Innovative Ventures INCORPORATED
Manager of US Venture Capital Funds
Investment Advisor to International Financial Institutions
& Governments in Private Equity

REPORT OF THE CONTRACTOR

Creation of a Venture Capital Industry in Croatia

Contractor: Thomas D. Nastas

Founder & President
Innovative Ventures Inc.
Haslett, MI USA

Presented to:
Paulo Correa
Europe & Central Asia Department
The World Bank
Washington D.C.

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US: Haslett, MI. 48840, Tel. # 1.517.899.1432
www.IVIpe.com; e-mail Tom@IVIpe.com

PROJECT SUMMARY

Introduction

This report presents recommendations of the contractor (Thomas D. Nastas, Innovative Ventures Inc.) on the World Bank mission to Croatia, 13-20 February 2011. The objectives in this mission were to provide answers to two issues:

1. If money from the Croatia Government's 'Economic Development Funds' initiative will be invested in young, technology SMEs.

2. New ideas and initiatives to grow a seed and early stage venture capital industry in Croatia.

To conduct this work, the contractor met with representatives from:

- Croatian private equity funds
- Croatian Business Angel Network
- Croatian Venture Capital Association
- BICRO
- Croatian institutes & technoparks
- HABOR, the Croatia Bank of Development & Development
- Senior government officials and the Government's financial regulator

Background: What is Venture Capital & Private Equity?

Venture capital (VC) & private equity (PE) funds are non-banking financial institutions that make investments in privately held companies.

VC in the USA historically invested 1st money in start-ups and young companies in the technology sphere with money spent to develop & launch products/services, build out the business model & the management team, develop a SME's infrastructure, establish production facilities, implement sales and marketing. The amount of investment/transaction varies to the size and needs of the company, usually from $250,000-$5,000,000 and the amount of money managed by the VC fund.

VC funds finance SMEs with revenues that range from $0.0 (start-up) to $25 million. Venture investors will typically invest up to 10% of their money under management in any one company. Historically VC funds manage between $10MM-$75MM.

PE investors invest in companies that are profitable, larger and more established vs. VC financed SMEs. PE investors invest in two sets of companies:

1. Venture backed SMEs once the risk of early growth is eliminated through the capital and active help of VC investors in developing early stage SMEs into expansion stage companies;
2. Growth stage companies that develop through a combination of founders' capital, debt and cash flow.

PE investors invest up to 10% of their managed capital in any one company, investment of $10MM-$100+MM in a company with revenues of $25MM-$200MM.

As one might expect, an economy needs an active VC industry to build the pipeline of companies for investors in the next link of the financing chain, PE funds. But more start-ups and early stage companies are required for much more than just this narrow sector of economic activity in a country;

when they 'grow-up,' they are the clients of banks and financial institutions that are the heart and soul of a country's growth and development. Without a steady stream of start-ups, early stage companies & entrepreneurs, all countries are at risk of economic stagnation and decline.

The Importance of Venture Capital to Croatia

An early stage VC industry is needed in Croatia for other reasons too. Venture capitalists work to two interrelated goals that help propel the country forward:

1. Commercialize university and institute technology through the creation of new start-ups.

2. Provide operational assistance in SME creation through three interventions:
    - Develop the business plan/model including early technology evaluation with 1st customers
    - Recruit talent to the venture, e.g., attract serial entrepreneurs and seasoned CEOs to new start-ups in the local community, encourage (and groom) 1st time unproven entrepreneurs for start-ups
    - Invest capital for prototyping and early product development as 1st round 'series A' investment and assist in raising follow-on capital, i.e., subsequent rounds of investment as 'series B, C, etc.'

These interventions are done to achieve financial goals of the VC firm, but they also generate economic development spillovers in many ways:

1. Increase financial returns to a country's investment in STI.

2. Make an economic development impact on the local community by creating more jobs, increasing and diversifying a region's industrial, employment and tax base.

3. Develop the ecosystem for more VC investment and more entrepreneurship in the local community, to stimulate more angel and seed investing.

General Findings

Current Status: Venture Capital in Croatia

A VC industry does not exist in Croatia. Five private equity (PE) funds (three newly created) operate in the country, seeking investment opportunities in established, operating businesses with revenues, cash flow and profits. PE is typically the 1st asset class that develops in the emerging and frontier markets since investors seek opportunities that provide short and medium term (3-5 years) ROI. It is only much later that investors' risk appetite increases to finance seed and early stage SMEs, tech or non-technology, and the market generates sufficient numbers of projects and SMEs for VC investment.

The group called the Croatian Venture Capital Association is a bit of a misnomer as its sixteen members are five PE funds (managing seven funds, not VC funds), a couple of angel investors, the Venture Exchange (a networking firm that operates throughout the Balkans) and service providers (accounting & a legal firm). Its mission is to support the development of an angel, VC and PE industry in Croatia.

Government Initiatives to Create Venture Capital in Croatia

The Government of Croatia launched a tender in 2010 to catalyze the industry in the country through a program called the 'Economic Cooperation Funds' initiative. The Government budgeted 1 billion kunas (≈\$189MM, ≈€136MM) to match 1 to 1 the monies that Croatian investment funds raise from institutional (domestic or international sources) & private investors.

Five Croatian PE funds raised the required co-investment monies and signed the contracts with the Government to commence operations & seek investment opportunities recently, week beginning 31 January 2011. There is now 2 billion kunas (≈\$374MM, ≈€272MM) available in the country for PE investment.

Taxpayer money is invested as equity in these funds with the Government holding a 50% interest in each fund, sharing profits and losses equally with other investors & the fund managers. Transactions require a 75% 'yes' vote for approval by the fund's investment committee (institutional investors and one Government representative). With its 50% voting share, the Croatian Government can block transactions, which could subject the funds to political interference and/or corruption (see page 8 for details).

Private Equity in Croatia

There are two major funds with an operating history & investment track record in Croatia. They include:

1. Quaestus is the 1st PE fund in Croatia, when they raised ≈€35MM in 2004. Quaestus was fully invested in 2008.

   In its 1st fund, management invested in seven companies with four being start-ups. They financed new SMEs due to a lack of investment opportunities in Croatia; at that time, local banks were financing expansion stage companies with cheap foreign money and the cost of Quaestus' money was too expensive vs. bank debt. The four start-ups were a mobile telephone operator (with Swedish group Tele2), a fixed line telephone operator, a private hospital (specializing in orthopedics) and a fast food chain.

