2009

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Szkoła Główna Handlowa w Warszawie

UNDERSTANDING THE ROLE OF THE GOVERNMENT TO HELP BUILDING THE OPPORTUNITIES TO FINANCING "SEED" AND "START-UP" PROJECTS BY PE/VC

1. Introduction

This paper analyzes factors that influence the development of private equity markets at the seed and start-up stage. The authors want to show solutions of the venture capital and angel capital shames that could be potentially considered in Central & Eastern Europe and be developed to facilitate business growth and economic development giving opportunities to access capital.

These examples should allow and enable small and new startup businesses to access investment funds and providing incentives for innovation and entrepreneurship.

The study focuses on evaluating the process to seek financing for start-up or seed capital, examining the significance of such factors including the methods and solution presenting examples of business schemes that help to secure alternative and sourcing funds to raising money which reflects the structure, cost of capital and risk factor associated with that.

In the following paper we would like to introduce basic concepts to financing projects with seed and start-up capital. We will discuss some business constrains and strategic decisions to be made by the PE/VC and the entrepreneurs. We will give examples how US Government sponsored project have been operating and describe their main characteristics and business constrains. Moreover, we will give guidelines to show examples of models/schemes for entrepreneurs and small and medium companies to participate in obtaining financing for start-up and seed capital in quasi-private and government sponsored initiatives.

We will present guidelines of financing terms and investment models for start-up and seed capital project that could be adopted to help entrepreneurs and PE/VC investor to cooperate.

Furthermore, we will also highlight factors that are important to outline strategic role of PE/VC in the local markets and their participation with entrepreneurs and business people.

2. Taxonomy of private equity/venture capital funds – overview for the entrepreneurs

The PE/VC market is well known to be a significant source of funds of seed capital, funds for start-up firms, private small and middle-market enterprises and other public companies or quasi-public firms seeking financing and refinancing solutions.

Over the last 20 years, Venture Capital and Private Equity Funds (PE/VC) have been for many years driving engines of the US capital economy and has been the fastest growing market for corporate finance including public equity, bond markets and private placement debt. There are over 200 billion of dollars of PE/VC funds in the United States and about 60 billion of dollars is available in Europe.

Without such contribution, the level of innovation and the growth of some most important sectors would not be completed. We can give hundreds of examples and case studies today which reflect the undisputable evidence that PE and VC have been instrumental in the emergence of largest and strongest firms today in the US and world-wide reach. These are for example IBM, Microsoft or Dell just to mention few.

The great deal of details has been devoted to define "seed" capital and "start-up" stages for PE/VC capital industry. We have taken analysis and terminology of PE Taxonomy presented by Thomson Venture Economics and Illinois Venture Capital Association, VE have been categorized in the following way:

- Venture Capital:
- seed stage: product development, market research,
- start-up financing: key mgmt. in place, initial marketing, pre-sales,
- other early stage: product in development or available, first institutional financing,
- expansion stage: product shipping, funds needed for working capital or plant expansion,
- later stage: stable growth rate, likely to be profitable, cash flow positive,
- bridge financing: company to go public in 6-12 months.
- Other Private Equity:
- open market: company is publicly traded,
- acquisitions: LBOs, acquisitions, recapitalizations,
- mgmt/leveraged buyout: management acquiring a product line or business at any stage of development,
- turnaround: operationally or financially troubled.

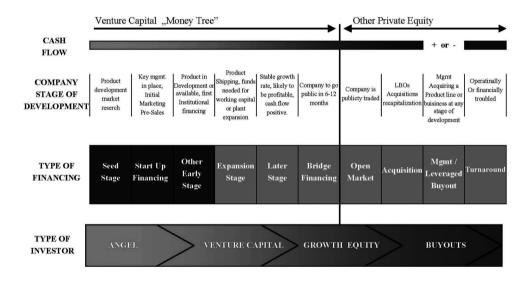
***Seed stage financing

This stage is a relatively small amount of capital provided to an inventor or entrepreneur to prove a concept and to qualify for start-up capital. This may involve product development and market research as well as building a management team and developing a business plan, if the initial steps are successful. This is a pre-marketing stage.

***Start-up Financing

This stage provides financing to companies completing development and may include initial marketing efforts. Companies may be in the process of organizing or they may already be in business for one year or less, but have not sold their products commercially. Usually such firms will have made market studies, assembled the key management, developed a business plan, and are ready to conduct business.

TAXONOMY OF PRIVATE EQUITY



Source: Thomson Venture Economics & IVCA

Fig. 1. Taxonomy of Private equity

Source: Thomson Venture Economics&IVCA.

