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Abell Foundation Study: For Your Interest

Maryland and Pension Fund Would Be Well Served By Investing Modest Percent Of Fund Into Venture Capital

Benefits: High Return, Reduction of Risk Through Diversification, Enrichment of Economic Development. Delegates Have Opportunity With "Resolution No. 25."

The Maryland State Retirement and Pension System contains over $8.5 billion in assets, invested largely in publicly traded stocks, bonds and real estate. Over the past nine years, the return on this investment has averaged 13.6 percent -- better than many other public and private pension funds. But a portion of the fund can be made to yield not only a higher return but also provide stimulation and acceleration of the state's economy.

With this broader and more ambitious concept in mind, Delegates Rosapepe, Rawlings, Rosenberg, Boergers and LaMotte have introduced House Joint Resolution No. 25. The resolution seeks to "encourage" the Maryland Retirement Systems to invest in seed capital investment funds. Such a resolve is consistent with the programming of a growing number of public pension funds, which are investing a portion of their resources in venture capital partnerships. The Maryland system currently has made no investment in venture capital. Almost $3 billion has been invested by over 200 pension funds in venture capital (Pension and Investment Age, January 25, 1988, p. 83). According to Venture Economics, the leading authority in the field, the yield from venture partnerships over the last decade has averaged 20 to 25 percent. It is the argument of this paper that Maryland should follow their examples, and invest a small percentage (1 to 5) of its pension funds in venture capital, focusing on investments in Maryland with preference given to "seed" funds -- that is, those that invest in the earliest stage of a business. The benefits to the Maryland taxpayer could be generous, indeed: an even higher return than is now being enjoyed, reduction of risk through diversification, and enrichment of economic development.

The issue is of national significance. "The American economy is increasingly entrepreneurial while the American financial industry is increasingly institutional." ("Entrepreneurship and the Culture of Development Finance," Derek Hansen. The Entrepreneurial Economy Review, October, 1988.) The focus of productivity and growth in the country is becoming more decentralized, entrepreneurial, and relatively smaller in scale as our economy has shifted from heavy manufacturing to smaller, more responsive manufacturing units, communications and information.

At the same time this trend toward smallness is taking place, financial institutions are becoming increasingly institutionalized and centralized.

Hansen also notes, "A financial industry that is increasingly dominated by bigger and bigger institutions is simply not well-equipped to move capital back into the small and growing businesses that are the strength of our economy."

Public and private pension funds are absorbing more and more of America's capital. If they invest only in existing, established businesses, the lifeblood of entrepreneurial activity will be dried up.

Venture Capital Rates of Return

An increasing number of public pension funds are diversifying their investments to include venture capital because such investments strengthen their fund.

The wisdom of such investments is demonstrated by numerous studies. A 4/17/85 Morgan Stanley report written by Barton M. Biggs on asset allocation indicated the following real annual rates of return for various types of investments:

Average Returns on Assets (1920-1984)

Asset Category	Nominal Annual Rate Of Return	Volatility	Standard Deviation	Liquidity	Real Annual Rate of Return
Short-Term Investments	+3.7%	10	2.9%	10	1.6%
U.S. Common Stocks	+10.1	4	17.0	8	8.1
Emerging Growth Stocks	+15.3	2	29.3	4	8.8
Venture Capital	+28.2	1	--	1	19.6
Bonds	+4.5	6	8.5	8	2.4
Non-U.S. Common Stocks	+9.1	5	16.2	5	–
Real Estate	+7.7	6	7.7	8	5.7
Gold	+6.0	4	–	8	3.0

A major university-based investor studied its returns in ten venture partnership funds from 1972 to 1984. These combined partnerships invested in 358 companies, 11 industries and 8 geographic areas. The time-weighted composite rate of return was 35 percent for the ten year period. A comparison of the ten funds to benchmark indices is below:

Time-Weighted Annual Rates of Return of Venture Capital Partnerships and Selected Indexes Through December 31, 1983

	Last 5 Years	Last 10 Years
Ten Fund Composite	51.2%	35.0%
Hambrecht & Quist Technology Index	26.1%	21.6%
NASDAQ Composite	21.8%	14.7%
S&P 500	17.3%	10.6%

