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MŰHELYTANULMÁNYOK **DISCUSSION PAPERS**

MT-**DP – 2009/1**

"The End of the Golden Age"

The Developments of the Venture Capital and Private Equity Industry in Central and Eastern Europe

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INSTITUTE OF ECONOMICS, HUNGARIAN ACADEMY OF SCIENCES
BUDAPEST, 2009

Discussion papers
MT-DP – 2009/1

Institute of Economics, Hungarian Academy of Sciences

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"The End of the Golden Age"
The Developments of the Venture Capital and Private Equity Industry
in Central and Eastern Europe

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Jauary 2009

ISBN 978 963 9796 49 2
ISSN 1785 377X

"The End of the Golden Age"

The Developments of the Venture Capital and Private Equity Industry in Central and Eastern Europe[1]

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Abstract

The current downturn in the American and Western European economies, combined with increasing regulatory pressure on private equity throughout the developed world, made emerging markets an attractive destination for private equity. As part of the emerging markets, Central and Eastern Europe's (CEE) private equity industry was an accidental beneficiary of this development. The attractiveness of the CEE markets was also boosted by the fact that value added resulted from the organic growth of the companies, rather than from leverage utilisation. As a result of the crisis in autumn 2008, the growth financed by loans itself became a synonym of the risk. Consequently the CEE countries as parts of emerging markets were handicapped, irrespective of the already applied greatest cautiousness of investors and the relatively deteriorated availability and higher interest rates of provided loans in the region. Since the majority of high volume capital raised recently by private equity funds in the CEE region still expected to be invested, it is not likely that the cutback of private equity financing in the CEE countries will be as radical as it was in the developed markets. The Golden Age of the private equity investments in the CEE region, however, ended in the autumn of 2008.

The paper forecasts the future developments of the private equity industry in the CEE region, based on a detailed analysis of the five years' tendencies. The paper reviews within an international surrounding the changes in the volume and structure of raised regional funds, as well as the actual investment trends by the related countries and sectors. The study provides several examples for the applied individual corporate level investments strategies of private equity investors in the CEE region. The chosen exit routes and returns received by regional private equity investors are also illustrated with actual examples. The final part of the analysis speculates on the future effects of the global financial crisis and recession on the private equity industry of the CEE region.

[1] Financing for this research was provided by the Hungarian Scientific Research Found (OTKA) grant No. K 68471.

Keywords: Venture Capital, Private Equity, Central Eastern Europe (CEE), International Asset Allocation, Institutional Investors, Merger & Acquisition, Corporate Restructuring.

JEL: G23, G24, G34, M13

"Az aranykor vége"
A kockázati- és magántőke-ágazat fejlődése Közép- és Kelet-Európában

KARSAI JUDIT

Összefoglaló

Az elmúlt években a fejlett országok növekedésének lassulása, a kockázati- és magántőke-piac szabályozásának szigorodása a befektetők feltörekvő piacok felé fordulását váltotta ki. A feltörekvő piacok részeként Közép- és Kelet-Európa kockázati- és magántőke-piaca is átmenetileg a fejlődés haszonélvezőjévé vált. A nemzetközi pénzügyi válság nyomán a hitelből finanszírozott növekedés a kockázat szinonimájává vált, ezért a feltörekvő piacok, ezen belül a régió országai hátrányba kerültek a fejlett piacokkal szemben, függetlenül az itteni befektetéseket eddig is övező nagyobb óvatosságtól és a nagyösszegű hitelek relatíve nehezebb elérhetőségétől, valamint eleve magasabb kamataitól. Mivel a közelmúltban a régióbeli befektetésekre összegyűjtött rendkívül nagyösszegű tőke egy jelentős részét a kockázatitőke-alapok várhatóan még be fogják fektetni, a régióban a következő egy-két évben még nem várható a kockázatitőke-finanszírozásnak a fejlett piacokhoz hasonló mértékű drasztikus visszaesése. A régiós kockázatitőke-befektetések 2008 őszéig tartó aranykora azonban minden bizonnyal végetért.

Az alábbi elemzés Közép- és Kelet-Európa (a továbbiakban: régió) kockázati- és magántőke-finanszírozásának várható fejleményeit a régióban az elmúlt mintegy öt évben érvényesült tendenciák ismeretében kísérli meg előrejelezni. Ehhez először áttekinti a befektetésekhez rendelkezésre bocsátott tőke volumenében és forrásának szerkezetében bekövetkezett változásokat, valamint a tényleges befektetések földrajzi és szektorális alakulásának tendenciáit. Táblázatokba foglalva részletezi az egyes régiós alapok forrásait, kezelt tőkéjét illetve fontosabb befektetéseit, számos példán keresztül mutatva be a befektetők által alkalmazott vállalati szintű stratégiákat. Ugyancsak vállalati példákkal illusztrálva elemzi a régiós alapok befektetéseiből történő kilépések módszerét, az elért hozamokat. A régióbeli kockázatitőke-piacot nemzetközi keretbe ágyazó elemzés az amerikai jelzálogpiaci válság nyomán bekövetkezett pénzügyi válság és recesszió régióra gyakorolt várható hatásainak mérlegelésével zárul.

Tárgyszavak: kockázati tőke, magántőke, Közép-Európa, vállalatfelvásárlás, intézményi befektetők, vállalat átstrukturálás

1. THE DEVELOPMENT OF THE VENTURE CAPITAL AND PRIVATE EQUITY INDUSTRY IN THE CEE

Since the Central and Eastern European (CEE) region's venture capital and private equity (VC&PE) industry has had a much shorter history than that of Western Europe's, and since the loans needed for larger scale investments only became available after 2003, the volume of the investments as a fraction of GDP in the region is significantly lower than for the rest of Europe, although the difference has been shrinking rapidly. The VC&PE investors – utilizing credit facilities for the acquisitions – target enterprises, which they were not able to finance in the 1990s. The cash-flow based credit facilities, which became available in the region due to the region's states joining to EU, reduce risk to the investors and to the financial institutions.