   For its 2nd fund, Quaestus raised ≈€70MM, ≈€35MM from pension funds, banks, insurance companies & corporations with ≈€35MM raised from the Government of Croatia. They'll invest €5MM-€15MM per company in expansion stage enterprises operating in the retail, wholesaling, tourism and light manufacturing sectors of the economy. Generally speaking start-ups or early stage SMEs (tech or non-tech) are not investment targets of Quaestus.

2. Nexus with ≈€70MM under management in their 2nd fund, ≈€35MM raised from institutional investors and the matching ≈€35MM raised from the Croatian Government.

   Nexus began operations in 2008 by raising their 1st fund of €36MM, investing in expansion stage companies like equipment for the automotive industry, a retail pharmacy chain and a bed & bath consumer products. For their 2nd fund, they target sectors of growth in the Croatian economy including tourism, renewable energy (wind and solar power distribution), food processing, business services, and selectively, light manufacturing & IT. Like Quaestus, they seek profitable companies requiring growth capital for market expansion.

The other three funds are newly created and include Alternative Private Equity (€80MM raised, ½ from the Government), Honstas Private Equity (€34MM raised, ½ from the Government) and Prosperus Private Equity (€11MM raised, ½ from the Government).

Like Quaestus and Nexus, these three funds target expansion stage companies with proven business models & proven management teams to generate quick (three-five years) and profitable (25+% IRR) returns for their investors. Such a result will build their brand reputation in the market as trusted and reliable fund managers, and enable them to raise new money for investment without public sector capital.

Gaps in the Market

The five PE funds seek safety, capital preservation and investment opportunities that will ensure their success; these funds will not invest in early stage projects. There are no local VC funds operating in Croatia, and until this product is added to the Croatian financial market, seed and early stage SMEs have no source of money to develop their technologies and launch 1st sales.

Two BICRO projects/companies reduced risk by penetrating international markets. This accomplishment demonstrates that their managers have the business model and the management talent for execution, and they should be ideal investment candidates for Croatian PE funds.

However these BIRCO supported SMEs declined to negotiate with the PE funds, other than meeting with them for an exploratory discussion. This should not be a surprise as these entrepreneurs now operate from a position of strength due to their success in selling to foreign customers. As these SMEs expand internationally, their cash needs will increase; expect these entrepreneurs and managers to re-start negotiations sometime in the future with Croatian PE managers and/or international funds.

These two successes demonstrate the successes of the Bank's STP in Croatia, and the performance of BICRO. Yet there are another 12+ projects with potential, but since their products require additional development, they lack customers to grow through cash flow and early stage money is unavailable to them.

In some economies, angel investors fill this gap to finance such entrepreneurs and start-ups, but this group is just forming in Croatia, and is not prepared to make such investments. Without intervention to capitalize a VC fund in Croatia with the risk appetite for start-ups and early stage SMEs, these 12+ projects will stagnate and/or die as their promoters and entrepreneurs seek jobs and projects that will meet their financial needs. BICRO, other incubators, accelerators and technoparks have additional projects & SMEs in the pipeline that will not survive too, unless seed & early risk capital is available for investment.

THE GOFORWARD PLAN FOR CROATIA

Priorities

There are immediate, medium & long-term actions required for a viable VC (and PE) industry to emerge in the country, with continuing roles for the Bank and the Government of Croatia to make this happen.

Immediate Initiatives: for 2011

Permit BICRO to Make Venture Investments

Several BICRO projects have strong potential to achieve revenue growth and profitability in the short-term with small equity investments of $250,000-$500,000; success with these SMEs would demonstrate to investors that (selectively) seed and early stage VC is viable and profitable in Croatia. Without investment, these projects and SMEs will stagnate; an economic development waste given the success of BICRO in nurturing them to growth.

The contractor recommends that the Bank permit BICRO to invest remaining World Bank loan monies in the 'best-of-the-best' projects, those with the best short term potential to generate equity rates of return, and manage these investments to success.

Initiate Efforts to Capitalize a $20MM Venture Fund

Given the project's conclusion on 31 May 2011, there is not enough time to mobilize a private sector financed initiative to create a VC fund in Croatia for entrepreneurs of seed and early stage projects. The Government could use its political leverage and their 'bully-pulpit' to encourage PE funds to invest a small % of assets (e.g., 10%) into start-ups and early stage SMEs, but it's just too early in the life of these new funds to expect them to do so; they are focused on expansion stage companies and committed to this strategy as a condition of investment to their institutional investors (pension funds, insurance companies and corporations).

There are other issues that make it unlikely to create a ***privately funded*** VC fund in Croatia in the immediate future.

While PE funds might selectively consider early stage companies for investment, the amount of money they invest per company, €2MM-€10MM, is just too much money for start-ups and early stage SMEs to absorb and productively use for development and early growth. Moreover Croatian PE managers lack the staff skills in transacting early stage investments in technology and must acquire new know-how to do so; another impediment to mobilizing private capital to transition BICRO projects to their next stage of development.

What's needed is an investor with the skills, the talent, the risk appetite and the right amount of capital ($20MM) to invest the $250k-$2MM needed to take start-ups and early stage to their next stage of growth.

One solution to this need is for the Government of Croatia to request that the Bank 'top-up' the existing loan facility so that new money is available not only for BIRCO, but to create a VC fund for Croatian start-ups and early stage technology SMEs. With the right team to make investments, it might be possible to raise co-investment monies from:

- Croatian institutional investors since they can invest up to 1% of their net assets into this class of investment (VC, PE & other illiquid assets), more than enough money to jump-start the creation of a VC initiative in Croatia

- PE funds that participated in the Government's 'Economic Cooperation Funds' initiative (see pages 5-6)

Ensure the Independent Growth of the Venture Capital & Private Equity Industry in Croatia

HBOR, the Croatian Bank for Reconstruction & Development was appointed by the Ministry of Finance as its representative to oversee the Government's investment in the five PE funds that received ≈$189MM of taxpayer money. HBOR staff sits on each fund's investment committee, and these individuals have the authority and ability to block investments proposed by the fund manager since the Government has a 50% interest in each fund and a 75% majority is required to approve investments.

PE investments made in the emerging markets frequently generate controversy when investors force restructuring in their investee companies and/or when their companies create competition to those with close ties to certain Government and public sector officials. Such investments create the potential for unemployment, social unrest or conflict; the temptation may exist for seen or unseen Government officials to use political pressure to influence the votes by HBOR in the investment committees of government-financed PE funds, irrespective of the financial merits of transactions under consideration.

