

VENTURE CAPITALISTS' INVESTMENT SELECTION CRITERIA IN CEE COUNTRIES AND RUSSIA

Marek ZINECKER¹, David BOLF²

Faculty of Business and Management, Brno University of Technology, Kolejní 2906/4, 612 00 Brno, Czech Republic E-mails: ¹zinecker@fbm.vutbr.cz (corresponding author); ²davidbolf@gmail.com

Received 26 February 2014; accepted 01 July 2014

Abstract. This article deals with findings of a survey in the Central and Eastern European (CEE) and Russian venture capital markets. The main aim of this study is to explore the following issues: Which criteria play an essential role in the selection of business proposals by firms investing venture capital in the CEE and Russian markets? What are the key characteristics of an investment selection process? And, in addition: Who are the investors in these markets? The nature of this study is explorative. It relies on primary data that were collected using a semi-structured questionnaire. The data were processed by statistical methods reflecting their nature and quantity. Descriptive methods served as basic statistical analyses. The survey results, which provide a number of unique insights into the field, are subsequently compared with findings which were published in similar studies undertaken in well-developed capital markets. This study supports the thesis that, when considering business proposals, above-average attention has been paid to criteria concerning the competitive advantage of the product and its potential to generate high returns. Our survey also confirms conclusions drawn from other studies which identify the size of the market and its growth rate as the most significant criteria characterizing the market. The crucial criterion in the category dedicated to management's experience in the initial stage of the business life cycle is the management's familiarity with the target market although investors emphasize its lower significance compared to the product and market characteristics. By publishing empirical data, an important signal regarding up-to-date evaluative criteria and their weight is sent both to prospective venture capitalists and investee companies operating under specific conditions of the CEE countries and Russia.

Keywords: venture capital, business angels, entrepreneurship, investment selection criteria, survey, Central and Eastern Europe, Russia.

JEL Classification: G24, G32.

Introduction

When starting a business, the first problem the founders have to face is acquiring the starting capital. The initial capital can be accumulated in various ways such as selffinancing by the owner, loans from friends or relatives, private stock issue, forming a partnership, venture capital funds or angel investors. Conventional financing by bank loans seems to be rather unavailable due to a fairly high degree of information asymmetry between the external capital provider and the investee company (Khatiashvili *et al.* 2009).

In well-developed market economies, a lack of conventional funds during the early life stages of a company is, in addition to various forms of state subsidies, covered by formal and informal venture capital. The venture capital market, as a part of the private equity market, is primarily devoted to equity or equity-linked investments in young growth-oriented ventures. The venture capital market consists of two main segments: institutional venture capital (also called "formal venture capital"), and informal venture capital with business angels (Landström 2007). Business angel investments are "the single most important source of early-stage equity capital for small- and medium-sized enterprises" in the US as well as in other well-developed countries (Riding 2008). Prelipcean and Boscoianu (2011) see applying financial innovations in SME's financing,

To link to this article: http://dx.doi.org/10.3846/btp.2015.441

Copyright © 2015 The Authors. Published by VGTU Press.

This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 (CC BY-NC 4.0) license, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. The material cannot be used for commercial purposes.

especially in the case of venture capital and private equity financing as a very important task. They point out the critical importance of this aspect in emerging markets, where the access to funds is very restricted.

Venture capital is traditionally associated with the USA and the UK, from where private investment in various forms began spreading around the entire world. The total VC investment volume in the EU countries was just under \in 3.2 billion in 2012, which represents 0.023% of GDP. However, there are significant disparities between the EU countries when considering total venture capital investments scaled by GDP. The Nordic countries and the United Kingdom have been scoring the highest investment in venture funding. 2007–2011 annual average venture capital investments scaled by GDP reached 0.090% in Sweden, 0.058% in Denmark, 0.041% in Finland, 0.055% in Norway and 0.060% in the UK (compared to 0.038% which represents the European average) (Pan-European Private... 2013).

Compared to the European average, the venture capitalists' activity in the Central and Eastern European (CEE) and Russian venture capital markets is still at very low levels and the recent development does not support its long-term sustainability and establishing an appropriate infrastructure (e.g. specialist legal and accounting firms, attractiveness of market for entrepreneurs, liquidity of capital markets, etc.). 2007-2011 total venture capital investment scaled by GDP reached 0.018% in Hungary, 0.015% in the Baltics, 0.012% in the Czech Republic and Romania, 0.08% in Poland and 0.04% in other CEE countries (Pan-European Private... 2013). On the basis of data published by the World Data Bank (2013) and in the RVCA Yearbook 2012 (2012) we calculated that in the period 2007-2011 the VC investments in Russia including seed, start-ups and other early stages reached \$819 million. Scaled by GDP, this represents 0.011%.

Thus, CEE countries and Russia seem to face macroeconomic challenges similar to Spain and Italy. Redoli and Mompo (2006) use the Ventakaraman's Vicious Cycle to explain the situation in the Spanish venture capital market where politicians and board directors are concerned about poor Spanish R&D results compared to other EU countries. Public R&D policies try to alleviate the problem, but the result is worthless given the lack of high quality firms that are consistent with these policies. Moreover, best talent is not pushed to create new business models based on novel ideas but is driven to comfortable ones. The result is poor deal flow because the economy is based on traditional enterprise and incremental innovations rather than either disruptive technology-based innovations or market-based innovations.

