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USING VENTURE CAPITAL FOR BUSINESS DEVELOPMENT IN LITHUANIA

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Abstract. The goal of the research is to establish whether (and how) appropriate financing sources – especially private equity and venture capital funds – could reveal any strategic opportunities of Lithuanian companies (and simultaneously opportunities of the whole national economy). The methods of the research cover a comparative analysis of scientific literature and a correlation analysis. The article shows how private equity and venture capital funds, being an alternative and in certain cases – the single financial source for the companies, can promote innovation development and creation of innovative business environment, thus, contributing to the growth of employment and economy of the country. It is also suggested to use venture capital funds as an instrument to diminish economic inequality in the country.

Keywords: venture capital, private equity funds, innovation, knowledge commercialization, social inequality.

Jel: G24, D63.

1. Introduction

Profit-generating and financially solvent companies are a base of a stable economy. Essential condition for their functioning is adequite and reliable financing. One can find many and various forms and types of financing selection which mostly depends on the purpose of the funds needed: investment activities, long-term property are commonly financed by the company equity and long-term bank credits, while daily operations of companies and their working capital – by short-term resources, such as supplier credit, credit line or bank overdraft[1].

[1] Credit line is a way to finance working capital when the company, having a certain bank-defined borrowing limit, is extended at its discretion with a certain amount of credit not exceeding this limit and repays it only after having received payment for the goods or services sold.

Financing sources are also dependent on the fact with what type of risk in daily economical activities companies are faced: if the risk is higher the companies will probably have to use their own funds and will borrow less from banks (or, to be more precise, the banks will be less willing to lend). Supplier credit[2], according to the profile of financed risk, takes an intermediate position between own funds and the funds borrowed from a bank.

Company risk profile, which determines financing sources, depends not only on the sector of company activities, i.e. the risk a company is faced with in daily economical activities, but also on the age of a company: for newly established companies, which are more risky, neither bank financing nor supplier credit is available. In frequent cases this impedes business development and the spread of new ideas. The same should be said about various high technology sectors which are most receptive to science and technologies, though, most risky at the same time. Besides, due to financial crisis continuing since 2008 the increase in a credit risk has been observed in all sectors (public, private and individual[3]) and at all levels (national, institutional and individual). Various solutions – already many times discussed and analyzed – are possible for solving mentioned problems: consolidation of public finance, the International Monetary Fund support, enlargement of bank liquidity by additional contributions of their shareholders (e.g. new issue of shares or bonds) or by using national funds to partly or even completely nationalize them and, thus, restoring confidence in separate elements of financial system (e.g. banks), the whole financial system or even the solvency of a country.

In non-financial sector a significant increase in a credit risk[4] has been also observed: "unwillingness" of banks to lend[5], credit limits for the companies "cut down" by credit insurance companies[6], and, respectively, raised distrust of business

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Overdraft is a form of financing when a company can have a negative balance of bank account not exceeding a bank-defined limit.

[2] Supplier credit is the term of deferred payment provided for the client.

[3] This involves problems of budget deficit and national debt as well as more costly borrowing, and in certain cases – even incapacity to borrow without external support. Private sector is faced to increased business costs and more complicated borrowing terms what, in general, conditioned a lower number and amount of extended new credits.

[4] Lithuanian Business Environment Risk Index, calculated by a credit management services company Intrum Justitia, has risen from 157 items in 2008 to 162 items in 2009 and 164 items in 2010 (Intrum Justitia 2010).

[5] According to data of the Bank of Lithuania the new bank loans given to non-financial companies have decreased from 11,108 billion Lt in 2008 to 8,683 billion Lt in 2009 and 4,011 billion Lt in 2010.

[6] In July 2009 Euler Hermes – one of two trade credit insurance companies operating in Lithuania – cancelled a credit rate assigned to Lithuania attributing Lithuania to the category of uninsured countries together with Laos, Cambodia and Djibouti, and on 1 January 2011 shut down its office in Lithuania.

partners expressed in lower (or none at all) credit limits and shorter terms of deferred payment. In order to solve these problems the solutions similar to those mentioned above are possible: decrease of expenses (at company level), enlargement of liquidity (or even restoration of solvency) by the funds of shareholders (including but not confined to a new issue of shares). Larger-size companies can even expect a state support, sometimes, which ends sometimes – like in the case of banks – in nationalization. Perhaps, the mentioned measures do not solve the problems of long-term solvency of a company but at least they can partially help to reduce its credit risk and to restore its liquidity.

