Many firms believe this emphasis is justified by the higher rate of return on new technology investments. Rate of return data for the industry are not generally available by type of investment, but some venture capital firms apparently have experienced returns of over 25 percent a year on high tech versus less than 20 percent on other investments. High tech often holds in addition the possibility of occasional very high returns ("upside potential" or "positive skew"), while more mundane projects do not.

Venture Capital in the Southeast

Venture capital firms in the Southeast exhibit the same interest in technology, as these national figures show. Table 3 lists the venture capital firms for eight southeastern states as of 1982. Fully 27 of the 39, or 69 percent, are SBICS or

[3]Stanley Pratt, "Special Report - Venture Capital Disbursements, 1981: A Statistical Overview." **Venture Capital Journal**, June 1982, p. 8.

Table 2. Venture Capital Disbursement by Industry

	Percent of Total Number of Investments		Percent of Dollar Amount	
	1981	1980	1981	1980
Communications	11.4%	11.5%	11.2%	10.9%
Computer Related	30.0	27.4	34.3	25.7
Other Electronics Related	14.5	9.6	13.1	9.6
Genetic Engineering	6.2	4.2	11.2	7.6
Medical/Health Related	7.0	10.5	5.8	9.3
Energy	4.9	8.3	5.8	19.9
Consumer Related	4.9	7.5	1.9	3.7
Industrial Automation	6.2	4.5	5.3	2.7
Industrial Products	4.4	3.6	3.4	2.0
Other	10.5	12.9	8.0	8.6
TOTAL	100.0%	100.0%	100.0%	100.0%

Source: See Table 1.

MESBICs. Capital under management ranges from $500,000 to $17 million. A preference for high-tech investments was recorded as a "yes" if the information on the firm specifically stated that one or more of its target industries was a high-tech field. If it listed no preferences (as in about 30 percent of the cases) or if its target industries were not high tech, the preference is listed as "no." On this basis, 18 firms, or 46 percent, are interested in high technology either exclusively or among other interests.

Most venture capital in the Southeast seems to be concentrated in Florida and Georgia; these two states together claim 60 percent of the funds listed in Table 3. The firms in Georgia, with one exception, are in Atlanta, while those in Florida are more dispersed. For the country as a whole, venture capital is concentrated in areas with a record of producing new (and high-technology) industry. A large proportion of the venture funds are based in New York, Boston, Chicago, Minneapolis and California. This raises a chicken and egg problem as far as economic growth is concerned. Is the presence of a large venture capital pool a prerequisite for the growth of new industry, or does industry's growth potential attract venture firms?

Professional venture capitalists generally hold that they are funding all of the projects that look promising, and that investment is constrained by profitability, not the supply of venture capital. State officials interested in fostering growth, on the other hand, believe that capital is the scarce resource and that more venture capital is needed, especially in areas without a large local pool of venture funds.

In the Southeast, high-technology manufacturing is more dispersed than the supply of venture capital. Table 4 presents the distribution of high-tech industry by state for the region. Our definition of high tech covers the three-and four-digit Standard Industrial Classification codes in Table 4; the two-digit industries are shown because they are the more inclusive industrial categories which in most cases are closely related to the smaller high-tech fields within each. The totals at the bottom of the table show the high-tech industries as a percent of their larger two-digit categories are well as their size as a percent of total manufacturing in each state. Florida, not surprisingly, has the largest absolute and relative amount of high-tech employment. Florida also boasts the categories of employment that are most unambiguously high tech. There is always a difficult problem in defining this type of industry from Census data, since all classifications include a wide variety of products, components and accessories. But Florida has the region's largest employment in computer production (3573), communication equipment (366) and aerospace (376), all of which are for the most part technically advanced types of production processes.