There is **still much room for expanding** the regional private equity market. Private equity investments represented only a small fraction, 0,054% of the regional GDP in 2002, while in the EU this proportion was five times higher, 0,277 %. In 2007 this proportion rose to 0,325% in the region, and to 0,571% in the EU. In spite of the spectacular advancement, the difference is still significant. *(See Table 1.)*

When looking at the data, one must take into consideration, that **a single high-value buyout can make a significant change** in the value of the annual investments, while it has no similar effect on the GDP. For example Bulgaria jumped to the top of the list in 2004 due to the buyout of Bulgarian Telecom Co. by Advent International, and again in 2007 due to its acquisition by the private investor AIG Capital Partners. Similarly, Hungary became number 4 on the list in 2006 due to the buyout of the delisted BorsodChem Zrt. by Permira, one of greatest private equity funds worldwide.

Table 1.

Venture capital and private equity investments as a percentage of GDP in CEE*, 2002-2007

Country	2002	2003	2004	2005	2006	2007
Bosnia & Herzegovina	NA	NA	NA	0,123	0,055	0,007
Bulgaria	0,016	0,101	1,110	0,000	0,143	1,923
Croatia	0,014	0,011	0,015	0,002	0,035	0,046
Czech Republic	0,037	0,052	0,019	0,112	0,315	0,133
Estonia	0,010	0,022	0,004	0,120	0,031	0,332
Hungary	0,110	0,154	0,150	0,167	0,883	0,478
Latvia	0,011	0,031	0,120	0,068	0,000	0,793
Lithuania	0,008	0,036	0,007	0,070	0,076	0,567
Poland	0,069	0,098	0,069	0,045	0,118	0,222
Romania	0,037	0,159	0,055	0,088	0,115	0,392
Serbia & Montenegro	NA	NA	NA	0,300	0,150	0,548
Slovakia	0,018	0,016	0,021	0,052	0,045	0,043
Slovenia	0,007	0,015	0,000	0,007	0,130	0,139
Total CEE	0,054	0,088	0,096	0,073	0,218	0,325
Total EU**	0,277	0,284	0,321	0,569	0,552	0,571

*Investments in the CEE countries.
**Investments by fund managers based in the EU.
Source: PEREP_Analytics for 2007 data, EVCA/Thomson Reuters/PricewaterhouseCoopers for data of the previous years.
In: EVCA (2004, 2005, 2006, 2007, 2008) and EVCA Yearbook (2008)

There have been several studies analyzing the developments of the VC&PE markets of the transition countries, with special attention to the CEE region, since the early 1990s. These studies looked at the role of the VC&PE mainly from the point of their participation in the **privatization** of state-owned companies (e.g. Karsai & Wright, 1994, Filatotchev and et al., 1996). Karsai at al. (1998,1999) highlighted the different investment practices of the regional investors in comparison with the global market investors. Wright at al. (1999) pointed out, that the **hands-on participation** of investors in the region, had much more significance. Farag at al. (2004) analyzed mainly the region's obstacles to catching up with the developed markets. While the authors found similarities in investment practices, the greater risk of the region surfaced in the financing agreements and in the monitoring practices. They thought that the development of the VC&PE market of the CEE region required more high quality projects seeking financing, and widening exit opportunities. Klonowski (2005, 2006) analyzed to long-

term developments of the Polish, Hungarian, Czech and Slovakian VC&PE investments. According most of the authors, the main obstacle of the regional investments was the lack of **qualified management** teams at the financed companies. The conclusion of the analysis was that most of the failures had been caused by management problems. Iliev (2006) highlighted the very low number of **early-stage financings**, which could be explained by high transaction costs, the limited number of high-quality projects, and the lack of infrastructure for these business transactions. Karsai (2004) when analyzing the activity of Hungarian investment companies that were financed from the central budget, and were operated exclusively by government employees, pointed out, that even **direct government participation** did not improve the chances of successful early-stage investments on the venture capital market. The lower number of **informal investors** with smaller investments was another obstacle for the early-stage companies trying to attract assets (Szerb at al., 2007). Johnson at al. (1999) highlighted the importance of the **protection of the shareholders' rights**. They consider the lack of bank funds as a minor problem. According to other surveys, the limited **availability of credit lines** also made it more difficult to realize the desired returns on leveraged investments in the region (Wright at al.,1999, Karsai at al., 1999, Farag at al., 2004). The accordant conclusions of the studies on the VC&PE industry of the CEE region say, that in order to reduce the risk of the investors, first of all the quality of the **legal and institutional systems** need to be improved.

Groh at al. (2008) analyzed the parameters considered by the institutional (end)investors, when making their decisions. They found that the effective protection of the shareholders' rights has been the highest priority for these investors. The high-standard of local management, and the size and liquidity of the regional capital market are also important factors. At the time of surveying, these factors were still obstacles to the sourcing of the funds. At the same time, the attractive growth perspectives had stimulative effects. The experiences in the region also had positive effects, since the investors who had financed previous investments in the region were satisfied with the realized risk/return ratio. On this basis, they had a positive opinion about the local investment opportunities, and the experience of the local fund managers. According to Groh at al. (2008), the **private equity investors considered the region as an attractive territory** in comparison to other emerging markets.

