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Investment strategies of management companies in Czech companies with the venture capital involvement

Abstract

The main objective of the research is to identify the investment strategy of management companies investing the venture capital into the Czech companies. This objective is achieved through the analysis of selected economic characteristic (indicators): ROE, ROA, fixed assets in the net form, revenues connected with the business object and employee performance. From the research sample of 31 management companies, the three of them were selected that showed the most numerous venture capital investments. The partial conclusions from the research are following:

Conclusion to the company Genesis: the expansive and cost-saving policy was identified in 16% of companies, the expansive investment policy was identified in 42% of companies, the cost-saving policy in 37% of companies, 5% of companies was identified as companies without a growth.

Conclusion to the company ARCA: the expansive and cost-saving policy was realized in 13% of companies, the expansive policy in 27% of companies, the cost-saving policy in 60% of companies.

Conclusion to the company ARX Equity Partners: the expansive policy was identified in 14% of companies, its modification in revenues growth connected with fixed assets decline in 43% of companies, only the cost-saving policy in 43% of companies, concurrent expansive and cost-saving policy was identified in no company.

The strategy of management companies, which participated most frequently in venture capital investments in companies in the Czech Republic, is identified as the cost-saving strategy, i.e. conservative strategy, therefore can be considered in terms of studied economic characteristics as beneficial.

Keywords: investment strategy, expansive strategy, cost-saving strategy, venture capital, management companies, economic (characteristics) indicators.
JEL Classification: G32, M21.

Introduction and the theoretical framework

Many foreign authors are dealing with examining of venture capital. Many researchers highlight the positive impact of venture capital financing on business development, e.g. Jain. Based on the analysis of business data, Kini (1995) conducted the research of 136 companies that were financed by venture capital; the results showed that the support of venture capital has a positive impact on higher employment and revenue growth compared with companies that are funded by other forms of financing (control group). The similar research was made by Lerner (1999), that aimed to compare companies funded by venture capital with control group. The companies were selected according to the following criteria: annual turnover, branch and place of business. The research presented the companies financed by venture capital showed three to four times higher rate of growth in selected indicators − employment and sales than the control group.

Penedel and Jud (2006) and AVCO (2004) conducted the research that compared the companies financed by venture capital with the control group and that was based on the questionnaire survey among owners and CEOs of the selected companies. The result of the research is following:

- The companies financed by venture capital have reached better financial results than companies in the control group, even though both groups were from the same branches with high potential of development.
- Cash flow growth rate of the control group was about 29% higher, but the rate of employment growth in the control group was 46% lower than the companies financed by venture capital; venture capital financing reached about 10% higher turnover.
- The companies from the control group recorded much lower growth rates of economic indicators than companies financed by venture capital.
- Technological innovation and other innovative knowledge provided by investor is the real instrument of the business development for the companies financed by venture capital and companies from the control group as well.
- Companies financed by venture capital were in a bad financial condition (e.g. CF negative, the inability to achieve a bank loan, etc.) before entering the investor, compared with the control group.
- ¾ of companies that are financed by venture capital consider the venture capital financing as beneficial.

The similar results recorded the research conducted by Britischen Venture Capital Association − BVCA in 2002. 176 companies from the file of 1168

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companies confirmed that its business is financed by venture capital more quickly, in case of turnover and employment, than the average of companies indexed to the exchange.

Based on internal data of surveyed companies, Engel and Keilbach (2002) studied the impact of venture capital on the number of patent announcement. The research showed the so-called effect of selection. Innovative companies have a higher probability of complicity on the part of venture capital investors. The development of companies financed by venture capital is faster than the companies in the control group. The authors assume that venture capital investors finance more innovative companies, but afterward strengthen its activities in the form of product placing on the market and thus increase the speed of the business development.

The opposite result was recorded by Frederiksen et al. (1991). In contrast with the conclusions of its own research in 1990, the research showed that the development of financial indicators (liquidity, turnover, number of employees, equity ratio) have not a positive impact of venture capital investors on the business development. The research was conducted by questionnaire survey CEOs of the selected companies. Frederiksen (1997) also observed the financial and non-financial benefits of venture capital in the business. The survey showed the positive impact of investors on the business development in the non-financial business parts, i.e. such as marketing, production of contacts, human resources management etc. The research was based on the questionnaire survey in 34 companies. Nevertheless, the positive impact of venture capital in the financial parts was not confirmed.