However, the question is if the mentioned measures, and especially too detail analysis of *problems* and possible ways to solve them, don't turn off the attention from more important things, such as *possibility* to suggest companies alternative financing sources which would not be so sensitively responsive to the changes in credit risk of companies like banks are and would not be so much dependent on credit limits (or ratings) determined by credit insurance companies (or – in other case – credit rating agencies) like suppliers. In our opinion, companies could be suggested with such financing sources which would not only solve their liquidity (and solvency) problems but also point out new strategic possibilities. And these are venture capital funds.

Thus, the goal of the research is to establish whether (and how) appropriate financing sources – especially private equity and venture capital funds – could reveal any strategic opportunities of the companies (and simultaneously opportunities of the whole national economy). The methods of the research cover a comparative analysis of scientific literature and a correlation analysis.

2. Importance of alternative financing sources

As we know from the works of D. W. Diamond and P. H. Dybvig, the banks (in contrast to capital markets) "know" their customers, thus, they are able to establish a long-term relationship the importance of which becomes especially evident during a crisis[7]. Capital markets, under conditions of lower uncertainty, become an alternative financing source, and in this way help to avoid a monopoly of banks, however, they do not "know" their customers so well as banks, therefore, their customers cannot take advantage of the benefit provided by long-term relationship.

Suppliers, like banks, also „know" their customers, besides, they work in the same business sector as their customers, therefore, in a recession period a supplier credit becomes an alternative to a bank credit (especially in short-term financing of small and medium-size enterprises) (Jasienė, Laurinavičius 2009).

[7] It should happen theoretically, whereas in practice, as the recent crisis showed, this is not always the case – at least in Lithuania.

However, neither banks nor suppliers (the more so capital markets) lend money to the newly established companies[8]. Thus, new and often innovative companies (offering new, non-traditional products, services or solutions) are left without financing.

Venture capital funds, as suggested by the name itself, are disposed towards taking a higher risk than the banks, which essentially use a borrowed capital, and, therefore, are not afraid to finance companies in their early development stages where other financing sources are not available for them yet. Besides, financing, granted by venture capital funds, is of utmost importance to high technology and higher risk companies. Therefore, it is expected that having created appropriate preconditions for the functioning of venture capital the country would have better probability for the establishment of companies of high technology sector, thus, appropriate financing of this sector is also a possibility for the whole national economy.

Activities of private equity funds which also includes venture capital would be also useful during a crisis: A. Ljungqvist and M. P. Richardson state that under competitive market of private equity the funds of private equity in a case of shock would help to regularize and restore economy by offering to the companies capital which at that time would be very necessary for them and which they could obtain from other sources at significantly higher costs.

On the other hand, existence of venture capital funds, mainly due to their higher disposition to risk, is not always possible without state support: for private investors this level of risk is not always acceptable but on national scale it is "repaid".

Hence, what are those private equity and venture capital funds? Private equity funds are divided into two groups, the first of which involves venture capital and the second – buyout capital. The latter is most frequently used for the acquisition/buyout of larger and mature companies, whereas venture capital, depending on its type, can invest into scientific research and development (seed capital), initial development of markets and ideas (start-up capital) and development of mature companies (expansion capital, also called development or growth capital). Thus, venture capital could be described as a kind of private equity where funds are invested into small companies at their early- and growth- stage. It follows that venture capital funds most often invest their funds into non-listed or newly created companies. Another important aspect of activities of companies into which venture capital is invested is their innovation capacity: venture capital is attracted by those companies for which traditional financing sources are unavailable – those are new/advanced/innovative companies facing a higher risk of activities and namely because of that promising their investors larger return on investments. A term of venture capital investments is limited, most often not exceeding 3-5 years (Ministry of Economy of the Republic of Lithuania 2006).