The Vicious cycle can also be found in the CEE countries and Russia in many forms. The consequence is a lack of innovative projects, which are the ones capable of transforming the business environment. This results in underdevelopment of the local venture capital markets. It appears that it is thus necessary to implement projects that support development of this strategy of corporate financing, since filling this identified gap will facilitate the availability of financial resources for creating and developing technology businesses and thereby ultimately enhance the competitiveness of the Eastern European economies.

It follows from the following literature review that surveys into issues associated with Venture Capitalists have a tradition going back many years in advanced market economies. Under the conditions of emerging capital markets in Eastern Europe and Russia, both theory and corporate practice struggle with the absence of empirical results.

The aim of this article is to contribute to a better understanding of the formal and informal venture capital markets in the CEE countries and Russia. This paper addresses the following issues connected with the Eastern European and Russian venture capital markets: Which fundamental criteria play an essential role in the selection of business proposals by firms investing Venture Capital in the CEE and Russian market? What are the key characteristics of the investment selection process? And in addition: Who are the investors in these markets? To meet the aim, a semistructured questionnaire with a subsequent statistical evaluation is used.

The survey results which provide a number of unique insights into the field are subsequently compared with findings which were published in similar studies undertaken in well-developed capital markets.

This paper is organized as follows: this introductory section is followed by a review of existing survey literature. Then the data employed and the analysis methods are described. Finally, the empirical findings are presented and the paper closes with a discussion of the implications of the results for future surveys.

2. Theoretical approaches to venture capitalists' investment selection criteria

The past two decades have witnessed a worldwide rise in the importance of funding early-stage entrepreneurial ventures through venture capitalists. This segment of the financial market has been the subject of many empirical studies in advanced market economies (e.g. Bell 1998; Brettel *et al.* 2000; Brzozowska 2008; Harrison, Mason 1992; Hindle, Wenban 1999; Hindle, Lee 2002; Lahti 2008; Landström 1993, 2007; Lumme *et al.* 1998; Mason, Harrison 2004, 1997; Mason 2009; Riding 2008; Stedler, Peters 2003; Van Osnabrugge, Robinson 2009; Maula *et al.* 2005).

The existing studies on venture capital "have typically been descriptive, focusing primarily on investor characteristics, due diligence process, investment activity, information channels, and involvement in investee companies in different countries including the USA, UK, Sweden, Canada, Finland, Japan, Australia, Norway, and Singapore. Common for these studies is that they distinguish between a formal (a segment driven by institutionalized venture capital funds) and an informal (a segment driven by business angels) venture capital. The estimation concerning the size of both segments is that the size of the informal venture capital market is multiple times the size of the formal venture capital market" (Maula *et al.* 2005).

Van Osnabrugge and Robinson (2009) conducted the first-ever detailed comparison of investment criteria and procedures of two investor types, namely business angels and venture capitalists, in the British informal venture capital market. "Utilising data from 40 personal interviews and 262 questionnaire responses, this study empirically supports the main hypothesized notion that, although both investors reduce agency risks at all stages of the investment process, BAs place more emphasis on doing so ex-post investment (the incomplete contracts approach), whilst VCs stress doing so more ex-ante investment (the principalagent approach). In supporting the hypothesis, empirical information is gathered about each investment stage and each investor group's heterogeneity. Possible implications of these findings are then discussed in the hope of aiding, no matter how slightly, the funding efficiency of small entrepreneurial firms".

Brettel *et al.* (2000) aimed their empirical study at "gaining a deeper understanding of business angels" motivation, personality, investment preferences, modus operandi and estimates of future developments' in Germany. The study also compares its results with those in other countries. "A total of 232 valid questionnaires (return rate of 46%) enabled the widest sample of this area in Germany to date to be analysed".

Studies conducted on the informal venture capital market deal with business angel networks (BANs) providing a channel of communication between business angels and entrepreneurs who are seeking venture capital. Mason and Harrison (1997) demonstrate that there are "significant differences between public sector and other not-for-profit BANs and private sector, commercially-oriented BANs, in terms of the investments that they facilitate in the U.K. The emergence of private sector BANs has not eliminated the need for public sector support for locally-oriented networks".

Maula *et al.* (2005) studied the determinants of the propensity of individuals to make informal investments in businesses owned by others. They built their survey upon two important theoretical bases. First, they employ the social psychological theory of planned behaviour; second, they employ the economic theory on the determinants of demand for risky assets in household portfolios. Building upon these two theoretical frameworks, they develop a set of hypotheses predicting the propensity of individuals to make informal investments in new businesses owned by

others under the conditions of the Finnish market. In their analysis they test whether the determinants of micro-angel investments are similar when investing in a business owned by a close family member versus a more distant business. The findings show that the theoretical frameworks have more power in explaining investments in firms not owned by close family members. The study provides new understanding of the differences in drivers of different types of micro-angel investments.