Should political influence be injected into the decision making process, it will damage the development of a risk-taking environment in Croatia, with negative consequences and spillovers to not just the nascent PE industry, but also the Bank's efforts to catalyze VC.

How ensure the development of a transparent and ethical risk capital investment industry in Croatia, free from political interference?

The World Bank mobilizes an initiative for the Government to select, appoint and compensate independent members to the investment committees of the government-sponsored PE funds. Appoint independent members for three years, guide Croatian PE fund managers to execute international standards in PE including corporate government, evaluation, approval & management of investments.

Explore Feasibility, Consolidation of Institutions Investing in Proof-of-Concept to Build Mass

BICRO, the Croatian Institute of Technology and others invested in projects with difference levels of development, risk and capital needs; some in tech creation-requiring proof-of-concept (PoC) money, while others are generating revenues-seeking their 1st round of equity. Individually these projects do not satisfy the criteria that PE funds seek: but perhaps consolidated into a portfolio under one entity they might provide the diversification of risk and ROI to warrant investment from PE funds (and provide the future pipeline of emerging technology opportunities).

The contractor explored this idea with Nexus & Quaestus. As expected, their 1st reaction was to consider opportunities that mature from BICRO, the Croatian Institute of Technology and others vs. purchase equity in a holding company with a portfolio of tech investments; however their ability to do so is questionable since these funds lack the talent, market and tech knowledge to grow seed projects and early stage SMEs as BICRO and others have proven. The PE funds need to be sold on this strategy.

Perhaps the World Bank and others can encourage management of BICRO, Croatian Institute of Technology and others to consolidate into a for-profit (holding) company with a portfolio of transactions and approach several of the PE funds for investment? Start the process and start selling to get reactions, qualify objections. Embed this strategy into the creation of a $20MM VC fund and we've started transitioning technology development and commercialization from the public to the private sector.

Medium Term Initiatives: for Market Development

Engage Multinationals & Corporates for Croatian Ecosystem Development

While BICRO lacks the capacity to do more PoC financing now, they can be proactive to promote their projects and help them raise new money. One solution to accomplish this is to organize a R&D & supply chain 'show and tell' program for users of technology-multinationals, local Croatian companies & regional firms.

Business plan competitions that present young technology SMEs to venture capitalists contribute to ecosystem development in the USA, Europe, China, India and Canada, and R&D programs do too. R&D 'show & tell' competitions present technology, to generate interaction between tech developers and the R&D staff from corporations. The audience is corporate R&D staff and corporate venture capitalists, not financial VC investors.

Attracting large corporations to R&D programs has many benefits. They are able to invest in promising technologies, guide their development with customer feedback, speed commercialization and help access opportunities in the supply chain. Most multinationals hunt for technologies no matter where they come from, and they are able to benchmark technologies from one country to another, to help Croatian developers identify strengths and weaknesses of their technology to global competitors. Others have a strategic priority to integrate technology into the corporation as supply chain linkages, thereby stimulating innovation, growth and job creation in ways such as:

- Be the technology platform that helps model technology and scale solutions in advance of customer demands
- Reduce development time and get to market quickly
- Lower investment risk and help SMEs secure funding
- Jump-start and drive sales momentum
- Expand the market reach of SMEs by integrating them into corporate & international business ecosystems.

The venture capital arms of multinationals are especially helpful. Corporate venture capitalists Siemens, Nokia, Sony, Dow, DuPont, Shell, Chevron, Norsk Hydro, Cisco, Intel, Sun, Oracle, Motorola, SAP, Schlumberger, IBM, etc., invest into technology just like VC investors do. But they add-value in ways that financial venture capitalist can't.

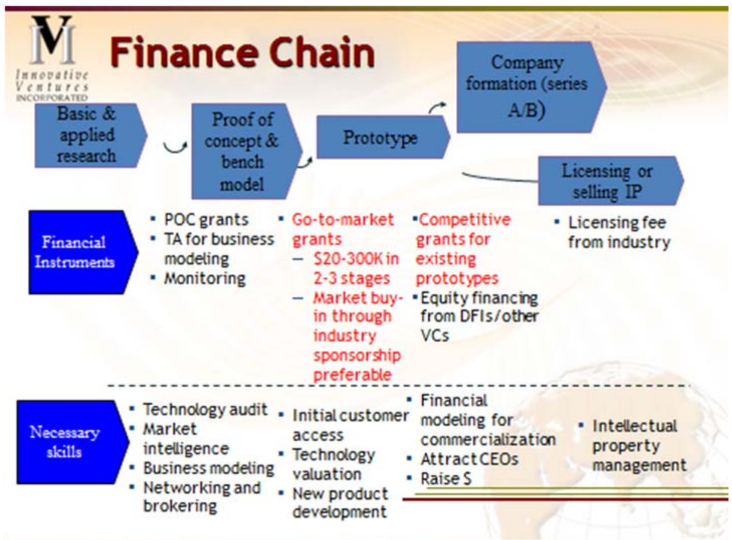
They take technology risks by investing corporate VC in the R&D of young SMEs, and invest directly in IP with technology right-of-use, a structure that accelerates the diffusion of technology to markets and customers. Corporate VCs also provide access to corporate R&D budgets for the funding of technologies at their early stages of development, before financial VCs are able or willing to invest.

Corporations are one set of buyers that can help BICRO & others to apply their technology to customer needs. As Esther Dyson, an investor in Eastern European startups once remarked: "One thing that the market requires is a more demanding customer base. They need to become better buyers and users. They have all the necessary technical skills, but they don't have the business experience to apply the technology as well as they should."

Other Ideas for Grant Making Schemes

Technology opportunities require additional development to demonstrate the performance that's required to attract licensees & customers, from proof-of-concept through prototype development. Many US universities have a variety of 'gap' funding programs over and beyond 'proof of concept.' The success/failure of a technology transfer office (TTO) and its business formation activity is a function of the availability of this money to fund the progression of technology from the lab to the stage where its value is demonstrated to licensing partners and VC investors. Figure 1 shows the chain of schemes, products and skills required in financing technology, from PoC through 1st sale. BICRO provides PoC money yet gaps exist that require new solutions, specifically go-to-market grants and competitive grants.

Figure 1



The Contractor recommends that under World Bank leadership, the Government of Croatia & the EU fund programs to solve 'gap' financing issues in Croatia, thereby speeding technology to market.