Based on the development of exchange rates and data for a period of two years, Cherin and Hergert (1988) conducted the research in the companies with venture capital involvement and control group. The research showed that the development of companies financed by venture capital is not more beneficial than the development of companies from the control group. The research focused on the development of employment and turnover growth in the period of two years, so it is possible that the benefits of the venture capital financing were not shown.

Manigart, Hyfte (1999) were focused on the survey that showed the companies financed by venture capital and do not have expressively higher employment growth, but have a higher rate of growth in assets and cash flow. In the research, 187 Belgian companies financed by venture capital were compared with the control group of companies.

The conclusions, from the foreign researches mentioned above, answered questions about the impact of venture capital on the business development. With these results, we formulated the subject of the research project: to evaluate the overall economic development of Czech companies financed by venture capital. Sedláček (2007) conducted the study that analyzed the financial performance in Czech companies, however, the conclusions of this research have not been presented, yet. Therefore, our following research can be considered as exclusive for the Czech Republic.

1. The objective of the research

The objective of the research is to identify the investment strategies of management companies investing venture capital into companies in the Czech Republic. This objective is fulfilled by the results of the analysis of the selected financial indicators. The systematic effort to underpin the development of companies and the identification of investment strategy resulted in the selection of these financial indicators: return on equity (ROE), ROA return on assets (ROA), fixed assets in the net form (netto fixed assets), revenues connected with the business objective and employee performance.

2. Materials and methods of the research

The research material is based on data from all business entities in the period of 1998-2012 in the Czech Republic that were financed by venture capital. The companies were monitored one year before entering the investor in the company and in the period of management company actuating in the company. The basic research file contains a total of 93 companies based in the Czech Republic. The source for the acquisition of the basic research file was The Czech Association of Private Equity and Venture Capital. Data on the number of employees in individual companies were obtained from publicly available financial statements. Although venture capital participated in financing of 93 Czech companies in the period of 1998-2012, data were obtained from 86 companies. The research sample thus consists of 94% companies from the basic research file. Qualitative data was processed using the descriptive statistics.

The monitored indicators were calculated using the following formulas:

$$ROE = \frac{profit\ after\ taxation}{equity},$$

$$ROE = \frac{profit\ after\ taxation}{assets},$$

$$Netto\ fixed\ assets = fixed\ assets - \\ -accumulated\ depreciation,$$

$$revenues = revenues\ from\ selling\ of\ goods + \\ +revenues\ from\ selling\ of\ own\ products \\ and\ services.$$

To evaluate the employee performance (EP), we drew on our stated definition of employee performance, e.g. (Rajchlová, Fedorová, 2013).

$$EP = \frac{OPAA}{ARNE} = \frac{OP - RSFAM + BPFAM}{ARNE}.$$

Legend:

EP represents employee performance, OPAA stands for operating profit, adjusted from the result (revenues) from selling of assets, OP stands for operating profit, RSFAM stands for revenues from selling of long-term (fixed) assets and material sales of fixed assets and material, BPFAM represents balance price of long-term (fixed) assets and material and ARNE represents the average recalculated number of employees.

The venture capital investments in the Czech Republic accounted for a total of 31 management companies in the monitored period. Table 1 gives an overview of the number of venture capital investors and number of their investments.

Table 1. The overview of management companies with venture capital involvement and its number of investments

The name of fund	Number of investments	The name of fund	Number of investments
Genesis	19	Bancroft JPM	1
Arca Capital Bohemia, a.s.	15	Darby Overseas Investments	1
ARX Equity Partners	7	DBG	1
Argus Capital	3	EK Mittelstandsfinanzierungs AG	1
JV Capital Management	3	Enterprise Capital + Intel Capital	1
MCI	3	Enterprise Investros – pl	1
Advent	2	Garvest	1
Benson Oak	2	Intel Capital	1
GIMV	2	Macquarie	1
Invest Equity	2	Mezzanine Management Central Europe	1
KBC	2	Middle Europe Investments	1
Mid europa	2	Pamplona Capital Partners I	1
MID Europa Partners, Lehman Brother, Al-Bateen Investments	2	Royalton Partners	1
Penta Investments	2	Syntaxis Capital	1
PPF Partners	2	TA Associates	1
Riverside	2		

Source: own research.