The EBRD (2006) study analyzing the development of the private equity market in the region from the investors' point of view, show that the development of the region's market can be divided into four stages. The first stage lasts from the beginning of the transition period to the middle of the 1990s. During this period, beside the global funds investing international governmental funds, mainly the so-called **country funds** dominated. The typical sizes of the national funds were around USD50 million, as the fund managers did not have much investment experience in the region yet. There were unexpected obstacles during the

realization of the business opportunities. The investment derived from privatization had a major role among the business deals. They were mainly involved in the restructuring of the industry. The second stage had finished by the end of the 1990s. It was characterized mainly by the upsurgence of the **regional funds**. At the same time some smaller country funds and some sector funds also showed up on the market. The funds got bigger than before, the typical fund size grew to USD100-200 million. The financing of ventures' expansion stage became typical. The consolidation of the private equity market of the region had started. The third stage ended at the end of the millennium, with the burst of the technological bubble. It was characterized by fast expansion. In this stage the regional funds still dominated, and at the same time, the **financing of technology** became the focus of the investments. The typical size of capital managed by funds increased further, reaching the USD250-300 million bracket. The big financial institutional investors, the investors successful mainly in the area, and the investors targeting Europe as a whole, were all present in the private equity market at this time. Besides the financing of expansive-stage enterprises, the classical venture capital function, namely the investments to early-stage enterprises also showed up. Technology, IT and media were the main areas of financing. According to the EBRD (2006) study, the fourth, and last development stage lasted from 2001 till 2006, and was characterized by the consolidation and rationalization of the market. Only the successful fund managers were able to survive. Beside the regional and country funds, the specialized investors were also present in the market. The financing already included **buy-outs**. At the same time, on a smaller scale, the enterprises in their expansive stage were also supplied with further funding.

The financial crisis shocking the Western markets in the second half of 2007 focused the attention of VC&PE investors to the importance of their portfolios' diversification. Due to the economic slowdown and the increased levels of regulators pressure experienced in the developed markets, the VC&PE investors were **looking for new geographical target areas**. They were targeting emerging markets, especially the CEE region, which became less risky after joining the EU, and which was showing relatively fast growing rates and was less influenced by the effects of the financial crisis in the short run. Since the CEE region became one of the focus area of the investors, the raised capital grew rapidly, and in 2007 the first, and in 2008 the second regional fund exceeding €1 billion has been established. The regional funds, which raised more and more capital from a growing group of investors, were facing **competition** from other global and Pan-European funds. These funds tried to compensate the lack of their local experience, by hiring the fund managers of the regional funds with comprehensive local market knowledge. The high growth rate of the GDP, growing consumption, developing infrastructure, the possibility of regional expansion of local progressive enterprises, the divisions of the consolidating conglomerates available for buy-outs, were all promising attractive returns to the investors.

The Central European Private Equity Confidence Index, formulated by Deloitte (2008) in June 2008, however signalled a change in the investors' opinion about the region. In accordance with the globally worsening conditions of the private equity markets, this survey showed a robust **drop in the confidence** of the experts of the CEE private equity markets. The index, conducted twice a year since 2003, after reaching its peak in the first half of 2007 with 146 points, fell back to its 2003 level in the second half of 2007, and in May 2008 it finished 15 points lower. This signalled the end of a two years period, characterized by high levels of confidence, signalling tougher access to LBO credit sources, and a lower probability of syndicated investments. Business activity also fell substantially in the examined half-year period. The investors rather grew their stakes in their existing portfolio companies, than acquired other companies in the same field of activity.

2. THE SOURCE AND VOLUME OF VC&PE AVAILABLE FOR INVESTMENTS IN THE CEE REGION

Given that VC&PE has come to the CEE region almost exclusively from foreign sources, changes in the volume of capital available for investments were influenced primarily by getting involved the region into the global flow of working capital. The level of capital supply in the region in different years partly depended on the volume of free capital for which investors were seeking markets on the one hand, and on the other hand, how attractive an investment opportunity offered by a country in the region was in comparison with other countries. The decisive factor for fundraising was not the special characteristics of the individual countries in the first place, but the region's varying position in the regional flow of capital as an effect of different crises. The capital supply of individual countries was impacted by their feature, size and performance only as a secondary factor.

The annual volume of VC&PE raised in the CEE region was attempted to be measured for the first time in 2004 by the European Venture Capital and Private Equity Association (EVCA) with the assistance of its EVCA Task Force, an experts' workgroup specifically set up for this purpose. The closing figures of funds specialized in investments in the region were collected by the delegated experts for the past 15 years, however, these figures were published in a breakdown by year only from 2002 onward. According to the EVCA Central and Eastern Europe Task Force more than €7 billion capital was raised for the region during the 15-year period until 2004 (EVCA, 2004). Following that, only three years were required to raise a similar, €7.8 billion volume of capital. On the basis of these figures the **volume of capital raised** for investment purposes by the VC&PE funds in the CEE region since the beginning of market economy transformation is altogether estimated **at almost €15 billion**.

The magnitude of VC&PE raised by the almost 80 investors registered in the CEE region was €234 million in 2002, €312 million in 2003 and €496 million in 2004. VC&PE raising targeted to the region reached a record height in 2006 given that the €2.25 billion fresh capital exceeded the level of 2005 by 74% (EVCA, 2007), while in 2007 the received €4.3 billion capital practically doubled as compared to 2006 (EVCA, 2008).

The majority of freshly-raised **capital was mainly attracted by buyout funds** preparing for large-scale investments. The region has gained popularity, of which the clear indication is that while the level of fundraising in the EU dropped by almost one-third in 2007, the amount of capital raised for the region almost doubled. This ratio is remarkable even in case data outside Europe is taken into account because the volume of freshly raised VC&PE at an international level increased by only 10% in 2007 as compared to the previous year (IFSL, 2008). Increase in the region's significance is also apparent if expressed as a percentage of the European VC&PE fundraising, but at the same time it also indicates that there are still huge reserves in the CEE region. Until 2006 the volume of capital received by CEE regional funds has not exceeded 2% of the VC&PE raised in Europe, whereas in 2007 the ratio represented by the region suddenly jumped to over 5%. *(See Table 2.).*

Table 2.