1. For Technology Development
   - Establish an 'Engineering Technology Development Fund.' Provides funding for later-stage research activities, for technology refinement.[1] Size of grant up to $10k
   - Establish a 'Micro Grant Fund' modeled to an initiative at the University of Utah, which supports researchers' needs to purchase components or hire programming services to demonstrate experimentation results. Size of grant, up to $5k

2. Funding for Business Development
   - Provide 'Mini Grants' to document business opportunities for proposed technologies. A mini-grant of $3k-$10k is not intended to fund an entire business plan, but a 3-4 page document detailing the technology's potential
   - Establish a 'Prototype Creation Grant Fund' for the building of final prototypes for customer and investor demonstration. Size of grant up to $50k
   - Finance a revolving IP (intellectual property) fund that pays the legal costs of filing domestic or international patents with costs reimbursed through revenues generated from

[1]Source: http://techtransfer.umich.edu/assets/forms/etdfgap.pdf

licensing. Such repayments replenish the facility so it becomes a revolving fund with a one-time investment from the DFI or sponsoring organization

Research shows that foreign start-ups and SMEs with patents in the USA (in addition to their home country) raise more money from VC investors (local and foreign) vs. those with just patents in their home country. The explanation why this is so is simple; start-ups and SMEs with US patents have more protection and revenue opportunities when their IP is protected in US and foreign jurisdictions.

Long-term Solutions: to Build Long-Term Viability in Croatia

Venture Lending Funds

Venture lending investment schemes are modeled to the US Small Business Investment Company (SBIC) program. SBICs fill the market niche left vacant by VC; in the US for example, only 5% of the 500 fastest growing SMEs receive VC money. The other 95% of SMEs require money from different financial institutions and investors. Croatia needs new and different financing institutions just like the US needed them to develop its financial market.

<u>Venture Lending Defined/Features</u>

1. A public/private partnership. In the USA, venture lending companies are called SBICs (Small Business Investment Companies). SBICs are privately managed firms licensed by the U.S. agency called the Small Business Administration (SBA) to make equity/debt investments. SBICs borrow money from the SBA at low interest rates; re-lend money at a higher interest rate with most, but not necessarily all investments having an equity component.
   - SBICs invest in early growth & expansion companies, in the range of $250,000-$5MM per deal
   - SBICs fill the niche left vacant by VC; finance SMEs that will not grow big enough, fast enough, or owners that don't want VC

2. SBICs earn current income to compound IRR to generate equity-like IRR, so the pricing/ownership % required from equity is less vs. VC deals structured as 100% equity.

3. Some statistics from the SBIC program implemented in the US.
   - Since its start-up in 1958, SBICs invested $50.6 billion of long-term debt and equity to more than 102,000 SMEs, with $2.5 billion invested in 1,152 SMEs in 2008
   - From 2004-2008, SBICs invested $12.63 billion of debt & equity capital into 6,614 SMEs in the US, with an average equity investment per SME of $654,357-$812,539 and an average debt investment per SME of $530,849-$759,943
   - Many well-known U.S. companies received money from SBICs, including Intel, Apple Computer, Palm Computing, Federal Express, Callaway Golf, Whole Foods Market, Staples, Quiznos, Outback Steakhouse and Costco to name a few

<u>International Experiences with Venture Lending Schemes</u>

1. Venture lending, quasi-equity type programs were adopted and implemented in Canada, Europe, Asia and Africa by institutions like the Federal Business Development Bank of Canada ($80 million Venture Loan Program), IFC ($280 million African Succession Fund), and the European Commission ($30 million Technology Performance Financing Scheme) in the early 1990s.

2. As one example of its use in emerging markets, India received a $45 million loan from the World Bank in 1988/98. Money was re-lent at commercial rates to four public-sector financial institutions to establish VC. The loan was for 16 years—including a 7 year moratorium on interest & repayment.
   - Of the four VC companies funded, TDICI, Bangalore, a subsidiary of ICICI (Industrial Development Bank of India) and UTI-the state-run mutual fund was the most successful
   - TDICI's first fund – Vecaus 1--invested in 40 SMEs including VXL, Mastek, Software Systems, Microland and Sun Pharmaceuticals. Through 1994, IRR was 28%, an exceptional result for a first-time fund
   - This program is credited as seeding VC in India, although it took almost another 15 years before Indian VC was truly institutionalized. TDICI spillovers formalized the Indian VC industry. K. Nadkarni (former president) established the India Venture Capital Association and was the Indian partner for the first US firm in India (Draper, 1994). Another manager joined ICF Ventures, a fund financed by overseas investors. Several TDICI alumni became managers of Indian high technology firms

Relevance of the SBIC/Venture Lending Product to Croatia

1. ***Local investors must invest in high growth*** SMEs with 35%+ IRR, yet few SMEs meet such criteria. Low/slow growth SMEs that do not meet this requirement don't expand to their potential due to a lack of medium-term, affordable capital.

2. ***SBICs established the product and learning experiences*** for medium-term lending to develop in the USA, India, Africa, etc., and they can benefit Croatia in several ways including:
   - Increase the # of Croatian SMEs that can raise money, grow and develop. Many SMEs have good cash flow, but work in medium growth markets that lack the fast and rapid growth that investors require for investment. Also many entrepreneurs, some with fast growth companies, will not sell equity to VCs, yet still need medium term money to grow their business to its potential
   - Provide medium term money to young SMEs. The lack of medium term money is a huge funding gap in Croatia, and without a solution to fill this gap, the innovation sector will not develop to its potential

3. ***A SBIC program attracts institutional investors*** like insurance companies and pension funds to VC, new sources of money for risk capital investing. SBICs issue debentures, which are guaranteed by the SBA. Pools of these SBA guaranteed certificates are sold to institutional investors through public offerings. Debentures have a life of ten years and provide for semi-annual interest payments and a lump sum principal payment at maturity. The cash feature of the bonds with the risk protection from the US Government guarantee helped institutionalize VC investment in the US.
   - Couple the issue of bonds with legislation to liberalize the % of net assets that Croatian institutional investors can invest in alternative assets (real estate, oil/gas, VC & PE). This will unleash new money for investment into this segment of the market

Wealthy individual and family offices (of industrialists & financiers like the Fords, Rockefellers, Whitneys, Mellons, etc.) provided VC for new and small enterprises in the United States for many years. No institutional source of VC existed until 1958, when the US Congress passed the Small Business Investment Act, the legislation creating SBICs in the USA. Passage of the Act addressed concerns that a major gap existed in the capital markets for long-term funding for growth-oriented

SMEs. Additionally, it was thought that fostering entrepreneurial companies would spur technological advances to compete with Soviet Union.[2]

Before this legislation, institutional investors (pension funds, insurance companies, etc.) could only invest in cash, US Treasuries, liquid securities, i.e., publicly traded equity, bonds, etc. Investment in illiquid securities (privately held companies) was forbidden since these investments could not be sold quickly if institutional investors needed to raise cash quickly to meet pension fund obligations.

