

The Polish Market of Private Equity and Venture Capital Investments in 2001 - 2006

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Introduction

Although only a small fraction of corporate investments is financed through venture capital, research on venture capital is both important and challenging.¹ Private equity means buying shares in companies which are not listed on any exchange. Thus, these are investments on the private capital market. Their characteristic feature is usually mid-term and long-term character and the fact that the investor involves in managing the company that he co-finances. If such investments are made in early development stages of companies, they are classified as venture capital. However, many publications use these two names (venture capital and private equity) as substitutes. The author also uses this terminology.

The aim of the paper is to show the sector structure of pe/vc investments in Poland as well as its changes in 2001 – 2006. The author also presents some examinations on benefits from this kind of investments. These studies let conclude that venture capital investments in Poland are diversified into different sectors, which is a positive effect. However, they also pay attention to the problem of attracting pe/vc investments as a significant part of the future development of the Polish economy.

Venture Capital Characteristics

The modern venture capital industry was born in the United States in 1946 and developed apace throughout the next 60 years.² Venture capital invests in start-up companies anywhere from initial financing to last financing before an exist is in sight. Most start-ups have mediocre or poor performance, but those that succeed may provide outstanding returns.³ Thus, venture capital on one hand can be a profitable business, but on the other hand it is connected with a high level of risk, low liquidity, as well as low flexibility as far as inflows and rates of return are concerned. This means that if an investor decides for a venture capital, he or she must be aware of the fact that it may not

¹ J. Vauhkonen, *Essays on Financial Contracting*, Bank of Finland Studies E:30, 2004, p. 7.

² R. Pearce, S. Barnes, *Raising Venture Capital*, John Wiley & Sons, Ltd, Chichester 2006, p.15.

³ L. Tvede, *Business Cycles. History, Theory and Investment Reality*, Third Edition, John Wiley & Sons, Ltd, Chichester 2006, p. 386.

bring the results assumed earlier and what's more, there is a high probability that it will not. Chances are better when one invests in sectors with wide perspectives.

According to A. Metrick, a venture capital has five main characteristics:

1. A venture capital is a financial intermediary, meaning that it takes the investors' capital and invests it directly in portfolio companies.
2. A venture capital invests only in private companies. This means that once the investments are made, the companies cannot be immediately traded on a public exchange.
3. A venture capital takes an active role in monitoring and helping the companies in its portfolio.
4. A venture capital's primary goal is to maximize its financial return by exiting investments through a sale or an initial public offering (IPO).
5. A venture capital invests to found the internal growth of companies.¹

In order to define a venture capital in a more precise way, it would be interesting to emphasize what venture capital is not. As S. Bloomfield states, venture capital is not:

- secured – there is no guarantee of recovery of the investment in the event of failure of the business;
- time limited – while there is a horizon (typically three to five years) for the calculation of the rate of return available to the investor, there is considerable uncertainty as to that being achieved;
- certain – the investment is always at the risk of market forces and managerial capability;
- liquid – once in it is very difficult to get the money out again readily;
- suitable for a “core” investment policy – venture money is capable of high rewards but is not intended for the provision of basic and safe returns.²

Many years of experience and scientific research in different countries show that companies strengthened with venture capital beat their competitors: they develop quicker than others, increase employment and introduce more innovations.

According to the research of companies benefiting from venture capital in EU countries:

- 90% of such companies increased the employment. They created on average 46 new jobs. Because the majority of them are small and medium enterprises, the growth was high, often a few times bigger than before.
- More than 90% of companies admit that without venture capital they would develop less quickly or they would even cease to exist.
- Almost 60% of companies admit that their profits growth rate was higher than in competitive firms.³

¹ A. Metrick, *Venture Capital and the Finance of Innovation*, John Wiley & Sons, New York 2007, p. 3.

² S. Bloomfield, *Venture Capital Funding. A Practical Guide to Raising Finance*, London and Sterling, VA, London 2005, p.22.

³ Statistical Yearbook 2002, Polish Private Equity Association, Warsaw 2003, p.4.