[8] Unwillingness of suppliers to lend money to new companies could be partly explained by zero credit limits to the newly established companies extended by credit insurance companies when suppliers insure their customers.

In 2007 there were more than 1200 private equity funds in Europe[9] and the companies invested by the private equity funds employed almost 6 million people all over Europe, i.e. about 3% of the European workforce. 5 million employees represented buyout capital and 1 million – venture capital (European Commission 2006).

2.1. Private equity funds – an incentive for innovation development

Research, carried out by the European Venture Capital Association, pointed out that employment in the companies invested by private equity funds from 2000 to 2004 grew on average by 5.4% yearly and this is almost eight times higher than the EU average in the mentioned period (0.7%[10]). The growth of employment in the companies invested by venture capital funds in the period of 1997 – 2004 amounted to 30% per year. The most rapid growth was recorded in biotechnology, health care and medical devices industry – more than 45% per year. Besides, a more rapid growth was represented by those companies which (with the help of venture capital funds) attempted to put into practice the university ideas – their employment was increasing by 62% yearly. Salaries and wages in the companies invested by private equity funds left behind the EU25 average even by 75%[11].

A great number of researches showed that the companies invested by private equity funds operate better than those obtaining no investments from these funds. Based on data of research, carried out in 2007 by the *Global Insight* (Global Insight 2007), US companies, provided with private equity fund investments, by their growth of sales and number of employees left behind the general indicators of market growth: the growth of sales in those companies exceeded the total growth of sales by 5.3 %, and employment – by 2.2 %[12]. When analyzing European companies a similar upward tendency could be noticed: companies which were provided with private equity investments represented a higher rate of sales, export and creation of new working places, besides, spent more money on scientific research (Jasienė, Laurinavičius 2008).

As mentioned above, private equity funds are an alternative financing source for the companies, and often the only source for those facing a higher risk (newly established, high technology companies, etc.). Therefore, private equity funds are the engine of progress since the lack of funds is the main reason to stop establishing new businesses and spreading innovative ideas: based on 2007 survey data (EVCA 2007) 75% of Europeans think that it is difficult to start their own business due to unavailability of

[9] In the EU, Switzerland and Norway

[10] Eurostat 2005.

[11] Or – to be more precise – by 50% the EU15 average since most of companies invested by venture capital funds are established in EU15 countries.

[12] To compare: in companies invested by private equity funds sales were growing by 11,8% at the same time when the total growth of sales was 6,5%; the growth of employment made 3,6% and 1,4%, respectively.

financial support allocated to new businesses. Even more complicated situation is found in Lithuania: 83% of schoolchildren and students would wish to have their own business (based on data of September 2011 survey by the market research company *Rait*), though, only 1.3 % of the interviewed are ready to start their own business in the next 12 months (based on data of May 2011 survey by the *Baltic Surveys*). The main reason for that, as both surveys showed, is the lack of funds.

Existence of empirical relationship between private equity investments and national innovation capacity could be showed with the help of data provided by the European Venture Capital Association about the private equity investments in different European countries[13] (as a percentage of national GDP) and data about the national innovation indicators, e. g. the Global Innovation Index 2011 estimated by the INSEAD business school (INSEAD 2011). Between the series of the mentioned data a positive correlation of medium strength is obtained (correlation coefficient is 0.58). The correlation coefficient of similar strength is also obtained having replaced the Global Innovation Index data with the Summary Innovation Index estimated by the EU (European Commission 2010). Then, correlation between private equity investments into national economy (expressed as a percentage of GDP) and the Summary Innovation Index of the country would be as follows (Table 1):

Table 1. Correlation between private equity investments (as a percentage of GDP) and Summary Innovation Index (Source: EVCA; Innovation... 2010 and own calculations)

Year	Correlation coefficient
2006	0.57
2007	0.56
2008	0.55
2009	0.53
2010	0.55

Therefore, in order to increase national innovation capacity together with the country's competitiveness in international markets, where only innovative products are competitive, it is of utmost importance for the country to create favorable conditions for the development of the alternative financing sources including private equity market and venture capital funds.