The survey shows that only three companies have undertaken such a number of investment projects, from which it is possible to generalize their results: the company Genesis, Arca Capital Bohemia and ARX Equity Partners. Genesis has operated in 19 companies, Arca Capital Bohemia in 15 companies and ARX Equity Partners in 7 companies. Other management companies are not assessed therefore they realized venture capital investment in the interval 1 to 3 companies in the entire monitored period. These small numbers of investments of individual companies cannot be considered as the research sample, from which it is possible to draw conclusions (i.e. formulation of investment success of management companies in Czech companies).

To assess the risk capital investments, we have selected the above economic characteristics (indicators) because of following reasons:

ROE was chosen because it is important for owners of corporations, including venture capital investors. When calculating ROE, the total disposable economic result (profit) was considered. To assess the achieved ROE value, we chose comparison with the achieved return on investment, which is generally considered to be risk-free, i.e. with the interest rate of governmental bonds (its amount is 4.04% p.a. (MVCR, 2014) during the last decade).

ROA was chosen because it indicates the amount of profit generated from the company assets – we consider this characteristic as very important. The efficient use of assets is one of the key points of the company's success. To assess the achieved ROA value, we assume that its level is lower than the ROE. Almost the same value of both indicators is possible only when all assets are financed by equity (which is not the real situation). Ceteris paribus is accompanied by a reduction in external resources to ROE decrease, while its increase causes ROE increase. If we accepted the interest rate of governmental bonds as a normative value for ROE, then 50% of its value for ROA would correspond to a state generally considered to be acceptable for good corporate financing. It is the 50% of equity and 50% of external resources of financing. In accordance with this point of view, we choose, for our situation, the lower limit of 2% as a basis for evaluating the effective use of assets.

For each characteristic, we have worked:

1. with the calculated average in the monitored years;
2. with the calculated annual absolute change in each indicator;
3. with the calculated average change of indicator;
4. with the ratio of the average change and average of indicator, which was converted to a percentage number.

For all other indicators, we used the average annual growth to express their increments. They are designed so that the resulting number is indicative of the average annual percentage changes of the observed indicator for each company, in the period of cooperation with venture capital investor and maximum of three years after investor's leaving of the company. The calculated change value is then used for the economic development analysis. MS Excel was used for the calculations.

We are working with the ROE and ROA increments regardless the initial level of both indicators, which is dependent on a number of specific circumstances. These ROE and ROA increments are an indication of the favorable development of business growth and maintaining of existing levels of both indicators.

We consider the revenues growth (in our case expressed as their average annual growth) to be the necessary prerequisite to the long-term positive development of the company. Without the revenue growth, the company has only limited temporary operating maneuvering possibilities in achieving good performance. Projecting the development of revenues in the overall performance of the company (together with other factors) is illustrated by ROE and ROA. The increments of fixed assets in companies confirm the situation when the company invests and does not relieve the property, therefore, e.g. in order to achieve revenues, profit and good performance.

The employee performance indicator − we find important the contribution of employees to the obtained results, i.e. the company performance. Frequently used indicator of labor productivity constructed by value added to one employee is not in the research for the employee performance used. The reason is that the value added displays only the evaluation of material and other supply inputs to the enterprise. Other cost items, e.g. wage, do not affect the amount of value added, but have an impact on the assessment of employee performance.

The indicators related to cash flow are considered to be very important but could not be observed, because these indicators, as an optional part of the financial statements, were not available.

3. The results of the research

The resulting values of the economic characteristics (indicators) are presented for clarity in the form of tables for each of the three companies separately. The first column is the serial number of funded enterprise and the second and third column represent an average rate of ROA and ROE in the monitored years. The fourth, fifth, sixth and seventh column contain the values of the average annual changes of the economic characteristics (indicators) in the monitored years. Zero values of ROA and ROE are listed in a situation where the economic result was the loss and the increments of ROA and ROE did not provide the information in the case of negative shareholders' equity. In these situations, the indicators lose their meaning. In the synthesis of the results of the financial analysis, the extreme values are respected, which in this case do not distort the formulated conclusions.

