ACTA UNIVERSITATIS AGRICULTURAE ET SILVICULTURAE MENDELIANAE BRUNENSIS

Volume LVIII 65 Number 6, 2010

PRIVATE EQUITY AND VENTURE CAPITALISTS' INVESTMENT CRITERIA IN THE CZECH REPUBLIC

M. Zinecker, J. Rajchlová

Received: August 23, 2010

ZINECKER, M., RAJCHLOVÁ, J.: *Private equity and venture capitalists' investment criteria in the Czech Republic.* Acta univ. agric. et silvic. Mendel. Brun., 2010, LVIII, No. 6, pp. 641–652

Abstract

For investment decision making to be rational, the existence of investment criteria is required. In the theory of financial management, the effectiveness of investment is traditionally judged by the degree to which an investment proposal contributes to achieving the main financial goal of business, i.e. market value maximization of the firm.
So far, potential businesses for Private Equity and Venture Capital financing in the Czech Republic have not had information regarding investment criteria and their significance, when considered by investors, at their disposal, which is due to absence of relevant research results.
This article presents results of the research project whose aim is to establish which criteria are considered to perform an essential role in the selection of business proposals by firms investing Private Equity and Venture Capital in the Czech Republic as well as the most common reasons for rejecting the proposals. Based on practical experience of financing by Private Equity and Venture Capital, the research made it possible to identify the most significant criteria, namely characterization of management, market, product and the rate of investment capital appreciation. The results of the research are consequently compared with findings which were published in similar studies undertaken in the past (e.g. Tyebjee, Bruno, 1984; Fried, Hisrich, 1994; MacMillan *et al.*, 1985, 1987; Muzyka *et al.*, 1996; Eisele, 2002).
The research supports the thesis that, when considering business proposals, above-average weight is attached to criteria concerning the characterization of management, i.e. experience and competencies in all stages of business life cycle. Nevertheless, the fulfilment of the criteria is not sufficient for investors to evaluate a business proposal positively. They also place an emphasis on selected criteria related to market and product. By publishing empirical data, an important signal regarding up-to-date evaluative criteria and their weight is sent to those interested in financing by means of Private Equity/Venture Capital as well as investors in Private Equity and Venture Capital funds and to investment companies.

private equity, venture capital, business proposals, investment decision making, investment criteria

Rational investment decision making necessitates the existence of investment criteria. In the theory of financial management, the effectiveness of investment is traditionally judged by the degree to which an investment proposal contributes to achieving the main financial goal of business, i.e. market value maximization of a firm. A net present value of an investment proposal is established as a criterion in deciding about whether an investment proposal is acceptable or not, for only investments with a positive net present value contribute to the growth of market value of the firm (cf. Nývltová, Režňáková, 2007; Valach, 2006). However, the net present value is influenced by the value of individual cash flow, incoming and outcoming, which may not be certain. Therefore, an investor will be willing to provide capital only if an investment risk is rewarded in the form of a risk premium.

With reference to investment decision making in the area of *Private Equity* and *Venture Capital*, there is typically a higher extent of information asymmetry between an external capital provider and those who receive it. Hartmann, Wendels (1987) state that the quality of the investment portfolio of a capital provider depends, in particular, on their ability to assess the risk of individual proposals. To be successful, a selection of appropriate investment criteria in the investment decision making is crucial. Identification and evaluation of significance of these criteria have been dealt with in numerous research projects undertaken particularly in the USA and Germany *Private Equity* and *Venture Capital* markets, dating from the seventies up to the present.

Tyebjee, Bruno (1984), Fried, Hisrich (1994), MacMillan *et al.* (1985, 1987) and Muzyka *et al.* (1996) emphasize the existence and significance of the following criteria when considering business proposals: market size and attractiveness, management's competencies, product uniqueness, product acceptance in the market and competition intensity. Studies conducted in Germany by Laub (1989), Schröder (1992) and Eisele *et al.* (2002) contributed to identification of decision criteria in German market. The last of the above-mentioned studies was also dedicated to the weight of evaluative criteria in individual stages of development of the business in which an investment is realized.

At present, potential businesses for *Private Equity* and *Venture Capital* financing in the Czech Republic do not have information regarding investment criteria and their significance, when considered by investors, at their disposal, which is due to the absence of relevant research results. The fact stimulated this research, whose aim is to identify evaluative criteria of investment proposals from the point of view of *Private Equity* and *Venture Capital* investors in the Czech Republic as well as consider the weight of these criteria according to individual stages of development of a business. This research also investigates the reasons why investors refuse to finance some business proposals.

METHODOLOGY

As a research tool, a questionnaire was designed to collect data. The main reason for selecting a questionnaire was experience of the foreign colleagues quoted above. We also aimed for the least time-consuming method for respondents. Furthermore, a standardized questionnaire, unlike an interview, excludes undesired subjectivity.

The questionnaire is based on 37 evaluative criteria divided into six sections, each of which evaluates management's psychological characteristics, their competencies and functional background, product, relevant market and financial plans. The selection of the evaluative criteria was influenced by foreign research (Eisele *et al.*, 2002; Tyebjee, Bruno, 1984; Fried, Hisrich, 1994; MacMillan *et al.*, 1985, 1987; Muzyka, 1987) and consultations with CVCA representatives.

A 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 four-point ordinal scale. For further information concerning the levels of weight attached to the evaluative criteria see Table I. As the evaluation of criteria was conducted for each stage of development of a business separately, the object of this research could be achieved reflecting changes in the weight attached to the evaluative criteria between individual stages of business life cycle defined in Table II.

Reasons for rejecting business proposals are found by means of an open question addressed to respondents. The questionnaire includes a part dedicated to identification of the private equity fund concerning the respondent.