Georgia ranks only sixth of the eight states in the amount of high-tech employment, and its employment in these fields is only 3 percent of total manufacturing, the lowest share in the region. It also ranks only fourth in the total employment in the two-digit industries of machinery, electronics, instruments, rubber and plastics. These industries are mostly concentrated in heavily industrialized North Carolina and

Table 3. Private Venture Capital Firms in the Southeast, 1982

State	Location	High Tech Preference	Age	Type	Capital
Alabama	Birmingham	yes	7	P*	$1,000,000
	Fayette	yes	NA**	SBIC	NA
Florida	Palm Beach	no	18	P	NA
	Orlando	yes	12	P	4,000,000
	Ft. Lauderdale	yes	8	P	NA
	Sanford	no	8	CDC	10,000,000
	Gainesville	yes	6	P	NA
	N. Miami	no	3	SBIC	2,000,000
	Miami	no	1	MESBIC	500,000
	Miami	yes	20	SBIC	1,200,000
	Miami	no	12	SBIC	6,000,000
	Miami	yes	1	MESBIC	1,000,000
	Miami	yes	2	MESBIC	1,000,000
	Miami	no	NA	MESBIC	5,000,000
Georgia	Augusta	no	17	SBIC	
	Atlanta	no	10	P	17,000,000
	Atlanta	yes	7	P	NA
	Atlanta	no	NA	P	NA
	Atlanta	no	22	SBIC	11,100,000
Louisiana	Shreveport	yes	1	SBIC	500,000
	Covington	yes	NA	SBIC	NA
	Baton Rouge	yes	19	SBIC	4,600,000
	New Orleans	yes	4	P	500,000
	Baton Rouge	no	6	SBIC	1,700,000
	New Orleans	no	18	SBIC	NA
	Shreveport	no	1	SBIC	1,000,000
	Lafayette	no	6	MESBIC	2,000,000
	Baton Rouge	yes	7	SBIC	5,000,000
Mississippi	Olive Branch	no	3	SBIC	900,000
	Jackson	yes	6	SBIC	4,600,000
North Carolina	Charlotte	yes	19	SBIC	6,000,000
	Charlotte	no	18	SBIC	NA
	Charlotte	no	1	SBIC	2,000,000
	Winston-Salem	yes	10	MESBIC	4,500,000
South Carolina	Hilton Head	no	3	SBIC	500,000
	Charleston	no	18	SBIC	3,000,000
	Greenville	no	7	P	NA
Tennessee	Memphis	no	3	MESBIC	1,000,000
	Knoxville	yes	12	P	NA

Source: Stanley Pratt, **Guide to Sources of Venture Capital**, 1982

*P denotes a private venture capital firm.

**NA denotes not available

Table 4. High Technology Manufacturing Employment in the Southeast (In Thousands of Workers)

SIC	ALA	FLA	GA	LA	MISS	NC	SC	TN
30	14.8	10.8	2.5*	1.75	2.5	21.9	12.5	21.6
35	13.0	20.9	16.2	9.3	11.9	33.0	27.3	29.7
36	14.7	41.9	15.8	10.2	18.3	40.1	17.4	38.1
366	4.9	20.4	2.3	2.5*	1.75	9.2	1.9	2.5*
367	1.7	9.9	0.5	—	0.4	5.1	6.7	2.7
37	17.0	36.7	30.8	22.1	31.3	11.3	2.5*	25.4
372	2.5*	2.5*	2.5*	—	—	0.38	0.2	1.7
376	1.7	7.8	—	1.7	—	—	0.2	—
38	2.5	8.3	4.0	0.7	2.0	8.4	4.7	3.8
TOTALS								
1. 2-digit	62.0	118.6	69.3	59.8	66.0	114.7	64.4	118.6
2. 3-and 4-digit**	16.78	56.2	15.6	7.28	8.95	36.26	25.41	23.05
(2) / (1)	0.27	0.47	0.23	0.12	0.14	0.32	0.39	0.19
(2) as percent of manufacturing employment	0.05	0.16	0.03	0.04	0.04	0.05	0.07	0.05