Table 2. Results of the businesses portfolio of management company Genesis

	ROA (%)	ROE (%)	Δ ROA (%)	Δ ROE (%)	Δ revenues (%)	Δ fixed assets (%)	Δ employee performance (%)
1	0	1	0.00	0.00	6.91	0.77	57.36
2	22	0	65.15	-	74.90	-110.21	53.99
3	0	0	-	-	21.17	-27.00	-82.95
4	1	2	31.95	15.92	15.21	71.80	496.02
5	1	1	42.52	-8.18	-9.59	5.34	57.56
6	0	0	-	-	1.92	17.18	-
7	2	4	-11.97	-40.01	-30.76	8.77	66.17
8	25	42	-2.99	46.28	97.09	33.85	-493.50
9	13	0	149.82	0.00	32.44	15.17	-15.98
10	5	32	-10.55	5.68	0.87	9.96	-8.20
11	1	1	0.00	0.00	9.63	9.57	23.94
12	6	20	5.54	5.37	-2.34	6.09	2.90
13	2	8	-116.39	-119.58	-1.37	-10.44	57.19
14	11	30	-19.75	-6.07	-9.43	-4.68	-33.33
15	2	11	-85.14	-52.24	3.79	18.53	-29.54
16	0	0	-	-	200.00	-1.37	46.27

Table 2 (cont.). Results of the businesses portfolio of management company Genesis

	ROA (%)	ROE (%)	Δ ROA (%)	Δ ROE (%)	Δ revenues (%)	Δ fixed assets (%)	Δ employee performance (%)
17	4	18	-63.69	-94.37	-36.24	28.16	364.24
18	11	16	-0.53	-2.82	4.03	-3.62	-9.54
19	2	19	18.16	12.10	-4.70	-17.63	-131.02

Source: own research.

The average total annual value of ROA was found to be 6% in the monitored period. The average annual value of over 20% was determined in two companies, in three companies in the interval from 11% to 13%. Overall, 12 companies, i.e. 63% of the whole, reached ROA value of 2 and more percent. 6 companies, which create 37% of the whole, did not reach the derived ROA value.

The economic characteristic (indicator) ROE acquired the average total annual value of 11%. The average annual value of ROE of 42% was achieved in one company; a total of 10 companies, i.e. 53% of that whole, reached the level four and more percent. From the remaining 47%, i.e. 9 companies, which ROE was below 4%, five firms have zero ROE, i.e. 16% of companies. Conjunction of higher levels than 2% and 4% of indicators ROA and ROE was found in 10 companies, i.e. almost 53% of all companies by this investor.

We identified the following findings during the monitoring of the average annual changes of the selected economic indicators:

- ♦ The monitored indicators of profitability were increased in 5 subjects (26%) in case of ROE indicator and in 6 subjects (32%) in case of ROA indicator.
- ♦ The annual average economic growth of economic characteristics (indicators) – revenues and fixed assets – i.e. 42% of companies, was determined in 8 subjects.
- ♦ The growth of employee performance indicator was determined in 10 subjects, i.e. 53% of companies.
- ♦ The simultaneous growth of these three indicators, i.e. revenues, fixed assets and employee performance was occurred in three companies (16%).
- ♦ In the case of one company, there was the growth in all five monitored indicators.
- ♦ The simultaneous growth of four indicators − ROA, ROE, revenues, employee performance − was identified in one company.
- ♦ In the overall assessment of the observed changes, we can state: the overall ROA characteristic increased an average by 0.13% a year, while the ROE characteristic declined an average by 15.86% a year. The revenues indicator was increased an average by 19.66% a year, as well as the fixed assets by 2.6%. The employee performance indicator reached an annual increase of 23.42%.
- ♦ In one company, i.e. 5% of the whole, the average annual growth was not identified in any of the monitored characteristic.

