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#### LATER STAGE AND GROWTH CAPITAL IN THE CZECH REPUBLIC

#### **Abstract:**

The paper analyses later stage venture capital and growth capital investment activity in the Czech Republic. These segments of private equity investments follow up with early stage venture capital segments such as start-up capital. Our earlier research has shown that the development of the Czech venture capital market does not comply with European activity over 2007-2015. This paper further enhances the research for this following private equity segments and provides comparison with early stage venture capital market development. The later stage and growth capital investments follow the overall European trends with only more substantial jumps in investment activity caused by relatively more important occurance of larger transactions due to smaller market size.

#### **Keywords:**

venture capital, growth capital, asset management, private equity, financial markets, market failure, government failure

JEL Classification: G24

#### Introduction

Our earlier research<sup>1</sup> has shown the development and comparison of Czech and European private equity and venture capital markets in 2007-2012 or 2007-2013 respectively. The aim of this paper is to enhance the time line with the 2014 and 2015 data and find out the differences in market development trends (if any).

Theoretical background focuses on definitions connected with venture capital and private equity investing and their history. Data and results describe the main features of the Czech later stage venture capital and growth capital market in relation to the European data. Conclusions concentrate on the comparison of earlier research on mainly early stage venture capital with the findings of this paper.

### **Theoretical Background**

Although there is an extensive literature describing venture capital processes, terminology used is not united. Venture capital generally refers to equity investments in companies not listed on the financial markets. Venture capital is generally seen as a subset of private equity asset class. Sometimes, venture capital is also perceived as a synonym of private equity. In general, the authors agree that there are at least two stages of venture capital - investments in early stage companies (seed, early stage, start-up) and subsequent investment in advanced societies (later stage, expansion).

Private equity further includes mainly buyout investments, which again are often divided into small, mid-market, large and mega buyouts. Besides buyouts, growth capital is identified as a space between venture capital and larger buyouts transactions. Rescue and turnaround capital is also seen as specific subset of private equity.

The different stages of private equity refer to stages of portfolio companies development at purchase of their shares and also to expected investment amounts and therefore also funds size.

This segments breakdown of private equity respects the Invest Europe guidelines and is used in this paper. Other possible segmentation of private equity can be found e.g. in Ruhnka, Young (1987).

After 1945, the United States saw gradual development of a true venture capital in terms of pooling of resources and more investors in investment funds and their management by professional investment managers. According to Ante (2008), Georges Doriot is considered real "father of venture capital". A former associate dean at Harvard Business School, he founded ARDC asset management firm together with Ralph Flanders and Karl Compton, former rector of MIT, in 1946. They invested in companies of WWII veterans. For the first investment of venture capital investment was deemed an investment company later known as Venrock Associates (founded by Laurance S. Rockefeller) to Fairchild Semiconductor in 1959.

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<sup>&</sup>lt;sup>1</sup> For instance Ptáček (2014).

According to Brook, Penrice (2009), since the 1960s, there are starting to work consistently limited partnership structures and since 1980s, there appear leverage buyout transactions. The phenomenon of venture capital is associated with a particular industry cluster development of ICT in California's Silicon Valley. After several alternating phases of growth and gradual decline during the second half of the 90s to the emergence of so-called. Dotcom bubble, which washed off in 2000. Later, in 2004-2007, a further strong increase in venture capital was observed, again most notably in California. In the aftermath of the financial crisis of 2008 is experiencing market recovery associated with other new technologies (the internet of things, alternative energy sources, electric vehicles, etc.).

# Data and Results: Later Stage and Growth Capital development in the Czech Republic in compare to Europe

The companies targeted by later stage and growth capital investment funds are generally innovative SMEs and mid-caps, which have been active on the market for a certain time and have the potential for significant further growth, but need additional capital input to achieve this. Private equity investors would provide these companies with financing typically through investment funds managed by professional management teams in exchange for a stake in the company. They generally want a return on investment in the form of a profitable sale of equity within a certain number of years. Typically, the growth capital funds lifetime is around ten years. In the case of later stage investment, this often involves a follow-on round of investment, i.e. additional investment in a company that has already received capital in earlier phases of its development and which is continuing to grow. This form of financing may also be suitable for fast-growing companies in comparison with debt financing, which can be significantly more problematic for a company in terms of liquidity management and its stability. This effect has been proved in literature, e.g. by Bertoni et al. (2011).