Riding (2008) has examined the Canadian market for informal investment. It was found that "the flow of investment from business angels was several times that of the flow of institutional venture capital. Moreover, it was found that the flow of investment from business angels was substantially greater than that from formal, institutional, sources of risk capital". Riding (2008) also points out another finding: "business angels experienced losses less frequently and substantial gains more frequently, than did other categories of informal investor". He warns that "it may be counterproductive to the economy to encourage amateur informal investors, but that business angels are not amateurs".

Maxwell *et al.* (2011) investigated early stage business angel decision making with a conclusion that "angel investors do not use a fully compensatory decision model wherein they weigh and score a large number of attributes". They prefer using "a shortcut decision making to reduce the available investment opportunities to a more manageable size".

Blume and Covin (2011) studied entrepreneurs' attributions to intuition and their actual use of intuition. They propose "characteristics of entrepreneurs that increase the likelihood that they will attribute intuition as a basis for decisions during the venture founding process and moreover they delineate characteristics that make the development and effective use of entrepreneurial intuition more likely".

There is also an increasing interest in the issue if perceived passion is likely to play a significant role in the funding decision process on the side of business angel investors. Mitteness *et al.* (2012) explored "how several individual characteristics of angel investors impact the relationship between perceived passion and evaluations of funding potential". The results of the study indicate that "the relationship is stronger for angel investors who are older, more intuitive, have a high openness personality, or those who are motivated to mentor".

The literature review emphasizes the importance of both the formal and the informal venture capital market for funding new entrepreneurial projects in the US and most Western European countries. However, there is a lack of empirical evidence on the CEE and Russian venture capital markets. Potential investee companies do not have information regarding fundamental investment criteria, their significance and investment selection process.

Based on the "Venture Capital and Private Equity Country Attractiveness Index 2013" published by Groh et al. (2013), the CEE venture capital market seems to be rather unattractive compared to Western Europe. Weaknesses and threats of this market consist in "weak capital market structures, lower political stability and less stable regulatory and enforcement environment". All CEE economies are dependent on the development in Western Europe that is "the primary driver of exports and main source of investments". This development has also been confirmed by other studies emphasizing that the CEE countries are underdeveloped in attracting appropriate investments (Jurevičienė, Martinkutė 2013; Tvaronavičienė et al. 2011). On the other hand, Russia differs in many aspects from these countries because of its non-EU membership and thus different economic and legal standards, an extraordinary market size and a relatively high number of domestic investors.

Therefore, in order to encourage the development of these markets, this explorative study will aid in filling in the empirical gap in the area of fundamental examination of business investment proposals. It is difficult to make a decision about investing in new ventures, "as all of them have very poor accounting data or still do not have any". The evaluation of new ventures' effectiveness requires considering both quantitative and qualitative data (Stankevičienė, Žinytė 2011). Without knowledge of the following aspects, the venture capitalists cannot even think of taking a decision (e.g. Tyebjee, Bruno 1984; Fried, Hisrich 1994; MacMillan *et al.* 1985, 1987; Muzyka 1996; Eisele *et al.* 2002; Volkmann *et al.* 2010): management, product, markets and finance. The aim of this process is to reduce information asymmetry between the venture capital seeker and the investor.

3. Survey methodology and data sources

The purpose of this empirical survey is to gain a greater understanding of the CEE and Russian formal and informal venture capital markets. The CEE region includes the Czech Republic, Poland, Hungary, Slovenia, Slovakia and Baltic countries. The study deals with venture capital investments, which are per definition investments in seed, start-up and early stage development of enterprises (Pan-European Private... 2013). A high level of risks and thus high required returns are typical of this investment category.

The nature of this study is explorative. It relies on primary data that were collected using a semi-structured questionnaire, i.e., it does not test a specific hypothesis. The questionnaire in English is based on 17 evaluative criteria divided into four parts, each of which evaluates the product, the quality of management and financial and market aspects. The selection of the evaluative criteria was adopted from previous studies (e.g. Tyebjee, Bruno 1984; Fried, Hisrich 1994; MacMillan *et al.* 1985, 1987; Muzyka 1996; Eisele *et al.* 2002; Volkmann *et al.* 2010). The respondent holding the position of an investment analyst was asked to express the weight attached to individual criteria by qualitative evaluation, i.e. by selecting a relevant point on a five-point ordinal scale with two extreme anchors, 1 (unimportant) and 5 (of a high significance).

Collecting a sample of venture capitalists operating in the CEE countries and Russia is a great challenge since there are only official statistics for the formal VC market and not for business angels. Despite this fact, we decided to interview both groups, the institutionalized (formal) and non-institutionalized (informal, business angels) investors.

The obtained sample was collected during the period from December 2013 to January 2014. In total 400 venture capitalists in the CEE region and Russia were asked to complete the questionnaire. The sample was collected asking public relations departments of VC funds, BAs, national venture capital associations and business angels' networks. E-mails and social media such as LinkedIn and Facebook were used. The obtained data comprise 35 venture capitalists in Eastern Europe and 14 venture capitalists in Russia, which represents a 12% response rate. It should be pointed out that the return rates fall within the range mentioned in other survey-based financial studies (Brau, Fawcett 2006).