Studies have shown that private equity is good for economies in the medium-term. In particular, this is attributed to the strong alignment of interests between Private equity General Partners and portfolio company managements. Private equity General Partners recognise that appropriate financial engineering does not in isolation provide longer term value creation.¹ Some authors proved that there is a positive correlation between venture capital and profits generated by companies, their innovation, as well as good effects for the whole economy.² Besides, there are many publications that prove that venture capital influences knowledge creation in companies. Thus, taking all above mentioned factors, it is indisputable that venture capital has many good sides to companies and to the economy itself.

It should be noted that investors can't jump in and out of existing private equity funds at will. Most of these funds will require approval of their investors, and an investor who wants to enter an existing private equity fund during an emerging bull market may only be able to do so if he can find someone else who wants to leave, and if the fund approves the change of ownership of the shares.³

As far as a private equity fund makes a decision to invest in a company and the company decides to take advantage of financial means offered by the fund, partners negotiate terms of agreement which specifies their relations and conditions of cooperation. Funds usually want a wide range of collateralisation because they want their money to be spent in a reasonable way and their investment not to lose its value. Sometimes it happens that the company considers fund's requirements as too rigid. Generally, the more motivated the company is, the more strict conditions it will accept.

Besides, future partners should agree at the beginning the terms of ending their cooperation. Plans of the company may be different. Some companies intend to take over other firms or launch new products into the market. Some others plan to develop much enough to be taken over by competitive corporations. There are also firms that want to start quotations on the domestic or even foreign stock market. It is important

¹ Private Equity Going Public, Global Private Equity Report 2006, PriceWaterhouseCoopers, p.9.

² See f.ex. A. Brav, P. Gompers, Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Non-Venture Capital-Backed Companies, *Journal of Finance* 52(5), 1997, p. 1791 – 1821; D. Engel, The Impact of Venture Capital on Firm Growth: An Empirical Investigation, ZEW Discussion Paper 02 – 02, 2002; D. Engel, M. Keilbach, Firm Level Implications of Early Stage VC Investments: An Empirical Investigation, ZEW Discussion Paper 02 – 82, 2002; R. Fehn, T. Fuchs, Capital Market Institutions and Venture Capital: Do They Affect Unemployment and Labour Demand? *Applied Economics Quarterly* 50(4), 2004, p. 393 – 422.; T. Hellmann, M. Puri, The Interaction between Product Market and Financing Strategy: The Role of Venture Capital, *Review of Financial Studies* 13(4), 2000, p. 959 – 984; S. Kortum, J. Lerner, Assessing the Contribution of Venture Capital to Innovation, *Rand Journal of Economics* 31(4), 2000, p. 674 – 692; J. Lerner, Boom and Bust in the Venture Capital Industry and the Impact on Innovation, *Federal Reserve Bank of Atlanta Economic Review*, Fourth Quarter 2002b; W.L. Megginson, K.A. Weiss, Venture Capitalist Certification in Initial Public Offerings, *Journal of Finance* 46(3), 1991, p. 879 – 903.

³ L. Tvede, *Business Cycles. History, Theory and Investment Reality*, Third Edition, John Wiley & Sons, Ltd, Chichester 2006, p. 388.

then both for the company and for the venture capital fund to set all the details and to be aware of the final goal. As soon as it is realised, the fund will finish the investment and starts to look for another one. The contract usually specifies what time is needed to achieve the assumed results and usually it is about ten years, however it may be set differently if it is necessary. For the venture capital fund the whole thing is to achieve the assumed rate of return in the specified period of time.

The Analysis of Venture Capital Investments Structure in Poland

This part of the paper analyses pe/vc investments in Poland by sector both in total values and as a percent of the total. At the beginning, the amount of investments is examined, whereas in the next part the author makes studies on the number of companies benefiting from vc/pc.