Fundraising for CEE venture capital and private equity 2002-2007 (in € million and percentage)

Country	2002	2003	2004	2005	2006	2007
Fundraising for CEE* (€ million)	273,7	312,0	496,0	1293,0	2254,0	4253,3
Fundraising for CEE in percentage of fundraising in EU** (%)	1,0	1,2	1,8	1,8	2,0	5,4

*Fundraising of regional fund managers based in the CEE countries.
**Fundraising of fund managers based in the EU.
Source: PEREP_Analytics for 2007 data, EVCA /Thomson Reuters/PricewaterhouseCoopers for data of the previous years.
In: EVCA (2004, 2005, 2006, 2007, 2008) and EVCA Yearbook (2008)

The capital volume summarized by the EVCA Task Force only includes the capital of funds established specifically for investments in the CEE region, namely it doesn't include new capital sources of those funds of which the primary focus is not the region, although from time to time they make investments in the region as well. Figures that also take into account the volume of capital held by other funds (outside the region) that raise capital with the purpose of investing in the region, indicate a very significant increase in interest. According to this, sources planned to be invested in the CEE region, in Russia and other CIS countries was below USD0.5 billion in 2003, however, their value increased to USD1.8 billion in 2004 and to

USD2.7 billion in 2005. In 2006 interest in the CEE region (in a broader sense) was again huge that was indicated by a fundraising of USD3.3 billion. Finally in 2007 the USD14.6 billion volume showed a dazzling interest that has smashed all previous records (EMPEA, 2008/a). A survey made in the first half of 2007 already projected the massive boost in interest. The survey that summarized the plans of more than 80 institutional (end)investors playing a world-wide key role in VC&PE financing revealed that the proportion of investors rady to invest in the (broader sense) CEE region increases from an almost 60% in 2007 to 87% in 2012 (EMPEA, 2007).

According to the survey published by EVCA Task Force in 2007 (EVCA, 2007) more than 80% of the fresh VC&PE raised by regional funds in 2006 was provided by (end)investors outside the region, mainly from Western Europe and North America. Only less than **2% of the capital raised in the CEE region in 2007** for investment purposes **was sourced by the CEE countries' local investors**, as opposed to the 42% average in the EU countries. In 2007 two-thirds of the raised capital received from outside the region came from Europe, whereas one-third of it came from outside Europe, mainly from North America (EVCA, 2008). The overwhelming majority of VC&PE raised were received by the regional funds targeted for the region as a whole, and not by the country funds that target specific countries. Consequently the €4.3 billion raised in 2007 basically represents the VC&PE volume targeted for the CEE region, which is supplemented with that portion of fresh capital raised by Pan European and global funds in 2007, which the fund managers meant to commit for investments in the CEE region.

The vast majority of CEE VC&PE investments is provided by the regional funds. A breakdown of their capital source by (end) investor for the period prior to 2007 can be best represented by the figures of EBRD, the most significant investor in CEE regional funds (EBRD, 2005). However, EBRD data includes funds that have investments in Russia and other CIS countries as well. The EBRD data analyzing the period between 1992 and 2004 reveals that international financial institutions provided the largest – 40% – portion of raised capital, of which EBRD alone provided 29%. Pension funds providing 16% of the sources stood on the second place and fund of funds, namely the funds established for investing institutional investors' capital ranked third with 14%. The ratio of banks was merely 9% and that of corporate venture capital investors was 8%, while insurance companies and private individuals equally provided 6% of the capital raised for VC&PE investment purposes. *(See Appendix 1. for the list of investors of the most significant private equity funds that have been closed since 2005 and whose investors were published.)*

The 2007 figures indicate a shift in the types of (end)investors of funds raising VC&PE for regional investments, with the financial institutions slipping back on the list and the **pension funds eventually pulling ahead** (both directly and by involving funds of funds). In 2007

almost one-fourth of the volume of capital raised by regional funds was provided by funds of funds, which is almost twofold of their proportion in the entire EU (EVCA, 2008). Presumably this solution offered a greater security to institutional investors newly interested in the region but less familiar with regional fund managers. The situation is quite different with corporate venture capital investors who are well familiar with the local markets and whose proportion (7.3%) in fundraising in the region was three times larger than in Europe. The proportion of private individuals (10.4%) and government agencies (10.3%) in regional capital allocation was similarly almost twofold of that of the European average, which was partly due to the bolder investments by private persons who grew rich from their businesses and partly to the governments' efforts to fill the gap in source allocation that was not covered by the private sector with classical venture capital investments. *(Capital allocated to the region in 2007 in a breakdown by (end)investors is included in Table 3.)* The lower level of institutional savings and their less flexible regulation explains why the proportion of pension funds, which provide the highest (18%) rate of VC&PE sources in the EU, achieved 13% in the CEE region that represents here the second place. At the same time, mainly due to a different regulatory framework, the rate of direct involvement in source allocation by local pension funds is still lagging far behind the level experienced in developed countries.

Table 3.

Sources of venture capital and private equity raised for the CEE and the EU in 2007 (in percentages)*

Sources	CEE	EU
Fund of funds	23,5	11,2
Pension funds	13,4	18,0
Private individuals	10,4	4,7
Government agencies	10,3	5,4
Banks	10,2	11,8
Insurance companies	8,7	8,3
Corporate investors	7,3	2,5
Endowments & foundations	3,1	1,6
Other sources	13,1	36,5
Total	100,0	100,0

*Data is limited to capital raised by funds with CEE declared as their target region.

Source: PEREP_Analytics

In: EVCA (2008), EVCA Yearbook (2008)

The almost doubled fundraising in the CEE region in 2007 as compared to the previous year with also a record increase, can be attributed to the shift in the function of financing. Namely, an **increasing number of funds raised capital with buyout purposes**, transactions demanding much larger amounts than expansion investments. In 2007 more than three-fourths of the capital invested in region-headquartered enterprises was represented by buyout transactions and the investors wished to spend 63% of the newly raised capital on buyout of local enterprises in the CEE region (EVCA, 2008).

Given the increasing interest in the region as well as the shift of investments towards buyouts, it is not surprising that in 2007 the region's first, more than €1 billion private equity fund was born. The London-based Mid Europa Partners has launched a fund of €1.5 billion, of which the size was twice as large as the biggest fund in the region until then, namely the €658 million private equity fund set up by Enterprise Investors in 2006 (Lewis, 2008).