Besides, it is possible to show that there is also a relationship between country's innovation capacity and the part of employees working in high technology sector comparing to the total workforce of the country. Correlation and regression analysis carried out using the Global Innovation Index 2011 data and *Eurostat* data about

[13] In the EU Member States, Switzerland and Norway

employment and salaries in high technology sector, shows that there is a positive strong relationship (correlation coefficient is 0.73) between country's innovation capacity and the part of employees working in high technology sector. Determination coefficient which equals 0.53 indicates that more than half of workforce dispersion in the sector of high technologies could be explained solely by data of the country's innovation capacity.

Similar results were obtained after having used the Summary Innovation Index data and the same data of employment (Table 2).

Table 2. Correlation and determination between Summary Innovation Index and employment in high-tech sector (as a percentage of total employment) (Source: EVCA; Innovation... 2010 and own calculations)

Year	Correlation coefficient	Determination coefficient
2006	0.75	0.56
2007	0.75	0.56
2008	0.72	0.52
2009	0.71	0.51
2010	0.73	0.54

2.2. Alternative financing sources and innovations in Lithuania

In Lithuania venture capital like all private equity investments is taking only first steps. If the investments of private equity funds were expressed as a percentage of national GDP it would be obvious that Lithuania, together with Latvia and Estonia, in the line of European countries share the last positions, falling behind the average several times: based on data of the European Venture Capital Association, investments of private equity funds in Lithuania in 2009 made only 0.011% of GDP, whereas, the average in Europe amounted to 0.186%. Investments of private equity funds in the Scandinavian countries, such as Denmark, Finland and Norway, exceeded 0.2% and in Sweden – even 0.4%. The largest investments of private equity were concentrated in Great Britain where they exceeded 0.5% of national GDP. More detailed results are given in Figure 1.

In this context it is not to be surprised that the results of a survey of the top managers, carried out by the market and opinion research centre *Vilmorus* in October – November 2010 showed that even 93% of the interviewed did not know at least one venture capital nor private equity fund acting in Lithuania, and 91.5% could not name any Lithuanian companies into which those funds were and are invested. Thus, it's no wonder that, based on data of the same survey, 78% of the interviewed top managers

had not included private equity nor venture capital funds into the list of potential factors for their companies development.

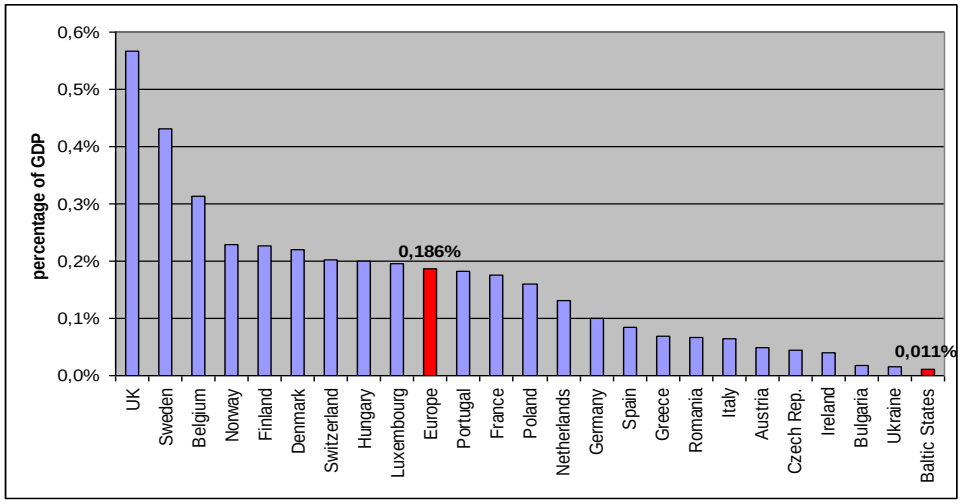

Fig. 1. Private equity investments in European countries in 2009 as a percentage of GDP (Source: EVCA and own calculations)

Having such a low level of private equity investments, it is understandable that the level of industrial progress of a country can not be very high: if in 2002 only 17.3% of products manufactured in Lithuania were created with the use of high tech and medium high tech, almost the same situation remained 6 years later (Fig. 2).

