

# PRIVATE EQUITY AND VENTURE CAPITAL FINANCING IN THE CZECH REPUBLIC AND OTHER EUROPEAN COUNTRIES – DEVELOPMENT, OPPORTUNITIES AND LIMITATIONS

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## Abstract

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Financing by means of private equity and venture capital (PE/VC) offers businesses the resources required to finance their future growth and bring prospective business plans and innovative ideas to reality. This form of financing is relatively new and even though it offers clear advantages it is not frequently used in the Czech Republic and other European countries in the CEE region. This paper addresses current and very relevant issues related to this form of financing. The purpose of this research is to identify opportunities and limitations for this type of financing based on benchmarking analysis. This analysis observes the development of PE/VC financing in the Czech Republic and compares it with several other countries in the CEE region. This paper discusses several factors that influence the development of PE/VC financing. Several conclusions can be drawn from this research. The Czech Republic is in 10<sup>th</sup> place in the utilization of venture capital from the selected 22 countries covered in this research. The time frame for this research is between 2004 and 2010. After thorough analysis of development and conditions in other countries a list of recommended changes that have proven positive impact on the whole economy is formulated. The relatively low level of utilization of the venture capital in the Czech Republic may be due to several things for example by a lack of knowledge of this form of financing and the inability of the management to formulate a business plan that is interesting for the PE/VC investor. The managers are often afraid of the administrative complexity and also the investor expects relatively high profitability of the investment. Another possible limitation is that the public issuing of stocks is used rarely in the Czech Republic. Another cause for the low level of utilization is the absence of public and institutional support for this form of financing. Venture capital has clear and measurable positive impacts on the whole economy and it is therefore important to support and research the use of this method of financing.

venture capital, private equity, financing, firm, GDP, benchmarking

Financing by means of private equity and venture capital is one of several forms of business financing. According to Zinecker (2008) this form of financing allows the investor to increase the equity of the business company that wants to get financial resources from the investor. Režňáková (2007), Zinecker (2008), Valach (2001), Schefzyk

(2006) and others perceive PE/VC as a capital that is invested into businesses that are not publicly tradable on the stock exchange and it is intended especially for use in startups, companies with high growth potential and financing of the innovative projects that are relatively risky. Investor can be either a private company so called Business Angel

or an institutional investor so called PE/VC fund. The difference between private equity and venture capital is in the stage at which the investment is made.

According to the European Private equity and Venture capital Association (EVCA) there are several stages. In the early stage only the initial idea and the know-how of the entrepreneur exist – the business company is brand new or yet to be founded. In the next stages the business company already exists but it cannot get additional financial resources from banks or the owners do not have enough resources required for the new business plan. Investments in this stage are often used to increase the manufacturing capacity, promote sales or optimize the organization or processes. This stage is called later stage venture. The next stage is called buyout. In this stage the management of the company or an external company pays the investor for the share of the company it got for the initial investment. Growth stage is when the company offering the investment possibility wants to expand, reengineer, make an acquisition etc. Bridge financing during the buyout stage helps to increase own equity and prepare for an IPO in the near future. Rescue or Turnaround financing helps businesses to solve short-term problems if they are caused by insufficient own financial resources. Replacement capital is used to buy share of existing business or to refinance bank credits in order to decrease debt. According to the EVCA the private equity is capital used in the buyout stage. Capital used for financing early stage and later stage venture is called venture capital.

PE/VC financing is one of the forms of financing and it is frequently used in other states of the European Union and elsewhere in the world according to (Zinecker & Rajchlová, 2010). For example the great success of Silicon Valley in the USA was possible thanks to venture capital. Or the economic boom in Germany in 1980s was also financed mainly with venture capital according to Scheffczyk (2006), Dvořák (1998).

PE/VC financing and issues connected with it are very current and enough attention has to be focused on it. This form of financing has a clear and measurable positive impact on the development of business enterprises and also on whole economies – this fact is confirmed by numerous studies conducted abroad. Numerous foreign studies confirm this fact for example studies made by EVCA (2001) (2002), NVCA (2002), BVCA (2002) (2003), AVCO (2006) and also research done by Engel (2001), Roling (2001), (Peneder & Jud, 2004) and others. All these studies confirm the positive influence of PE/VC financing on employment, innovativeness, new patents and the new capital often leads to fast growth and success of new business ideas. PE/VC financing helps businesses to obtain new capital for their prospective business plans or patents even without the warranties required by other institutions that offer businesses additional financial resources in form of credits etc. The investor also communicates

with the company and know-how is shared between the investor and the company which receives the venture capital intended mostly to facilitate the realization of the new idea or promising new project. The PE/VC capital strengthens the position of the business company and also means more stability. This is one of the basic strategic objectives of any business company according to (Zinecker & Rajchlová, 2010). Risk is divided between the company and the venture capital investor. The task of the investor is to analyze the risk and decide if the investment is profitable enough to be worth the risk. The main objective of the investor is of course to minimize the risk and maximize profit. The business company is free of interest charged by the bank if bank credit would be used instead of the venture capital according to Režňáková (2007).