The availability of this medium term money and investors financing SMEs was a key factor that stimulated strong US economic growth in the 1960s, 1970's & the 1980's; growth that continues today, even in the slowly recovering US economy.

But this was not the only contribution that SBICs had on the US economy and financial system.

SBICs demonstrated that with the right mix of industry knowledge, investment skills, people and talent, investing in SMEs is not only profitable (IRR of 10%+ higher than investing in liquid, publicly traded securities), but also diversified risk to improve total returns for institutional investors' pensioners and stakeholders. As the life expectancy of pensioners increased in the USA with new cash demands on the system, institutional investors began to lobby for freedom to invest more of their cash into alternative assets.

Initially the Employee Retirement Income Security Act (ERISA) of 1974 prohibited corporate pension funds from investing in certain risky investments including SMEs. However in 1978 the US Labor Department liberalized some ERISA restrictions under the prudent man rule,[3] allowing pension funds to invest in VC and providing a major source of money of venture capitalists. This change plus a reduction in the capital gains tax led to an explosion in new money invested in VC; in 1975 only $10 million of new money was raised for VC investing. In 1978, the VC industry raised $750 million and by the 1988, the industry managed over $31 billion.

SBICs stimulated investing in SMEs. But this effect was minor in comparison to the multiplier effect it had on the US economy. It set the stage for the creation of a new asset class for institutional investors from the USA to Europe to Asia and the Middle East. Leadership from the World Bank in the creation of a medium-term financing facility for Croatia is one of the single most important initiatives that it can execute to grow the Croatian capital markets and institutional VC segment in the country.

Deal Flow Funds

Deal flow funds are organized to finance new technologies around a single product or service that solve significant technical challenges and market needs; GameChanging technologies disrupt industry standards to increase the quality and quantity of deals for VC investors. Every county needs to increase the quality and quantity of investment opportunities for VC investors, and Croatia is no different.

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[2] http://en.wikipedia.org/wiki/Small_Business_Investment_Companies#Small_Business_Investment_Companies

[3] The "prudent man rule" is a fiduciary responsibility of investment managers under ERISA. Under the original application, each investment was expected to adhere to risk standards on its own merits, limiting the ability of investment managers to make any investments deemed potentially risky. Under the revised 1978 interpretation, the concept of portfolio diversification of risk, measuring risk at the aggregate portfolio level rather than the investment level to satisfy fiduciary standards would also be accepted (source: http://en.wikipedia.org/wiki/Venture_capital#cite_note-12)

Gamechanging technologies create excitement, interest, attention, networks, etc., to attract the very best scientific minds, attract the very best and most networked investors, and catalyze networks for collective learning and collaboration in VC, entrepreneurship and knowledge creation to Croatia.

The BlackBerry Partners Fund™ (Research in Motion, Blackberry), the iPhone Fund (Kleiner Perkins, Caufield & Perkins) and the Google Android Developer Challenge (Google) are international examples of deal flow funds around a single product or service. In just 12 months from their inception, these three funds evaluated over 4,800 business plans & funding applications, and invested a total of $56.55 million into 27 SMEs and developers. ***Such results demonstrate the value, attraction and industry creation that deal flow funds have in the market to stimulate new ideas, new SMEs, new innovation and more entrepreneurship.*** These deal flow initiatives are role models and point the way to create deal flow funds for the creation of new innovation, technology and SMEs in Croatia.

Examples of deal flow funds include:

1. Canadian corporation Research in Motion (RIM), manufacturer of Blackberry®. The BlackBerry Partners Fund™ (http://www.blackberrypartnersfund.com) is a $150 million venture capital fund focused on applications and services including mobile commerce (payments, advertising, retailing and banking), vertical and horizontal enterprise applications, communications, social networking, location-based applications and services (navigation and mapping), media and entertainment, and lifestyle and personal productivity applications for the BlackBerry® and other mobile platforms. The Fund invests all stages of development and is co-managed by JLA Ventures (http://www.jlaventures.com) and RBC Venture Partners (http://www.rbc.com/vp).
   - The Fund's 'Jump Start' Program finances innovation in Smartphone application development. It provides entrepreneurs with capital of up to $250,000. The initiative is designed to bring new and innovative ideas into the development process faster allowing entrepreneurs to focus on building great Smartphone applications instead of raising seed capital. Over 3,000 funding applications were received
   - The Fund invests up to $250,000 as a convertible debenture, to give entrepreneurs a standard financing package while giving the Fund early exposure to opportunities

2. VC fund Kleiner Perkins (http://www.kpcb.com**)** created the iPhone VC fund (http://www.kpcb.com/initiatives/ifund/index.html).
   - This $100 million fund finances market-changing ideas and products that extend the iPhone and iPod touch platform, to seed the development of applications for the iPhone & iPod. The fund also supports companies working on software for the iPod Touch, which shares many of the iPhone's functions but lacks its mobile phone capability. Apple provides the Fund with market insight and support
   - The iFund finances seed, early- to late-stage investments in companies providing location based services, social networking, mCommerce (including advertising & payments), communication, and entertainment. The iFund™ invests in innovators pursuing transformative, high-impact ideas with an eye towards building independent durable companies atop the iPhone/iPod touch platform. The iFund™ invests in all stage of investment and invests in SMEs building applications, services and components

3. The Android is Google's mobile operating system for Smartphones. Google used the platform to enter the world of mobile advertising. In November 2007, Google launched the $10 Million Android Developer Challenge

(http://www.google.com/intl/en/press/pressrel/20071112_android_challenge.html), to inspire innovation in the developer and SME community for mobile applications on the Android™ operating system. The Challenge awards cash prizes ranging from $25,000 to $275,000 to developers whose applications are picked by a panel of judges.