The questionnaire-collected data were processed by statistical methods reflecting their nature and quantity separately for the CEE market and Russia because of the specifics of both markets mentioned above. Descriptive methods served as basic statistical analyses. The following discussion explains the data analysis results in order to outline some specific issues existing in the Eastern Europe and Russian formal and informal venture capital markets. The results are afterwards compared with similar studies conducted under conditions of well-developed venture capital markets.

Sample description

Table 1 shows personal characteristics of investors interviewed. A typical investor in our sample is male (94% of respondents) and aged 36-45 (46%). On average, Russian investors are younger (40 years old) compared to those operating in the CEE (46 years old). Investors in the age category 46-55 are from the frequency point of view on the second place. A private investor may thus be a relatively young person (36-45 years of age) who is able to offer their know-how despite having a short professional career. Some of them graduated from British universities and gained professional experience abroad. All respondents are active either as members in investee committees of VC funds or as BAs. It can be assumed that venture capitalists play an important role not only as providers of venture capital, but also as providers of competences, so they offer added value in the sense that they contribute their previous professional experience in addition to equity.

Age Category	Frequency	In %			
25-35	8	16			
36-45	23	46			
46-55	13	26			
56 and more	6	12			
Age – Mean (sample)	44.8				
Age – Mean (CEE Countries)	46.2				
Age – Mean (Russia)	40.3				
Gender					
Male	46 94				
Female	3	6			
Total	49	100			

Table 1. Survey results - the sample

4. Empirical findings

Table 2 shows some basic features of the investment selection process. It is obvious that investment proposals are evaluated in the majority of cases by teams including 2 to 3 persons. There are no significant differences between respondents in the CEE and Russian set.

The duration of the investment selection process is mostly between 2 and 6 weeks. At the same time, Russian venture capitalists tend to be more agile compared to CEE investors.

Tables 3 and 4 report the results of the questionnairebased survey of evaluative criteria divided into four parts (I–IV) separately for the CEE region and Russia. This method of data processing is suitable for highlighting common characteristics and differences. The data shown in Tables 2 and 3 also constitute a source for the subsequent comparison of the survey's findings with previous studies.

The respondents were asked to indicate, on a five-point ordinal scale with two extreme anchors, 1 (unimportant) and 5 (of a high significance), their answer to the following question: "how important are the following criteria when evaluating business proposals?" The results of this analysis are expressed as an arithmetic mean ± standard deviation followed by the relative frequency of answers 4 and 5.

The survey results for the CEE set of respondents (Table 3) indicate that the venture capitalists view the uniqueness of the product $(4.09\pm0.64; 82.86\%)$, its competitive advantage $(4.69\pm0.47; 100.00\%)$ and global potential $(4.51\pm0.29; 97.14\%)$ as most significant criteria when considering the investment. Most respondents from the CEE group of investors believe that the life cycle of the product is of middle importance, which demonstrates their belief that money should be invested in such projects where the product will move from dogs to stars and next to cash cows according to the Boston matrix $(3.46\pm0.77; 40.00\%)$.

Similarly to the product criteria, investors financing the early stages of a business in Eastern Europe pay Table 2. Survey results – features of the investment selection process

	CEE	Russia				
Number of Persons Involved in Investment Selection Process						
1 person	Frequency	5	1			
	In %	14	7			
2 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Frequency	19	8			
2 to 3 persons	In %	54	57			
4	Frequency	11	5			
4 and more	In %	31	36			
Duration of Investment Selection Process						
Less than 1 week	Frequency	4	3			
	In %	11	21			
2 (2 1	Frequency	13	6			
2 to 3 weeks	In %	37	43			
A to Grupoliza	Frequency	14	4			
4 to 6 weeks	In %	40	29			
Longer than 7 weeks	Frequency	4	1			
Longer than 7 weeks	In %	11	7			

particular attention to both criteria evaluating the market. The fact that the relevant market is sufficiently large and is growing sufficiently fast $(4.29\pm0.70; 85.71\%)$ is more relevant than sufficient access of the business to the market. However, the demand for an investee company's products ought to be substantiated in the business proposal $(4.17\pm0.66; 85.71\%)$.

With regard to a manager's personality, investors in the CEE countries lay a particular emphasis on communicative abilities, i.e. abilities to represent the business idea and identify and evaluate risks. The points attached to management's effort to achieve independence may be considered as significant as well (4.00±0.84; 74.29%). Respondents were homogenous in their responses; this indicates a low standard deviation. Venture capitalists mostly pay average attention to the criterion concerning personal sympathies for the management of investee companies (2.49±0.73; 34.29%). This suggests that a certain degree of subjectivity plays an important role in the decision making process, however, the investors take more objective criteria into consideration. Criteria related to management's objective competencies carry more weight. From these criteria, functional backgrounds, competencies and skills (4.03±0.78; 71.43%) and experience with the industry have been emphasized (3.86±0.74; 62.86%). Evaluating the quality of management is based on a personal presentation of business proposals. Nevertheless, references from prior career and sources of capital are of medium importance as well (4.51±0.92; 17.14%).