The investment activity of private equity (PE) and venture capital (VC) in the Czech Republic was observing an upward trend in 2007-2009, decreasing in 2010-2012 with recovery in 2013-2014 and sharp decline in 2015.<sup>2</sup> However, strong expectations have been pronounced by the local market representatives for 2016 and the following years.<sup>3</sup>

Later stage capital investments were developing quite hopefully until 2010. Since then, its investment activity has been diminishing to only 3% of 2009 values in 2013 and almost no value of new investments in 2015.

Even though – the situation may be getting better in the coming years. One of the main Czech PE firms Genesis focusing on later stage and growth financing has been managing new fund GPEF III with EUR 60 mil. available for investments. The investors' list has changed in compare to previous funds of this PE firm. They are no more dependent on international financial institutions as they attracted also domestic

<sup>&</sup>lt;sup>2</sup> CVCA (2013), EVCA (2011, 2012, 2013, 2014, 2015), Invest Europe (2016).

<sup>&</sup>lt;sup>3</sup> See for instance CVCA (2016).

financial investors including Česká spořitelna, major retail bank or Investiční společnost Komerční banky, investment company of other Czech retail bank or Kooperativa, an insurance company. This is a very important signal that could help further develop PE market in the coming years.

Due to missing stronger market activity, the overall share of venture capital funding on GDP in the Czech Republic is significantly lower than in Europe. Furthermore, the Czech Republic has been constantly placing at the least positions within Europe. The following charts 1 and 2 depicts investment value by venture capital stage to GDP ratio in the Czech Republic and European countries.<sup>4</sup>

0,140% 0,120% 0.100% 0.080% 0.060% 0.040% 0.020% 0,000% 2007 2008 2013 2009 2010 2011 2012 2014 2015 Later-Stage Venture — | Growth Capital

Chart 1: Investment amounts in the Czech Republic, by PE stage, 2007-2015, % of GDP

Data source: EVCA and Invest Europe, Eurostat

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<sup>&</sup>lt;sup>4</sup> The European countries include EU 28, Switzerland and Norway.

Later-Stage Venture Growth Capital 0,050% 0,040% 0,030% 0.020% 0,010% 0,000% 2007 2008 2009 2010 2011 2012 2013 2014 2015

Chart 2: Investment amounts in Europe, by PE stage, 2007-2015, % of GDP

Data source: EVCA and Invest Europe, Eurostat

If we compare data on PE and VC investment activity in the Czech Republic with total European figures over the period of 2007-2015 as in Table 1, we find out that besides the overall weak performance of the market in the Czech Republic, there are also differences in particular categories.

The overall number of investment is limited and varies between about 5 to 10 in the later stage venture capital and growth capital segments of private equity in the Czech Republic, hence the investment activity is influenced by appearance of several larger investments, as depicted below in Table 1.

Table 1: Later stage venture capital and growth capital investments in the Czech Republic by year, 2007-2015

Year	Later stage	Growth	Total	
2007	3.692	116.238		
			119.9	M EUR
	5	2		
			7	investments
2008	31.543	72.121		
			103.7	M EUR
	4	7	44	investments
2000	28.248	191.347	11	investments
2009	20.240	191.347	219.6	M EUR
	4	7	210.0	IVI LOIX
	i i	•	11	investments
2010	9.91	116.142	<del>-</del>	
2010			126.1	M EUR
	1	5		
			6	investments
2011	7.811	7.733		
			15.5	M EUR
	3	2	-	in control and a
2012	5.101	4.22	<u> </u>	investments
2012	5.101	4.22	9.3	M EUR
	2	2	3.3	IVI LOIX
	_	_	4	investments
2013	0.924	4.44		
			5.4	M EUR
	2	2		
			4	investments
2014	2.634	29.386		
			32.0	M EUR
	2	4	•	in vootmants
2015	0.105	8.75	6	investments
2015	0.105	6.75	8.9	M EUR
	2	3	0.9	IVI LOIX
	_	3	5	investments

Source: Invest Europe

The data above in Table 1 reveal the major problem in the functioning of private equity market in the Czech Republic in compare to Europe. Given that only a very few of this type of investment are made each year in the Czech Republic, the market's overall performance is extremely unstable. In general, later stage investments have taken slightly larger share than early stage investments over the long term, but the latest data from 2014 and 2015 show that these may drop significantly year-on-year.

Over longer term, the year-on-year jumps are smoothed. However, growth capital share on total PE investment is of 7 p.p. higher in the Czech Republic than in Europe, as depicted in Table 2 below. A possible explanation is again the stronger relative importance of larger transactions in the context of Czech Republic. The market is overall small, hence a couple of larger investments more likely to happen in later development phases play the decisive role.