Other early stage financing includes an increase in valuation, total size and the per share price for companies whose products are either in development or are commercially available. This involves the first round of financing following a company's start-up phase that involves an institutional venture capital fund. Seed and start-

-up financing tend to involve angel investors more than institutional investors. The networking capabilities of the venture capitalist are used more here than in more advanced stages.

*** definitions are provided by Thomson Venture Economics.

3. Seeking the seed capital and financing start-ups

PE/VC funds are important source to obtaining capital to finance moderate and high risk ventures in exchange for potentially high returns and profits.

Quite often the number one reason why entrepreneurs are seeking the capital to obtain capital from PE/VC is lack of ability to secure any form of funding from the financial institutions.

Entrepreneurs quite often have a good business plan and set of skills that are required to undertake challenging project. However they are lacking in putting up adequate capital and therefore PE/VC can be right solutions for business people seeking non-banking financing.

The PE/VC capitalists are determined to undertake considerable risk if the assessment of the project presented for evaluation is satisfactory.

Comprehensive selection process and complete due diligence must confirm and reassure that all interesting projects are being screened and evaluated based on valid merits and facts. Any interesting projects that are not qualified will be rejected at initial stage.

Majority of PE/VC funds are seeking to provide financing to start-up and seed capital project for 3-5 years and possibly extend this period for additional 2 years.

PE/VC are doing lots of investment pre-planning and post-investment after conducting detail financial reviews and internal business audits, PE/VC funds are evaluating their alternatives to find most efficient exit mechanism for its investment.

The start-up companies typically established and funded by venture capitalists present a unique set of issues for corporate governance. PE/VC capitalists while investing in start-ups or seed capital place particular demands on tracking the financial performance of the project or the company.

4. Financing schemes/models for PE/VC funds

We would like to discuss some examples of US quasi-government and private investment PE/VC Programs that could be developed in CEE and potentially bring a dramatic change and revolutionize the way in which the current start-up and seed capital companies and/or projects obtain financing to fund their businesses/projects.

The study how the US Government uses its Small Business Innovation Research (SBIR) have been presented by Mr. David Connel in his publication "Secrets" of the world's largest seed capital fund. According to the US Government the SBIR program known as the Small Business Innovation Research program was established

based on Small Business Innovation Development Act of 1982, signed by the President Ronald Regan. This is considered to be the largest seed capital program of its kind for science and technology businesses in the world.

US Government imposed legislation on Federal Government Agencies with extramural research and development budgets over \$100 million are required to administer SBIR programs using an annual set-aside budget of 2.5%. dedicated for small companies to conduct innovative research or research and development (R and R&D) that has potential for commercialization. The public should also benefit out of that as well.

We will illustrate key program's objectives of SBIR and the funding conditions and requirements. SBIR is non—equity form of financing and does not take the form loans or grants as it has been used in other similar programs in other countries. SBIR funds are providing "contract awards" for the development of technologies that US Federal Government and respective agencies require as customers or research institutions. SBIR was established to stimulate growth of small and medium size companies, entrepreneurs, researches and scholars who would be willing to establish small projects or companies and have difficulty to obtain seed and start-up funding.

Furthermore, it has been presented in Connel's work that studies indicate that majority of SBIR winners through funding with SBIR are not able to raise funds for their projects from usual or conventional PE/VC at such early stage to lunch start-up development phase. The above described program encompasses a variety of different significant components: The program will offer 100% of funding necessary to complete a project plus a profit element to all the participants who are able to pass successfully award process. According to many US Federal Government sources and David Connel's work the awards are being qualified to be distributed in different phases in order to manage the risk. There are typically two or three phases.

Phase 1 is devoted to be disposing on covering feasibility study or pre-development phase in the a mount of 100,000 USD and about 50% of the award participants in Phase 1 are qualified to move forward and be awarded to work at Phase 2, often called as development phase.

Phase II offers to win 750,000 USD.

Phase 3 is designated for the awards to be provided outside of SBIR pools and is covered from other federal government sources.

The program is designed to offer transparent and standard contracts with RFP/ solicitations throughout a calendar year. Program offers complete transparency to the terms and conditions of the awards, scope of work, topics, monetary awards, etc.

The businesses or ventures do not have to be registered until awards are given. It is important to mention that is inviting and providing involvement of academics and scholars to support and support creation of academic spin-off initiatives/ventures and transfer of the know-how and technologies.

The major objectives of this program have been to set up a small business platform to stimulate development of technological and product innovation and engage a variety of different small and medium enterprises and other ventures to participate in the "set up" investment program based on the book of orders arranged from US Government agencies.