Traditionally, venture capital investments have been concentrated in two broad sectors: health care and information technology (IT), where the latter sector is defined to include the communications, semiconductor, software, and hardware industries. This concentration is no accident: because venture capitals invest in small companies with the potential to quickly grow large, they need to look for business with large, addressable markets.¹ If we look into the structure of Polish investments, it can be noticed that according to the United States tendencies, venture capital is the most strong in a telecommunications/media sector and other computer related sectors, however as far as health care is concerned, venture capital is present in this sector, however it is not as noticeable as in the former branches. It should be stressed that the distribution of investments by sectors is diversified and changes all the time, although telecommunications/media is the most important sector in all analysed years i.e. from 2001 to 2006. Another significant sector, where pe/vc goes to, is consumer related and other manufacturing. These three mentioned earlier sectors are steadily the most important receivers of venture capital. Sectors where vc/pe is rarely present are: industrial products and services, biotechnology, other electronics-related or industrial education.

As far as the total pe/vc investment is concerned, it was about the same level in 2001 – 2004, however in 2005 it decreased suddenly by almost four times to 153 981 million PLN to increase again in 2006 to 293 723 million PLN, which was by two times only.

Speaking about the structure of investments, in 2001 the investments in the telecommunications and media sector were 46,4% of all venture capital investments, which is an impressive number (see table 2). If one analyses the value of venture capital investments in 2001 – 2006 (see table 1), it is easily noticeable that their values fluctuate. In 2002 investments in the telecommunications/media sector decreased dramatically to 63 080 million PLN in comparison with 2001 when they reached 256 146 million PLN, to increase again in 2003 but they weren't still as impressive as two years earlier. In 2004

¹ A. Metrick, *Venture Capital and the Finance of Innovation*, John Wiley & Sons, New York 2007, p. 17.

they went up again to 199 306 million PLN, which was the effect of Poland's joining the European Union, however in 2005 they went down back to 8 606 million PLN, having the minimum level in the whole examined period. In 2006 they were almost twice as much as a year earlier, but they still did not achieve the 2001 level.

The second sector where venture capital investments are most developed is consumer related sector which in the best 2005 year accounted for almost 19% of the total value of investments. The amount of venture capital investments in this branch in 2001 was 49 020 million PLN and grew suddenly to 159 373 million PLN in 2002 in order to note a small down movement in 2003 reaching 148 959 million PLN and a dramatic reduction in 2004 to 23 835 million PLN. In 2005 venture capital investments in consumer related sector grew more than twice in comparison to the previous year, however this tendency did not last for a long time because in 2006 their volume was zero.

Another important venture capital sector in Poland is other manufacturing that in 2005 had an almost 25% share in the total value of investments. Venture capital investments in this sector were in 2001 at the level of 80 463 million PLN. They were decreasing in 2002 – 2003 in order to increase in 2004 to 77 790 million PLN and diminish again in 2005 to 38 209 million PLN. In 2006 they increased up to 60 633 million PLN but they were still lower than in 2001, 2002 or 2004.

Table 1. PE/VC investment in Poland by sector [million PLN]

PLN (thousands)	Amount of Investment					
	2001	2002	2003	2004	2005	2006
Telecommunications/media	256	63 080	173	199	8 606	164
	146		719	306		977
Computer Related	4 379	17 408	523	0	28 376	0
Other Electronics-related	0	2 668	6 858	0	0	0
Biotechnology	0	2 194	0	0	0	0
Medical/Health-related	27112	16 165	27 082	4 770	114	3 046
Energy	4 157	31 058	30 419	16 626	0	9 219
Consumer related	49 020	159 373	148 959	23 835	65 785	0
Industrial Products and Services	2 389	7 689	0	943	0	0
Chemicals and Materials	34 890	0	7 826	10 202	0	0
Industrial Automation	0	8 290	0	0	0	0
Other Manufacturing	80 463	72 049	17 247	77 790	38 209	60 633
Transportation	0	27 243	5 425	4 285	9 675	7 460
Financial Services	2 517	5 368	138 605	97 767	3 216	41 437
Other Services	90 921	14 681	6 388	48 600	0	103
Agriculture	0	0	150	2 367	0	0
Construction	0	26 257	8 780	103 067	0	5 001

Other	307	0	13 581	0	0	1 847
Total Investment	552 301	453 522	585 561	589 558	153 981	293 723
Subtotal High-Tech	185 634	36 181	181 105	199 306	36 983	164 977

Source: prepared by the author on the basis of European Venture Capital Association data.