Copley Venture Partners compiled a number of studies on venture capital returns. Sources were Pension & Investment Age (12/10/84), Venture Magazine (9/85) and Venture Economics (1985). The results were as follows:

Source of Study	Year of Study	Period of Study	Compound Annual Rate of Return
Venture Economics	1984	20 years	26.0%
Stanford	1984	20 years	24.0
Harvard	1984	15 years	25.0
CIGNA	1985	14 years	Over 20.0
Horsley Keogh	1983	10 years	35.0
1st Chicago	1985	9 years	24.5

Venture Economics (The Venture Capital Industry - Opportunities and Considerations for Investors, 1987 Edition) has analyzed the returns of 34 venture capital firms active between 1970 and 1986. This sample represents 35 percent of the total population of that time. The results were as follows:

Initial Year Of Funds	Number Of Funds	Average Duration	Median Return	Average Return	Range of Returns
1970 to 1974	5	13.8 yrs	19.5%	21.7%	12.5 - 28.1%
1975 to 1979	7	8.0 yrs	27.5%	36.1%	13.2 - 81.0%
1980 to 1981	22	5.7 yrs	10.3%	13.1%	-7.9 - 56.1%

Thus, the return to pension funds on venture capital investments is more than competitive with alternative forms of investment.

Pension Fund Commitments to Venture Capital

According to Eugene Burroughs, Director of the Teamsters' Investment Department (Pension World, 12/84), "of all the potential investor groups, pension funds may be the most uniquely qualified to invest in venture capital." His reasons are:

1. Because of their huge size, pension funds can diversify their risk by investing in a number of partnerships;
2. Additional diversification can be achieved through investing in "funds of funds;"
3. Pension funds can be very patient, trading liquidity constraints for the potential of higher relative return, and;
4. Most pension funds have the resources and wherewithal to find superior funds in which to invest.

Such information has caused increased amounts of public pension funds to flow into venture capital. The following chart shows this trend over the last decade.

Year	Total Pension Commitments	Pension Commitment as a Percentage of Total $ Committed to Venture Funds	Public Pensions Investment
1978	$ 32	15%	
1981	179	23	
1982	320	31	
1983	1,070	31	
1984	1,085	34	297
1985 (1)	767	33	222
1986 (2)	1,672	49	389
1987 (3) (First Half)	651	47	184

(1) = Six new states entered market
(2) = New entrants: Massachusetts, New Hampshire
(3) = Includes: Illinois, Iowa, Kansas, Massachusetts, Michigan, Missouri, New Hampshire, Ohio, Pennsylvania, Utah, Wisconsin (none were new participants)

The states that have public employee retirement system funds invested in venture capital are Colorado, Delaware, Kansas, Washington, Connecticut, Florida, Illinois, New York, Rhode Island, Iowa, New Hampshire, Minnesota, Missouri, Oregon, Utah, Ohio, Wisconsin, Nevada, Michigan, Pennsylvania and Massachusetts. Greta Marshall, investment manager of the $45 billion California Public Employment Retirement System, reports that they have decided to invest 2 to 3 percent or $900 million to $1.35 billion of their assets in venture capital.

Venture capital is as old as the Bible, but as a discrete industry it is relatively new in America. In the mid-1970s, the fledgling industry developed into a significant financial force when it began to attract huge capital investments. These capital investments were made possible largely because of the cut in the capital gains taxes. As a result, corporate retirement funds and large institutional investors began shifting a portion of their portfolios into venture capital. By the 1980s, Venture Capital had become a boom industry with the largest growth occurring between 1982 and 1986 when the investment increased nearly fourfold, from $7.6 billion to $24.1 billion.

During this same period, pension fund investment in venture capital grew from $320 million to $1.672 billion. Public pension funds began investment in venture capital in 1981. Since that time, investment has grown from $5 million to $500 million in 1987. During the first six months of 1988, public pension funds invested $250 million in venture capital partnerships (Venture Capital Journal, September 1988, p. 11). In 1986, public and private pension trust funds accounted for about half -- 49 percent -- of all venture capital invested.