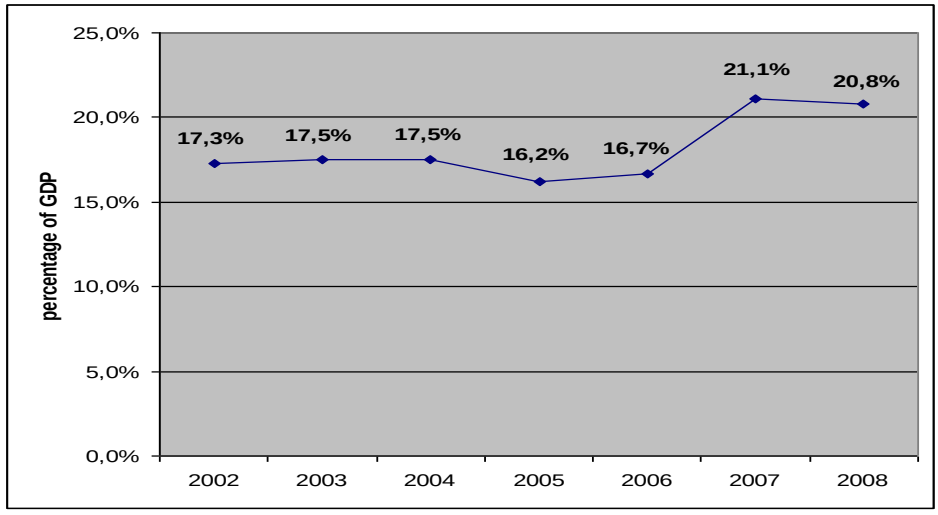

Fig. 2. Manufacturing using high and medium-high technologies in Lithuania as a percentage of GDP (Source: Lithuanian innovation strategy for the year 2010-2020 and own calculations)

A low innovation capacity of Lithuania is also indicated by the European Innovation Scoreboard (European Commission 2008): based on 2008 data, the Summary Innovation Index of Lithuania made 0.29, whereas, the EU27 average was 0.47. According to this index Lithuania had left behind only Romania, Latvia and Bulgaria. The European Innovation Scoreboard states that Lithuania was lacking behind other countries because of insufficient financing of scientific research and experimental development (hereafter – R&D) (in 2007 Lithuania allocated 0.82% of GDP for the R&D financing, whereas, the EU average was 1.85%) and poor indicators of the protection of industrial property (in 2005 Lithuania had 1.3 European patent per 1 million population and only 0.5 patent under the Patent Cooperation Treaty, other EU Member States had on average 105.7 and 52.2). Meanwhile, according to the number of R&D employees Lithuania falls not so much behind the EU average: based on *Eurostat* data, in 2007 Lithuania had 11.5 R&D employees per 1 000 of workforce, whereas, the EU average was 14.6. Consequently, Lithuania has a sufficient knowledge potential, the problem lies in commercialization of this knowledge and this is represented by unbelievably small amount of patents. The same fact could be visually illustrated by another indicator: most of R&D employees in Lithuania work in higher education and governmental institutions, in 2007 only 13.7% of all R&D employees worked in private sector. In most EU Member States private sector has much more R&D employees than in Lithuania: in 2007 the average part of R&D employees working in a private sector in the EU was 42.3%.

Thus, the main problem in Lithuania is not the lack of knowledge potential but the commercialization of this knowledge, i.e. of scientific research results, and this is impossible without the initial financing of innovations. This financing could be implemented by the mentioned private equity or venture capital funds with possibly partial state capital. At present 3 venture capital funds have been already operating in Lithuania established by the JEREMIE (Joint European Resources for Micro to Medium Enterprises*)* initiative, 5 science and technology valleys in Vilnius, Kaunas and Klaipėda and 7 business incubators.

However, it is still difficult for the decision-makers of Lithuania to realize that business incubators are not the buildings lending their premises on easy terms to the companies, providing office or accounting services. Business incubators are first of all a complex of measures and services aimed at introducing into the market (commercializing) goods and services created thereat.