All 13 regular members of *Czech Private Equity and Venture Capital Association* (hereafter cited as CVCA) were asked to complete the questionnaire. These members represent the main source of institutionalized, profit-oriented *Private Equity* and *Venture Capital* in the Czech Republic and were therefore selected as respondents (according to CVCA). The importance of non-institutionalized *Private Equity* and *Venture Capital* is impossible to assess taking the absence of relevant data into consideration. CVCA members are profit-oriented businesses. Unlike some other countries, no state assistance in the form of *Private Equity* and *Venture Capital* financing may be found in the Czech Republic. The main aim of institutions providing state assistance does not necessarily have to be making profit, but, for instance, promoting enterprise and consequently job creation.

I: *Business proposals evaluation scale*

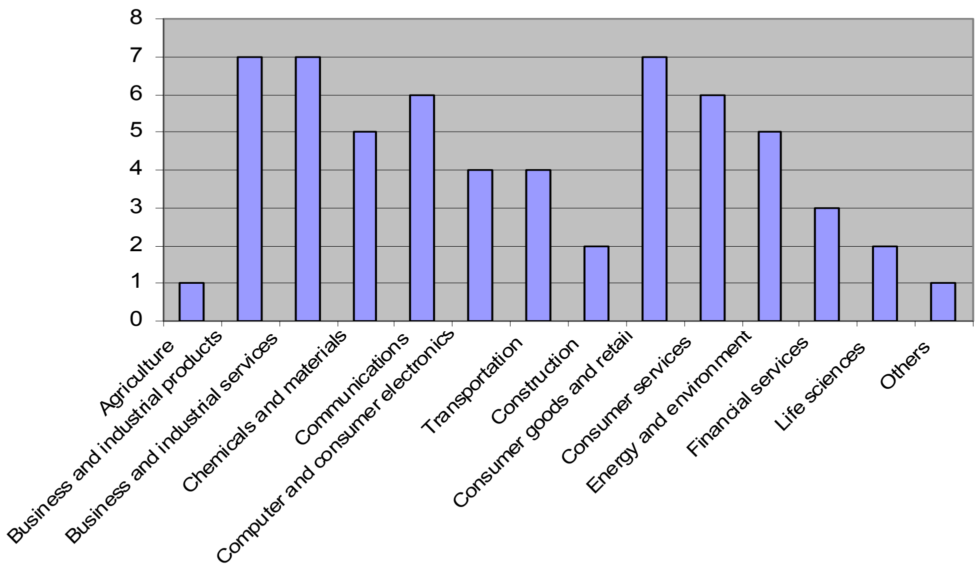
Level item	Level item	Description of the item
0	unimportant	The criterion has no influence upon the investor's decision-making about their capital investment in the business.
1	less significant	The criterion increases the probability of the investor's capital investment in a business.
2	of high significance	The criterion, if fulfilled, supports the investor in capital investment in the business.
3	indispensable	The criterion which is absolutely necessary for the investor to decide for capital investment in the business.

Source: adapted from EISELE *et al.*, 2002

II: *Stage definitions (investment tables)*

Stage	Stage definition
Early Stage (Seed, Start-up)	**Seed:** Financing provided to research, assess and develop an initial concept before a business has reached the start-up phase. **Start up:** Financing provided to companies for product development and initial marketing. Companies may be in the process of being set up of may have been in business for a short time, but have not sold their product commercially.
Later Stage Venture	Financing provided for the expansion of an operating company, which may or may not be breaking even or trading profitably. Late stage venture tends to be financing into companies already backed by venture capitalists, therefore they would be C or D rounds of financing.
Buyouts (Growth, Rescue/ Turnaround, Replacement capital, Buyouts)	**Grow:** It is a type of private equity investment, most often a minority investment but not necessarily, in relatively mature companies that are looking for capital to expand or restructure operations, enter new markets of finance a significant acquisition without a change of control of the business. As a round of financing, growth capital tends to be the first private equity backing of the company. Additionally, all investments made by buyout funds into venture type of stages should be defined as growth capital. **Rescue/turnaround:** Financing made available to an existing business, which has experienced trading difficulties, with a view to re-establishing prosperity. **Secondary purchase/replacement capital:** Minority stake purchase of existing shares in a company, from another private equity investment organization or from another shareholder or shareholders. **Management buyout:** Financing provided to enable current operating management and investors to acquire existing product line or business. **Management buy-in:** Financing provided to enable a manager or group of managers from outside the company to buy-in to the company with the support of private equity investors. **Public to private:** A transaction involving an offer for the entire share capital of a listed target company for the purpose of delisting the company, management may be involved in the offering. **Other PIPE:** A private investment in public equity as a minority or majority stake without taking the company private. **Other leveraged buyout:** Financing provided to acquire a company (other than MBI, MBO, public to private or other PIPE), by using significant amount of borrowed money to meet the cost of acquisition.

Source: EVCA, 2008



1: *Branches of business in which Private Equity and Venture Capital firms realize their investments in the Czech Republic*
Source: own research

Members of the association, or to be more precise their management, were sent a questionnaire with an accompanying email. If a respondent did not react to the request for participation in the research within two weeks, they were contacted by phone. Two businesses did not respond to our request and two respondents refused to participate in the research. Consequently, the total sample consists of eight respondents, i.e. 62% of the questionnaires were returned. Data collection was organized in March and April 2010. The data were processed using Microsoft Excel and descriptive statistics methods.

The sample may be further characterized by the following information:

- firms investing *Private Equity* and *Venture Capital* in the Czech Republic have a base in the Czech Republic, USA, UK, Netherlands, Austria, Belgium and Finland.
- branches of business in which these firms realize their investments most frequently fall into the following categories: *Business and Industrial Products, Business and Industrial Services* and *Communications* (see Fig. 1)
- proposals in *Buyouts* stage account for 65.9% of investment portfolio value of the firms. The proposals in the other stages make up a lower proportion of investment portfolio value. (*Later Stage Venture* – 25.9%; *Early Stage* – 8.3%).