Venture capital has also several negative aspects. The venture capital changes the ownership structure of the business company. Some important information or know-how may escape and may be revealed. And there is currently not enough legislation that regulates the use of venture capital. Also there may be a lack of qualified workforce needed to realize the new business ideas. The Czech Republic is gradually changing and evolving toward a market economy. There were several PE/VC investments before 1997 yet no institution existed that would record it. The Czech private equity and venture capital association (CVCA) was founded in 1997. Since then this form of financing is closely observed and there is enough information available to research the utilization of venture capital in the Czech Republic. The objective of this research is to analyze the development of PE/VC financing in the Czech Republic and to measure the utilization in comparison to selected other countries in the European Union. The utility of this research is in the thorough analysis and comparison of PE/VC investing in selected European countries and in the identification of barriers that hinder higher utilization of PE/VC financing.

## RESEARCH OBJECTIVE AND METHODS

The objective of this research is to identify impacts the PE/VC financing has on economies. Also a list of opportunities and limitations is identified. These findings are based on the analysis of the development in the Czech Republic and of the information collected by the EVCA, CVCA, Bundesverband Deutscher Kapitalbeteiligungsgesellschaften – BVK and other institutions. The next step is the comparison with selected other countries – these countries are in the region of Central and Eastern Europe (CEE). Opportunities, limitations and impacts of the PE/VC financing are formulated for current conditions in the Czech Republic based on the benchmarking study and studies conducted in foreign countries. This research uses several scientific methods including analysis, induction, description, mathematical and statistical methods.

Figures are used to visualize the time series and trends in observed variables. EVCA, CVCA and BVK associations use the PEREP Analytics platform – this platform ensures that the information is not biased and can be easily compared. PEREP platform records the development of PE/VC financing in 25 European countries. The time frame between 1997 and 2010 was chosen for this research. The comparison with other countries was done on time frame between 2003 and 2010. These countries were selected for comparison: Sweden, United Kingdom, Holland, France, Hungary, Finland, Spain, Belgium, Norway, Germany, Lithuania, Italy, Ireland, Czech Republic, Romania, Portugal, Latvia, Poland, Estonia and Slovakia.

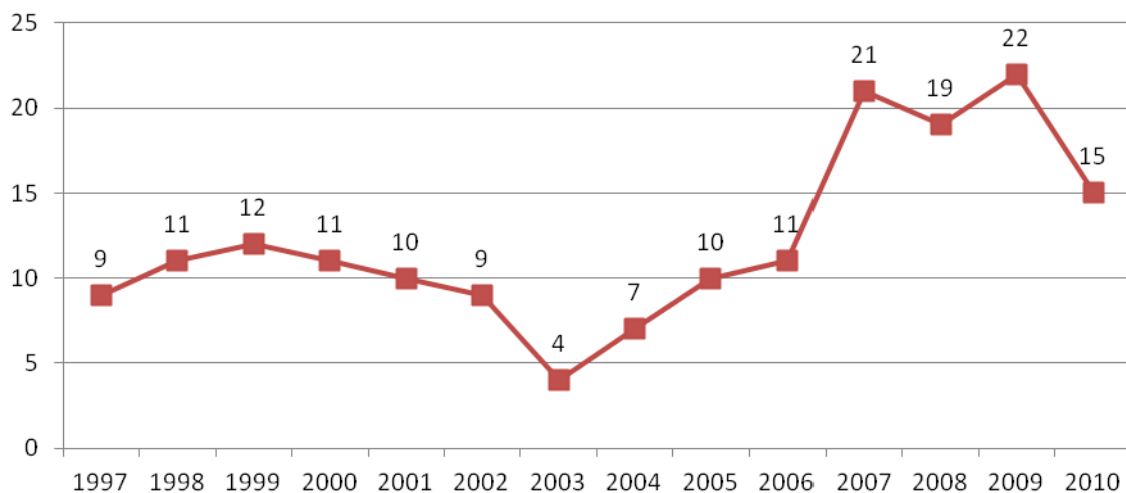
## RESULTS AND DISCUSSION

Counts of business companies that received venture capital investment and total volume of investments per year will be used to demonstrate the development of PE/VC financing. This information is analyzed from 1997 to 2010. In order to measure the utilization of venture capital the total volume of PE/VC investments is compared to the GDP of individual countries. This ratio can then be easily used for basic comparison. Especially the comparison in the CEE region is important because countries in this region have similar economies and industry to a certain degree. They also differ significantly from countries in western Europe.