The top 200 public and private pension funds investing in venture capital have more than $2.9 billion of their assets at work either through direct investment or in partnerships with venture capital firms. The largest of these is AT&T, with $383 million of its $37.5 billion portfolio invested in venture capital. For AT&T, this represents an increased investment in venture capital of $67 million between 1986 and 1988 -- up from $316 million.

AT&T is followed by the Washington State Retirement Board with $210 million in venture capital investments, and the Michigan State Retirement Board with $196 million. Of the $2.9 billion that the top 200 corporate and public pensions funds in America have invested in venture capital, state retirement systems have more than a $630 million share of the pie.

Minnesota's pension fund, for example, has been in the venture capital business since 1983. It has a diversified portfolio of $4.6 billion with a legally allowable limit of 2.5 percent -- currently $110 million -- set aside for investment in venture capital.

John Griebenow, the senior portfolio manager for the Minnesota fund, says that while the state's experience in venture capital has been brief, "so far we are pleased."

"We are getting ready to increase our allocations in venture capital, not decrease them," Griebenow says.

Similarly, Pennsylvania's chief investment officer, Kenneth Mertz, says his state's retirement system has "built up a very good portfolio in venture capital" since it began investing in 1985.

"What amazed us," Mertz says, "was the quality and capability of the firms that responded to our RFP (request for proposals). They came after us. We didn't have to go after them."

In 1988 Governor Deukmejian of California approved the submission of legislation (Assembly Bill 1354) that authorized the Public Employees' Retirement System to place up to one percent of its assets or $500 million, whichever is less, in small business venture capital investments. The bill was passed and signed in early 1989.

Maryland State Retirement and Pension System

The Maryland State Retirement & Pension Systems is the 36th largest pension fund in the nation. It is built upon the traditional mix of stocks and bonds and only recently branched out into real estate. Its portfolio does not include direct venture capital investments even though there are no legal prohibitions against this type of investing. A vote of the pension board of trustees is sufficient to alter investment policy in Maryland.

J. Randall Evans, secretary of Maryland's Department of Economic and Employment Development, is urging a change in investment policy and has stated, "Let's face it, one of the primary factors affecting a positive business climate is the availability of capital. Both venture capital and seed venture capital funds are the necessary fuel for increased entrepreneurial activity in Maryland. It looks like a win-win situation to me. The State Pension Fund could increase its yield and thereby strengthen Maryland's future by financing economic growth and job development."

Decision Considerations

Venture capital is one element in an investment portfolio mix. Venture capital provides a greater rate of return because the potential is greater. Investors are coming in at the birth of a new firm rather than during its middle or old age.

Arguments that are heard in opposition to involving pension fund money in venture capital partnerships are:

1. Pension funds have a fiduciary responsibility to earn the highest rate of return.
2. The return is not worth the risk.
3. There is difficulty in investing large amounts of money because of the relatively small size of venture capital partnerships.
4. Lack of liquidity.
5. Timing of investment.

A growing number of pension funds have answered these concerns to their satisfaction. The first two objections listed above have to do with comparative return of venture capital versus traditional investments. The comparative return data listed earlier in this document shows that venture capital returns have, in fact, exceeded those in traditional investments in recent years and that one might contend that a pension fund is violating the fiduciary duty by not investing a portion of its assets in venture capital.

First Chicago Investment Advisors, which counsels a number of public pension funds, is forecasting a "conservative" 16.5 percent compound return for venture investments and recommending that its clients invest 3 to 5 percent of their assets in venture capital investments (letter from T. Bondurant French, vice president, 4/12/88). Their analysis includes the following data as to past performance and future projections:

Investable Capital Market Performance Characteristics
12/31/76 - 12/31/86

	Annualized Deviation	Standard Deviation (1)
Venture Capital	27.2%	24.1%
International Equity	20.9	16.2
Small Cap. Equity	18.5	19.0
Non-Dollar Bonds	13.8	12.8
Real Estate	13.2	2.6
Large Cap. Equity	12.9	14.0
Domestic Fixed Income	10.4	9.9
T-Bills	9.1	1.3
Inflation	6.6	–

(1) Calculated using quarterly logarithmic returns and then annualized.