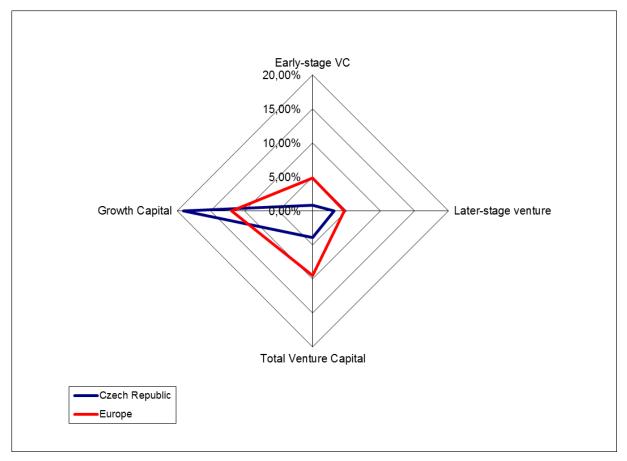
Table 2: Investment amounts and number of invested companies in VC and PE segments, Czech Republic and Europe, 2007-2015 totals

	Czech Republic				Total Europe			
	Total			% of	Total			% of
	investment	<b>%</b>	No.	No.	investment	<b>%</b>	No.	No.
Early-								
stage								
venture	23 113	0,80%	21	15,00%	19 214 902	4,85%	19 686	42,74%
Later-								
stage								
venture	89 969	3,12%	25	17,86%	18 316 146	4,63%	9 209	19,99%
<b>Total VC</b>	113 082	3,92%	46	32,86%	37 531 048	9,48%	28 253	61,34%
Growth								
Capital	550 376	19,08%	34	24,29%	47 495 869	11,99%	8 219	17,84%
Buyouts								
and other								
PE	2 221 335	77,00%	60	42,86%	310 982 439	78,53%	9 589	20,82%
Total	2 884 793	100,0%	140	100,0%	396 009 356	100,0%	46 061	100,0%

Source: Own adjustment of EVCA and Invest Europe data

As regards fundraising, the market is depending on international financial institutions support, including mainly European Bank for Restoration and Development (EBRD) and European Investment Fund (EIF), according to interviews with VC/PE industry representatives. As the Czech Republic has maturated from EBRD support recently, EIF has become key fundraising partner for domestic venture capitalists. In January 2017, a fund of funds facility oriented solely on Czech Republic has been announced by EIF, utilising European Structural and Investment Funds resources managed by the Ministry of Industry and Trade and the City Hall of Prague. Another EIF initiative, focusing on later stage and growth capital, was announced in 2016. This should cover the whole area of Central Europe.

Chart 3: VC and PE investments to GDP (current prices, EUR) percentage ratio by stage, Czech Republic and Europe, 2007-2015 totals



Source: Own adjustment of EVCA, Invest Europe and Eurostat data

Furthermore, business angels' networks do not adequately take the place of lacking early stage venture capital funds due to CVCA findings<sup>5</sup>. Ventures already having research and development results must still seek funds for their commercialization among friends and family or rely on bank loans and grants.

<sup>&</sup>lt;sup>5</sup> See EVCA (2011) and EVCA (2012).

The reluctance towards capital-based instruments may stem from the pursuit of a high level of autonomy by the businesses. Both entrepreneurial candidates and representatives of companies in further phases of development indicated the need for independence as one of the main reasons for starting or having started their businesses according to a survey in Poland.<sup>6</sup> Businesses also stress the lack of the competences of financial institutions and simplistic, underdeveloped and inappropriate approach to new business ventures' assessment in certain knowledge intensive industries, such as biotechnology.<sup>7</sup>

#### Conclusion

The paper has analysed the development and compared Czech and European later stage venture capital and growth capital markets in 2007-2015, mainly to find out the differences in trends with early stage venture capital as described in earlier papers.

In general terms, early stage enterprises receive only a little venture capital in the Czech Republic. Although some recent improvement has been observed, the environment including regulation requirements does not encourage PE investors enough to enter the venture capital market as well. This is particularly evident from the data on PE and VC funds investing in the Czech Republic (full CVCA members).

Whereas early venture stage capital suffers from lack of investors in the Czech Republic, later stage capital and particularly growth capital does not seem to show any differences in compare to European data, both in absolute and relative to GDP terms. Only over longer term, we find out that growth capital is significantly more important in the Czech Republic than in the rest of Europe. A closer eye on data and interviews with industry representatives showed that this is mainly driven by two factors: relative small size of the Czech market and subsequent decisive influence of several larger investments, which are more likely to happen in later development stages of companies.

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<sup>&</sup>lt;sup>6</sup> Matejun (2013)

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