Table 2. The amount of PE/VC investment in Poland by sector as a percent of the total

PLN (thousands)	%					
	2001	2002	2003	2004	2005	2006
Telecommunications/media	46,4	13,9	29,7	33,8	5,6	56,2
Computer Related	0,8	3,8	0,1	0,0	18,4	0,0
Other Electronics-related	0,0	0,6	1,2	0,0	0,0	0,0
Biotechnology	0,0	0,5	0,0	0,0	0,0	0,0
Medical/Health-related	4,9	3,6	4,6	0,8	0,1	1,0
Energy	0,8	6,8	5,2	2,8	0,0	0,0
Consumer related	8,9	35,1	25,4	4,0	42,7	3,2
Industrial Products and Services	0,4	1,7	0,0	0,2	0,0	0,0
Chemicals and Materials	6,3	0,0	1,3	1,7	0,0	0,0
Industrial Automation	0,0	1,8	0,0	0,0	0,0	0,0
Other Manufacturing	14,6	15,9	2,9	13,2	24,8	20,7
Transportation	0,0	6,0	0,9	0,7	6,3	2,5
Financial Services	0,5	1,2	23,7	16,6	2,1	14,1
Other Services	16,5	3,2	1,1	8,2	0,0	0,0
Agriculture	0,0	0,0	0,0	0,4	0,0	0,0
Construction	0,0	5,8	1,5	17,5	0,0	1,7
Other	0,1	0,0	2,3	0,0	0,0	0,6
Total Investment	100	100	100	100	100	100
Subtotal High-Tech	33,6	8,0	30,9	33,8	24	56,2

Source: prepared by the author on the basis of European Venture Capital Association data.

If one looks at the number of companies in pe/vc investments in Poland (see table 3), conclusions about the most and least important sectors are almost the same as in the case of investment volume which was deeply analysed in the earlier part of the text and tendencies in the analysed years differ a little. To be exact, when one analyses the number of companies in pe/vc investments in Poland, it turns out that the two most important sectors are telecommunications and consumer related (as in the case of the analysis of the value of investments) whereas the third most significant sector are other services, although its role decreased year by year. If one interprets it in per cent of the

total (see table 4), the biggest share has telecommunications/media sector (varying in different years from 17,6% to 37,3%. The second reward can be given to consumer related accounting for 5,9% to 28% percent in different years, and the third place goes to other services whose share ranges from 0 to 21,6% of the total number of companies benefiting from vc/pe.

Table 3. The number of companies in PE/VC investment in Poland in real numbers

PLN (thousands)	Number of Companies					
	2001	2002	2003	2004	2005	2006
Telecommunications/media	21	21	13	6	7	7
Computer Related	3	9	1	0	4	0
Other Electronics-related	0	3	1	0	0	0
Biotechnology	0	1	0	0	0	0
Medical/Health-related	3	3	2	1	1	1
Energy	1	4	1	1	0	0
Consumer related	3	12	7	5	7	5
Industrial Products and Services	2	4	0	2	0	3
Chemicals and Materials	1	0	1	6	0	0
Industrial Automation	0	1	0	0	0	0
Other Manufacturing	4	9	6	2	1	3
Transportation	0	4	1	1	2	2
Financial Services	4	1	5	7	2	5
Other Services	12	8	1	1	0	1
Agriculture	0	0	1	1	0	0
Construction	0	5	4	1	0	1
Other	1	0	4	0	1	9
Total Investment	57	86	48	34	25	37
Subtotal High-Tech	22	16	15	6	11	7

Source: prepared by the author on the basis of European Venture Capital Association data.