Investable Capital Market Performance Characteristics
12/31/59 - 12/31/86

	Annualized Deviation	Standard Deviation (1)
Venture Capital	15.3%	49.9%
International Equity	12.2	17.7
Small Cap. Equity	11.7	21.2
Large Cap. Equity	9.0	15.1
Real Estate	8.6	4.5
Non-Dollar Bonds	8.5	9.5
Domestic Fixed Income	6.7	7.6
T-Bills	6.3	2.8
Inflation	5.0	–

(1) Calculated using quarterly logarithmic returns and then annualized.

As to risk, Steve Seymour of Grotech Venture Capital of Baltimore argues that the failure rate of individual firms invested in by a venture capital partnership is very low, somewhere around 10 percent.

"Eighty percent are singles and doubles, and ten percent are home runs," Seymour says. "Of course, everybody is looking for an Apple Computer or a Digital Equipment. But the overall record of the venture capital industry is definitely positive."

He adds that the Grotech I fund will ultimately show a 28 percent annual return, and that the Grotech II fund is financed partly with $10 million from the Baltimore Gas & Electric Co. pension fund.

As to the difficulty of investing large amounts of money, the sizable investments by other pension funds which are bigger than Maryland's should answer that concern.

Lack of liquidity is a real concern. This is why pension funds only invest a small portion of their funds in venture capital. Liquidity is provided by their other investments in publicly traded stocks and bonds, plus interest and dividend income, all of which, constituting at least 95 percent of the various funds' investments, provide more than enough liquidity.

As to timing, that is an issue of when to invest in venture capital, not whether to invest. Once a decision is made to invest, the timing issue will be worked out by the fund's advisors as it is on other forms of investments.

The Need for Venture Capital in Maryland

The State of Maryland presently has eleven different programs under five different agencies to assist businesses, large and small, in the state. Add to these two Federal Small Business Administration and one Farmers Home Administration program and nowhere among the fourteen programs is one that provides venture capital.

Venture capital is money that cannot be obtained through conventional lending sources, such as banks, insurance companies and other lending institutions. Most states that are in the venture capital business have no geographic restrictions on investing, but instead make a good faith effort to use their money to launch and underwrite home-grown businesses.

The Maryland Pension Fund has not chosen to invest any of its assets in venture capital funds, much less in venture capital funds focused on Maryland. In part this is because the Maryland Pension Fund has not chosen to invest in any venture capital fund, and in part because until recently there have been no venture capital funds in existence focusing on Maryland.

John Weiss, a partner of Arete Ventures, a Baltimore-based venture capital fund, says that placing state pension funds in venture capital pools "is a resource Maryland could benefit from."

"There is a particular need for seed venture money," Weiss says, "but I wouldn't put it all into seed. I'd find a comfortable ratio. And if the pension system invested in venture capital, the majority of the money should stay in Maryland to stimulate deal flow. This could be a great service by the state to the state."

Hans Mayer, executive director of Maryland Economic Development Corporation, urges the state to invest retirement system money in Maryland-oriented venture capital because it "enhances the capacity of the state to grow as an economic entity and the returns could be incalculable."

David Gillece, president of Baltimore Economic Development Corporation, says such a move would provide the "gap financing" that is needed in Maryland.

Mike Eckhart, a venture consultant in Bethesda, estimates that less than 2 percent of the area's venture capital is earmarked for seed investment, and that one-half of the area's venture capital requirement is being met by sources outside of the area.

Steve Seymour, a partner in Grotech, says that a decision by retirement fund trustees to invest in venture capital would "send a message that Maryland believes in and supports entrepreneurs."

As noted above, it is the recommendation of this report that the Maryland Pension Fund make a decision to invest at least 1 percent of its assets in venture capital funds and, further, that to the maximum extent possible, those venture capital funds be selected that agree to make their best effort to invest their funds primarily in Maryland companies.