Fig. 1 records the total number of businesses that received venture capital in the Czech Republic between 1997 and 2010. About 10 businesses received venture capital each year before the year 2002. In 2003 the observed number decreased to 4 – this was because the venture capital investors were waiting for the Czech Republic to enter the European Union. Later a slight increase can be observed. The highest value was recorded in the year 2009 – 22 businesses. In 2010 the number

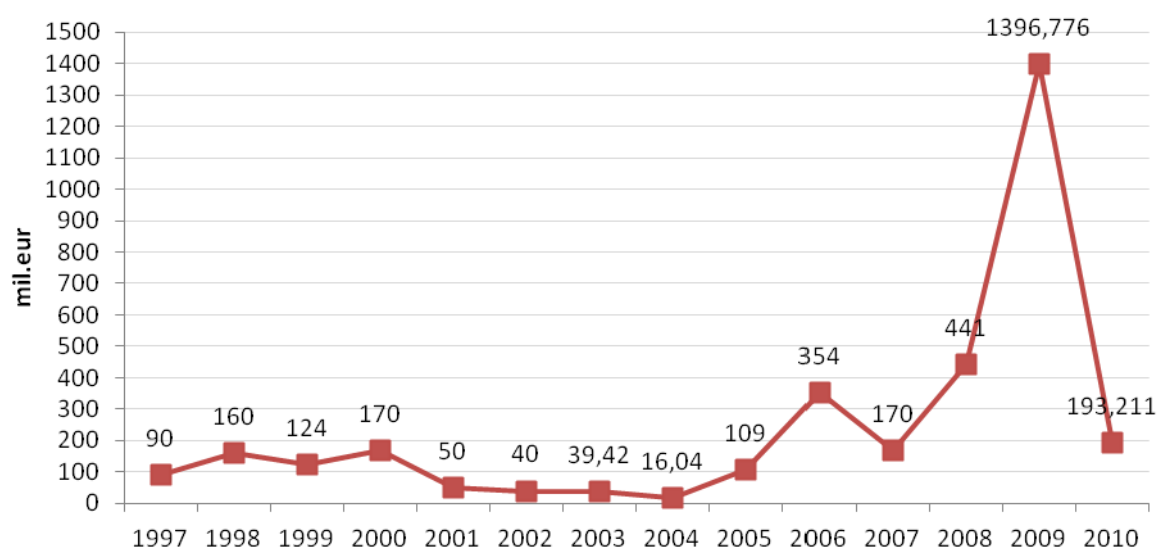
decreased to 15. According to Zinecker/Rajchlová (2010) the venture capital investors invest in these areas: consumer and industrial products, consumer and industrial services and communication. Venture capital investors are steadily searching for business plans with high growth potential, unique products or services and the utility for the consumer has to be clear also the target market has to have growth potential. Management of the company has to prove its high efficiency and endurance. The desired ROI should be between 21.6 % and 33.8 % p.a. based on the stage when the investment occurs. When considering this information it becomes apparent that only a small fraction of companies is selected by the venture capital investor. The investor uses the process called due diligence to carefully analyze different important areas of the business plan before the decision is made according to Horvath (2006), Rajchlová (2010), Schoenbauer (2007). Unlike bank credit the venture capital investment is not covered by assets and it is therefore very risky for the investor. The high risk has to be balanced by high potential profits. Investor uses the due diligence to make sure that the business plan is suitable and interesting for the investor. Fig. 2 records the total volume of PE/VC investments in the Czech Republic between 1997 and 2010. Before 2005 the total volume was below € 200 million per year. The maximal value was recorded in 2009 which defies the trend measured in this year in other countries. This peak value was caused by one major PE/VC investment in the area of telecommunication – the total volume of this one investment was about € 1 billion. This single investment significantly influences the time series but the PEREP Analytics includes this investment so it has to be taken into consideration.