What concerns experience of other countries, for example Israel, incubators in this country offer businessmen not only administrative services (accounting and legal) but also initial financing of ideas and their commercialization (i. e. conversion of scientific inventions to products (or services) which can be traded in the market). Moreover, they share their professional experience that is why they correspond to the seed and pre-seed venture capital funds (Pridor 2010). The scientists or engineers, having created new ideas, are not commonly able to finance them

themselves due to the lack of funds; traditional financing instruments (e. g. banks) are not available for them due to excessive risk of early business, while the seed and pre-seed venture capital funds, having assessed the idea, are able to provide financing and, thus, to convert an idea to a product.

Israeli experience shows that various types of venture capital funds are possible: private participation, private and state participation, and "business angels" (funds of venture capital fund + funds and participation in the project of a person or legal entity which are called "business angel"). Another alternative is also possible: instrument, aimed at small investments of natural persons into innovative projects, where investors can invest a relatively small amount into the ideas they like directly by the internet; a similar system is active in France.

What concerns a legal regulation of private equity and venture capital funds in Lithuania, on 1 March 2008 a new edition of the Law on Collective Investment Undertakings came into force which made it possible in Lithuania to register the funds of alternative investments. This law ended implementation of the Directive 2004/39/EC of the European Parliament and of the Council on Markets of Financial Instruments.

At present there are 3 venture capital funds acting in Lithuania, established by the European Investment Fund (hereafter – EIF). EIF implements EU objectives to promote innovations, applied research and development, competitiveness and employment. At the end of 2009 the total investment of EIF into more than 300 venture capital funds in various European countries amounted to more than 3.7 billion EUR.

All 3 funds were established in Lithuania by the initiative of JEREMIE. It is a joint initiative launched by the European Commission and the European Investment Bank group the aim of which is to assist companies in obtaining external financing sources with the use of part of EU Structural Assistance funds for the period of 2007-2013. JEREMIE enables the EU Member States and regions to use part of funds from the EU Structural Funds and national resources for financing small and medium-size enterprises through controlling funds. Since this assistance is provided on a repayment basis, the funding will be reinvested and hence more of small and medium-size enterprises will benefit from the EU resources.

All 3 mentioned funds were established in 2010, those are Business Angel Fund I, Baltcap and LitCapital. The Business Angel Fund I (hereafter – BAF-I) differs from the other two in a way that it invests into perspective and export-oriented companies only together with a "business angel" – natural or legal person which is ready to invest into the company a portion of its own private equity and to share personal business experience with the management of this company. BAF-I seeks to invest into small and medium-size enterprises acting in Lithuania the sales of which are oriented towards foreign markets, and the amount of one investment comes to 400 thousand Euros.

In a year of operation BAF-I was applied by 160 companies, into 5 of them BAF-1 invested. The field of activities of the selected companies varies from IT solutions for

agricultural sector, LED lamps and recuperators to women basketball clothing. It is expected that the total BAF-I and "business angels" investments in Lithuania would amount to about 58 million Litas, more than 27 million Litas of which will be invested from the funds of JEREMIE controlling fund.

Though Lithuanian achievements in the field of venture capital – and innovation development in general – are still modest one should expect that they will gather speed especially taking into consideration that in 2010 the Lithuanian innovation strategy for the year 2010-2020 was approved providing main innovation development trends and means to achieve them. It is very important that the decision-makers realize not only the significance of separate elements of innovation creation ecosystem – business incubators, science and technology valleys, and venture capital funds – but also the significant effects of relations between those elements on a successful creation and functioning of this system (Smilga 2009). Venture capital funds, not being a part of a more wide strategic management system, including the government and its institutions, science and technology development institutions and business structures, but acting separately, will not assist in implementing the government tasks in the field of innovation promotion.

3. Ethical aspects: venture capital funds and social policy

Venture capital funds, being the part of ecosystem for financing the starting companies, not only provide those companies with deficient financing but also promote the growth in innovation capacity and technology level of the whole country. Their benefit is unquestioned to not only private investors, who had decided to implement advanced and financially risky ideas, but also to the whole country: products of higher added value in long term improve the standard of living of each resident of a country.