Table 3. Results of the businesses portfolio of management company ARCA Capital

	ROA (%)	ROE (%)	Δ ROA (%)	Δ ROE (%)	Δ revenues (%)	Δ fixed assets (%)	Δ employee performance (%)
1	4	37	9.26	8.89	7.54	10.27	64.96
2	4	159	19.59	3.09	-3.89	11.60	0.84
3	1	2	0.00	0.00	9.63	15.70	20.78
4	2	0	112.16	0.00	0.00	73.61	0.00
5	2	116	300.00	200.00	-45.14	-84.76	261.86
6	0	0	0.00	0.00	-166.44	9.92	57.15
7	4	5	-10.73	-12.94	-2.83	0.01	-21.42
8	0	0	0.00	0.00	50.00	26.21	-2.75
9	2	16	0.00	0.00	7.46	17.65	-68.51
10	9	15	27.28	22.84	-6.19	27.83	47.06
11	2	3	28.92	37.46	-22.18	-9.38	26.93
12	1	9	-16.91	0.00	-30.65	-15.19	484.38
13	8	19	0.00	0.00	-31.55	-13.47	41.60
14	1	181	0.00	0.00	-22.07	89.71	15.73
15	1	1	-37.38	-34.83	-8.34	20.96	-932.65

Source: own research.

The average annual value of ROA was 3 % in the case of companies, in which the management company Arca Capital Bohemia invested the venture capital. The highest value, in interval from 8% to 9%, was found in the case of two companies. Overall, nine companies, which is 60% of the whole, reached the ROA value of two percent or more. Six firms (40%) did not reach the derived value ROA.

The ROE characteristic reached the average total annual value of 37%. From the 9 companies, i.e. 60% of that whole, reached the level four and higher percent. From the remaining 4%, i.e. 6 companies, which ROE was below 4%, the three companies had zero ROE, i.e. 20% of companies. The concurrent higher level of 2 percent or more in ROA and 4 percent or more in ROE was reached in total by 5 companies, which is more than 33%.

We can say, from the average annual changes of the monitored indicators, the following:

- Return on equity increased in five companies (33.33%), return on assets increased in seven companies (47%).
- Four companies of the monitored whole (almost 27%) had concurrent annual average growth of revenues and fixed assets. The growth of employee performance indicator was identified by ten subjects (nearly 67%).
- Only two companies (13%) had a concurrent growth in sales of fixed assets and employee performance.
- The all five monitored indicators were grown in one company.
- An average annual ROA increase of 28.81% was identified for the monitored changes. On closer examination, it can be stated that in the case of 20% of the companies the monitored indicator was decreasing, 40% of companies showed no change and 40% of companies showed the growth of this indicator. In two cases, i.e. 19% of companies, the average annual extreme increases of 112% and 300% were identified.
- The ROE value is an average increasing of 14.94% per year for all surveyed companies of the management company ARCA. In two companies, i.e. 13% of all companies, the average annual decline of this indicator was found, 53% of companies showed no change of this indicator and 40% of companies registered an increase in ROE. As in the case of ROA, the extreme annual increase of ROE was detected in one company, i.e. of 200% per year.
- The values of revenues showed the following percentage annual changes: the total average annual percent change was set at -17.64%, i.e. the value of revenues indicator of all surveyed companies of ARCA was an average decreased by 14.94% per year. Specifically, it was a decrease of revenues in ten companies, i.e., 67% of the total, one company (7%) showed unchanged revenues in the period and the revenues were increased in ten companies (27%) a year.
- The total average annual percentage change of fixed assets was determined to be 12.04%. Decreasing the average annual value of fixed assets in the net form was found in 27% of companies, increasing the average annual of fixed assets in the form was found with 73% of companies.
- Employee performance, monitored as an average value of annual changes, declined by 0.27%. It is necessary to point out the significant distortion of extreme value in the case of one company, where the average annual decline of 932.65% was found. The number of companies, in which the decreasing value of employee performance was found, was 10, i.e. 27%; in 67% of companies, the average annual increase was found. One company, i.e. 7% of the total, showed no change of this indicator.
- One company, i.e. 7% of the total number of companies, had an increase of value in all monitored characteristics (indicators).
- In one company, i.e. 7% of the total, there was an increase of four monitored characteristics, except the revenues.
- The most often annual increase of economic characteristics (indicators) in the case of fixed assets in the net form and employee performance was identified in 67% of companies. Consequently, the annual increase of ROA indicator was identified in 40% of companies, the annual increase of ROE indicator was identified in 33% of companies. The annual increase of revenues indicator was identified in 27% of companies, i.e. at least cases.

The results of the portfolio of the management company ARX Equity Partners are listed in Table 4.