Throughout the country and in Maryland, a special need exists for "seed" venture capital funds, those that invest in the earliest stage of businesses and provide business advice as well as capital to new businesses. Seed funds are rare because of the large amount of work needed with each investment and the small size of the investment.

As traditional venture capital firms have grown larger and are required to make large investments in order to operate efficiently, it has become more difficult to find funds interested in start-up businesses. Maryland's Secretary of Economic & Community Development, J. Randall Evans, has stated "a major gap in the financial support available to small businesses in Maryland is access to seed capital funds."

As indicated above, a competent seed fund must not only supply a relatively small, but very important amount of capital (initially $100,000-250,000), but more importantly, be equipped to provide the business expertise that the potential entrepreneur often lacks.

Many of the ideas for new businesses come from scientists and engineers and are described loosely as high technology. Maryland has one of the most important prerequisites for high tech business creation in that the area between Baltimore and Washington has the highest per capita concentration of scientists and engineers in the nation. In spite of this, Inc. magazine's March 1988 issue ranked the Baltimore area as 23rd in the country in new business creation.

This is due in part to the fact there are no seed venture capital funds in Maryland (other than the small, totally public, $2 million pioneered by BEDCO, the economic development arm of Baltimore city). The San Francisco area, as a comparison, has over 25.

If there had been no venture capital, there would have been no Silicon Valley in California or Route 128 in Boston.

Seed financing is distinguished from "start-up" money, which is used for product development and initial marketing and from "first stage" financing, which is used for actual manufacturing. Still another level is later-stage financing and the steps that lead to a company going public -- all part of the venture capital process.

Seed money is in high demand and low supply in Maryland.

"The recent shift of venture capital to later-stage investing is making it more difficult for entrepreneurs to raise seed money," says Paul Kelley of Zero Stage Capital Corporation of Massachusetts and Pennsylvania. "More venture capital is going into established companies."

The need for seed venture capital is not just a Maryland phenomenon, it is a national concern (see "Desperate for Dollars," Venture, 5/88, p. 57).

The reason for this is that:

(a) companies beyond the seed- and first-stages do not need as much of a venture capital partner's time for nurturing as seed companies do;

(b) the tremendous increase in institutional as opposed to pension fund investment in venture capital funds has added limited partners who as investors need quarterly results - it is not the "patient" money needed by seed funds;

(c) many new venture capitalists have no business experience and therefore are leery of more entrepreneurial ventures;

(d) the market decline of October, 1987 which dried up the market for initial public offerings had a dampening psychological effect;

(e) private capital is less available because of the change in tax laws removing the differential treatment of capital gains.

The Abell Foundation with assets of $120 million confronts investment decisions similar to those faced by the Maryland Pension Fund. Not only has the foundation decided to diversify its investments by placing 4 percent of its funds in venture capital, it has decided to use these funds to assist in the creation of seed venture capital funds focused on Maryland investments. The first of these, Catalyst Ventures, recently closed on its $15 million financing and is now in operation. The Abell Foundation made the first commitment of funds ($2 million) to this undertaking.

The analysis by the foundation's investment advisors concluded that Maryland was a fertile area for seed investments because of the abundance of scientific talent located in this area and the health of the economy. These funds will create an appetite for a portion of the Maryland pension funds venture capital investment, should a decision to invest in this manner be made.

If this investment decision is realized, Maryland will join at least 10 states which have seed capital funds specifically for investing in high-technology development, according to a study by The Corporation for Enterprise Development.

Benefits to Maryland

An increasing number of those state pension funds that do invest in venture capital funds direct at least a portion of those investments to funds that invest all or part of their assets in companies located within that state.

If investment in venture capital is a wise course of action for the Maryland pension fund, should that investment be made in a manner to stimulate economic development in the state of Maryland without negatively impacting the rate of return to the pension fund?

Within the state of Maryland there exists a paradox. On the one hand, Maryland is faced with stagnating or declining economies in several parts of a generally healthy state. On the other hand, Maryland has perhaps the largest and strongest base of technologists and scientists in the nation from which could be developed a number of prosperous businesses. How can the state most effectively intervene to increase the number of jobs offered its residents? Numerous studies have demonstrated that most new jobs are created by small businesses. The issue then is what can government do to increase the number of and encourage the growth of small businesses.