- Google awarded 20 developers cash for applications developed for its Linux-based mobile operating system Android. Google gave 10 winners' awards of $275,000 each and 10 semi-finalists $100,000
- Google's award to Android applications developers is the latest success for next-generation applications on mobile devices that move software control increasingly away from carriers
- Almost 1,800 developers entered the Google competition, which demonstrates the need for, and appeal of deal flow funds

Relevance of Deal Flow Funds to Croatia

1. Deal flow funds focus the time, attention and creative energy of entrepreneurs, SMEs and developers to a single problem, so they more quickly test, reject, develop new ideas and product solutions to customer needs, actions that accelerate the creation and commercialization of new technology - to realize objectives faster and more simply. These actions have another benefit; they reduce technical and commercial risk so investors have a better chance to more accurately calculate rate of return on any probable investments.

2. Deal flow funds are another building block to construct an innovation 'ecosystem' in the country. An ecosystem consists of customers, suppliers, developers, universities, SMEs, service providers and investors, all working together with the common objectives for more knowledge creation. Deal flow funds are an integrated solution to make technology 'investment ready' for investors. It is a solution to bridge the innovation gap that exists in Croatia.

3. Deal flow funds pioneer ideas and assist entrepreneurs with the advancement of their concepts into a viable product faster and more cost effectively than ever before. Entrepreneurs spend time building innovative applications instead of searching for start-up capital in a time where the economic environment makes it difficult to raise seed capital.

A theme where Gamechanging technologies can benefit Croatia is the creation of new supply chain & logistics solutions that exploit Croatia strategic location on the Adriatic Sea.

Concluding Comments to the World Bank

Success in VC and SME creation mandates new approaches and business models just when the Bank is getting comfortable with the strategies that worked so successfully in the past. New initiatives to create more STI require experimentation & failure as the Bank knows well; welcome them, and learn from them.

Be well and be lucky

Thomas Nastas
Innovative Ventures Inc.

APPENDIX

Analysis: SBIC (USA) Venture Lending Investment Schemes

Prepared for Paulo Correa, the World Bank, Croatia STP Project

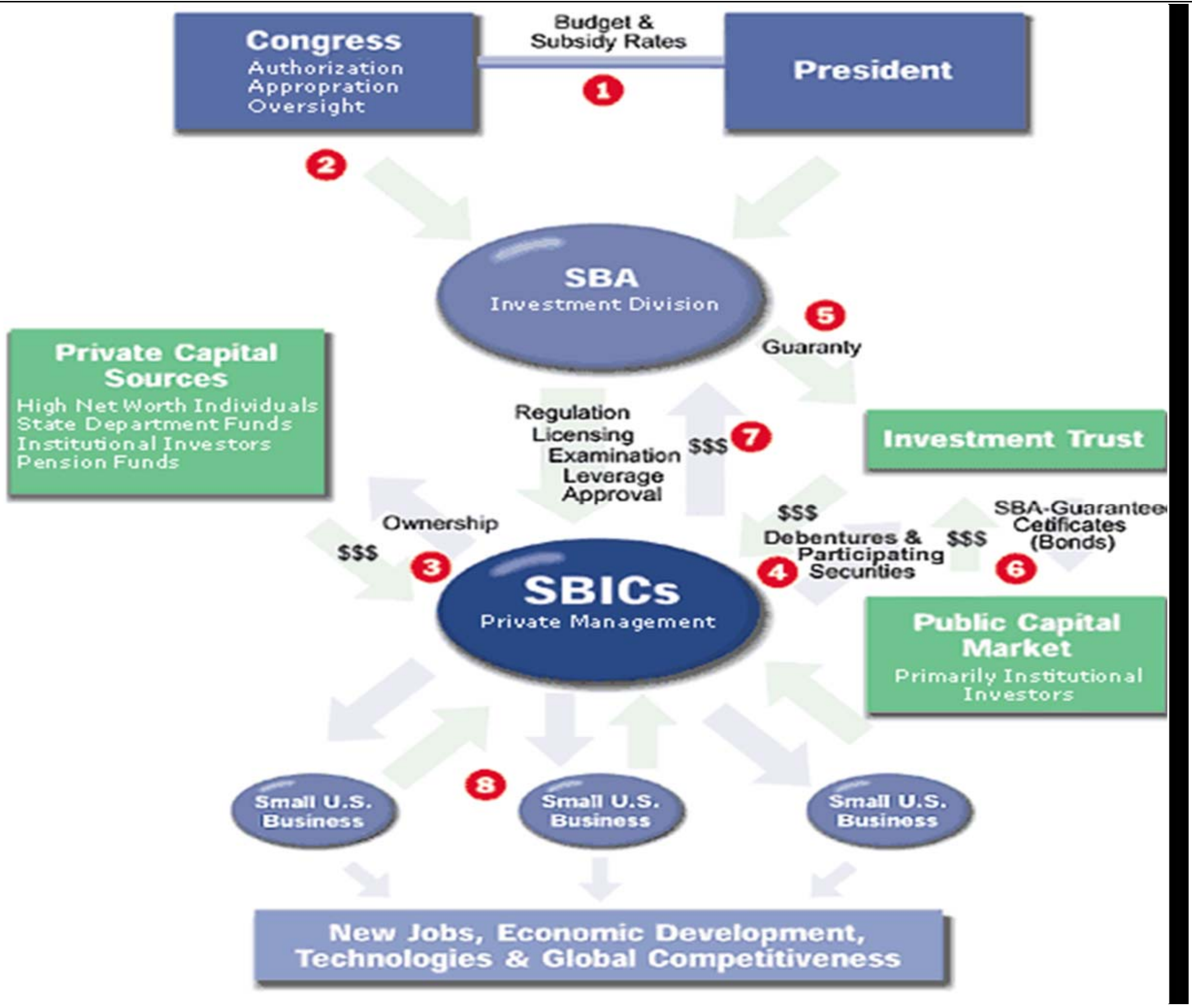
Evaluation: Why Venture Lending	This attachment is a summary of the SBIC lending program of the US Government. VC requires fast growth SMEs, yet historically only 5% of the 500 fastest growing SMEs in the US receive VC. The other 95% of SMEs require other products to finance the capital gap left by VC. Investors must invest in high growth SMEs with 35%+ IRR, yet few SMEs meet such criteria. Low/slow growth SMEs that do not meet this requirement don't expand to their potential due to a lack of long-term, affordable capital. Venture lending, SBIC-type program solve three problems in emerging markets: 1) Increase the # of SMEs that can raise money, grow and develop. 2) Provide medium/long-term money to young SMEs, a huge funding gap in these countries. 3) Develop the market for local institutional investors (pension funds, insurance companies) to invest money into medium-term financial products. SBICs established the product and learning experiences for medium and long-term lending to develop in the USA, India, Africa, etc., and they can do the same in many other countries & regions.
Background on the SBIC Program. Objectives & Mission ***Leverage Facts, SBA Capital to Private Capital***	Individual investors provided VC for new and small enterprises in the United States for many years. No institutional source of VC existed until 1958, when the US Congress passed the Small Business Investment Act. Before this legislation, institutional investors (pension funds, insurance companies, etc.) could only invest in cash, US Treasuries, liquid securities, i.e., publicly traded equity, bonds, etc. Investment in illiquid securities (privately held companies) was forbidden since these investments could not be sold quickly if institutional investors needed to raise cash quickly to meet pension fund obligations. Small Business Investment Companies (SBICs) are financial institutions that invest equity and long-term loans (5+ years) into SMEs. SBICs are privately owned and managed investment funds, licensed and regulated by the United States' Small Business Administration (SBA). SBICs use their own capital plus funds borrowed with an SBA guarantee to invest in qualifying SMEs. SBICs set their own policies and make their own investment decisions. In return for pledging to finance only SMEs, SBICs qualify for US government-backed long-term loans The SBA does not invest directly into SMEs through the SBIC Program. SBA requires a minimum private capital investment of $5 million for an SBIC to receive a license & SBA money. A minimum of 30% of this capital must come from sources unaffiliated