Foreign experience shows that properly managed venture capital funds, besides the above mentioned benefit to the companies seeking for financial support and to the whole national economy, are beneficial also to their founders and participants. For instance, the Binational Industrial Research and Development (BIRD) Foundation – the predecessor of Israel venture capital funds – based on 2009 data had funded 780 projects and invested more than 250 million US dollars. The result of its investments was 8 billion US dollars received from direct and indirect sale of investments. Meantime, another group of Israel venture capital funds *Yozma*, launched in 1992-1997, which started with 200 million US dollars, based on 2009 data managed the capital of almost 3 billion US dollars (Senor, Singer 2009).

In this context the question is if venture capital funds could, besides all enumerated advantages, be distinguished in the aspect of social benefit, and namely to become the instrument for diminishing economic inequality.

It should be noted that traditionally in the struggle against poverty and economic inequality the attention is focused on the questions of income and consumption, laying a special emphasis on the idea of progressive taxation of income and the increase of various benefits for the poor. Such proposals ignore several especially important aspects:

- various support and benefit programs, aimed at exclusively the poor, strongly reduce the stimuli to work in official labor market, are stigmatizing and are deepening social gap between different social groups more than promoting solidarity;

- as if forgetting the aspect that even very progressive taxes cannot ensure proper equality since a considerably larger inequality exists not in the income of individuals but in their accumulated assets. The US research showed that a median white had about 50% higher income than a median African American or Latino, meanwhile, the net assets of a median white was even 1000% (11 times) higher than those of an African American or Latino (Oliver, Shapiro 2006; Lawerence et al. 2007);

- finally, instead of introducing additional taxes for the rich which would reduce their initiative, and giving new additional benefits to the poor frustrating their initiative, it would be better to give everybody more or less equal starting possibilities.

Thus, though income or consumption is still the most widely spread poverty measure in social policy – since assurance of income is indispensable for meeting basic requirements – at present the idea of income, as of the only measure of poverty and welfare, has become questionable. The recently formed asset-based policy emphasizes the long-lasting possibilities for individuals who are provided with certain amount of accumulated assets. Asset accumulation leads to important psychological and social changes that are not reached by receiving and spending of certain amount of regular income. This effect of asset accumulation behavior is essential for the welfare of a household. It creates the stimuli for long-term planning, better financial self-education and for the increased level of social and political involvement of people.

It should be emphasized that though in recent decade the global economy (including Lithuania) has been growing at especially high speed but most of individuals, the main source of subsistence of whom was income solely related to the employment contracts, made only a small profit on the growth of national and global economy. More rich people could buy shares, investment funds and, thus, to get involved into the sharing of economic increase, while the non-investing people could not do that. Therefore, one of the suggestions to diminish inequality could be to enlarge a class of investors and to give a chance for everybody to become the owner of capital including venture capital funds.

As mentioned above, property is of vital importance to the policy of diminishing poverty and social inequality delivering not only economic security but also psychological frame of mind to save and to plan future. All those who inherit even a small amount of money are free to think and act *independently*; however, those who

inherit nothing do not have this freedom. Researches show that the gap between those having financial freedom and those having it not is considerably larger than the gap between the prosperous and the rich. Such an insight raises a question: why not to ensure each individual with a certain part of inheritance which would guarantee him the mentioned freedom? Why not to socialize the process of inheritance in a way that each newborn child who acquires the right into the citizenship would also acquire a right to at least modest economic stake which could be called "*citizen's stake*"?

Many authors, especially M. Sherraden, B. Ackerman and A. Alstott, Ph. Van Parijs, suggested various ways and means to realize this "citizen's stake" and some of them have already been put into practice:

1. In Great Britain, in 2005 the program of the Child Trust Fund (CTF) was introduced which ensures that all children born on or after 1st September of 2002 will receive a voucher of 250 pounds (and an extra 250 pounds voucher if a child was born in a low-income family)[14]. When a child reaches the age of 7 years the government makes an additional payment of the same amount for children in low-income families. CTF funds are invested for a long-term period and managed by parents/legal guardians until a child reaches the age of 16. At this point, a child will have an option to take over the management of his account but he will still not be able to withdraw funds from the account until he reaches 18.