Table 4. The number of companies in PE/VC investment in Poland as a percent of the total

PLN (thousands)	%					
	2001	2002	2003	2004	2005	2006
Telecommunications/media	37,3	24,4	27,1	17,6	28,0	18,9
Computer Related	5,9	10,5	2,1	0,0	16,0	0,0
Other Electronics-related	0,0	3,5	2,1	0,0	0,0	0,0
Biotechnology	0,0	1,2	0,0	0,0	0,0	0,0
Medical/Health-related	5,9	3,5	4,2	2,9	4,0	2,8
Energy	2,0	4,7	2,1	2,9	0,0	0,0
Consumer related	5,9	14,0	14,6	14,7	28,0	13,5

Industrial Products and Services	3,9	4,7	0,0	5,9	0,0	0,0
Chemicals and Materials	2,0	0,0	2,1	17,6	0,0	0,0
Industrial Automation	0,0	1,2	0,0	0,0	0,0	0,0
Other Manufacturing	6,9	10,5	12,5	5,9	4,0	8,1
Transportation	0,0	4,7	2,1	2,9	8,0	8,1
Financial Services	6,9	1,2	10,4	20,6	8,0	5,4
Other Services	21,6	9,3	2,1	2,9	0,0	13,5
Agriculture	0,0	0,0	2,1	2,9	0,0	0,0
Construction	0,0	5,8	8,3	2,9	0,0	2,7
Other	2,0	0,0	8,3	0,0	4,0	2,7
Total Investment	100,0	100,0	100,0	100,0	100,0	100,0
Subtotal High-Tech	38,6	18,6	31,3	17,6	44,0	18,9

Source: prepared by the author on the basis of European Venture Capital Association data.

As Schertler, using panel data techniques proves, countries with a high amount of total knowledge capital are likely to generate more business start-ups in high-technology industries than countries with a low amount of knowledge capital. This is because the founder of a high technology start-up must be highly skilled and because the founders need employees who are highly skilled, as well.¹ This may mean that rather poorly developed venture capital sector in Poland results from low expenditures on research and development. If they are not increased, it will be difficult to stimulate it in a long run.

Moreover, venture capital is influenced by macroeconomic factors. This problem was examined by Paul A. Gompers and Josh Lerner on the basis of the United States in 1972 – 1994.² The authors conclude that the most important factors are those that influence demand. Decreasing rate of income tax resulted in the increased amount of capital possessed by venture capital funds. The interesting matter was the fact that this rule applied both to institutions paying taxes and to those which are tax-free like pension funds or foundations. Demand for venture capital is created thanks to the development of the whole economy. It helps to create new companies which then use venture capital. Supply depends for example on risk free interest rate. If interest rates are rather high, venture capital investors are not eager to risk more than that. This may be one of the reasons for poor development of domestic venture capital in Poland. However, interest rates have been going down for a few years, which gives optimistic views for the future.

¹ A. Schertler, Knowledge Capital and Venture Capital Investments: New Evidence from European Panel Data, *German Economic Review* 8(1), 2007, p.66.

² P.A. Gompers, J. Lerner, What Drives Venture Capital Fundraising?, NBER Working Paper No. 6906, 1999.

Venture Capital Divestments in Poland

Venture capital funds take up the investment in order to achieve certain, specified earlier goals and as soon as it is done, they set new challenges or exit the investment in order to find another firm which will allow them to realise expected rates of return. Divestments are natural in this field. It should be then emphasised that divestments are a normal part of the whole investment process and can not be interpreted differently. Their analysis in 2001 – 2006 provides with conclusions concerning the most popular types of exiting the investments by venture capital funds.

Table 5. Divestment by Polish PE/VC fund managers at historical cost in 2001 - 2006 [million PLN].

Type	2001	2002	2003	2004	2005	2006
Trade sale	96	161	47,0	123,8	74,1	19,0
Write-Off	No data	No data	62,0	77,5	8,1	0,0
Stock Exchange	11	98	109,0	108,8	22,0	74,8
Loan Repayment	No data	No data	2,0	20,4	0,3	17,2
Sale to Another VC Fund	7	22	18,0	16,8	1,1	21,1
Sale to Financial Institution	No data	No data	0,0	10,0	0,6	0,0
MBO	No data	No data	151,0	39,4	1,3	4,4
Other	28	8	117,0	5,4	8,1	3,5
Total	142	289	506	402,1	115,6	140

Source: prepared by the author on the basis of European Venture Capital Association data.