	with the fund manager. A licensed SBIC in good standing, with a demonstrated need for funds, may receive leverage up to 3x of its private capital (most are approved for 2x), but no fund manager may exceed the allowable maximum amount of leverage, currently $119 million of total SBA leverage and commitments, at any one time. Once leverage is committed to an SBIC, it may be drawn down as needed over the entire 4 to 5 year commitment period. The private capital is at risk in its entirety before any taxpayer money is at risk, and SBA examines SBICs regularly to ensure their financial soundness and regulatory compliance.
Definition of a Qualifying SME	SBA leverage operates on a zero-subsidy basis. To obtain leverage, SBICs issue debentures, which are guaranteed by the SBA. Pools of these SBA guaranteed certificates are sold to investors through public offerings. Debentures have a life of ten years and provide for semi-annual interest payments and a lump sum principal payment at maturity. The ten-year debenture allows prepayment with a penalty during the first five years. Thereafter, the debenture may be prepaid without a penalty. In either case, the rate of interest on the debenture is determined by market conditions and the rate of 10-year US treasury securities at the time of the sale.
SBICs Invest Debt & Equity, to Finance Gaps in the Market Left by VCs & Banks	Only SMEs as defined by the SBA are eligible for SBIC financing. The SBIC program defines an SME when its net worth is $18.0 million or less and its average after tax net income for the prior two years is less than $6.0 million. All of the SMEs subsidiaries, parent companies and affiliates are considered in determining the SME's size, and for certain industries alternative size standards may apply. SBICs are an important source of capital during a company's early years. SMEs require financing in the $250,000 to $5 million range, as subordinated loans or equity. SBICs fill niches left by: 1). VC as SBICs finance SMEs that will not grow big enough, fast enough, or owners that don't want VC. 2). Banks as SBICs finance young SMEs, those rich in intellectual assets (with IP and technology) but with few or insufficient tangible assets (buildings, equipment & other collateral) that banks require for loans.
SBICs Generate Equity-Like IRR of VC	SBIC financing supports jobs and job growth. SMEs receiving SBIC money in FY 2007 employed approximately 306,000—an average of 149 employees per company—at the time they received the SBIC financing; with new money they created or retained more than 62,000 jobs. The average number of employees in SBIC-financed SMEs was 37. SBICs generate current income to compound internal rates of return (IRR), so the pricing/ownership % required from equity is less vs. VC deals structured as 100% equity. SBICs earn equity-like IRR for their investors.
SBICs Specialize	Some SBICs specialize in loans or loans with an equity component (warrants, options). These SBICs invest in SMEs mature enough to make

	current interest payments so the SBIC can meet its interest obligations to SBA. Some SBICs specialize in making equity investments, in start-ups and new SMEs. SBICs play an important role in financing SMEs in states and geographic regions not served by non-SBIC private equity firms. Of the 1,256 SMEs that received FY 2007 SBIC financing, 26% were located in government-designated Low & Moderate Income (LMI) areas of the US. Those LMI-district companies received $583 million (22%) of the total $2.65 billion invested by SBICs in FY 2007. SBICs invest in the manufacturing sector, an underinvested sector of the US economy by VCs. Of the $2.65 billion in SBIC investments in FY 2007, 34.8% ($921.2 million) was invested in SMEs operating in the manufacturing sector. For the period FY 2001-2007 SBIC investments in SMEs operating in the manufacturing sector was $6.17 billion.
Results Achieved	Since its start-up in 1958, SBICs invested $50.6 billion of long-term debt and equity to more than 102,000 SMEs, with $2.5 billion invested in 1,152 SMEs in FY 2008. SBICs invest in multiple industries, geographies and stage of investment. Some SBICs invest in a particular field or industry in which their management has expertise, while others invest more generally. Most SBICs concentrate on a particular stage of investment (i.e. start-up, expansion or turnaround) and identify a geographic area in which to focus. Many well-known U.S. firms received money from SBIC including Quiznos, Apple, Palm Computing, Federal Express, Callaway Golf, Whole Foods, Intel, Staples, Outback Steakhouse, Costco, Mothers Work, and Build-A-Bear Workshop. Companies with SBIC money have figured prominently in a variety of 'best of' business lists, e.g., the Inc. 500, BusinessWeek's 'Hot Growth Companies' and 'Hot Growth Hall of Fame,' Fortune magazine's 'Best Companies to Work For' and 'Most Admired Companies.' At year-end FY 2008, 348 SBICs operated in 45 states, the District of Columbia, and Puerto Rico. At year-end FY 2007, SBICs held $19.2 billion in capital resources; of that total, $9.4 billion was private capital and $9.8 billion was SBA-guaranteed capital or commitments. *One of every three dollars invested by SBICs in FY 2007 went to SMEs operating two years or less at the time of investment. When SBIC money is granted as a subordinated loan, statistics show that every SBIC dollar invested results in two additional dollars from banks or other sources.*