According to EVCA Task Force figures, during the course of 2007, altogether eight VC&PE funds closed fundraising, having raised €3.7 billion since inception. The remaining part of the €4.3 billion fundraising in 2007 was represented by capital committed to funds not yet closed. *(A list of the most significant private equity funds raised between 2005 and April 2008 is included in Appendix 2.)* Large regional funds that were similar to Mid Europa Partners' billion-sized fund, already facilitated entrance to the region for a new type of (end)investors. Namely for those, for whom the €50-70 million cap on funds to be invested in one fund would upfront exclude middle-sized funds from the range of targeted funds (Lewis, 2008).

An indication of the great appetite of VC&PE investors in the CEE region in spite of the altered global economic outlook was that Advent International, which has been present in the region already for a long time, also closed a €1 billion regional fund in April, 2008. Thus the size of the new fund became three times larger than the fund established by the same fund manager in 2005. This increase was mainly a manifest of a **re-increasing interest for the region by American investors** (Thomson, 2008; Romaine, 2008/a). *(The most significant funds together with the geographic areas affected by the investments are summarized in Appendix 3.)* American investors making major regional investments in the 90s turned their back to the region after suffering major losses as an outcome of the burst of the technology bubble.

One-fourth of Advent's new fund was already sourced by American investors, whereas American investors did not at all contributed to the fund established by this very same fund manager in 2005, although even at that time they indicated that they keep an eye on the region but at that time they did not subscribe any capital. Almost one-third of Mid Europa Partners' USD650 million fund that was closed in 2006, came from American investors, 60% from Europe, while the rest of the capital was received from Asia and almost half of the committed

capital was sourced by pension funds and government-related organizations (Unquote,2008/a; Lewis, 2008).

Fewer funds operate in the region in 2008 than 15 years ago and as a result of the consolidation, the investment market is “top-heavy”. Since several minor fund managers were unable to set up a new fund, three large fund managers – Mid Europa Partners, Advent International and Enterprise Investors – manage half of the capital that can be invested in the region. At the same time some important West-European fund managers also entered the regional market with their investments. Regional fund managers perceive that **competition is becoming fiercer** with the emergence of those global buyout funds, which opened their offices in the region recently. Included among them are for instance Carlyle Group, EQT, CVC Capital Partners as well as Candover (Private Equity Europe, 2007; Unquote, 2008/b).

Fund managers appearing in the region in 2007-2008 typically entered the market with fund manager teams, who already have major experiences in the region, given that some of the fund managers were attracted from fund managers formerly already operating in the region. Global funds taking the first steps in the region as newcomers initially financed their investments from their Pan European or global funds and not from their funds here and only after this did they consider to form their own regional fund. *(The movements of managers of regional funds among regional and global funds are illustrated in Appendix 4.)*

3. THE VALUE OF VC&PE INVESTED IN THE CEE REGION

According to the Flash Barometer, published in the EU in 2006 (Flash EB, 2006), venture capital financing of small and medium-size enterprises was practically non-existent in the new member states. On average, only one percent of the companies participating in the survey applied for venture capital financing, and only 2 percent of the interviewed small and mid-size companies reported, that they wished to raise capital from venture capital funds.

Meanwhile, the funds invested mainly in large enterprises by buy-outs, more than tripled in 2006 compared to the previous year, and VC&PE investments to the CEE region hit the €1.7 billion record level. The extremely low investment levels in the previous years showed a significant increase in almost all of the region's countries, especially in Hungary, in the Czech Republic, and in Poland, or in other words, the countries that joined the EU in the first round. In the year 2006, 90% of the private equity investments in the region were produced by the Hungarian, Czech, Polish and Rumanian markets. The soaring of the VC&PE investments to the CEE regions went on. *(Table 4. shows the value of the invested VC&PE by the countries of the region).*

Table 4.

Annual venture capital and private equity investment values in CEE countries, 2002-2007 (in € million)*

Country	2002	2003	2004	2005	2006	2007
Bosnia and Herzegovina	0	0	0	10,0	5,3	0,8
Bulgaria	2,7	18,0	216,0	0	35,8	555,7
Croatia	3,3	2,8	4,0	0,8	12,0	17,2
Czech Republic	27,4	39,4	16,1	109,0	354,2	170,3
Estonia	0,7	1,7	0,4	12,7	4,0	51,7
Hungary	75,7	110,8	121,6	147,3	734,4	491,4
Latvia	1,0	2,7	13,3	8,7	0	159,2
Lithuania	1,2	5,6	1,2	14,4	18,1	158,8
Macedonia	0	0	0	0	0	9,1
Poland	137,2	177,2	134,4	107,8	303,6	683,5
Romania	18,0	82,0	32,5	70,0	110,0	475,9
Serbia and Montenegro	0	0	0	6,4	31,5	161,6
Slovakia	4,7	4,5	7,1	19,5	19,3	23,5
Slovenia	1,7	3,7	0	2,0	38,7	46,7
Total CEE	273,6	448,4	546,6	508,6	1666,9	3005,4
Investments in the CEE in percentage of investments in the EU** (%)	1,0	1,5	1,5	1,1	2,3	4,1

*Investments in the CEE countries.
**Investments by fund managers based in the EU.
Source: PEREP_Analytics for 2007 data,
EVCA/ThomsonReuters/PricewaterhouseCoopers for data of the previous years.
In: EVCA (2004, 2005, 2006, 2007, 2008) and EVCA Yearbook (2008)

The 2007 investment level of €3 billion exceeded the 2006 level by 80%, while the number of companies involved also increased by one third. The level of these dynamics can be especially appreciated, knowing that in the same period of time in the whole of Europe, the value of VC&PE investments rose only by 6% (EVCA Yearbook, 2008), and worldwide it rose only by one third (IFSL, 2008). Due to this spectacular growth in investments, the very low ratio of regional investments almost doubled, that is in 2007 it exceeded 4%, and the number of the financed companies reached a similar percentage. In 2007 the Polish market was involved in almost half of the investments. A significant growth was noticeable in the Bulgarian, Rumanian and the Baltic countries' markets. The value of the investments in

Hungarian companies declined only compared to the very high 2006 transaction values, when it represented 44% of the total investments to the region.