A common feature may be observed in financial criteria within the CEE set – the effort of investors to maximize the

7 1								
	Mean	Median	Mode	Mode	Standard	%	%	%
			moue	frequency	deviation	1-2	3	4-5
I. Product								
Uniqueness of the product	4.09	3.00	4.00	20	0.64	0.00	17.14	82.86
Global potential of the product	4.51	3.00	5.00	19	0.29	0.00	2.86	97.14
Competitive advantage of the product	4.69	2.00	5.00	24	0.47	0.00	0.00	100.00
Life cycle of product	3.46	4.00	3.00	19	0.77	5.71	54.29	40.00
II. Quality of management								
Experienced and skilled management	4.03	3.00	4.00	14	0.78	0.00	28.57	71.43
Reputation of management	4.51	5.00	3.00	13	0.92	14.29	68.57	17.14
Personal sympathies to management	2.49	3.50	3.00	20	0.73	8.57	57.14	34.29
Management is communicative	4.00	3.00	4.00	15	0.84	5.71	20.00	74.29
Experience with the industry	3.83	5.00	4.00	17	0.70	0.00	34.29	65.71
III. Financial criteria		·						-
Potential of high returns	4.03	3.00	5.00	18	0.73	0.00	17.14	82.86
Early exit potential	2.77	3.00	3.00	17	0.81	22.86	71.43	5.71
Continuity to company portfolio	3.40	3.50	3.00	17	0.81	11.43	48.57	40.00
Low capital requirements	2.11	2.00	1.00 3.00	12 12	0.93	60.00	34.29	5.71
Low marketing and production costs	2.83	2.00	3.00	16	1.00	22.86	45.71	31.43
Low level of monitoring and administration costs	3.51	3.50	4.00	12	0.95	17.14	31.43	51.43
IV. Market criteria							•	
Demand for the product	4.17	3.00	4.00	19	0.66	0.00	14.29	85.71
Size of the market and its growth	4.29	3.00	4.00 5.00	15 15	0.70	0.00	14.29	85.71

Table 3. Survey results - importance of investment criteria (CEE countries subsample)

Table 4. Survey results - importance of investment criteria (Russian subsample)

	Mean	Median	Mode	Mode frequency	Standard deviation	% 1-2	% 3	% 4-5
I. Product								
Uniqueness of the product	4.21	3.00	4.00	7	0.55	0.00	14.29	85.71
Global potential of the product	4.14	3.00	4.00	6	0.74	0.00	21.43	78.57
Competitive advantage of the product	4.36	3.00	4.00	7	0.49	7.14	50.00	42.86
Life cycle of product	4.14	3.00	2.0 3.0 4.0	4 4 4	0.82	42.86	28.57	28.57
II. Quality of management								
Experienced and skilled management	3.93	5.00	3.00 4. 00	5 5	0.70	35.71	35.71	28.57
Reputation of management	4.14	3.00	3.00	7	0.90	21.43	50.00	28.57
Personal sympathies to management	4.36	3.00	3.00	6	0.83	35.71	64.29	0.00
Management is communicative	3.71	5.00	3.00 4.00	5 5	0.80	7.14	71.43	21.43
Experience with the industry	4.14	3.00	4.00	8	0.52	0.00	14.29	85.71
III. Financial criteria								
Potential of high returns	4.36	3.00	4.00	7	0.73	0.00	7.14	92.86
Early exit potential	3.57	5.00	3.00	6	0.77	7.14	78.57	14.29
Continuity to company portfolio	3.71	5.00	3.00 4.00	6 6	0.62	0.00	42.86	57.14

	Mean	Median	Mode	Mode frequency	Standard deviation	% 1-2	% 3	% 4-5
Low capital requirements	2.36	1.00	2.00	5	1.03	57.14	28.57	14.29
Low marketing and production costs	3.21	2.00	4.00	6	0.59	21.43	35.71	42.86
Low level of monitoring and administration costs	3.36	2.00	3.00	5	0.94	21.43	35.71	42.86
IV. Market criteria								
Demand for the product	4.36	3.00	4.00	7	0.56	0.00	7.14	92.86
Size of the market and its growth	4.36	3.00	5.00	7	0.72	0.00	14.29	85.71

Continued Table 4

return on investment. Almost 83% of respondents consider this criterion as indispensable when evaluating business proposals (4.03±0.73; 82.86%). The results concerning required rate of return on investment (or required internal rate of return) are not surprising. More than a half of respondents view the criterion that it is possible to sell the equity share quickly and without problems and that there is a potential to withdraw dividends continuously as medium important (2.77±0.81; 5.71%). Based on the theory, a short payback period is preferred in particular in early stages of business life cycle. Initial capital requirements are perceived as rather unimportant by the majority of respondents, which is in compliance with the financial theory as well (2.11±0.93; 5.71%). Low capital requirements are a typical feature of venture capital financing and thus in line with our expectations. Respondents mostly expect a low level of marketing and production costs. This may explain why this criterion has been predominantly evaluated by a medium grade (2.83±1.00; 31.43%). It is obvious that a low level of monitoring and administration costs is a criterion of significant importance for a great majority of respondents in the monitored group of venture capitalists (3.51±0.95; 51.43%). In this context, the investors tend to emphasize the role of confidence between them and the management of investee companies. This allows downsizing the information asymmetry, a high degree of which is a typical feature of venture capital industry.