One promising area of business growth is that based on new technology. As pointed out by Erick Bloch, director of the National Science Foundation (Sun, 4/22/88, p. 13), since America cannot reasonably hope to compete internationally because of its workmanship, design cleverness, low wages or high productivity, our country's only hope is technological superiority.

In Maryland, substantial economic activity can be stimulated because of the large concentration of federal laboratories and academic research facilities in the Baltimore-Washington area. A recently issued evaluation of Maryland's economy compared to that of other states gave it an "A" in the category of Technological Resource capacity (Making the Grade, Corporation for Economic Development, 1988, p. 51). This index measures scientists and engineers in the work force, science and engineering doctoral students, patents issued, university research and development, and federal research and development. Maryland was first in the country in university R & D expenditures per capita (p. 62).

Low and high technology businesses develop from a combination of technological resources and financial resources. The same study gave Maryland a "C" when measuring its financial resource capacity, a measure which includes active venture capital participation in the state. Financial resources are required throughout the development cycle of a business. Capital enables a person with an idea to convert the idea into a business. Capital helps small businesses to take advantage of growth opportunities, and capital allows division of large corporations to be spun off into profitable locally based and owned businesses.

The more venture capital that is available and focused on Maryland, the more businesses that will be helped or formed. The more businesses that are helped and formed, assuming that assistance is wisely given, the greater the growth in economic vitality, jobs, and tax revenue.

Venture capital also contributes significantly to the tax bases of states and counties. A U.S. General Accounting Office Report of August, 1982, was cited in a study by Gerald L. Feigen, the former associate advocate for Capital Formation/Venture Capital for the Office of Advocacy of the Small Business Administration.

The report "discusses the evolution of venture capital industry and its relationship to innovation, technology and productivity...The report studied the experiences of 1,332 venture backed firms in which venture capitalists invested $1.4 billion between the years 1970 and 1979. It was determined that over 54 percent of these venture backed firms and 61 percent of the venture money invested went to companies offering productivity related products, systems and services.

"Further, the report demonstrates benefits to the national economy and productivity which are disproportionately large when compared to the capital invested. As an isolated example, venture capital amounting to $209 million was invested between 1970 and 1979 to create 72 firms which 'went public,' and had combined sales in 1979 totaling $6 billion. 'Their growth in annual sales averaged 33 percent a year and in the process these firms created, 1) an estimated 130,000 jobs; 2) over $100 million in corporate tax revenues; 3) $350 million in employee tax revenues; and 4) $900 million in export sales.' " Because of this, many state pension funds have invested a portion of their funds in venture capital funds located in their states which focus in varying degrees on investing in businesses within that state.

Successful Experience of Other States

Perhaps because it is relatively well off, Maryland is steadily falling behind other states in stimulating new and creative entrepreneurial activities and nurturing ideas into profitable businesses. Consider the following situations:

Massachusetts is an example of a depressed state that watched helplessly as its manufacturing base dwindled and its unemployment rolls swelled. In the mid-1970s, Massachusetts became the second state -- Connecticut was the first -- to create a public venture capital firm, the Massachusetts Technology Development Corporation, which has experienced great success. Massachusetts also benefited from the boom in the venture capital industry and more than 60 venture capital firms are now located in and around Boston.

In 1986, the state pension fund decided to invest $25 million in Massachusetts-based venture capital funds. Two million dollars of this amount went to the state-created Massachusetts Technology Development Corporation venture capital fund. That fund is over ten years old. According to the director; John Hodgman, the fund has earned an annual 28% return during this period. The state seed fund has received this return even though it can only invest in Massachusetts companies. The firms invested in must also be technology-based.

According to Paul Quirk of the Massachusetts Pension Fund, they are so pleased with their investments, particularly their investments in the Massachusetts Technology Development Corporation, that they are doubling both their investment in the MTDC fund and that in the private venture capital funds.