2. Since 1998 in 40 states of US a program of Individual Development Account (IDA) has been active. It ensures that the savings of low-income families are in a certain ratio (1:1 to 1:3) supplemented with public funds. In a certain time (usually once in 4-5 years) savings can be used to purchase a first home, to pay post-secondary education, or to start or expand small business.

One should remember that having created a similar system of benefits in Lithuania (either certain vouchers to the newborn children to be invested or the supplement of private funds with public ones) and having diverted all those benefits into the National Venture Capital Fund, everybody could benefit: first of all, the fund would be entrusted with long-term funds, since, as mentioned above, the child will be able to manage their funds only having reached a certain age, and namely this type of funds (long-term) is necessary for venture capital funds. On the other hand, venture capital, as a form of investments, would also suit these funds (or – to be more precise – their shareholders, i.e. newborn children) due to the above reasons, i.e. long period investments and a possibility to take a higher than medium risk. In the result, besides additional financing of starting innovative high-risk companies, it would be also possible to share investment returns – high enough since investments are also of a higher than medium risk level – between all the citizens who had invested into this fund, i.e. a new generation of residents.

[14] This program was stopped since 2011 due to the financial crisis.

The early results of saving/investment programs implemented in other countries show[15] that the policy of investment solidarity increases the level of saving, financial literacy and responsibility of individuals. Besides, it was found out that young people who had even a small stake of private equity at the beginning of their full age, 10 years later would have a large advantage over those who had no equity. This advantage is expressed in lower unemployment level, higher salary and better health. Possession of even a small equity encourages people to invest, save and think about future, and gives them psychological and economic independence – essential factors when seeking for innovation and competitiveness.

4. Conclusions

1. There is a positive medium-strength correlation between private equity investments in the country and innovative capacity of this country; there is a strong correlation between the country‘s innovation capacity and the proportion of people employed in high technology sector.
2. Lithuania has the least private equity investments in the whole EU, therefore, the indicators of innovation capacity and manufacturing using high technologies remain low.
3. The main problem in Lithuania is not the lack of knowledge potential but the commercialization of this knowledge, i.e. of scientific research results, which is impossible without initial financing of innovations. This could be implemented by private equity and venture capital funds.
4. In order to create a high added value economy, Lithuania needs innovative companies that would create a competitive business environment in the country and contribute to the growth of employment and economy; innovative companies need adequate financing infrastructure which could be ensured by venture capital funds.
5. Venture capital funds are able to produce maximum effect only by joining their activity with that of university research centers (science valleys) – only this way the effect of synergy will be achieved to disclose and realize strategic possibilities of the country.
6. Socialization of investments into venture capital funds would not only give a possibility to ensure additional funding for innovative companies but would also create sustainable preconditions for diminishing economic inequality and educating the class of investors.

[15] It should be emphasized that none of the countries has implemented the suggested model when benefits of the residents get into national venture capital fund; generally, with one or another restriction individuals themselves had the right to select the type of investment of their benefits.

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RIZIKOS KAPITALO PANAUDOJIMAS VERSLO PLĖTRAI LIETUVOJE

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Santrauka

Straipsnyje analizuojama, kaip rizikos kapitalo fondai, būdami alternatyviu, o tam tikrais atvejais – ir vieninteliu finansavimo šaltiniu įmonėms, gali paskatinti inovacijų plėtrą ir konkurencingos verslo aplinkos šalyje sukūrimą, tuo būdu prisidėdami prie užimtumo šalyje bei ekonomikos augimo. Iškeliama žinių komercializavimo Lietuvoje problema, nes, šalyje esant pakankamam žinių potencialui, inovatyvumo bei gamybos naudojant aukštąsias technologijas rodikliai išlieka žemi. Taip pat siūloma rizikos kapitalo fondus panaudoti kaip instrumentą, mažinantį socialinę nelygybę šalyje.

Reikšminiai žodžiai: rizikos kapitalas, privataus kapitalo fondai, inovatyvumas, žinių komercializavimas, socialinės nelygybės mažinimas.

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