Tab. I describes the time series of investments broken down by the stage when the investment occurs. In 2004 the EVCA changed the method of measuring the PE/VC investments and that led to



1: Number of businesses financed by PE/VC in the Czech Republic

Source: own work based on Jež (2007) and EVCA (2006), (2007), (2008), (2009), (2011)



2: Total volume of PE/VC investments in the Czech Republic (millions of euros)

Source: own work based on Jež (2007), EVCA (2006), (2007), (2008), (2009), (2011), BVK (2008), (2009), (2010)

I: PE/VC investments in the Czech Republic broken down by the stage when the investment occurs

Stage / Year	2004	2005	2006	2007	2008	2009	2010
Early stage (seed, start-up)	2.25	0.408	0.32	0.50	0.28	0.00	13.14
Later stage venture	13.83	10.62	0.78	89.92	45.69	29.99	9.91
Buyouts (growth, rescue, replacement capital, Buyouts)	0.00	97.92	353.11	79.84	395.46	1355.79	170.16
Total	16.07	108.55	354.21	170.25	441.43	1396.776	193.21

Source: own work based on EVCA (2006), (2007), (2008), (2009), (2011), BVK (2005) (2008), (2009), (2010)

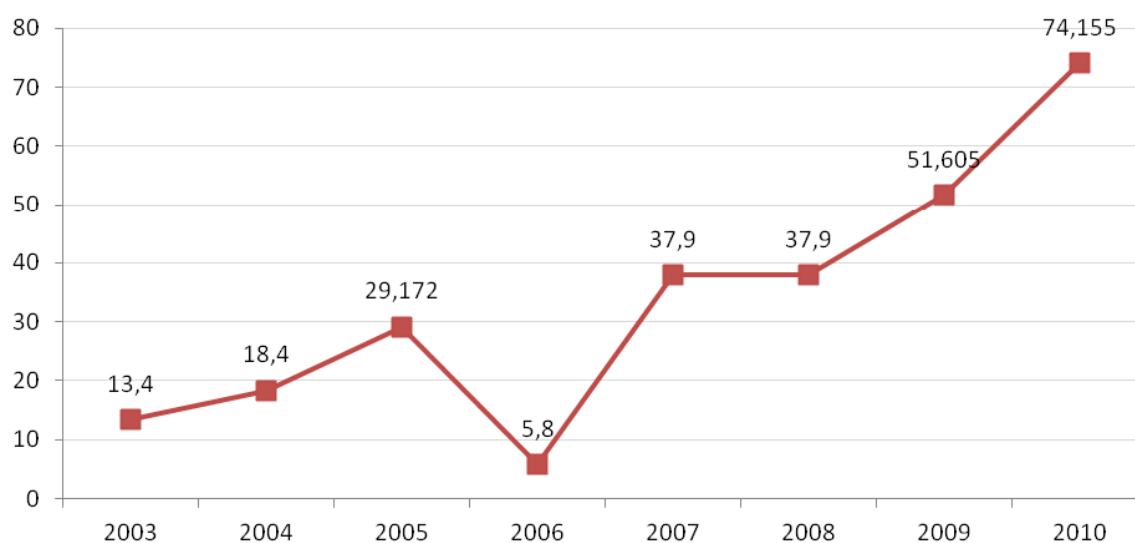


3: Number of disinvestments per year in the Czech Republic

Source: own work based on EVCA (2006), (2007), (2008), (2009), (2011), BVK (2005)

slight changes in the recorded information. Before 2004 only the total volume of investments was recorded. Starting with 2004 the total volume is divided into the individual stages – this difference is useful because more conclusions can be drawn from the historical data. The table tells us that the

majority of investments are made in the buyout stage. This finding can also be observed in other countries. Fig. 3 records the number of exits in each year in the Czech Republic. Exit or so called disinvestment means the successful finalization of the investment process. Disinvestments have several



4: Total volume of resources in the disinvestment stage (millions of euros)

Source: own work based on EVCA (2006), (2007), (2008), (2009), (2011), BVK (2005)

II: Ratio of total PE/VC investments to GDP in the CEE region

Year/Country	Hungary	Czech Republic	Latvia	Romania	Lithuania	Poland	Estonia	Slovakia
2010	0.07	0.13	0.05	0.1	0.05	0.19	0.05	0
2009	0.223	1.017	0.005	0.189	0.004	0.089	0.033	0
2008	0.423	0.297	0.274	0.198	0	0.165	0.088	0.046
2007	0.487	0.133	0.793	0.392	0.567	0.222	0.332	0.043
2006	0.883	0.315	0	0.115	0.076	0.118	0.031	0.045
2005	0.167	0.112	0.068	0.088	0.07	0.045	0	0.052
2004	0.15	0.019	0.12	0.055	0.007	0.069	0.004	0.021
Average ratio of PE/VC inv. to GDP	0.343	0.289	0.187	0.162	0.111	0.128	0.077	0.030

Source: own work based on EVCA (2006), (2007), (2008), (2009), (2011), BVK (2005)

forms – the company can pay to the investor, the results of the investment can be sold to a strategic partner or the company can do an IPO. The number of disinvestments in the observed time frame was between 5 and 10 per year.