Maryland has the resources to duplicate the Massachusetts high-tech model which is built solidly on a handful of ingredients -- outstanding research universities, brain power, venture capital and an entrepreneurial environment that has stimulated innovation, risk-taking and new companies.

"Things were never that bad in Maryland," says Walter H. Plosila, who masterminded Pennsylvania's heralded economic turnaround and now heads Maryland's Montgomery County High Technology Council. "In Pennsylvania and in Michigan, things were such a disaster that those states had to start from the beginning."

In both Pennsylvania and Michigan, state government was the catalyst for generating new economic activity through numerous initiatives including the strategic use of state retirement system money as venture capital to underwrite new and emerging businesses in their states. Every government dollar that was put up leveraged additional dollars of private investment. In Pennsylvania alone, a $100 million public equity investment has stimulated the investment of an additional $300 million in private equity capital.

The Pennsylvania State Employees Pension Fund has invested $81 million in venture capital. All the venture capital firms invested in put at least 50 percent of their investments in Pennsylvania companies. They also have invested $2 million in each of four seed venture capital funds. The director of the pension fund, Ken Mertz, is limited by a state legislative restriction to 1 percent of the pension fund that can be invested in venture capital. Because of their success with venture capital investments, he is having legislation introduced to increase that maximum percentage to 5 percent.

The Michigan Pension Fund has set aside 5 percent of its assets for venture capital. This money is invested directly ($5 million) in 35 venture capital-backed businesses, $150 million in 12 venture capital partnerships with the understanding they will maximize their investments in Michigan, and $700,000 in a newly created state seed venture capital fund.

"The beauty is that the pension fund can maximize its income, which is its primary function, while at the same time play a positive role in local economic development," Plosila says. "The pension fund plays a role in venture capital, and venture capital stimulates the private sector and leverages more dollars."

Tom Laders of the New York State Retirement System reports that the $65 million venture capital investment is in firms that are expected, "to the extent reasonably possible," to invest in New York businesses. They also have an $800 million leveraged buy-out fund with the same requirement.

The large California fund mentioned earlier operates under the general understanding, according to the investment manager, that all things being equal, venture capital investments will be made in California companies.

The Connecticut state pension system entered the venture capital market in September, 1987, and plans to invest $100 million over the next five years, according to Guy Garcia, the senior investment officer.

"Our tilt is primarily toward Connecticut companies," Garcia says, "and they will get about 75 percent of our funds at various stages but primarily in seed capital.

"To stimulate the local economy, much of the venture capital available at home is invested in pools of seed money although for diversification some is spread across emerging growth and later stage investments."

Nationally, the economy has been rapidly increasing the number of new jobs. Much of this growth comes from small businesses that come into existence or expand because of venture capital -- money that financed ideas when no other cash was available.

Conclusions and Recommendations

According to Venture Magazine, "A Governor's Roundtable on High Technology in 1986 outlined a paradox in Maryland's economic development. Maryland is among the lowest rank of states in providing economic incentives for high-technology industry. The report urged the governor to become the leading advocate for high technology and new venture development. Partly as a result of that, Governor (William Donald) Schaefer's administration is considering implementing a venture fund in Maryland."

The evidence is all around us that wherever a state has taken the initiative to become an active financial partner in the cause of stimulating ideas and entrepreneurs, economic development -- new businesses, jobs, new tax revenues and profits -- have flourished.

Maryland's system of universities and teaching hospitals, its incubator program at the University of Maryland's College Park campus, its burgeoning bio-tech center at the University of Maryland Baltimore County Campus, and its research and development industry, provide the synergism for an explosive growth of ideas and solutions that will help determine the economic direction of the region into the next century.

The Maryland State Retirement and Pension Systems can help launch a new era of prosperity by becoming an investor for progress -- a future where ideas and money go hand in hand for the advancement of Maryland.

As described, investing in venture capital can be justified on the merits of superior investment return, reduction of risk through diversification, and support and stimulus for the state's economic well-being. Against this background, it is the recommendation of this paper that the 1989 legislature review with favor House Joint Resolution No. 25, which would support a decision by the Retirement System to allocate 1 to 5 percent of its assets to the investment area of venture capital.