According to Small Business Reauthorization Act of 2000, US Government has been willing to stimulate and maintain the above program for many years and consequently between 1982-1988, the "set aside" pool of funds by SBIR has increased from 0.2% to 1.25% and 1992, it was increased to 2.5%.

According to US State Department, eleven Federal government agencies participate in the SBIR program. They are: the Departments of Health and Human Services (DHHS), Agriculture (USDA), Commerce (DOC), Defense (DOD), Education (DoED), Energy (DOE), Homeland Security (DHS), and Transportation (DOT); the Environmental Protection Agency (EPA), the National Aeronautics and Space Administration (NASA), and the National Science Foundation (NSF).

According to the US Government to date, over \$12 billion has been allocated and awarded by the SBIR program to various small businesses ventures and initiatives.

This effort was possible from support from governmental agencies as well as from the small companies, private equity/ venture capital and research companies.

This program has proved to accelerate invitation initiatives and the transfer of the know-how and overall helped increased the level of private sector commercialization for innovations and developments. Furthermore it has greatly accelerated further development of ventures and small business enterprises that have been using PE/VC to further accelerate growth of their incubators.

Authors are aware that CEE in need of further development of investment schemes that would allow business people, entrepreneurs, scholars and all other business creators to find sources of capital that would enable them to finance their initiatives and business objectives that are requested or required by the governments and investment funds of CEE.

Without any doubts we should explore the above schemes in the Polish context and explore opportunities to engage scholars and universities and academic (e.g. PAN, KBN) to participate and support an idea of creation PE/VC funds sponsored by the government and quasi – government agencies to pioneer the proposed schemes in Poland.

It is quite often evident that arranging financing through "standard" PE/VC is difficult and often impossible. It is especially difficult to arrange PE/VC funds at the seed and start-up level. We trust that design of suitable and similar projects for CEE and in particular Poland would greatly accelerate growth of economies and further increase CEE competitiveness in EU.

We propose that Government of Poland should arrange with PE/VE capitalist(s) to form the quasi-private funds where some large government institutions and selected PE/VC funds that are operating in CEE are invited to "set aside" a pool of money to be used to promote different "seed" and "start-up" schemes activities in CEE.

Government and PE/VC firms should explore opportunities to arrange proposed "platform" through European Bank for Construction and Development and International Finance Corporation. The equity for financing small commercial projects is available from EBCD but usually EBRD requests to contact these investment funds or venture capital firms in which EBRD has made equity investments already.

If we assume that foreign beneficiaries (including US) are among the clients or companies who want to participate or take active role in the development of these proposed investment "schemes", we foresee possible cooperation between for instance the US and CEE. It is quite often important for all US institutions to have either direct or indirect participation by one of the US shareholder (e.g. a US Company or the US citizens) who would have direct impact on these programs or initiatives.

It is imperative to seek help from the US and request help to structure and launch a pilot program similar to SBRE available in the US to promote "seed" and start-up investments.

Authors want to emphasize that today most EU funds (usually in the forms of grants) are available but are permitting the use of funds for non-profit purposes. Contribution from the European Commission allows to be used to support a specific proposal or project of a non-commercial type. They can only be offered to non-profit organizations such as universities, focus groups, etc. after approving specific proposals and projects.

Poland and other CEE countries should work to create programs similar to the US SBA's Small Business Innovation Research Program and Venture Capital Investment program that have been developed in the early 80's in North America. Such programs if developed in CEE can give a totally new sense to new growing era of PE/VC in transitional economies.

As we have stated the SBIR program provides funds for innovative research and development in the early stages (e.g. Phases I and II), before the technology or project has been completely developed.

Furthermore what we want to emphasize that SBIR have allowed venture capital firms to cooperate and take direct participations to apply to the program to win the awards.

Small Business Innovation Research Program (SBIR) have set the following requirements for SBIR applicants with venture capital investment: be organized as a for-profit entity, have no more than 500 employees, including its affiliates, and be at least 51% owned and controlled by one or more individuals who are U.S. citizens or permanent resident aliens or either has to have at least 51% ownership and controlled by another for-profit concern that is at least 51% owned and controlled by one or more persons individuals who are U.S. citizens or US green card holders. Under current regulations, in the US, SBIR allows VC/PE investment and partial ownership in a Small Business Concern receiving a Small Business Innovation Research Program (SBIR) award.