RESULTS

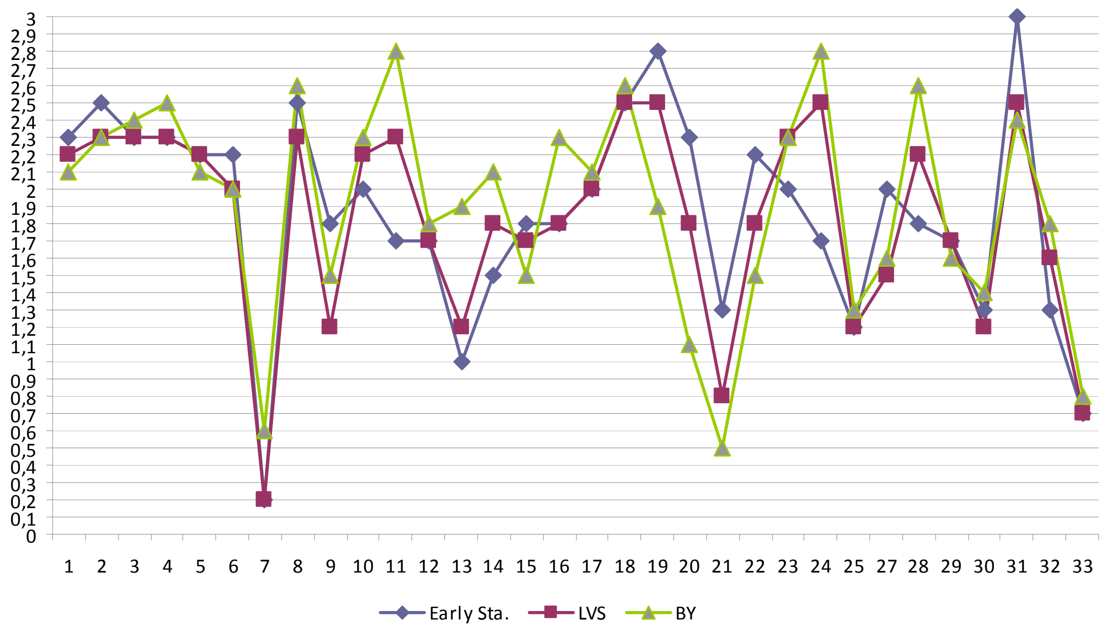
Table III shows evaluative criteria of business proposals divided into six sections according to topic. The respondent was asked to consider the weight of a criterion in the process of investment decision making on a scale ranging from zero to three for individual stages of business life cycle (*Early Stage, Later Stage Venture, Buyouts*). Figure reflecting average evaluation of the weight attached to a criterion in individual stages and figure reflecting standard deviation are shown in columns 2–7. To be able to determine whether a criterion is considered to perform an essential or secondary role in investment decision making, reference values have been defined for individual investment stages. They are expressed as an average of average weight evaluation of all criteria (i.e. criteria 1–37) in individual investment stages. Reference values are 1.77 for *Early Stage*, 1.82 for *Later Stage Venture* and 1.89 for *Buyouts*.

Table III also provides information on the relative frequency of the *Indispensable* level item for individual criteria. Thus, it is evident which criteria need to be satisfied for the majority of investors to evaluate a business proposal positively and subsequently decide to realize their investment in it.

Management's Evaluation

With regard to a manager's personality, investors lay a particular emphasis on *high level of performance and perseverance*. Average weight attached to this criterion in individual stages of business life cycle is 2.5 (*Early Stage*), 2.3 (*Later Stage Venture*) and 2.3 (*Buyouts*). Respondents were homogenous in their answers, which is indicated by the low standard deviation. It is indispensable for 66.7% of respondents to fulfil this criterion in *Early Stage*. In *Later Stage Venture* and *Buyouts* stages to the contrary, the criterion was viewed as necessary for 50 and 37.5% of respondents respectively. An investor's decision making is in all stages of business life cycle also considerably influenced by *ability of senior management to identify problems, to set objectives and to allocate tasks*; *ability of senior management to identify and to evaluate risks, the ability of senior management of the right response to risks*; and *ability of senior management to represent the business idea*. In the first section, no single criterion may be classified as indispensable by investors throughout all stages. The points attached to management's effort to independence may be considered insignificant.

Investors regard a *high level of performance and perseverance of senior management* as the most important cri-



2: *Average weight attached to criteria in individual stages*
Source: own research

terion in *Early Stage* (average weight 2.5). A great emphasis is also laid on the *ability of senior management to represent the business idea, to identify and to evaluate risks, the ability of senior management of the right response to risks* and *the ability to identify problems, to set objectives and to allocate tasks*. The order of criterions according to the weight attached to them in *Later Stage Venture* is identical with the order in *Early Stage*. As far as *Buyouts* stage is concerned, the highest average weight is carried by the *ability of senior management to identify problems, to set objectives and to allocate tasks* (average weight 2.5).

Criteria related to management's competencies, i.e. criteria which may be viewed more objectively, carry less weight, if compared with the variables in the previous section. The second section also contains a lower number of variables whose presence is considered indispensable by the absolute majority of respondents. The only exception is the criterion that *management exactly knows the market targeted by the venture*. Average weight in *Early Stage* is 2.5, in *Later Stage Venture* 2.3 and in *Buyouts* stage 2.6. The most significant criterion in terms of weight in *Buyouts* stage is considered to be the *competency of senior management to act as a leader* (average weight 2.8, standard deviation 0.4). In this stage, 75% of respondents consider fulfilling this criterion as indispensable, whereas in Early Stage, not a single respondent does. As for criteria evaluating experience and competencies of a manager in the field of production management, marketing and financial management, growing weight attached to the criteria is evident in later stages of business life cycle (*Later Stage Venture, Buyouts*). Experience and competencies in the field of research and development are, from investment analysts' point of view, the most significant in *Early Stage*.