Table 4 allows a closer look at the evaluation of investment criteria by investors in Russia. Differences between the two subsamples, the Russian and the CEE set, will be identified below. However, because of the explorative character of our study, we do not test if there are statistically significant differences between the subsamples.

Within the product set of criteria, a lower proportion of investors in Russia pay the highest attention to the competitive advantage of the product (4.36 ± 0.49 ; 42.86%) and its life cycle (4.14 ± 0.82 ; 28.57%). Slight difference can also be identified within the management set of criteria. Experienced and skilled management is viewed as a less significant criterion by Russian venture capitalists compared to the investors in the CEE countries (3.93 ± 0.70 ; 28.57%). Some differences between the studied groups of companies may also be seen in their perception of communicative abilities of capital seekers (3.71 ± 0.80 ; 21.43%). Concerning other evaluating criteria, both groups of respondents seem to be well-balanced when evaluating business proposals.

5. Discussion

This explorative study has examined the CEE and Russian markets for formal and informal venture capital investments. Under the conditions of these markets, this explorative and comparative study has been one of the first descriptive analyses of the investment selection process and, in addition, of personal characteristics of venture capitalists. Most of the findings discussed were quite expected.

It was found that a typical investor is a male and middle-aged manager with professional and entrepreneurial experience and specialized know-how. These findings are consistent with previous descriptive surveys (e.g. Landström 1993, 2007). Moreover, it was found that an average investor in Russia is younger and graduated from a British university and gained professional experience abroad. The second most frequent category is represented by investors aged 46–55 with entrepreneurial experience. All respondents are active either as members in investee committees of VC funds or as BAs.

Concerning other features of the investment selection process, we can conclude that investments proposals are evaluated in the majority of cases by teams including 2 to 3 persons within a relatively short period of time (the minimum is 2 weeks, the maximum 6 weeks).

A part of previous studies on investment selection process conducted by Zacharakis and Meyer (1998) and Tyebjee and Bruno (1984) revealed that firms investing venture capital place a stronger emphasis on the characteristics of the product and market rather than characteristics of management. These studies imply that investors tend to evaluate management's competencies in connection with other characteristics, such as the size of the market and intensity of competition in particular. This thesis is also supported by the results of our survey, as the overwhelming majority of criteria which characterize the product and the market are seen as above average significant on both the CEE and Russian venture capital markets.

The product uniqueness, its global potential and competitive advantage are the most significant criteria. This indicates that utility of the product for the customer and obvious distinction between company's product and products of competitors are factors which affect the competitive position of the business on the domestic and foreign market and thus influence the extent to which an investment is successful, as they represent the potential for creation of values. Similar results were reported by Eisele *et al.* (2002).

Our survey also confirms the conclusions drawn from other studies which identify the size of the market and its growth rate as the most significant criterion characterizing the market (Eisele *et al.* 2002; Muzyka 1996). Muzyka (1996) emphasizes the importance of this criterion, for market size and its growth "enable the business to achieve profitability".

Nevertheless, it is not sufficient if businesses are positively evaluated only on the basis of the product and market criteria. Investors also emphasize selected characteristics of management despite their lower significance compared to the product and market characteristics.

The crucial criterion in the category dedicated to management's experience in initial stage of business life cycle is management's familiarity with the target market. In this respect, Eisele et al. (2002) state that "familiarity with conditions in the target market diminishes the risk of particular errors as early as a business is launched, makes the specific direction of research and development possible and contributes to reduction of a loss-making potential of an investment". The criterion regarding management's experience and skills is of middle to high significance, which is not very surprising. The survey results in this category are in accord with conclusions published in studies which stress the significance of management's competencies. Fried and Hisrich (1994) highlight the importance of management's experience in marketing, finance and production and therefore accent professional qualification. Robinson (1987) and Knight (1992) recommend taking not only management's competencies, but also their maturity on the basis of references into consideration when assessing the quality of management. The importance of references is also proved by this investigation, especially in the Russian market.

Conclusions

The aim of this article was to contribute to a better understanding of the formal and informal venture capital markets in the CEE countries and Russia. To meet this aim a semi-structured questionnaire with a subsequent statistical evaluation was used.

By applying descriptive statistical methods, the profile of a typical venture capitalist was defined as well as characteristic features of the investment proposals evaluation process. This study supports the thesis that, when considering business proposals, above-average attention has been paid to criteria concerning the competitive advantage of the product and its potential to generate high returns. Our survey also confirms the conclusions drawn from other studies which identify the size of the market and its growth rate as the most significant criteria characterizing the market. The crucial criterion in the category dedicated to management's experience in the initial stage of business life cycle is management's familiarity with the target market although investors emphasize its lower significance compared to the product and market characteristics.