According to Fig. 4 it is safe to assume that there is a steady increase in the volume of investments particularly in the disinvestment stage. In 2005 the disinvestment was realized in 10 companies and the total volume was € 29,172 million. The 9 disinvestments in the year 2010 accounted for a much higher total volume of € 74,155 million. This steady increase is interrupted only in 2006 where the 5 disinvestments accounted for only € 5,8 million. Yet in 2003 the same number of exits accounted for € 13,4 million.

Evaluation of the impact the PE/VC investments have on the individual economies can be measured and compared with the help of a special ratio that can be easily calculated by dividing the total volume of PE/VC investments by the GDP of the country. These ratios are listed in Tab. II and Tab. III for selected countries between 2004 and 2010. The

highest values were recorded in Sweden, Great Britain and Holland. The ratio was higher than 1 % in two cases – the NVCA (National Venture Capital Association) in the USA considers this to be better than standard utilization of venture capital. The studies conducted by Belke, Fehn and Foster (2003) proved that the increase of this ratio has a long-term impact on employment – namely increase by one leads to the increase in employment by 1 % to 1.8 %. This finding is very interesting and shows how important a role the venture capital plays in world economies. Even stronger impact can be observed when investor invests in the early stages of the business plan. If the measured ratio increases by 0.25 the employment increases by 1 %. Holland also reached quite a high value of the ratio when compared to other countries namely 1.017%. On the other hand the countries with the lowest values are Greece, Estonia and Slovakia – all were under 0.1 %. The Czech Republic was tenth in the list with the average value close to 0.29 %.



III: PE/VC investment to GDP ratio in selected European countries

Country	2004	2005	2006	2007	2008	2009	2010	Average ratio of PE/VC investments to GDP
Sweden	0.78	0.86	1.44	1.2	0.67	0.37	0.78	0.87
United Kingdom	0.56	0.66	1.26	1.03	0.74	0.3	0.75	0.76
Holland	0.7	0.6	1.05	1.03	0.45	0.14	0.33	0.61
France	0.39	0.45	0.61	0.64	0.47	0.16	0.33	0.43
Finland	0.2	0.47	0.23	0.61	0.4	0.4	0.33	0.38
Norway	0.27	0.24	0.26	0.54	0.35	0.25	0.61	0.36
Hungary	0.15	0.17	0.88	0.49	0.42	0.22	0.07	0.34
Belgium	0.24	0.16	0.45	0.64	0.2	0.34	0.27	0.33
Spain	0.27	0.48	0.37	0.4	0.21	0.1	0.28	0.3
Czech Republic	0.02	0.11	0.32	0.13	0.3	1.02	0.13	0.29
Germany	0.23	0.25	0.31	0.44	0.37	0.11	0.19	0.27
Ireland	0.11	0.08	0.39	0.3	0.16	0.32	0.5	0.27
Latvia	0.12	0.07	0.07	0.79	0.27	0.01	0.05	0.2
Italy	0.14	0.02	0.33	0.21	0.34	0.13	0.1	0.18
Romania	0.06	0.09	0.12	0.39	0.2	0.19	0.1	0.16
Portugal	0.15	0.18	0.12	0.1	0.22	0.19	0.11	0.15
Austria	0.07	0.08	0.1	0.31	0.12	0.07	0.25	0.14
Lithuania	0.01	0.07	0.08	0.57	0	0	0.05	0.11
Poland	0.07	0.05	0.12	0.22	0.17	0.09	0.19	0.13
Greece	0	0.22	0.03	0.19	0.13	0.07	0.01	0.09
Estonia	0	0	0.03	0.33	0.09	0.03	0.05	0.08
Slovakia	0.02	0.05	0.05	0.04	0.05	0	0	0.03

Source: own work based on EVCA (2006), (2007), (2008), (2009), (2011), BVK (2005)

Of all the countries in the CEE region Hungary had the highest value of the observed ratio in 2006. Yet after 2006 the value gradually declined – this was caused mainly by the recent economic problems in Hungary. The Czech Republic is in second place. The lowest average ratio can be observed in Slovakia.

Tab. III shows that the PE/VC financing in the Czech Republic is on the average level. Based on the prior research several possible limitations that prevent higher utilization of this form of financing were identified. For example the pension funds and insurance companies cannot invest into PE/VC funds. Yet the legislative limitations should be removed by the collective investment act in the near future. The Czech government is steadily looking for ways to promote economic growth. The low level of utilization of the venture capital in the Czech Republic could also be due to the lack of knowledge of this form of financing and the inability of the management to formulate a business plan that is interesting for the PE/VC investor. The managers are often afraid of the administrative complexity and also the investor expects high profitability of the investment. Another limitation is that the public issuing of stocks is used very rarely in the Czech Republic.