U. S. Bureau of the Census
Standard Industrial Classifications

30	Rubber and Plastics	37	Transportation Equipment
35	Machinery, Except Electrical	372	Aircraft and Parts
36	Electrical and Electronic Equipment	376	Aerospace Equipment
366	Communication Equipment	38	Instruments
367	Electronic Components		

Source: U.S. Bureau of the Census, Census of Manufacturers, 1977.
*Indicates that employment is "over 2,500".
**Includes a number of minor classifications not shown

Tennessee. Table 4 demonstrates that the high technology industries seen as a springboard for growth generally represent only a fraction of the labor force. To generate a significant amount of economic growth, new high-tech companies must stimulate other areas of the economy, such as other manufacturing, finance, insurance and real estate, business services and transportation. It is with this broad-based growth in mind that many states are putting money into the venture capital field.

Federal and State Venture Capital Programs

The central debate with venture capital concerns the efficiency of capital markets. If there is shortage of seed capital for new firms because the capital market is not adequately serving these needs, then public programs designed to make more money available presumably will stimulate economic growth. If, on the other hand, venture capitalists are already identifying and funding the projects that are good risks, then throwing more money at this area may lead to an increase in business failures, producing economic waste. The striking success of the SBIC program, as measured by its size and the success of the businesses funded, suggests that public policy can make a positive contribution to fostering new business. On the other hand, the largest increase in SBIC investment has come since the late 1970s and may have coincided with an increase in the opportunities for new business arising from technological developments. Many professional venture capitalists are concerned that the dramatic increase in financings since the late 1970s has already saturated the market. They are concerned that the returns earned on venture capital projects cannot be maintained at their current level and will not justify the risks assumed in such investment. However, many

public programs do not compete directly with private firms because they are targeted to specific industries, to economically depressed areas or to firms that have government contracts.

Federal programs to stimulate small business include several small targeted efforts and one major program that overshadows all others, the Business Loan Program of the Small Business Administration. The SBA lends over $200 million annually through direct loans and over $1.5 billion in guaranteed loans. Loans are guaranteed up to 90 percent and interest rates run about 2.5 percent above prime. Direct loans are targeted to small firms that have been turned down for conventional bank loans; the maximum loan is $500,000 and rates are slightly over prime.

The SBA is the most important source of funding for small business, but in recent years other programs have been initiated to foster various public policy goals. The Small Business Innovations Research Program, administered by the National Science Foundation, is designed specifically to encourage new technology. The NSF makes around 80 small awards each from a $2.4 million budget. The Appropriate Technology Small Grants Program administered by the Department of Energy is similarly targeted at small businesses with new products and processes. With a budget of $1.5 million, it funds energy-related projects "appropriate to local needs and skills." The associated Energy-Related Inventions Program considers all energy-saving technologies under its $1.7 million annual budget.

States have taken various approaches to fostering small business, from guaranteed loans to equity capital and even product investment. Many of these programs appeared first in states that were incubators of new industries and technologies, such as Massachusetts, Minnesota and California. It became clear in these states that growth was occurring in technologically innovative fields, while older industries were stagnant or declining. This revelation occurred much later in the Midwest, where traditional industries continued to grow until the late 1970s, and in the South, where almost all industries were growing. Today the Midwest is looking hard for potential sources of growth and the South is looking to the future, asking whether it can count on continued growth from existing industry as the rate of change in the nation's industrial economy accelerates. States in the Midwest and the South have recently begun to look at programs adopted in the older industrial states to assess their potential for economic growth. Several possible directions for government initiatives are suggested in the programs described below.

Direct Loans and Equity Financing

The Massachusetts Technology Development Corporation is a publicly funded but independently operated venture capital organization. It was capitalized initially in 1979 by a $2 million grant from the Economic Development Administration to establish a revolving loan fund for business operations involving a significant amount of technology. It was awarded an additional grant of $1 million in 1981 by the U. S. Commerce Department's Corporations for Innovative Development Program, an amount matched by the state legislature to bring total capitalization to $4 million. MTDC provides capital to new and expanding companies oriented toward industrial and commercial applications of new products and technologies. The investments are aimed not at initial development but rather where funding is needed to follow up promising new technologies already developed.