The **large annual fluctuations** of the investment values in the individual markets **can be explained mainly with high valued buy-outs**. For several years, the most part of VC&PE financing in the CEE region went to Czech, Polish and Hungarian companies, whose countries joined the EU in the first round. The share of these three countries fell below 50% in 2007, due to the significant financing activities in Romania, Bulgaria and the Baltic states. With the exception of a single outstanding buy-out transaction in Bulgaria in 2004, the share of these three countries exceeded 70% in every analyzed year, and in 2006 due to the exceptionally high level of investments in Hungary it exceeded 80%. *(Table 5. shows the rank and the share of the most important regional markets among the regional investments.)*

Table 5.

The top five venture capital and private equity investment target countries in the CEE region in 2006-2007 (in percentages)

2006			2007		
Rank	**Country**	**% of total**	**Rank**	**Country**	**% of total**
1.	Hungary	44,1	1.	Poland	22,7
2.	Czech Republic	21,2	2.	Bulgaria	18,5
3.	Poland	18,2	3.	Hungary	16,4
4.	Romania	6,6	4.	Romania	15,8
5.	Slovenia	2,3	5.	The Baltics	12,3
1. - 5.	Total CEE	92,4	1. - 5.	Total CEE	85,7

Source: PEREP_Analytics

Calculations based on EVCA (2008)

The volume of VC&PE **investments per capita**, taking into consideration the size difference of the countries, clearly **show the dynamic growth of the investment value** in the CEE region, and also the significant lag compared to Europe as a whole. While in 2002 there were only €2 of investment per capita in the region compared to the €60 European average, in 2006 with 13 euros the region was still far behind the €234 European average, while in 2007, the €24 regional average VC&PE investment per capita compared to the €170 European average. *(See Table 6.)*

Table 6.

Venture capital and private equity investments in the CEE region per capita in 2002–2007 (in Euros)

Country	2002	2003	2004	2005	2006	2007
Investment per capita in the CEE*	2,2	3,6	4,4	4,1	13,3	24,1
Investment per capita in the EU**	59,5	58,4	69,3	155,1	242,6	170,5

*Investments in the CEE countries.
**Investments by fund managers based in the EU.
Source: PEREP_Analytics for 2007 data, EVCA/ThomsonReuters/PricewaterhouseCoopers for data of the previous years.
Based on EVCA (2004, 2005, 2006, 2007, 2008) and EVCA Yearbook (2003-2008)

4. THE FUNCTION OF VC&PE INVESTED IN THE CEE REGION

The impact of VC&PE industry on the development of business ventures depends on the actual life cycles and sectors of the related portfolio companies. Namely, to what extent the investments finance the enterprises' start-up, expansion and acquisition that may become necessary. This is the factor that determines whether or not VC&PE promote innovation, contribute to the establishment of cross-border companies of regional importance, participate in privatization and restructure large enterprises. *(The evolution of VC&PE investments in the CEE region and in Europe by the lifecycle of affected portfolio companies is included in Table 7.)*

Table 7.

The share of venture capital and private equity investment values in the CEE region* and in the EU by the life cycle of the portfolio companies in 2003-2007 (in percentages)**

Investment type	2003		2004		2005		2006		2007	
	CEE	EU	CEE	EU	CEE	EU	CEE	EU	CEE	EU
Seed	0,2	0,6	0,0	0,4	0,0	0,2	0,1	0,3	0,2	0,3
Start-up	5,4	6,8	1,1	6,0	1,8	5,0	2,7	10,0	0,8	3,3
Expansion	32,4	21,6	38,7	21,4	25,9	21,8	5,7	15,4	13,1	13,6
Replacement	11,4	7,9	19,3	2,5	24,8	4,8	0,5	5,1	8,8	4,2
Buyout	50,6	63,1	40,9	69,7	47,5	68,2	91,0	69,2	77,1	78,6
Total investment	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

*Investments in the CEE countries.
**Investments by fund managers based in the EU.
Source: PEREP_Analytics for 2007 data, EVCA/ThomsonReuters/PricewaterhouseCoopers for data of the previous years.
Based on EVCA (2004, 2005, 2006, 2007, 2008) and EVCA Yearbook (2003-2008)

According to EVCA Task Force (EVCA, 2004) the **expansion stage was dominant initially** in the VC&PE investments in the CEE region. This development phase was much more momentous in the CEE region than in the Western countries. This is explained primarily by the rapid growth of countries in the region given that among the businesses of a fast-growing economy the impact of companies wishing to grow and expand is inevitably greater. On the other hand, buyouts typically requiring an above-average amount of investment normally tend to take place in the more mature stage of a firm, whereas most companies in the region only slowly became mature for a buyout. However, one could already witness a **rise in the number of buyouts in recent years**. *(See Table 8.)* The significant increase in investment volumes is also mainly due to the proliferation of large-amount buyout transactions. This latter phenomenon arises partly from the increased number of private companies with experienced management, the transformation process of conglomerates and partly from the more increasingly available credit facilitates. Buyouts in the CEE region in the mid-90s were still characterized by the dominance of privatization deals. Private equity funds at that time normally supported the former management of a company in the course of buyouts from the government, however, trends observed at the end of the 2000s already impact the private companies and spin-offs of local and international conglomerates.

Table 8.