Financial Results:	**FY2004**	**FY2005**	**FY2006**	**FY2007**	**2008 FY**
Total Financing ($ millions)					
Equity	$1,447.3	$1,568.2	$1,487.0	$1,238.8	$842.2
Debt	$1,049.5	$1,084.3	$1,207.3	$1,277.8	$1,436.3
Total	**$2,496.8**	**$2,652.5**	**$2,694.3**	**$2,516.6**	**$2,278.5**
Average Size of Investment					
Equity	$684,649	$812,539	$812,134	$782,542	$654,357
Debt	$530,849	$618,513	$748,029	$763,309	$759,943
# of SMEs Financed					
# of Start-ups Financed w/Equity	190	218	194	155	94
# of Start-ups Financed w/Debt	178	190	212	175	197
# of Early & Growth stage SMEs Financed w/Equity	671	639	652	576	465
# of Early & Growth stage SMEs Financed w/Debt	365	353	344	350	396
Total	**1,404**	**1,400**	**1,402**	**1,256**	**1,152**
# of Financings to SMEs (new & repeat) w/Equity	2,114	1,930	1,831	1,583	1,287
# of Financings to SMEs (new & repeat) w/Debt	1,977	1,753	1,614	1,674	1,890
SBIC Investments ($ millions					
Equity	$4,013.3	$4,573.0	$4,906.8	$4,977.7	$4,519.8
Debt	$1,656.0	$1,705.1	$1,904.5	$2,120.2	$2,596.7
Total	**$5,669.3**	**$6,278.1**	**$6,811.3**	**$7,097.9**	**$7,116.5**
Private Capital Investments ($ millions)					
Equity	$5,715.4	$5,246.4	$4,912.1	$4,533.8	$3,956.7
Debt	$2,206.2	$2,326.9	$2,649.8	$2,975.8	$3,195.7
Total	**$7,921.6**	**$7,573.3**	**$7,561.9**	**$7,509.6**	**$7,152.4**
Total Investments					
Equity	**$9,728.7**	**$9819.4**	**$9,818.9**	**$9,511.5**	**$8,476.5**
Debt	**$3,862.2**	**$4,032.0**	**$4,554.3**	**$5,096**	**$5,792.4**
Total Capital Invested (in $ millions)	**$13,590.90**	**$13,851.40**	**$14,373.2**	**$14,607.50**	**$14,268.90**
Investment Restrictions	SBICs cannot invest in other SBICs, finance/investment or finance-type leasing companies, unimproved real estate, SMEs with less than 51% of their assets and employees in the US, passive or casual businesses (those not engaged in a regular and continuous operation), or SMEs which will use the proceeds to acquire farm land. SBICs may not invest in SMEs whose primary business activity is deemed contrary to the public interest.				

Qualifications for a License	SBICs must have management teams with: 1) Substantive and principal investment experience; 2) Realized track record of superior returns; 3) Evidence of strong deal flow in the investment area of the fund; 4) Cohesive management team, with history of working together; 5) Managerial, operational or technical experience that can add value; and 6) A demonstrated ability to manage cash flows so as to provide assurance the SBA will be repaid on a timely basis. An SBIC can be organized in any state, as either a corporation, limited partnership, or a limited liability company. Most SBICs are owned by small groups of local investors, although many are owned by commercial banks. A few SBICs are corporations with publicly traded stock.
SBIC Flow Chart: How the Program Works The eight points indicated in red on the flowchart are explained below.	



1 The Budget proposes total program level and subsidy rates. The subsidy rate is an estimate, as a percentage, of any appropriations amount to be reserved against possible program losses.

2 Congress sets the final program levels and, if necessary, the appropriation to support the same.

3 A SBIC must raise between $5 million and $10 million in private capital before it can be licensed. After licensing, the private capital is always at risk first.

4 Money (leverage) can only be drawn from the Trust after application to and approval by the SBA. A full credit and regulatory review is performed each time leverage is requested. Money drawn by SBICs is repaid in accordance with the terms of the securities.

5 SBA guarantees payment by the Trust of all principal and interest due on the certificates sold to the public market investors.

6 Money for leverage is raised by the sale of SBA-guaranteed securities bearing interest at a rate equal to that of 10-year Treasury Bonds plus a variable spread to that rate based on market conditions.

7 Participating Securities SBICs pay approximately 10% of their profits to SBA.

8 Investments in SMEs may be in the form of loans, loans with equity features (e.g., options to purchase stock or royalty rights), or purchases of equity (stock).

Requirements to Received SBIC Financing	A business plan is required that includes: **GENERAL INFORMATION** 1) The name of the business as it appears on the official records of the state or community in which it operates. 2) The city, county and state of the principal location and any branch offices. 3) The form of business organization and, if a corporation, the date and state of incorporation. **PRODUCTS OR SERVICES** 1) A description of the business, including products or services provided. 2) A history of the development of the products or services during the past five years (or since inception). 3) Importance of each main product/service to the business &its profits. **PRODUCT FACILITIES AND PROPERTY** 1) Description of real and physical property. 2) Description of technical attributes of facilities. **MARKETING** 1) Detailed information about customers, including potential customers. 2) A marketing survey and/or economic feasibility study. 3) A description of the distribution system for products or services. **COMPETITION** 1) Description of the competitive conditions in the industry in which the SME is engaged, including competitive position relative to largest and smallest competitors. 2) A full explanation and summary of the business's pricing policies. **MANAGEMENT** 1) Resumes of the management and principal owners, including ages, education, and business experience. 2) Banking, business, and personal references for each member of management and for the principal owners. **FINANCIAL STATEMENT** 1) Balance sheet and profit and loss statements for the last three fiscal years (or from inception). 2) Detailed projections of revenues, expenses, and net earnings for the coming year. 3) A statement of the amount of funding required and the time requirements for the funds. 4) Reasons for the investment and a description of proposed uses. 5) Description of the benefits expected from the financing, e.g., expansion, improvement in financial position, expense reduction, increase in efficiency, etc.

Benefits to Receiving an SBIC Investment	An SBIC must prove that its management and directors are experienced with a broad range of business and professional talents. SBICs can only make long-term loans or equity investments, and they are prohibited from taking control of the companies in which they invest; therefore, their interests and the entrepreneur must coincide.
National Association of Small Business Investment Companies	The SBIC industry is represented in Washington, DC, by the National Association of Small Business Investment Companies (NASBIC). For 47 years, NASBIC promoted the growth of the industry through effective representation and professional programs. NASBIC sponsors and coordinates industry meetings and educational programs, including the annual **Venture Capital Institute**, widely recognized as the premiere educational program on venture investing.