MTDC makes both debt and equity investments, often combining the two, and requires that its investment of between $75,000 and $300,000 be accompanied by two to four times that amount in private sector funds. The program has invested approximately $2.7 million out of the fund thus far, along with private sector funding of about $12 million. There have been no writeoffs to date, and MTDC estimates that the companies it has funded have created 1,000 jobs directly and about 1,400 others indirectly.

The Massachusetts Community Development Finance Corporation represents a different approach to public venture capital investment. CDFC is a public entity funded in 1975 by $10 million in general obligation revenue bonds. Its purpose is to create employment in economically depressed areas, working through local Community Development Corporations. The business applying for funding must demonstrate the potential to increase employment at 150 percent of the minimum wage and show that it was unable to obtain private funding. Financing can be debt or equity, but CDFC cannot hold more than 49 percent ownership. Beginning the 1982 fiscal year, investments ranged from $15,000 in a solar panel manufacturer to $427,000 in an upholstered furniture firm. Most applicants are in manufacturing, although some provide services and one was a real estate partnership. CDFC has

been less successful than most venture capital agencies because of its mandate to assist depressed areas, and several investments have been terminated. For fiscal 1981 it reported a loss on its venture funds, although it has an overall gain because most of its $10 million still is held in short-term, non-venture assets. The state believes that CDFC is fulfilling its purpose of reducing unemployment in economically troubled areas even though its investments have had little success.

The Minnesota Small Business Finance Agency uses tax-exempt financing to provide capital to young businesses. Established in 1980, MSBFA serves firms that meet the SBA definition of a small business, but it avoids those in financial services, real estate, professional services and some others. After tax-exempt bonds are issued by the state, MSBFA must find a purchaser for the bonds, and the financing is then accomplished with no state expenditure other than the foregone taxes. Five financings have been completed, ranging from $75,000 to $265,000, for established businesses in traditional industries such as printing. Interest rates are at 75 percent of prime.

Minnesota also has two programs targeted for redevelopment of depressed areas. The Area Redevelopment Administration Loan Program since 1961 has been making loans below the prime rate for start-ups and expansions. To date, $3.5 million has been lent, and the program has experienced $573,000 in non-performing loans. Since the lending is done at subsidized rates and no equity positions are taken by ARA, the performance of this type of program is difficult to compare with a private venture capital firm. The state is seeking to increase employment, and the economic efficiency of the businesses is not measured against alternative uses of the funds. The second program, the Minnesota Revolving Loan Fund, is even further removed from the market place. It was established in 1980 with funds from the Economic Development Administration to provide financing below market interest rates to new or existing manufacturers. It targets several counties in the state with particularly depressed conditions. Only two loans have been made so far and no assessment of the program's success has been made.

A unique venture capital concept is being pioneered in the Connecticut Product Development Corporation. CPDC was funded in 1972 through the issuance of general revenue bonds; its current capitalization is $7 million. CPDC is unique for several reasons. First, it is product-oriented and, second, it does not take debt or equity positions in its investments. Companies with potentially marketable products approach CPCD and they work out a business plan together for the product. If CPDC feels the plan has potential for success, it will invest as much as 60 percent of total development costs. If the product is successful, CPDC collects 5 percent of gross sales until the original investment is recovered. After that, collections are reduced to 0.5 percent of sales for an amount of time equal to that period when 5 percent was collected. If the product is a failure, then the borrower's obligation ends with no required payback.

Since 1972, CPDC has committed $5.2 million to 38 companies for 47 commercial and industrial products. Of these 47 products, 26 are currently on the market. These projects have created an estimated 214 additional jobs during the development stage and will create 1,500 more as the market for the products expands. There have been only seven failures in 10 years for a total write-off of $162,000.