Ownership interest by PE/VC companies is generally limited to 9% or less, depending and reviewed by each case. However, if a PE/VC capitalists company is for-profit and owned at least 51% by at least one person who is U.S. citizens or US green card holders, it may own more than 49% of the SBIR applicant so long as the SBIR applicant, together with its affiliates (including the venture capital company and its affiliates), have no more than 500 employees. SBIR and other SBA programs actively encourage and facilitate PE/VC and angel investment in SBIR projects in the later phases of the work. For instance, by working with state-level organizations, SBA has provided business assistance and investor matchmaking services to small businesses participating in, or interested in, the Small Business Innovation Research Program (SBIR). Further amendments made in 2005, the SBA allows PE/VC to receive SBIR awards by extending eligibility to for-profit business concerns is the same as for any other type of firm. The SBIR permits PE/VC and other for-profit companies to own at least 51% of an SBIR applicant if a the venture capital or other for-profit company is at least 51% owned and controlled by one or more individuals who are citizens of, or US permanent resident aliens and the SBIR applicant has, together with all of its affiliates, not exceeding 500 employees. Prior to that, a PE/VC company or other company could not own more than 51% of the SBIR applicant. In addition, one or more venture capital companies can own less than 49% of or invest in the SBIR applicant, as long as the venture capital company or companies do not control the SBIR applicant. We believe that after certain modifications and legal and tax adaptations the above examples of Small Business Innovation Research Program (SBIR) can be very effective in emerging economies of CEE. Under the same umbrella we can consider to form a variety of sub-funds with a selected pool of PE/VC companies, dedicated to special purpose program called Special Investment Purpose where allocation of funds can be disposed upon approval of applicants.

Another example that we would like to explore is a Small Business Technology Transfer Program (STTR).

The STTR (Small Business Technology Transfer and Research) program was established by the Small Business Technology Transfer Act of 1992 and reauthorized until the year 2001 by the Small Business Reauthorization Act of 1997 and reauthorized again until September 30, 2009, by the Small Business Technology Transfer Program Reauthorization Act of 2001.

Federal Government imposed on the selected agencies with extramural R&D budgets over \$1 billion to administer STTR programs with the annual set-aside budget of 0.30%. At present time, five Federal agencies participate in the STTR program: the Departments of Health and Human Services (DHHS), Defense (DOD), Energy (DOE), the Environmental Protection Agency (EPA), the National Aeronautics and Space Administration (NASA), and the National Science Foundation (NSF).

This program has a budget of 230 million USD which is devoted to work on projects in cooperation with universities and other academic centers of excellence. The above conditions are established to allow this model to work efficiently and effecti-

vely to meet the objectives of the program and the beneficiaries. One could say that SBIR have helped to establish business incubators through dedicated government sponsored funds in the forms of contracts and procurements.

Differences that exist between SBIR and STTR:

According to the US Government the SBIR and STTR programs have the following differences:

In the SBIR Program, the participant must have his primary employment base with the small business concern at the time of award and for the balance of the project period.

On the other hand the STTR Program, primary employment is not required. Second, the STTR Program requires research partners at universities and other non-profit research institutions to have a formal collaborative relationship with the small business concern. At least 40 percent of the STTR research project is to be conducted by the small business concern and at least 30 percent of the work is to be conducted by the single, "partnering" research institution.

While taking into account the above programs we could try to set up an umbrella of other different business schemes who could further explore opportunities to develop quasi government/private funds to promote start-up and seed capital projects.

5. Business Innovative scheme/program

This program provides investments for start-up/innovative new/young companies based in CEE a matching funds for every dollar invested by pre-approved PE/VC groups, up to e.g. \$1.4 million (equivalent of 1.0 M euros). Participants to this program/scheme have to be in business less than e.g. three years. Businesses/projects are developing innovative products or processes for the global market. The PE/VC will take an equity position in proportion to the investment made.

6. Growth stage financing scheme/program

This program provides funds for innovative start-up companies based in CEE. Investor for every two dollars an investor puts in to the business, e.g. up to \$1 million Company or enterprise has to look for second-stage/phase financing to enter the expansion stage of the business operations. Applicant must show its track record including innovation, commercialization level for products and services, earnings generated, customer base and confirmation of strong development and growth potential. Every two dollars raised by your company from investor(s) will be matched by a dollar from PE/VC fund, subject to a maximum of an e.g. \$1 million.

7. Entrepreneurial Development scheme/program

Provides young scholars and graduates entrepreneurs a monetary grant of up to \$100,000 to start developing your business applicant needs to present a business plan

and feasibility study to qualify to show how applicants want to lunch the products and services.

8. Strategic role of PE/VE in promoting investment funds

PE/VC in North America and in Western Europe in close collaboration with local governments and large financial institutions such as IPC or EBRD and adopting local regulations and adequate laws have been able to prepare investment and financing programs to reflect needs and expectations of the local companies.