From other criteria (criteria 15 to 17), significance attaches to *references of management from prior results* in all stages of business life cycle. Another important criterion for investors, especially in *Buyouts* stage, is a *balanced management team, i.e. it is composed of people with complementary functional backgrounds, competencies and skills*. The evaluation of the *share of the top management in the capital stock* criterion amounts to average weight of 1.8 (*Early Stage*), 1.7 (*Later Stage Venture*) and 1.5 (*Buyouts*) and its fulfilment is necessary for 50% of respondents to decide for an investment in *Early Stage*.

The Product

There are two criteria associated with the product which may be described as dominant in all stages of business life cycle as far as weight attached to them is concerned: *utility of the product for customers is evidently recognizable* and *the product is evidently better compared to up to now offerings*. Average weight attributed to the former was 2.5 in *Early Stage* (standard deviation 0.8), 2.5 in *Later Stage Venture* (standard deviation 0.5) and 2.6 in *Buyouts* stage (standard deviation 0.7). The criterion is indispensable for more than 50% of respondents in all stages. The second criterion is most significant in *Early Stage* (average weight 2.8, standard deviation 0.4) and *Later Stage Venture* (average weight 2.5, standard deviation 0.5), whereas in *Buyouts* stage, average weight attached to the criterion falls to 1.9 (standard deviation 0.8). It is indispensable for 83.3% of respondents in *Early Stage* to satisfy the criterion if a business proposal should be financed (in *Later Stage Venture* the criterion was perceived indispensable by 50% of respondents, in *Buyouts* stage by 25% of respondents).

The criteria 18 to 23 are of greater significance than criteria 24 and 25 in *Early Stage*. In this respect, this stage differs from *Later Stage Venture* and *Buyouts*, in which 50 and 75% of respondents respectively rate the criterion that *the product is obviously accepted in the market* as indispensable. Similarly, the importance of criterion 23 (*a functioning prototype of the product exists*) grows in the later stages of financing in the form of *Private Equity* and *Venture Capital*.

Financing by firms investing *Private Equity* and *Venture Capital* is not considerably conditioned upon whether a product is classified as a *„High Tech"* product or not. This holds true for any stage of financing. Nevertheless, it is necessary to highlight that average weight attached to this criterion varies in individual stages of business life cycle (1.3 in *Early Stage*, 0.8 in *Later Stage Venture* and 0.5 in *Buyouts*). The criterion that *the product or the way of its manufacturing are proprietary* exceeds the level of reference values in *Early Stage*. It is necessary for 50% of respondents to satisfy this criterion, whereas the importance of the criterion in the later stages of business life cycle is below average. The criterion that *the product disposes of potential to create a product family* ranks lower than reference values in all stages of evaluation.

Evaluation of Relevant Market

Two different tendencies may be discovered on the basis of results produced by the research into criteria. Whereas the most significant criteria for *Early Stage* are that *the market is growing fast enough* and that *the competition on the market is weak* (average weight 2.3 and 2.0, respectively, standard deviation 0.5 and 0.6, respectively), the crucial criterion in *Later Stage Venture* and *Buyouts* is that *there is sufficient access to the market targeted by a business* (average weight 2.2 and 2.6, respectively, standard deviation 0.7 and 0.6, respectively). That there is sufficient access to the market targeted by the business is indispensable for 62.5% of respondents in *Buyouts* stage.

The possibility of participating in *the business opening access to international* or *new markets* was not seen as an important criterion in the process of evaluating business proposals by a majority of respondents. Fulfilment of this criterion was required by only one respondent.

The results of the research also show differences between the significance of the characteristics of market in individual stages of *Private Equity* and *Venture Capital* investment. For an investor financing the development of a business in the initial stage, the fact that *the market is growing fast enough* and *the competition on the market is weak* after launch of the product is

III: *Average weight attached to criteria, standard deviation and relative frequency of Indispensable level item*
Source: own research and Eisele *et al.* (2002)

	Early Stage		Later Stage Venture		Buyouts		Relative frequency of *Indispensable* level item		
	ave-rage	standard deviation	ave-rage	standard deviation	ave-rage	standard deviation	Early Stage	Later Stage Venture	Buyouts
1	2	3	4	5	6	7	8	9	10
I. Top management's psychological characteristics and cognitive capabilities									
ability of senior management to represent the business idea	2.3	0.9	2.2	0.7	2.1	0.6	66.70	33.33	25.00
high level of performance and perseverance of senior management	2.5	0.8	2.3	0.7	2.3	0.7	66.70	50.00	37.50
ability of senior management to identify and to evaluate risks, the ability of senior management of the right response to risks	2.3	0.7	2.3	0.7	2.4	0.9	50.00	50.00	62.50
ability of senior management to identify problems, to set objectives and to allocate tasks	2.3	0.7	2.3	0.7	2.5	0.7	50.00	50.00	62.50
ability of senior management to get their team members for common vision	2.2	1.1	2.2	1.1	2.1	0.9	50.00	50.00	37.50
management's characteristics such as commitment and attention to detail	2.2	0.9	2	0.8	2	0.9	50.00	33.33	37.50
management's effort to independence	0.2	0.4	0.2	0.4	0.6	0.9	0.00	0.00	0.00
II. Top management's competencies and functional backgrounds									
management exactly knows the market targeted by the venture	2.5	0.76	2.3	0.7	2.6	0.5	66.70	50.00	62.50
management's competencies and experience in research and development	1.8	1.1	1.2	0.9	1.5	0.7	33.30	16.70	12.50
management's competencies and experience in production management	2	0.6	2.2	0.7	2.3	0.7	20.00	40.00	42.90
competency of senior management to act as a leader	1.7	0.5	2.3	0.7	2.8	0.4	0.00	50.00	75.00
management is graduated, experience and references of management from prior places of employment	1.7	1.1	1.7	0.9	1.8	1	33.30	16.70	25.00
management's competencies and experience in the field of marketing	1	0.8	1.2	0.7	1.9	0.9	0.00	0.00	25.00
management's competencies and experience in the field of financial management	1.5	0.5	1.8	0.4	2.1	0.3	0.00	0.00	12.50
III. Other criteria for top management's evaluation									
share of the top management in the capital stock	1.8	1.3	1.7	1.2	1.5	1.1	50.00	33.30	25.00
management team is balanced, i.e. it is composed of people with complementary functional backgrounds, competencies and skills	1.8	0.9	1.8	0.9	2.3	0.8	33.30	33.30	50.00
references of management from prior results	2	0.8	2	0.8	2.1	0.6	33.30	33.30	25.00