Another cause for the low level of utilization is the absence of public and institutional support for this form of financing. In many other

European countries there are so called seed funds (Schefczyk, 2006) which focus the financial support to innovative startup companies. In the Czech Republic the need for seed funds is already being discussed at the ministry of industry and trade. Banks together with private investors could easily provide the financial resources if there was legislative support from the government. Ministry of industry and trade is convinced that with the help of the EU a venture capital fund can be created which would then provide capital to the innovative projects and business ideas. The state would enter the business company in the form of PE/VC investment and after a certain period of time the state would sell its share of the company. The objective of this fund is to promote the application of results of research and development and also to facilitate the implementation of new ideas with high potential in business.

Currently the PE/VC financing for SMEs in the Czech Republic is a part of the Operational programme enterprise and innovations (OPEI) 2007–2013. The objective of this program is to help SMEs and facilitate access to the needed additional financial resources, help the small companies to realize their business ideas, make entrepreneurship more interesting for citizens, remove limitations and create new jobs. There are also newly founded business incubators and a program of the European

investment bank called JEREMIE (Joint European Resources for Micro to Medium Enterprises). This program is focused directly on venture capital.

A list of renowned companies was founded with the help of private equity and venture capital. This list includes names like Facebook, Cisco, FedEx, Microsoft, Skype, Apple, Home depot, Intel, Ebay, Google, Amazon, Starbucks, Twitter, Staples, Amgen, Zipcar, Zynga and others according to NVCA. PE/VC financing brings great opportunities for Czech Republic because especially new ideas and projects with high potential for growth are brought into reality with this type of capital. Rolling (2001), Schefczyk (2006). PE/VC financing is ideal especially for startups with innovative ideas – these companies can later grow quickly and expand. This type of financing also stimulates the business environment and allows more business companies to be created according to (Režňáková & Nývtová, 2007). The businesses also become more competitive and new jobs are created according to Roling (2001). Businesses funded by PE/VC investors also show that they operate better in certain areas than other businesses this is proven by several studies including AVCO (2006), EVCA (2002), EVCA (2001), Ernst & Young (2009), (Manigart & Van Hyfte, 1999), (Kortum & Lerner, 2000), Amess (2003), Engel (2002), (Engel & Keilbach; 2002), Bygrave *et al.* (2001) and Belke *et al.* (2003). The increase of PE/VC investments in Czech Republic can lead to an increase of new and to growth of existing innovative businesses. Increase of PE/VC investments can also be linked to a decrease of unemployment according to Belke *et al.* (2003). Several other countries as seen in Tab. III have 2.5 times higher utilization of this type of financing than Czech Republic. To promote the use of PE/VC in the Czech Republic several changes described in this paper should be implemented. It is necessary to promote PE/VC

financing and explain the benefits to the owners and managers of businesses. And of course it is important to eliminate the obstacles that prevent companies from using this form of financing. It has been proven that PE/VC has a measurable positive impact on GDP and employment. More research has to be conducted in this area with the objective to identify obstacles and promote the use of venture capital so its ratio to GDP rises in the near future.

## CONCLUSION

The objective of this research is to identify the impacts, opportunities and limitations the PE/VC financing has on the economies. Data describing PE/VC financing in the Czech Republic in relation to other European countries between 1997 and 2010 were analyzed in this research. Several criteria were observed – the number of businesses that were using the venture capital, total volume of PE/VC investments per year and number of disinvestments per year. And finally thanks to the ratio calculated from total PE/VC investments and GDP the utilization of venture capital can be compared easily between different countries. To reach the set objectives it was necessary to analyze the relevant statistical data published by the EVCA. Several conclusions can be drawn from the analysis. The utilization of venture capital in the Czech Republic is average when compared with other countries in the CEE region. Several limitations and obstacles were identified based on the studies conducted in other countries. Once the limitations and problems are found it is then easier to help businesses communicate with investors and even new legislation that is required can be created when the government realizes that the venture capital is important for the whole economy.

## SUMMARY

Venture capital and private equity is an alternative form of financing. Venture capital helps business companies realize their business plans with high growth potential that require a large amount of financial resources which the company does not have and cannot easily obtain from banks and other institutions. PE/VC financing is frequently used in other states of the European Union and elsewhere in the world according to (Rajchlová & Zinecker, 2010). For example the great success of Silicon Valley in the USA was possible thanks to the venture capital. Or the economic boom in Germany in 1980s was also financed mainly with venture capital according to Schefczyk (2006). Numerous foreign studies confirm this fact for example studies made by EVCA (2001) (2002), NVCA (2002), BVCA (2002) (2003), AVCO (2006) and also research done by Engel (2001), Roling (2001), (Peneder & Jud, 2004) and others. The Czech private equity and venture capital association (CVCA) was founded in 1997. Since then this form of financing has been closely observed and there is enough information available to research the use of venture capital in the Czech Republic. The objective of this research is to analyze the relevant available data from 1997 to 2010 and describe the development of PE/VC financing in the Czech Republic in relation to other European countries. Several criteria were observed – the number of businesses that were using the venture capital, total volume of PE/VC investments per year and number of disinvestments per year. And finally thanks to the ratio calculated from total PE/VC investments and GDP the utilization of venture capital can be compared easily between different countries. The low level of utilization of the venture capital in the Czech Republic could