The share of the buy-outs among all venture capital and private equity investment volumes in six Central and Eastern European countries in 2003-2007* (in € millions, and in percentages)

Country	2003		2004		2005		2006		2007	
	Value	%	Value	%	Value	%	Value	%	Value	%
Bulgaria	NA	NA	192	89	NA	NA	29	81	538	97
Czech Republic	13	33	0	0	67	61	353	100	78	46
Hungary	88	79	1	1	65	44	703	96	422	86
Poland	92	52	31	23	50	46	297	98	546	80
Romania	32	39	0	0	55	79	36	33	310	65
Slovakia	0	0	0	0	0	0	13	68	23	100
Total buyout in the CEE	227	51	223	41	242	48	1517	91	2319	77
Total buyout in the EU**	18457	63	25767	70	32109	68	46897	69	56844	79

*Buyout investments in the CEE countries.
**Buyout investments by fund managers based in the EU.
Source: PEREP_Analytics for 2007 data, EVCA/ThomsonReuters/PricewaterhouseCoopers for data of the previous years
Based on EVCA (2004, 2005, 2006, 2007, 2008) and EVCA Yearbook (2003-2008)

Today the overwhelming proportion of the region's VC&PE investments is provided by – similarly to the whole of Europe – buyout transactions. While in the first half of the 2000s the ratio of these investments didn't or barely reached half of the financing volume, in 2006 it already raised to over 90% and in 2007 it also approximated 80%. The ratio of buyouts in Europe between 2003 and 2006 moved between 60% and 70% and in 2007 similarly to the CEE region, reached an 80% rate (EVCA, 2008). In 2007 the proportion of buyouts within the total VC&PE invested worldwide was even higher than in Europe, nearing 90%, while one year before it was over 80% (IFSL, 2007, 2008).

Buyouts also becoming dominant in the CEE region means that **investments here have been more and more adjusted to the changes that took place in other parts of the world**. Namely, venture capitalists, who previously financed the establishment, development and expansion of new ventures, now sensed a better business opportunity in facilitating the transfer of companies to new owners. This involved for instance the acquisition of public companies within the framework of privatization, the buyout and merger of independent companies operating in the same segment in the region as well as restructuring and delisting the subsidiaries of multinational firms.

As compared to earlier investments made in the expansion stage, buyout financing resulted in **much larger single deals** for investors. The extreme deviation in volume well demonstrates that while in 2007 the average value of investment per deal in case of the

region’s early-stage companies barely reached €1 million and even in the expansion stage it was only €5.5 million, the average size of buyout investments reached €25.5 million.

Large-amount investments were economical for investors in the region not only because of the economies of scale but also because **deals could be financed partially by loans**. Buyouts were financed by investors in the region by leverage loans, although the amount of these loans was yet smaller than in Europe. Later, at the time of the credit-market crisis of autumn, 2008 this lower level may have proven to be a specific advantage in certain cases. Actually it was exactly the opportunity of taking loans with the coverage of assets of the bought-out companies that paved the way for much larger deals in the region than before.

With respect to the whole of Europe merely more than one-third of total investment value was financed by equity contribution by private equity investors between 2005 and 2007 (EVCA Barometer, 2008). As **for CEE, no equity/debt ratio figures are available**, but the fact that the region is far from catching up with Europe’s more developed markets in this area is apparent from the figures: the €25.5 million average size of the 54 buyout deals completed in the region in 2007 is far behind the €43.2 million average value measured in case of the 91 buyout deals in Europe. The EVCA Barometer (2007) survey issued in the middle of 2007 that sets out the analysis of the CEE region found that deal sizes increased, investments are provided at a later stage, competition is more fierce and credit markets are more developed in the region as compared to two years ago. Concerning deal financing in the region the survey also reports that credits are better available and leverage has become more widely spread in the region, including access to senior debt or mezzanine financing.

The almost €400 million value of transactions performed in the **expansion** stage in 2007 hasn’t even reached one-fifth of the buyouts, however, in comparison with the previous year it represented a significant, nearly fourfold increase. Thus the proportion of investments in the expansion stage by and large corresponds to the 13% measured in the whole of Europe. Investments in the expansion stage being pushed into the background by buyouts does not mean that target companies in the region have no growth perspective since most of the buyout targets themselves were firms with promising growth potentials.

Within VC&PE investments, financing provided in the **seed and start-up** stage represents the area where the region’s ventures have the greatest disadvantage in Europe. From among the several thousands of capital-eager regional firms with good perspectives, venture capitalists annually finance 30-to-40 firms by €30-40 million, which represents virtually a hardly measurable investment volume as compared to the total number of start-up companies. And it is tiny little even in comparison with the itself very low number of 2 thousand firms in the whole of Europe. The almost €850 thousand average investment amount granted to single companies in CEE in 2007 doesn’t even reach the European average value of almost €1.2 million, which is itself low as compared to the US. Many, otherwise viable, fast-

growing regional undertakings are simply not big enough to capture the interest of venture capital investors.

The capital gap between the demand for venture capital by start-up firms and the supply of venture capital, which also creates disadvantages for EU's early-stage, innovative companies. The gap burdens the region's start-up companies to an even greater extent because other financing sources – for instance business angels, government grants or seed financing – are practically not available either to companies in this stage in the region. Having recognized this problem, the European Union launched its so-called **JEREMIE-program** (Joint European Resources for Micro to Medium Enterprises), which expressively aims at promoting the capital supply of early-stage companies. The €80 million Lithuanian and the nearly twice as much Hungarian holding fund already approved by the European Committee is available for application by domestically-registered fund managers, who organize capital investments for micro, small and medium-sized enterprises and can provide a further 30% of private sector capital in addition to the EC funding.

The economic impact of venture capital on the region's markets is manifested primarily in those industrial sectors, where the financed companies operated. At the end of the 2000s **telecommunications and media** offered especially favorable opportunities to venture capitalists, however, as a result of the increasing income levels, other, consumption-related industries also attracted investors. Thus mainly financial services that were still lagging behind in development and construction industry-related areas as well (James, 2007). EMPEA's survey prepared in 2008 also reinforced that private consumption formed the basis for regional investments (EMPEA, 2008/a). Prime areas from the perspective of growth are retail trade, consumption-related services and health care but the role of infrastructure and the demand for business services has also increased.