The total sum of divestments was growing from 2001 to 2003 and in 2004 started to fall down in order to increase in 2006 again (see table 5). In 2001 the most popular method of exiting the venture capital investments were trade sales. They accounted for 67,6% of exits. The least popular method in this period were sales to another venture capital fund which were equal to 4,9% of the total. In 2002 these were also trade sales that were the most popular method of divestments, accounting for 55,7% of total exit value. Management Buy Outs were the most important way of exiting the investment in 2003 accounting for 29,8% of all exits. In 2004 these were again trade sales which accounted for 30,8% of the total divestments. The same tendency was observed in 2005 when trade sales were responsible for 64,1% of all divestments. In 2006 the majority of exits (exactly 53,4%) were done by stock exchanges. Generally, it can be concluded that

the most popular way of exiting venture capital investments in Poland in 2001 – 2006 were trade sales.

Concluding Remarks

Literature shows certain proves for positive effects of benefiting from venture capital/private equity investments. What's interesting, L.Bottazzi and M. Da Rin¹ show there is no evidence of positive effect of venture capital on the growth of companies whereas the same authors² prove later that firms benefiting from venture capital increase their sales faster after they go public.

Besides, R. Pearce and S. Barnes notice that experimental learning of the nature and consequences of risk and the necessity of its professional management lies behind much of a venture capital's behaviour towards investment opportunities. Facing these likely attrition dynamics, the venture capital recognises that each company he or she backs statistically only has a 20-30 % chance of being successful (in fact, it has been demonstrated by academics that even the most successful companies in high growth sectors statistically have a less than 12% chance of success – neatly demonstrating how ally-ing with a venture capital can improve an entrepreneur's chances of success).³

In well-developed countries, these are also governments that make efforts to stimulate such investments. For example, V. Kannianen and Ch. Keuschnigg emphasize that venture capital investing has attracted much governmental interest in the past decade owing to the importance of venture capital in funding small-technology firms and the perceived importance of these firms to economic growth. Many governments have in fact launched initiatives designed to strengthen their domestic venture capital industries and thus give a boost to their high-technology sectors.⁴ It should be a core issue for the Polish government to take care of attracting venture capital to small and medium companies but unfortunately it is not. It could give a solid base for further development of Polish firms and thus the whole economy. Good sources of venture capital are pension funds. Their investment horizon is long and it is certain that the financial means possessed by these institutions grow and will substantially grow in the future. The Polish government could help in this process.

As it was shown, venture capital investments are present in Poland in different sectors of the economy. Their values are not impressive but this type of investments develops gradually. The reason for anxiety is the fact that the majority of venture capital investments in Poland comes from foreign investor. The important factor for further development of pe/vc investments in Poland is to intensify domestic sources of venture capital financing. One of the most significant barriers to small and medium enterprises is

¹ L. Bottazzi, M.Da Rin, *Venture Capital in Europe and the Financing of Innovative Companies*, Economic Policy 34, 2002a, p. 229 – 269.

² L. Bottazzi, M.Da Rin,, *Europe's New Stock MArkets*, Discussion Paper 3521, Center for Economic Policy, London 2002b.

³ R.Pearce, S. Barnes, *Raising Venture Capital*, John Wiley & Sons, Ltd, Chichester 2006, p.32.

⁴ V. Kannianen, Ch. Keuschnigg, *Venture Capital, Entrepreneurship, and Public Policy*, Seminar Series, Massachusetts Institute of Technology, Cambridge-Massachusetts-London 2005, p. 69.

the lack of financial means for conducting small business projects. Vc/pe funds whose place of origin is foreign generally do not deal with projects worth less than 2 million Euro. It means that creating small local funds in Poland, capitalized by domestic institutional investors, would be a golden mean to this situation.

To sum up, venture capital can contribute to the dynamic development of companies and the economy itself. Thus, attracting it to Polish firms should be a core issue both for their managers and for the government.

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