also be due to the lack of knowledge of this form of financing and the inability of the management to formulate a business plan that is interesting for the PE/VC investor. Also the managers are often afraid of the administrative complexity and also the investor expects high profitability of the business plan. Another limitation is that the public issuing of stocks is used very rarely in the Czech Republic. Another cause for the low level of utilization is the absence of public and institutional support for this form of financing. Several conclusions can be drawn from the analysis. The utilization of venture capital in the Czech Republic is average when compared with other countries in the CEE region. When all these facts are considered it is safe to assume that PE/VC is a good form of financing not only for startups. It has been proven that PE/VC has a measurable positive impact on GDP and employment. More research has to be conducted in this area with the objective to identify obstacles and promote the use of venture capital so its ratio to GDP rises in the near future.

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## REFERENCES

- AMESS, K. 2003: The Effect of management Buyouts on Firm-Level Technical Inefficiency: Evidence from a Panel of UK Machinery and Equipment Manufacturers. *The Journal of Industrial Economics*. LI, s. 35–44. ISSN 1467-6451.
- AVCO, 2006: *Der Einfluss von Private Equity (PE) und Venture Capital (VC) auf Wachstum und Innovationsleistung österreichischer Unternehmen*, [online]. [cit. 2011-01-11]. <[http://www.avco.at/upload/medialibrary/Impact\\_von\\_PE\\_VC\\_Endbericht\\_Okt\\_2006.pdf](http://www.avco.at/upload/medialibrary/Impact_von_PE_VC_Endbericht_Okt_2006.pdf)>.
- BELKE, A., FEHN, R., FOSTER, N., 2003: Does Venture Capital Investment Spur Employment Growth? *Working paper No. 0303*. CESIFO, Vol. DII. ISBN 978-0-7334-2911-8.
- BVCA, 2002: *The Economic Impact of Private Equity in the UK*. [online]. [cit.2011-01-15]. <<http://www.bvca.co.uk/assets/features/show/TheEconomicImpactofPrivateEquityintheUK2002.pdf>>.
- BVK, 2005: *BVK Special. Private equity in Europa 2005*. [online]. [cit.2011-01-15]. <<http://www.bvkap.de/privateequity.php/cat/13/aid/161>>.
- BVK, 2008: *BVK Special. Private equity in Europa 2007*. [online]. [cit.2011-01-18]. <<http://www.bvkap.de/privateequity.php/cat/13/aid/161>>.
- BVK, 2009: *BVK Special. Private Equity in Europa 2008*. [online]. [cit.2011-01-16]. <<http://www.bvkap.de/privateequity.php/cat/13/aid/161>>.
- BVK, 2010: *BVK Special: private equity in Europa 2009*. [online]. [cit.2011-01-17]. <<http://www.bvkap.de/privateequity.php/cat/13/aid/161>>.
- BÝGRAVE, W. D., LANGE J. E., KOTHA, R. R., STOCK, W. I., 2001: *Venture Capitalist Investments and the Growth of Revolutionary New Industries*. London: AW, Sv. Frontiers of Enterpreneuership Research. ISSN 0938-5495.
- DVOŘÁK, I., PROCHÁZKA, P., 1998: *Rizikový a rozvojový kapitál – Venture Capital*. Praha: Management press, 169 s. ISBN 80-85943-74-3.
- ENGEL, D., 2001: Höheres Beschäftigungswachstum durch Venture Capital. Mannheim: ZEW, Discussion Paper No. 01-34.
- ENGEL, D. 2002: The Impact of Venture Capital on Firm Growth: An Empirical Investigation. Mannheim: ZEW, Discussion Paper No. 02-02.
- ENGEL, D., KEILBACH, M. 2002: Firm level Implications of Early stage Venture Capital Investments – An Empirical Investigation. Mannheim: ZEW, Discussion Paper No. 02-82.
- EVCA, 2008: *Central and Eastern Europe statistics*. [online]. [cit.2010-03-15]. <<http://www.evca.eu/Toolbox/Search.aspx?s=Central+and+Eastern+Europe+statistics>>.
- EVCA, 2009: *Central and Eastern Europe statistics*, [online]. [cit.2010-03-15]. <<http://www.evca.eu/Toolbox/Search.aspx?s=Central+and+Eastern+Europe+statistics>>.
- EVCA, 2007: *Central and Eastern Europe statistics*, [online]. [cit.2010-03-15]. <<http://www.evca.eu/Toolbox/Search.aspx?s=Central+and+Eastern+Europe+statistics>>.
- EVCA, 2006: *Central and Eastern Europe statistics*, [online]. [cit.2010-03-15]. <<http://www.evca.eu/Toolbox/Search.aspx?s=Central+and+Eastern+Europe+statistics>>.
- EVCA, 2011: *Creating lasting Value: Yearbook 2001*. [online]. [cit.2010-06-02] Dostupné z <[http://www.evca.eu/uploadedfiles/Home/Knowledge\\_Center/EVCA\\_Research/Statistics/Yearbook/Evca\\_Yearbook\\_2011.pdf](http://www.evca.eu/uploadedfiles/Home/Knowledge_Center/EVCA_Research/Statistics/Yearbook/Evca_Yearbook_2011.pdf)>.
- EVCA, 2001: Survey of the Economic and Social Impact of Management Buyouts and Buyin in Europe. *Survey of the Economic and Social Impact of Management Buyouts and Buyin in Europe*. Brussels: EVCA, Vol. Research paper, I.
- EVCA, 2002: Survey of the Economic and Social Impact of Venture Capital in Europe. *Survey of the Economic and Social Impact of Venture Capital in Europe*. Brussels : EVCA, Vol. Research paper, I.
- HAESSLER, C., HARHOFF, D., MÜELLER, E., 2009: To Be Financed or Not – The Role of Patents for Venture Capital Financing. CEPR, Discussion Paper 7115.
- HORVATH, G., 2006: Risikokapital in Österreich (eine Analyse im gesamteuropäischen Kontext). *Dissertation*. Wien: WU.