Table 4. Results of the businesses portfolio of management company ARX Equity Partners

	ROA (%)	ROE (%)	Δ ROA (%)	Δ ROE (%)	Δ revenues (%)	Δ fixed assets (%)	Δ employee performance (%)
1	3	7	23.8	23.6	40.5	-7.7	44.2
2	8	26	192.0	189.4	-57.9	-27.9	42.4
3	7	17	14.9	21.1	-5.7	14.3	45.1
4	2	5	-200.0	-200.0	16.1	17.5	-63.5
5	3	14	200.0	200.0	31.7	-6.5	-8.2
6	3	7	23.8	23.7	-2.7	-1.9	112.7
7	1	6	0.0	0.0	50.3	-6.8	4751.9

Source: own research.

The total average ROA value in the case of companies, in which the management company ARX Equity Partners was involved, was found to be 4%. The highest average annual values were obtained in two companies at 8% and 7%. 6 companies (i.e. 86%) achieved two or more percent of the monitored ROA value. The average total annual value of ROE was found to be 12%, the highest ROE value was determined at 26% and 17%. All companies reached the value ROE over 4%. 6 companies, i.e. 86%, reached simultaneously the required value of ROA and ROE.

The average annual changes have the following characteristics:

- The ROA value was an average increased by 36% a year. In the monitored file, there are extreme situations; one company reported the decline in this indicator by 200% a year, two companies reported an increase of this indicator by 192 % and 200% a year. From the seven monitored companies, there was one company, i.e. 14%, which recorded the decrease of indicator. In 71% of companies, the annual growth of the indicator was found and the change of indicator was found to be zero in one company.
- The average annual percentage change of ROE in the total portfolio of companies of the management company ARX Equity Partners was calculated at 37%, i.e. the value of this indicator was an average increasing in all monitored companies of the ARX Equity Partners year on year. Overall, there was an annual increase in the value of ROE for 5 companies, i.e. 71%. As in the case of ROA, the extreme annual decrease of ROE was detected in one company, i.e. by 200% per year. The extreme annual increase of ROE was detected in two companies, i.e. by 200% and 189%. Simultaneously, the increase of ROA and ROE value was identified in 5 companies, i.e. 71%.
- The average annual percentage change of the revenues indicator was calculated at 10.33 %. The annual percentage decrease was occurred in 43% of companies, the annual percentage increase was detected in 56% of companies.
- The values of economic indicator, fixed assets in the net form, showed an overall average annual decrease at 2.72%. On closer examination, it can be concluded that the annual average value was decreased in 71% of companies; the annual average value was increased in 29%.
- The last monitored indicator was employee performance. This indicator reaches the extraordinary values in the research, i.e. the overall average annual growth of 703.51%. This increase is due to the extreme value in one case, the annual changes of the value at 4751% were observed. If the file does not contain this value, then the annual increase is 28.28%. Overall, the annual increase of this indicator was identified in 71% of companies, then the decrease in 29% of companies.

The Overall results of the portfolio of companies of the management company ARX Equity Partner showed that neither one of them has reached the annual growth of all indicators at the same time. The two companies, i.e. 29% of companies managed by ARX Equity Partners, growth, amounted in an increase in 4 indicators. The ROE and ROA indicators were simultaneously increased the most often. In the monitored companies, the ROA, ROE and employee performance indicators consistently reached the level of annual increase in 71% of companies and were increased the most often. The fixed assets indicator was increased at least cases, when the increase of this indicator was identified in 29% of companies.

4. Discussion of results

More than half of the companies (53%), in which the management company Genesis invested the venture capital, currently have a good return on capital and assets in the form of fixed assets. The growth of these indicators was recorded in 26% of companies with ROE and 32% of companies with ROA in the period of the venture capital involvement. Concurrent ROA and ROE growth was recorded only in three companies representing 15% of the whole. Data on the ROA and ROE growth indicate that improving the return on capital and assets of companies was occurred in only 15% of companies during the monitored period of the company Genesis.

The annual average growth of revenues and fixed assets was reported of 8 companies, i.e. 42% of companies and 10 companies (i.e. 53%) showed an increase in employee performance indicators. The simultaneous growth of these three indicators, i.e. revenues, fixed assets and employee performance, was occurred in three companies (16%). The growth of revenues in connection with increments of fixed assets suggests the expansive market strategy of these companies as a prerequisite for a good future of the company. It is especially important that 4 companies of the whole number of 8 companies, in which this effect was occurred, are in a bad situation with returns.