III: *(Contd): Average weight attached to criteria, standard deviation and relative frequency of Indispensable level item*
Source: own research and Eisele *et al.* (2002)

	Early Stage		Later Stage Venture		Buyouts		Relative frequency of *Indispensable* level item		
	ave-rage	standard deviation	ave-rage	standard deviation	ave-rage	standard deviation	Early Stage	Later Stage Venture	Buyouts
1	2	3	4	5	6	7	8	9	10
IV. Product									
utility of the product for customers is evidently recognizable	2.5	0.8	2.5	0.5	2.6	0.7	66.70	50.00	75.00
the product is evidently better compared to up to now offerings	2.8	0.4	2.5	0.5	1.9	0.8	83.30	50.00	25.00
the product is of a high degree of innovation	2.3	0.7	1.8	0.7	1.1	0.6	50.00	16.70	0.00
the product is a „High Tech" product	1.3	0.7	0.8	0.4	0.5	0.5	0.00	0.00	0.00
the product or the way of its manufacturing are proprietary	2.2	0.9	1.8	0.7	1.5	0.5	50.00	16.67	0.00
a functioning prototype of the product exists	2	0.8	2.3	0.7	2.3	1.1	33.33	50.00	62.50
the product is obviously accepted in the market	1.7	1.1	2.5	0.5	2.8	0.4	33.33	50.00	75.00
the product disposes of potential to create a product family	1.2	1.2	1.2	1	1.3	0.9	20.00	20.00	14.29
V. Market and market growth									
the market is growing fast enough	2.3	0.5	1.7	0.5	1.5	0.5	33.33	0.00	0.00
the competition on the market is weak in the first period of three years after launching	2	0.6	1.5	0.5	1.6	0.5	16.67	0.00	0.00
there is sufficient access to the market targeted by a business	1.8	0.9	2.2	0.7	2.6	0.5	33.33	33.33	62.50
the business opens access to international markets	1.7	0.7	1.7	0.7	1.6	0.7	16.67	16.67	12.50
the business opens access to new markets	1.3	0.9	1.2	0.7	1.4	0.5	16.67	0.00	0.00
VI. Returns									
the possibility of achieving high future returns on investment in the business	3	0	2.5	0.5	2.4	0.5	100.00	50.00	37.50
it is possible to sell the share of the business quick and trouble-free	1.3	0.9	1.6	0.8	1.8	0.8	16.67	20.00	25.00
there is a potential to withdraw dividends continuously	0.7	0.5	0.7	0.5	0.8	0.7	0.00	0.00	0.00
required rate of return on investment/ROI (in per cent)	33.80	11.9	23.80	8.2	21.60	6.3	–	–	–
required internal rate of return /IRR (in per cent)	37.50	11	25.83	7.88	21	5.2	–	–	–
expected annual rate of return on investment portfolio (in per cent)	33.30	12	20	7.07	20	6.10	–	–	–
the maximum time duration of the project (in years)	4.5	1.2	4.66	0.745	5.4	1.3	–	–	–

more relevant than *sufficient access to the market*. On the other hand, sufficient access to the market targeted by a business is a necessary prerequisite for investors to decide to invest.

Financial Criteria

A common feature may be observed in all stages of business life cycle in the sixth section of evaluative criteria – the effort of investors to maximize capital appreciation. 100% of respondents consider the fulfilment of this criterion as indispensable in *Early Stage*, in *Later Stage Venture* and *Buyouts* 50 and 37.5%, respectively. Less than half of respondents view the criterion that *it is possible to sell the share of the business quick and trouble-free* and that *there is a potential to withdraw dividends continuously* as important. The results concerning *required rate of return on investment* and *required internal rate of return* are not surprising. The older a business is, the lower the values tend to be. On the other hand, shorter *time duration of the project* is preferred by investors in initial stages of business life cycle.

Reasons for Rejecting Business Proposals

The reasons for rejecting business proposals were found by means of an open question addressed to the respondents. Table IV shows an enumeration list of reasons for rejecting business proposals as stated by the respondents, i.e. firms investing *Private Equity* and *Venture Capital* in the Czech Republic.

DISCUSSION

Evaluation of the Management

It may be claimed that evaluative criteria dealing with the character of a manager play a leading role in decision making of firms investing *Private Equity* and *Venture Capital*. The average weight attached to the six criteria exceeds reference values in all stages of business life cycle. The personality of a manager may also be viewed as an indicator of an investment risk. This assumption is supported by research results presented by Eisele *et al.* (2002), according to which 'the competencies of management are important aspects affecting availability of *Private Equity* and *Venture Capital*'. Similarly, Khanin *et al.* (2008) confirms that investors accent psychological characteristics of top management and their cognitive competencies, such as persistence, responsibility, attention to detail and positive attitude to risk. Robinson (1987) emphasizes that particularly the ability of senior management to act as a leader and be perceived as such by team members is relevant for investors.