- JEŽ, V., 2007: Private equity v České republice. *Private equity v České republice*. Praha: CVCA.
- KORTUM, S., LERNER, J., 2000: Assessing the contribution of venture capital to innovation. *The Rand Journal of Economics*, 31, 4: 674-692. ISSN 1756-2171.
- NVCA, 2002: Measuring the Importance of Venture Capital and Its Benefits to the United States Economy. *Measuring the Importance of Venture Capital and Its Benefits to the United States Economy*. New York: NVCA, Vol. Research paper IV.
- MANIGART, S. W. VAN HYFTE, 1999: Post Investment Evolution of Venture Backed Companies. In: P. Reynolds et al. (eds). *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College.
- PENEDER, M., JUD, T., 2004: *Empirische Untersuchungen und Ergebnisse zur Wirkung von Private Equity und VentureCapital auf die Unternehmensentwicklung*. [online]. [cit.2010-04-01] <<http://www.avco.at/AVCO.aspx?target=21865>>.
- RAJCHLOVÁ, J., 2010: *Rozhodovací proces při financování rozvoje podniků venture kapitálem a private equity*. Brno: VUT FP, Vol 3, 15-21. ISBN 978-80-214-4194-1.
- REŽŇÁKOVÁ, M., NÝVLTOVÁ, R., 2007: *Mezinárodní kapitálové trhy – zdroj financování*. Praha: Grada, 222 s. ISBN 978-80-247-1922-1.
- ROLING, J., 2001: *Venture Capital und Innovation*. Bonn: J. Eul Verlag, 248 s. ISBN 3-89012-902-1.
- SCHEFCYK, M., 2006. *Finanzieren mit Venture Capital und Private Equity*. Berlin: Schaffer, Poeschel, 287 s. ISBN 978-3-7910-2507-0.
- SCHERTLER, A., TYKVOVA, T., 2009: Venture Capital and Internationalization. Mannheim: ZEW, Discussion Paper No. 09-055.
- SCHOENBAUER, G., 2007: Besonderheiten bei der Bewertung von schnell wachsenden, innovativen Unternehmen aus Sicht der Venture Capital-Industrie. *Dissertation*. Wien: WU.
- VALACH, J., 2001: *Investiční rozhodování a dlouhodobé financování*. Praha: Ekopress, 465 s. ISBN 80-86119-38-6.
- ZINECKER, M., 2008: *Základy financí podniku*. Brno: CERM, 193 s. ISBN 978-80-214-3704-3.
- ZINECKER, M., RAJCHLOVÁ, J., 2010: Private equity and venture capitalist investment criteria in the Czech Republic. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, LVIII, 6: 26-38. ISSN 1211-8516.

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