The file of ten subjects with an increase in employee performance (considered as a desirable effect) has five subjects with simultaneous decrease in revenues. The different level of ROA and ROE was for these five companies identified, even above average. The growth of employee performance is associated with a decrease in costs, which we consider as desirable, but only as the short-term business policy. The three companies showed a good connection of the expansive and cost-saving corporate policy. The companies need this type of strategy due to the low current return.

The conclusions for the management company Genesis:

- the expansive policy was identified in 16% of companies;
- the expansive policy was identified in 42% of companies;
- the cost-saving policy was identified in 37% of companies;
- 5% of companies were examined without a growth.

The 60% of companies of the management company ARCA Capital reached the recommended value of ROE that we determined as the required and derived from the least risky investments. The ROE value was increased in 5 companies (33.3%), ROA value was increased in 7 companies (47%). The concurrent increase of ROE and ROA value was reached in 5 companies, i.e. 33% of the whole. Four companies of the monitored whole (almost 27%) reached the concurrent average growth in revenues and fixed assets. Two of these four companies reached the poor indicators of profitability. The growth in employee performance was identified in 10 companies (almost 67%), which was accompanied by decrease in revenues in 9 of these 10 companies. Only two companies (13%) had a concurrent growth in revenues, fixed assets and employee performance. The growth of all monitored indicators was identified in one company.

The conclusion for the management company ARCA Capital:

- the expansive and cost-saving policy were identified in 13% of companies;
- the expansive policy was identified in 27% of companies;
- the cost-saving policy was identified in 60% of companies.

The 86% companies of the management company ARX Equity Partners reached the recommended value of ROE that we determined as the required and derived from the least risky investments. The concurrent growth of ROA and ROE indicators was occurred in 71% of companies and the concurrent growth of revenues and fixed assets was occurred in one enterprise, i.e., 14% of the whole. It was a company with low initial level of profitability.

The concurrent growth of revenues, fixed assets and employee performance was not occurred in any company. The decrease in revenues was identified in three of the five companies with the growth of employee performance. Simultaneously in three companies, the increase in revenues was connected with the decrease of fixed assets. In one company, the decrease in revenues was connected with the decrease of fixed assets.

The conclusion for the management company ARX Equity Partners:

- the distinct expansionary policy is identified in 14% of companies;
- its modification in revenues growth, associated with a decrease of fixed assets, was identified in 43% of companies;
- only the cost-saving policy (decrease in revenues, increase in employee performance) was identified in 43% of companies;
- simultaneous expansion and cost saving policy were identified in no company.

From the above findings, it can be identified the corporate strategy of management companies, which are most frequently involved in venture capital investments of companies in the Czech Republic, as **a cost-saving strategy, i.e. a conservative strategy**. The companies reached the average value in ROE, which could be considered as positive, due to the so-called recommended values. The other observed values of economic characteristics (indicators) reached rather the average annual percentage increases than decreases, and this fact can be considered as positive. We assume that the involvement of venture capital in Czech can be considered as beneficial.

Conclusion

The research task was seen in the identification of investment strategy of management companies investing the venture capital into the companies in the Czech Republic. The stated objective was achieved through the following steps: the selected economic characteristics (indicators) were processed by using statistical methods, such as the average in the monitored period, the annual absolute change and the resulting annual average percentage growth. From basic research file of the management companies in the Czech Republic, three were selected that showed the most numerous venture capital investments, i.e. these companies Genesis, Arca Capital Bohemia and ARX Equity Partners. Genesis worked in 19 business entities, Arca Capital Bohemia in 15 companies and ARX Equity Partners worked in 7 companies. Other management companies are not assessed therefore they realized venture capital investment in the interval from 1 to 3 companies in the entire monitored period. These small numbers of investments of individual companies cannot be considered as the research sample, from which it is possible to draw conclusions (i.e. formulation of investment success of management companies in Czech companies).