The crucial criterion in the category dedicated to *management's experience* in all stages 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 in *Early Stage* 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'. Average weight attached to this criterion in *Later Stage Venture* as well as *Buyouts* remains higher than reference values and therefore demonstrates its decisive influence on successful business development in other stages, e.g. the potential of a business to exert pressure to launch a new or differentiated product (Eisele *et al.*, 2002). The criterion regarding *management's competencies and experience in research and development* is attached the greatest weight in *Early Stage*, which is not very surprising, as it is in this stage that technical viability of the product is tested, a prototype is developed and serial production is started. Technical risk associated with the development of a product fades into the background in the later stages of business life cycle and the importance of management's competencies in the sphere of production management, leadership, marketing and financial management grows. The results of the research in this category are in accord with conclusions published in studies which stress the significance of management's competencies. Fried, Hisrich (1994) highlight the importance of management's experience in marketing, finance and

IV: *Reasons for rejecting business proposals*

Reason stated for rejecting proposals	How many times stated
unsuitable management	4
insufficient expected returns	2
unrealistic proposal	1
uncompetitive proposal	1
uninnovative proposal	1
insufficient opportunity for growth of proposal	1
inability of proposal to generate sufficient cash flow	1
too early a stage of proposal	1
risk involved in proposal	1
product with no prospects	1
unsuitable branch of business	1

Source: own research

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 research, for it is the highest rated criterion in the section called *Other criteria for top management's evaluation*. Muzyka *et al.* (1996) suggests that a management team should be balanced, i.e. its individual members should possess complementary competencies and skills. However, the results of the research imply that the criterion is assigned above-average significance only in *Buyouts* stage. Surprisingly enough, the criterion concerning the *share of the top management in the capital stock* is according to investors of average or below-average significance if compared with reference values. The share of the top management in the capital stock may be viewed as a signal of a businessman's trust in the business idea or as a means of reducing partners' capital loss if the business plan fails (Eisele *et al.*, 2002).

Characterization of Product

Many studies confirm that firms investing *Private Equity* and *Venture Capital* determine quality of a product according to the following criteria: product uniqueness or its sufficient differential in comparison with competitor's offer (Muzyka *et al.*, 1996), product patent protection (MacMillan *et al.*, 1985, 1987; Zacharakis, Meyer, 1998) and the existence of functioning prototype (MacMillan *et al.*, 1985, 1987).

This research proves above-average importance of product uniqueness and its utility for the customer when evaluating business plans in all stages. In *Early Stage*, above-average significance is attached to the criterion that *the product is of a high degree of innovation*. All the indications are that utility of the product for the customer and obvious distinction between the product and a product offered by competitors are factors which affect the competitive position of the business 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). Contrary to all expectations, it is not important in any stage of business life cycle whether *the product is a 'high tech' product* or not.

Product patent protection is a criterion of above-average significance in *Early Stage*. The weight attached to patent production in other stages of business life cycle is lower, though, which contradicts the research by Eisele *et al.* (2002). According to him, 'the existence of protective rights may imply that a company is active in a certain area of business and that it possesses corresponding know-how to prove its business activity and ability to innovate'.

That *a functioning prototype of the product exists* and that *the product is obviously accepted in the market* are criteria whose importance reaches above-average levels in later stages of business development, i.e. *Later Stage Venture* and *Buyouts*. Only then are the investors able to decide whether the product is successful, i.e. if it has been accepted in the market.

Characterization of Relevant Market

The results of the research confirm the conclusions drawn from foreign studies which identify the growth rate as the most significant criterion characterizing the market in *Early Stage* (Eisele *et al.*, 2002; Muzyka *et al.*, 1996). The weight attached to this criterion decreases in *Later Stage Venture* and *Buyouts* and it is supposable that even other characteristics of the market, especially its absolute size, play a powerful role. Muzyka *et al.* (1996) emphasizes such a size of the market that 'enables the business to achieve profitability'.

Above-average weight is in all stages of business life cycle attached to the criterion that *there is sufficient access to the market targeted by a business* which is necessary for catering for the target market. The weight of this criterion increases in *Later Stage Venture* and *Buyouts*, which may be expected due to rising volume of sale in those stages. The relevance of this criterion is also underlined by Tyebjee and Bruno (1984). To the contrary, Eisele *et al.* (2002) reached a surprising conclusion in his research claiming that sufficient access to the market targeted by a business is a criterion of below-average significance for firms investing *Private Equity* and *Venture Capital* in Germany. According to Eisele (2002), gaining access to the market may be considered as the investor's contribution in connection with a capital input to the business and thus the criterion has only average significance in investment decision making.

Anglo-Saxon literature places an emphasis on the extraordinary role played in investment decision making by the potential of the business in the sphere of *access to international* or *new markets* (MacMillan *et al.*, 1985, 1987). The weight attached to this criterion in the Czech Republic is in comparison with the results published in these studies below average.

Financial Criteria

The most significant criterion for investors in all stages of business life cycle is the potential for maximizing the value of co-ownership share. The significance of the criterion is further reflected in the low standard deviation. The results received in this research are in this respect identical with results published by Eisele *et al.* (2002), who claims that market value growth of co-ownership share is a strong motive affecting decision making of profit-oriented investors of *Private Equity* and *Venture Capital*. However, it is necessary to mention results of studies which highlight the fact that 'investors fairly often do not trust excessively optimistic business proposals concerning expected income and therefore pay more attention to an expected market growth rate and are interested in whether the product satisfies the needs of existing or emerging markets' (MacMillan *et al.*, 1985, 1987; Zacharakis, Meyer, 1998).