A more common route for a state government to take than equity financing or product investment is loan guarantees, since these do not require the expenditure of state funds unless losses are sustained. Guarantees encourage private lenders to finance seed capital and involve relatively small state staffs and line budgets. The agency assumes only a contingent liability requiring a loan loss reserve fund of some percentage of outstanding guarantees. Frequently the agencies are self-supporting, if fees based on the amount of principal guaranteed are adequate to meet loan losses and overhead expense.

One such loan guarantee program is the Louisiana Business Equity Corporation. LBEC was founded in 1982 at $22 million but did not begin operations until 1983. The funds were deposited in 16 banks, drawing interest that serves as the operating budget. A nine-member board appointed by the governor must approve all investment decisions. LBEC'S purpose is to provide partial loan guarantees for loans made to SBICs, MESBICs and other small business lenders. For lenders to receive LBEC guarantees, they must qualify and pay a membership fee, which goes into the LBEC capital pool. Louisiana hopes the loan guarantees will stimulate SBIC financing and help disadvantaged individuals in depressed areas of the state.

The Massachusetts Industrial Finance Agency is one of the largest state loan guarantee programs for new ventures. It provides industrial revenue bonds and loan guarantees for businesses in designated urban areas and for industrial firms anywhere in the state. MIFA is involved with companies in high-technology areas as well as more traditional industries such as textiles and fish processing. Since 1977 the agency has been involved in 55 projects with a total of $50 million in loans and an average size of $1.25 million.

A final general type of capital-funding agency is the non-public lending agency. One of the oldest and largest is the Massachusetts Business Development Corporation, founded in 1953, which provides loans for small businesses that cannot obtain all of their financial requirements from conventional sources. MBDC was capitalized through a stock sale to interested financial institutions. The investing institutions are subject to calls from MBDC for loans of varying amounts with terms up to five years and rates ¼ percent over prime. MBDC currently has $31 million in available credit and has loaned over $100 million since it was founded. It maintains a loan loss reserve of 5 percent. MBDC is considered a model in its field and has been credited with the creation of some 65,000 jobs in Massachusetts.

Summary and Conclusions

Economic growth that creates jobs and improves the standard of living has long been a major goal of public policy. Various past efforts directed at tax relief, easing of environmental regulations, and retraining of labor have enjoyed only limited and often transitory success. Today many growth efforts aim to provide capital for new businesses that offer the largest portion of new jobs.

A rather well defined venture capital industry in the United States is composed of private firms, government related firms and corporate firms. Supplementing these firms are a series of federal and state program or agencies intended to provide capital to attractive new businesses that for some reason are not served by the venture capital industry. The total volume of venture capital has grown dramatically in recent years and the central question today is whether more venture capital is needed to support potentially successful new businesses or if existing venture capital has matched the supply of new businesses with attractive prospects.

There is some truth in both positions. The overall capital markets are relatively efficient at providing funds to the venture capital industry when the industry offers projects with risk and return characteristics more attractive than competing uses of funds. However, new business financing involves tremendously high information costs that must be subtracted from prospective returns before determining any project's prospective risk and return and thus before the capital markets consider the project in relation to competing uses of funds. For this reason, high information costs can mean that attractive projects will go unfunded and both positions stated above will be true.

Consider all the dimensions of information costs. First, the new business must locate a source of venture capital. Then the venture capital source must (1) review the prospect, (2) structure an appropriate financial package if review is favorable, and (3) assist in the ongoing management of the business until the initial public offering. This sequence involves considerable time and requires a substantial amount of financial and general management talent. It is particularly expensive in smaller cities where most people in the Southeast live.

Future initiatives should involve plans to reduce the high information costs restricting the venture capital industry's ability to provide all of the capital that might be useful in stimulating new business growth. Many public programs will continue to emphasize methods of increasing investment that require limited expenditures of public funds, such as loan guarantees. While this does increase the supply of capital to small business, there is some question regarding the creditworthiness of some firms so funded. The alternative is to establish a capitalfunding agency designed to be self-supporting. This type of agency would compete directly with private venture capitalists, and to remain viable it would have to do the same exhaustive investigation of the ventures before investing.

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