The partial conclusions from the research were formulated:

- ♦ Conclusion to the company Genesis: the expansive and cost-saving policy was identified in 16 % of companies, the expansive investment policy was identified in 42% of companies, the cost-saving policy in 37% of companies, 5% of companies were identified as companies without a growth.
- ♦ Conclusion to the company ARCA: the expansive and cost-saving policy was realized in 13% of companies, the expansive policy in 27% of companies, the cost-saving policy in 60% of companies.
- ♦ Conclusion to the company ARX Equity Partners: the expansive policy was identified in 14% of companies, its modification in revenues growth connected with fixed assets decline in 43% of companies, only the cost-saving policy in 43% of companies, concurrent expansive and cost-saving policy was identified in no company.

The strategy of management companies, which participated most frequently in venture capital investments in companies in the Czech Republic, is identified as the cost-saving strategy, i.e. conservative strategy, therefore can be considered in terms of studied economic characteristics as beneficial.

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References

1. AVCO. (2006). *Der Einfluss von Private Equity (PE) und Venture Capital (VC) auf Wachstum und Innovationsleistungösterreichischer Unternehmen*, [Online]. Available at: http://www.avco.at/upload/media-library/Impact_von_PE_VC__Endbericht_Okt._2006.pdf. [Assessed 11 January 2011].
2. BVCA. (2002). *The Economic Impact of Private Equity in the UK*, [Online]. Available at: http://www.bvca.co.uk/assets/features/show/TheEconomicImpactofPrivateEquityintheUK2002.pdf. [Assessed 11 January 2011].
3. Engel, D. and Keilbach, M. (2002).Firm level Implications of Early stage Venture Capital Investments − An Empirical Investigation, *Discussion Paper* No. 02-82, Mannheim: ZEW.
4. Frederiksen, O., Olofsson, C. and Wahlbin, C. (1991). The role of venture capitalist add value? Do They? In: Churchill, N.C., Bygrave, W.D. ,Muzyka, D.F., Vesper, K.H., Weztler, W.E., Jr. (Hrsg.) Frontiers of Entrepreneurship Research, *Proceeding of the Eleventh Annual Babson College Entrepreneurship Research Conference*, Babson Park Verlag, MA, pp. 435-444.
5. Frederiksen, O. (1997). *Venture Capital Firms Relationship and Cooperation with Entrepreneurial Companies*, Dissertation Thesis No. 625. Linkoping: Linkoping University.
6. Cherin, A. and Hergert, M. (1988). Do venture capitalist create value? A Test from the computer industry, In: Kirchoff, B.A., Long, W.A., McMullan, W.Ed., Vesper, K.H., Weztler, W.E., Jr. (Hrsg.) Frontiers of Entrepreneurship Research, *Proceeding of the Eight Annual Babson College Entrepreneurship Research Conference,* Babson, Babson Park Verlag, MA, pp. 341-342.
7. Jain, B.A. and Kini, O. (1995). Venture Capitalist Participation and the Post-issue Operating Performance of IPO firms, *Managerial and Decision Economics*, 16, pp. 593-606.
8. Lerner, J. (1999). The Government as Venture Capitalist, *Journal of Business Venturing*, 72, No. 3, pp. 285-318.
9. MFCR: Ministry of Finance of the Czech Republic. (2014). *Emissive calendars of governmental long-term bonds*.[Online]. Available at: http://www.mfcr.cz/cs/verejny-sektor/hospodareni/rizeni-statniho-dluhu/emise-statnich-dluhopisu/emisni-kalendare-sdd. [Assessed 10 August 2014].
10. Manigart, S. and Van Hyfte, W. (1999). Post Investment Evolution of Venture Backed Companies. In *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College.
11. Peneder, M. and Jud, T. (2004). *Empirische Untersuchungen und Ergebnisse zur Wirkung von Private Equity und Venture Capital auf die Unternehmensentwicklung*, [Online]. Available at: http://www.avco.at/AVCO.aspx?target=21865. [Assessed 1 April 2010].
12. Rajchlová, J. and Fedorová, A. (2013). Financování českých podniků rizikovým kapitálem a vývoj výkonnosti jejich zaměstnanců, *Trendy ekonomiky a managementu*, 7 (14), pp. 55-62.
13. Sedláček, J. (2007). Analýza vývoje finanční výkonnosti podniků v České republice, *Ekonomický časopis/Journal of Economics*, 55, 1, pp. 3-18.