The possibility of quick and trouble-free sale of capital interest is a criterion to which below-average weight is attached in all stages of business life cycle. In this respect, the research findings presented by Eisele *et al.* (2002), which suggest that the criterion process plays a role of above-average significance in decision making were not confirmed. Many other studies emphasize that it is the exit strategy that is relevant in investment decision making of firms investing *Private Equity* and *Venture Capital*. Investors also focus on the question whether it will be possible to convert an investment into money on schedule (MacMillan *et al.*, 1985, 1987).

It is surprising to compare the average expected rate of return on individual investment and the expected average rate of return on investment portfolio, as the difference value is less than 4% in *Later Stage Venture*. The values, regardless of high standard deviation, reflect the fact that investors expect to keep a loss-making investment in their investment portfolio at the minimum. Thus, the result is in contrast to a statement given by a manager working for a firm investing *Private Equity/Venture Capital* quoted by Eisele *et al.* (2002), 'Out of twenty initial investments in *Early Stage*, insolvency is declared in twenty cases, five investments cover the costs, three reach the required rate of return and only two may be classified as *Super Deal*'.

The average time duration of the project ranges from 4.5 to 5.4 years. The values thus correspond to general time duration of projects stated in professional literature.

Reasons for Rejecting Business Proposals

The most frequent reason for rejecting business proposals provided by respondents is 'unsuitable management'. Other reasons cited are almost exclusively related to the character of business proposals. Those interested in financing by *Private Equity* and *Venture Capital* are rejected, as their proposals earn 'insufficient expected returns' and they are 'unrealistic, uncompetitive, uninnovative, too much risk is involved in them, there is insufficient opportunity for growth of the proposal and they do not promise to generate sufficient cash flow'. Some proposals are unacceptable due to 'too early a stage of proposal' or 'unsuitable branch of business'.

Answers to the open question concerning identification of reasons for rejecting proposals by firms investing *Private Equity* and *Venture Capital* in the Czech Republic more or less confirm what is implied by the results of the evaluation of weight attached to individual investment criteria (see Table III). The reasons for rejecting proposals are result of an interplay of several factors, from which the characteristics of management in a company applying fro being financed and the characteristics of the proposal, i.e. its product and relevant market play a dominant role.

CONCLUSION

The results of the research indicate which criteria affect decision making of firms investing *Private Equity* and *Venture Capital* in the Czech Republic and what the weight attached to these criteria in individual stages of business life cycle is, i.e. which criteria do not influence the result of evaluation of business proposals and the fulfilment of which criteria is conditional for investors to decide to finance a proposal.

The results of the research may serve as guidelines for businessmen, as they suggest factors to which particular attention should be paid when formulating business proposals. Businesses also familiarize themselves with the process of business proposal evaluation by firms investing *Private Equity* and *Venture Capital*, which differs in many respects from standard evaluation of loan applications by banks. As Eisele *et al.* (2002) has it, similar research is also beneficial for the actual investors in the position of *Limited Partners*, i.e. businesses consigning their capital to firms which subsequently invest it (*General Partners*). *Limited Partners* have information concerning how their financial means are dealt with. At the same time, *General Partners* are given the opportunity to critically evaluate their own criteria used to consider business proposals, for they are provided with data about average weight attached to selected criteria in individual stages of investment in the *Private Equity* and *Venture Capital* market in the Czech Republic.

In conclusion, it seems appropriate to mention a discussion on the significance of two groups of criteria which is regularly held in professional literature. For example, the studies conducted by Zacharakis, Meyer (1998) and Tyebjee, Bruno (1984) released a finding that firms investing *Private Equity* and *Venture Capital* place a stronger emphasis on the characteristics of the product and market rather than characteristics of management which thus fade into insignificance. On the other hand, other authors consider the criterion related to management's competencies and experience decisive (cf. Muzyka *et al.*, 1996; Knight, 1992). The studies undertaken by Zacharakis, Meyer (1998) and Shepherd (1999) imply that investors tend to evaluate management's competencies in connection with other characteristics, such as a size of the market and intensity of competition in particular. This thesis is also supported by the results of this research applying to firms investing *Private Equity* and *Venture Capital* in the

Czech Republic, as the overwhelming majority of criteria which characterize a manager's personality and their competencies are attached above-average weight in all stages of business life cycle. Nevertheless, it is not sufficient to fulfil the criteria for a business proposal to be viewed positively. Investors also place an emphasis on selected characteristics of market and product.

SOUHRN

Výzkum kritérií hodnocení podnikatelských projektů ze strany společností investujících Private Equity a Venture kapitál v ČR