Without being able to make generalizations about the above mentioned conclusions, it is necessary to point out that the results of this survey are based on the primary data analysis collected from a very limited number of respondents. It is thus necessary to view the survey primarily as a starting point from which additional studies can be carried out with a greater number of respondents in areas which appear prospective on the basis of the survey results.

Any survey results for individual areas may then be the subject of an international comparison, especially in the context of Russia and individual markets within the CEE, or other emerging markets.

Funding

This paper is supported by the Czech Science Foundation. Name of the Project: IPO Strategy – Specific Approaches in the CEE Region. Reg. No. 13-38047S.

Disclosure statement

Authors declare that they have no competing financial, professional, or personal interests from other parties.

References

- Bell, M. G. 1998. Der informelle Venture-Capital-Markt die Suche nach den Angels in Deutschland, Sparkasse 115(7): 301–306.
- Blume, B. D.; Covin, J. G. 2011. Attributions to intuition in the venture founding process: do entrepreneurs actually use intuition or just say that they do?, *Journal of Business Venturing* 26(1): 137–151. http://dx.doi.org/10.1016/j.jbusvent.2009.04.002
- Brettel, M.; Jaugey, C.; Rost, C. 2000. Business Angels: Der informelle Beteiligungskapitalmarkt in Deutschland. Wiesbaden: Gabler.

- Brau, J. C.; Fawcett, S. E. 2006. Initial public offerings: an analysis of theory and practise, *Journal of Finance* 61(1): 399–436. http://dx.doi.org/10.1111/j.1540-6261.2006.00840.x
- Brzozowska, K. 2008. Business angels in Poland in comparison to Informal venture capital market in European Union, *Engineering Economics* 57(2): 7–14.
- Eisele, F.; Habermann, M.; Oesterle, R. 2002. Die Beteiligungskriterien für eine Venture Capital Finanzierung – Eine empirische Analyse der phasenbezogenen Bedeutung. Tübingen: Wirtschaftswissenschaftliche Fakultät der Eberhard-Karls-Universität Tübingen, Tübinger Diskussionsbeitrag. 238 p.
- Fried, V. H.; Hisrich, R. D. 1994. Toward a model of venture capital investment decision making, *Financial Management* 23(3): 28–37. http://dx.doi.org/10.2307/3665619
- Groh, A.; Liechtenstein, H.; Lieser, K. 2013. *The venture capital and private equity country attractiveness index* [online], [cited 29 January 2014]. Available from Internet: http://blog. iese.edu/vcpeindex/
- Harrison, R. T.; Mason, C. M. 1992. International perspectives on the supply of informal venture capital, *Journal of Business Venturing* 7(6): 459–475. http://dx.doi.org/10.1016/0883-9026(92)90020-R
- Hindle, K.; Wenban, R. 1999. Australia's informal venture capitalists: an exploratory profile, *Venture Capital* 1(2): 169–186. http://dx.doi.org/10.1080/136910699295956
- Hindle, K; Lee, L. 2002. An exploratory investigation of informal venture capitalists in Singapore, *Venture Capital* 4(2): 169–177. http://dx.doi.org/10.1080/13691060110091255
- Jurevičienė, D.; Martinkutė, A. 2013. Venture capital funds: theoretical aspects, *Business: Theory and Practice* 14(2): 117–130. http://dx.doi.org/10.3846/btp.2013.13
- Khatiashvili, L.; Gvaramia, E.; Kamkamidze, E. 2009. Computer model for small business development in Georgia, in ECC'09 Proceedings of the 3rd International Conference on European Computing Conference, 26–28 June 2009, Tbilisi, Georgia. WSEAS, 280–285.
- Knight, R. M. 1992. A longitudinal study of criteria used by venture capitalists in Canada, *Journal of Business Venturing* 7(4): 12–26.
- Lahti, T. 2008. Angel investing in Finland: an analysis based on agency theory and the incomplete conctracting theory. Helsinky: Hanken School of Economics, Department of Management and Organisation.

Landström, H. 2007. *Handbook of survey on venture capital*. Cheltenham: Eward Elgar. http://dx.doi.org/10.4337/9781847208781

Landström, H. 1993. Informal risk capital in Sweden and some international comparisons, *Journal of Business Venturing* 8(6): 525–540.

http://dx.doi.org/10.1016/0883-9026(93)90037-6

- Lumme, A.; Mason, C.; Suomi, M. 1998. *Informal venture capital: investors, investments and policy issues in Finland*. Boston: Kluwer Academic Publishers. http://dx.doi.org/10.1007/978-1-4757-2785-2
- MacMillan, I. C.; Siegel, R.; Subba Narasimha, P. N. 1985. Criteria used by venture capitalists to evaluate new venture proposals, *Journal of Business Venturing* (1)1: 119–128. http://dx.doi.org/10.1016/0883-9026(85)90011-4