Depending on the investment programs, its program objectives, legal and capital structure, application enhancements and investment incentives introduced or adopted by the PE/VC capitalists and the local governments, PE/VC capitalists can form a variety of different quasi private-government sponsored programs that should help local entrepreneurs and business people in promoting their own projects and help obtain required "seed money" and "star-up capital". PE/VC capitalists have helped both the entrepreneurs and business people to meet their business objectives and contributed to the GDP and expansion of the overall economies including

- job growth and employment impact,
- acceleration of growth of start-up and small and middle companies,
- level of export more and develop new technologies,
- development of R&D,

At the local levels PE/VC Private Equity should actively conduct interviews and seminars to educate and explore knowledge of the local businesses. Investors should team-up with leading financial institutions to promote PE/VC and entrepreneurship activities. These steps would lead to build trust and recognition and improve awareness among the entrepreneurs and small and medium companies in CEE.

These funds should make lectures and seminars at the Universities and Polytechnics as well as with Chamber of Commerce and local associations of Venture capitalist.

These actions will help to build adequate concept and broaden the prospective about the PE/VC industry about the financing projects from PE/VC funds.

These sessions should give good and comprehensive orientation about the following:

- business objectives of the entrepreneurs seeking capital,
- implications to seek financing of start-ups and seeking seed capital,
- financial advice and strategic guidance,
- management recruitment,
- encourage to participate key CEO and angel investors,
- track record of objective, sound commercial decision making is critical to gain trust.

While analyzing investment seed and start-up opportunities PE/VC owners/angels and fund managers should always look closely segments and markets they wish or plan to invest.

While reviewing business plans and feasibility studies as well as performing comprehensive investment due diligence, the capital providers should review business implications like:

Corporate governance

- review the knowledge and experience of the key managers and personnel with the focus on strategic planning/growth of products and/or services,
- impose on the Management Board and Supervisory Board detail guidelines to form Standard operating procedures and internal control,
- insist on management to provide assistance and adequate professional training.

Revenue/Earnings: growth and expansion

- · gradual/organic growth,
- M&A, especially in consolidating sectors,
- planting know-how and solutions from North America/U.S./Europe to new markets

Future expansion and plans/multi-dimensional expansion

- re-positioning,
- rating company / redefine industry.
- peer review of core competences and refocus.

Sales/Product improvement

- better quality control of products and services,
- market share and branding marketing management,
- enhance production and distribution process,
- better use of human and man power inputs,

Restructuring

- internal and organizational structure,
- re-finance

9. Conclusion

We have examined originated in the US government and quasi-government PE/VC platforms that have developed the business financing schemes that have helped thousand of enterprises and small and medium companies to achieve their business growth.

Without such programs that have allowed opportunities to access the "seed" and "start-up" capital and full support and determination by the US government and PE/VC industry these programs would not be successful for so many years and would not be followed in many other countries like UK, Germany, or Australia.

We see a great need and huge demand for these programs in Poland. They would not only provide funding for entrepreneurs and business community but also would greatly influence the innovation in government and its umbrella for multi-disciplinary projects for ground breaking products and services stimulating demand for orders and contracts. Furthermore, these platforms would stimulate and accelerate technology transfer, including transfer of people. It may have its impact also in developing government projects including using sources from off-sets and other long-term projects to be executed with the help of the World Bank or European Bank for Reconstruction and Development (EBRD).

We trusts that both angel capital groups as well as individual PE/VC funds can greatly act as the future catalysts and pioneers for the proposed schemes that could in big way influence the future growth of the small and medium size companies in Poland and in Central & Eastern Europe.

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ZROZUMIENIE ROLI, JAKĄ ODGRYWA RZĄD W STWARZANIU OKAZJI DO FINANSOWANIA PROJEKTÓW TYPU "SEED" I "START-UP" PRZEZ FUNDUSZE TYPU PE/VC

Streszczenie

Finansowanie projektów kapitałem zasiewnym (*seed capital*) i projektów typu *start-up* z funduszy PE/VC jest zazwyczaj bardzo trudne i wskazane jest stworzenie programów rządowych lub *quasi-*rządowych w celu zapewnienia sprawniejszych metod i sposobów na finansowanie tego typu projektów. Ponad 20-letni rozwój rynków PE/VC wspomaganych przez wsparcie i właściwą legislację programów rządowych, takich jak Small Business Innovation Research (SBIR), doprowadził do rozwoju i finansowania wielu projektów typu *start-up*, *seed* i innych specjalnych programów inwestycyjnych, które stały się pionierami i katalizatorami rozwoju przyszłych nowoczesnych innowacji, zaawansowanych technologii i programów badawczo-rozwojowych w ośrodkach naukowych i uniwersyteckich.