Racionální rozhodování o investicích vyžaduje existenci investičních kritérií. Efektivnost investic se v teorii finančního managementu tradičně posuzuje podle toho, jak investiční projekt přispívá k dosažení hlavního finančního cíle podnikání, tj. maximalizaci tržní hodnoty podniku.
Potenciální příjemci Private Equity a Venture kapitálového financování působící v ČR dosud nedisponovali vzhledem k absenci odpovídajících výzkumných výsledků informacemi o investičních kritériích a jejich významu při posuzování projektů ze strany investorů.
Tento článek prezentuje výsledky výzkumného projektu, jehož cílem je posoudit, která kritéria považují společnosti investujících Private Equity a Venture kapitál v ČR za prioritní při výběru podnikatelských plánů, a jaké jsou nejčastější důvody zamítnutí předkládaných projektů. Výzkum umožnil identifikovat z hlediska praxe financování formou Private Equity a Venture kapitálu nejvýznamnější kritéria, jakými jsou charakteristiky managementu, trhu, produktu a míry zhodnocení investovaného kapitálu. Výsledky výzkumu jsou následně porovnány se závěry obdobných studií, které byly v minulosti realizovány (např. Tyebjee, Bruno, 1984; Fried, Hisrich, 1994; MacMillan *et al*., 1985, 1987; Muzika *et al*., 1996; Eisele, 2002).
Výzkum podporuje tezi, že, nadprůměrné míry významnosti při posuzování podnikatelských projektů dosahují charakteristiky managementu, tj. jeho schopnosti a zkušenosti, a to napříč všemi fázemi životního cyklu podniku. Nicméně splnění těchto kritérií není pro pozitivní ohodnocení podnikatelského záměru dostačující. Investoři rovněž kladou důraz na vybrané charakteristiky trhu a produktu. Publikováním empirických dat je vyslán významný signál potenciálním zájemcům o financování formou Private Equity/Venture Capital o aktuálních hodnotících kritériích a jejich váze, stejně jako investorům do Private Equity a Venture Capital fondů a investičním společnostem.

Private equity, rozvojový kapitál, podnikatelský plán, investiční rozhodování, kritéria investování

Acknowledgements

This article was written as a part of a project called *Barriers to Development of Venture Capital Financing in the Czech Republic*. This project is supported by Internal Grant Agency at Brno University of Technology and registered under no. FP-J-10-4.
The project was undertaken under the auspices of Czech Private Equity and Venture Capital Association (CVCA).

REFERENCES

Central and Eastern Europe statistics. Brussels: EVCA, 2008. 36 pp.

EISELE, F., HABERMANN, M., OESTERLE, R., 2002: *Die Beteiligungskriterien für eine Venture Capital Finanzierung – Eine empirische Analyse der phasenbezogenen Bedeutung* [online]. Tübingen: Wirtschaftswissenschaftliche Fakultät der Eberhard-Karls-Universität Tübingen, Tübinger Diskussionsbeitrag Nr. 238. 30 S. Available et: <http://tobias-lib.uni-tuebingen.de/volltexte/2005/1919/pdf/238.pdf>.

FISCHER, M., 2009: *Beteiligungskriterien Private Equity und Venture Capital*. [online]. Nürnberg: Georg-Simon-Ohm-Hochschule Nürnberg. 12 S. Available et: <http://www.mlfischer.com/content/PrivateEquityalsAnlageklasse_080609_mf.pdff>.

FRIED, V. H., HISRICH, R. D., 1994: Toward a Model of Venture Capital Investment Decision Making. *Financial Management*, Vol. 23, No. 3, pp. 28–37.

HARTMANN-WENDELS, T., 1987: Venture Capital aus finanzierungstheoretischer Sicht. *Zeitschrift für betriebswirtschaftliche Forschung*, No. 39, pp. 16–29.

KHANIN, D., BAUM, J. R., RAJ V. M., HELLER, C., 2008: Venture Capitalists'Investment Criteria: 40 Years of Research [online]. *Small Business Institute®Research Review*, Vol. 35, pp. 187–192. Available et: < http://sbaer.uca.edu/research/sbi/2008SBIPROCEEDS/20.pdf>.

KNIGHT, R. M., 1992: A Longitudinal Study of Criteria Used by Venture Capitalists in Canada. *Journal of Business Venturing*, No. 4, pp. 12–26.

LAUB, U., 1989: *Zur Bewertung innovativer Unternehmensgründungen im institutionellen Zusammenhang: empirisch gestützte Analyse*. München: Technische Universität, Dissertationsarbeit. 291 S. ISBN 3-88259-643-0.

MACMILLAN, I. C., SIEGEL, R., SUBBA NARASIMHA, P. N., 1985: Criteria used by venture capi-

talists to evaluate new venture proposals. *Journal of Business Venturing*, No. 1, pp. 119–128.
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*, No. 1, pp. 123–137.
MUZYKA, D., BIRLEY, S., LELEUX, B., 1996: Tradeoffs in the investment decisions of European venture capitalists. *Journal of Business Venturing*, No. 11, pp. 273–287.
NÝVLTOVÁ, R., REŽŇÁKOVÁ, M., 2007: Mezinárodní kapitálové trhy: zdroj financování. 1. vyd. Praha: Grada Publishing. 222 s. ISBN 978-80-247-1922-1.
ROBINSON, R. R., 1987: Emerging strategies in the venture capital industry. *Journal of Business Venturing*, No. 1, pp. 53–77.
SCHRÖDER, C., 1992: *Strategien und Management von Beteiligungsgesellschaften*. Baden-Baden: Nomos. 413 S. ISBN 978-3-7890-2618-8.
SHEPHERD, D. A., 1999: Venture capitalists' assessment of new venture survival. *Management Science*, Vol. 45, No. 5, pp. 621–632.
TYEBJEE, T. T., BRUNO, A. V., 1984: A Model of Venture Capitalist Investment Activity. *Management Science*, Vol. 30, No. 9, pp. 1051–1066.
VALACH, J., 2006: Investiční rozhodování a dlouhodobé financování. Praha: Ekopress. 465 s. ISBN: 80-86929-01-9.
ZACHARAKIS, A. L., MEYER, G. D., 1998: A lack of insight: do venture capitalists really understand their own decision process? *Journal of Business Venturing*, Vol. 13, No. 1, pp. 57–76.

Address

doc. Ing. Marek Zinecker, Ph.D., Ing. Jaroslava Rajchlová, BA, Ústav financí, Fakulta podnikatelská, Vysoké učení technické v Brně, Kolejní 4, 612 00 Brno, Česká republika, e-mail: zinecker@fbm.vutbr.cz, rajchlova@fbm.vutbr.cz