- MacMillan, I. C.; Zemann, L.; Subba Narasimha, P. N. 1987. Criteria distinguishing successful from unsuccessful ventures in the venture screening process, *Journal of Business Venturing* 2(2): 123–137. http://dx.doi.org/10.1016/0883-9026(87)90003-6
- Mason, C. M.; Harrison, R. T. 1997. Business angel networks and the development of the informal venture capital market in the U.K.: is there still a role for the public sector?, *Small Business Economics* 9(2): 111–123. http://dx.doi.org/10.1023/A:1007915705508
- Mason, C. M.; Harrison, R. T. 2004. Improving access to early stage venture capital in regional economies: a new approach to investment readiness, *Local Economy* 19(2): 159–173. http://dx.doi.org/10.1080/0269094042000203090
- Mason, C. M. 2009. Public policy support for the informal venture capital market in Europe: a critical review, *International Small Business Journal* 27(5): 536–556. http://dx.doi.org/10.1177/0266242609338754
- Maula, M.; Autio, E.; Arenius, P. 2005. What drives micro-angel investments?, *Small Business Economics* 25(5): 459–475. http://dx.doi.org/10.1007/s11187-004-2278-4
- Maxwell, A. L.; Jeffrey, S. A.; Lévesque, M. 2011. Business angel early stage decision making, *Journal of Business Venturing* 26(2): 212–225. http://dx.doi.org/10.1016/j.jbusvent.2009.09.002
- Mitteness, C.; Sudek, R.; Cardon, M. S. 2012. Angel investor characteristics that determine whether perceived passion leads to higher evaluations of funding potential, *Journal of Business Venturing* 27(5): 592–606. http://dx.doi.org/10.1016/j.jbusvent.2011.11.003
- Muzyka, D. 1996. Trade-offs in the investment decisions of European venture capitalists, *Journal of Business Venturing* 11(4): 273–287. http://dx.doi.org/10.1016/0883-9026(95)00126-3
- Pan-European private equity and venture capital activity. 2013. Brussels: European Private Equity and Venture Capital Association/EVCA.
- Prelipcean, G.; Boscoianu, M. 2011. Aspects regarding the design and development of innovative products for risk management, *Proceedings of the Mathematics and Computers in Biology, Business and Acoustics*, 11–13 April 2011, Transilvania University of Brasov, Romania. WSEAS, 209–214.
- Redoli, J.; Mompo, R. 2006. Ventakaraman virtuous cycles for entrepreneurship e-learning, in AIKED'06 Proceedings of the 5th WSEAS Intertnationale Conference on Artifical Inteligence, Knowledge Engineering and Data Bases, 15–17 February 2006, Madrid, Spain. WSEAS, 303–306.
- Riding, A. 2008. Business angels and informal investors: on the size and structure of the informal market for risk capital. Ottawa: Telfer School of Management.
- Robinson, R. R. 1987. Emerging strategies in the venture capital industry, *Journal of Business Venturing* 2(1): 53–77.
- RVCA Yearbook 2012. 2012. St. Petersburg: Russian Venture Capital Association.

http://dx.doi.org/10.1016/0883-9026(87)90019-X

Stankevičienė, J.; Žinytė, S. 2011. Valuation model of new start-up companies: Lithuanian case, Business: Theory and Practice 12(4): 379–389. http://dx.doi.org/10.3846/btp.2011.39

- Stedler, H. R.; Peters, H. H. 2003. Business angels in Germany: an empirical study, *Venture Capital* 5(3): 269–276.
- Tvaronavičienė, M.; Ginevičius, R.; Grybaitė, V. 2008. Comparisons of Baltic Countries' development: practical aspects of complex approach, *Business: Theory and Practice* 9(1): 51–64. http://dx.doi.org/10.1080/1369106032000126596
- Tyebjee, T. T.; Bruno, A. V. 1984. A model of venture capitalist investment activity, *Management Science* 30(9): 1051–1066. http://dx.doi.org/10.1287/mnsc.30.9.1051
- Van Osnabrugge, M.; Robinson, R. 2009. Angel investing: matching startup funds with startup companies: the guide for entrepreneurs, individual investors, and venture capitalists. San Francisco: Jossey-Bass.
- Volkmann, C. K.; Tokarski, K. O.; Grünhagen, M. 2010. Entrepreneurship in a European perspective: concepts for the creation and growth of new ventures. Wiesbaden: Gabler. http://dx.doi.org/10.1007/978-3-8349-8752-5
- World Data Bank. 2013. GDP Development Indicators [online], [cited 8 January, 2014]. Available from Internet: http://databank.worldbank.org/data/home.aspx
- Zacharakis, A. L.; Meyer, G. D. 1998. A lack of insight: do venture capitalists really understand their own decision process?, *Journal of Business Venturing* 13(1): 57–76. http://dx.doi.org/10.1016/S0883-9026(97)00004-9

Marek ZINECKER is an Associate Professor at Brno University of Technology, Faculty of Business and Management. His main research areas include macroeconomic factors influencing corporate financing via venture capital and initial public offerings.

David BOLF graduated in Business and Finance at Brno University of Technology, Faculty of Business and Management. His main research areas include financing set-ups via institutional and non-institutional venture capital.