During the one and a half decade until 2004 the highest amount of capital in the region – according to EVCA Task Force – was channeled to the telecommunications sector, producers and providers of consumer goods and services, producers of industrial products and services, media as well as providers of financial services (EVCA, 2004). At the time of the Internet boom, technological sectors received a significant amount of capital in the CEE region as well but the magnitude of it was far smaller than in Western Europe or the US. Although IT sector in the region also declined when the technology boom receded, it less stirred investors' concerns because of the smaller density of investments.

In the course of the 2000s specific areas of telecommunications, cable services and infrastructure have become the focus of private equity, projecting great prospects for all those areas that are related to retail consumption, such as retail trade or financial services, especially with respect to consumer financing or managing savings. In addition, the emergence of a wealthy middle class set forth the likelihood of an upswing in the entertainment industry

(Hart, 2006). Regional funds were most interested in investments made in the area of telecom and media, forecasting that facilities geared by rising retail income levels will be decisive for investments, thus mainly the areas related to consumption with special regard to financial service area still in its infancy as well as the numerous, construction industry-related ventures. In its survey of the CEE region published in the middle of 2007 EVCA found that no major changes took place in the segments affected by VC&PE financing as compared to the market situation two years ago (EVCA Barometer, 2007). Only a few respondents mentioned that services and entertainment industry has come to the forefront.

A detailed analysis by EVCA Task Force of CEE VC&PE investments by sector made for the first time for the years 2006 and 2007 (EVCA, 2008) well reflects that telecommunications companies were the investors' favourites in the region in both years. In 2006 almost 30% and in 2007 almost one-fourth of investments was channeled to the telecommunication sector. Many telecom companies were bought-out by private equity funds in the past few years. In May, 2007 Mid Europa Partners and GMT Communication Partners sold the Hungarian Invitel company for €470 million to Hungarian Telephone & Cable (HTCC), which the two investor companies bought for €325 million from the French Vivendi Universal back in 2003. In 2008 a consortium led by Columbia Capital, M/C Venture Partners and Innova Capital has wholly acquired telecom service operator GTS Central Europe. The consortium also included HarbourVest Partners, Oak Investment Partners and Bessemer Venture Partners (Unquote, 2008/a,b).

While in 2006 due to a mega buyout, more than 40% of VC&PE financing was represented by the chemical industry and 30% by telecommunications, **in 2007 investments spread much more evenly across the different sectors** because by then the first five sectors covered only the two-third of investments. Companies operating in the area of business and industrial products, transportation, financial services as well as life sciences equally received a share of about 10%. Comparing the 2007 sectoral split of regional investments with that of the whole of Europe it is apparent that in the CEE region the proportion of capital provided to communication, transportation as well as financial services sectors was roughly twice as large as in the EU. In contrast, the volume of financing of consumer goods and services as well as retail trade was double of the volume in the region. However, the real big difference was shown in the favour of Europe in case of **business and industrial products sector**, namely this sector **hasn't yet captured the interest of investors**. *(The proportion of different sectors by the volume of investments in the CEE region and in the EU is included in Appendix 5.)*

By examining the financed sectors and the region's countries together, it is evident that in 2007 the highest-amount investment in the communication sector was made in Bulgaria (€274 million) and an additional amount – almost the half of this – was received by telecommunication companies in Lithuania (€121 million) and in the Czech Republic (€102

million), too. Chemical industry received the highest amount of capital (€220 million) on the Hungarian market, while in the area of business and industrial product financing Bulgaria (€160 million) and Poland (€138 million) were on the top of the list. Investments in the area of financial services, transportation and life sciences were equally dominant in Poland, representing €133 million, €112 million and €103 million amounts respectively. As opposed to this, in the area of computers and consumer electronics Latvia takes the lead with its investment of €128 million.

5. VC&PE INVESTMENTS IN THE CEE REGION'S COMPANIES

In order to ensure the success of VC&PE investments, investors having sufficient local knowledge must have the ability to select the companies that have the most attractive growth potentials, then elaborate a strategy for them that would guarantee success, finance and manage the implementation of this strategy then exit with a high return. *(The most significant post-2006 investments in the CEE region are set out in Appendix 6.)*

Investors need to have sufficient local knowledge in order to be able to find the companies in the region that are attractive to them. To this end, investors either had to be present in the region for years with a new fund from time to time or they had to get fund managers who had gained extensive local experiences by having managed local funds. Another way of ensuring the special expertise was when **global and local funds jointly invested** in a regional company. An example of this latter solution is the €33 million financing provided to the Ukrainian leading consumer lending business IMB Group jointly by Warburg Pincus and the Ukrainian Horizon Capital (Private Equity News, 2007). Another team work was the €1.2 billion buyout deal jointly concluded by Mid Europa Partners, the American Lehman Brothers Private Equity and Al Bateen from Abu Dhabi, within the framework of which the group have acquired stakes in two Czech telecommunication companies at a time, 100% of Radiokomunikace and 32% of T-Mobile Czech Republik. (Private Equity Online, 2006). In 2008 GTS Central Europe was also bought by a consortium that was managed jointly by the global Columbia Capital, M/C Venture Partners and the local Innova Capital (Unquote, 2008/a).

The investors' **local knowledge and expertise had a much higher importance** in the CEE region than on the developed Western markets (EMPEA, 2007). This is because in the region a much greater part of value creation arose from the organic growth and performance improvement of the realated companies and these were only supplemented by the returns from financial engineering.

A special way of ensuring local expertise was when **local and global funds** made investments in regional companies by **succeeding one another**. Deals that became to known as secondary buyouts, which have enjoyed a long-time popularity on the developed markets, have also facilitated the entry into the region's market since 2007 for funds newly entering the market by assuming a lower risk, since they could buy the targeted companies from experienced local venture capital investors. While these deals offered previous investors a profitable exit option, funds entering the market could negotiate their investments with sellers who „spoke their language". Further opportunities for the development of companies were provided by the emergence of new, more highly capitalized private equity investors with international connections. For local and regional funds, who were initially involved in the companies' daily business, the transfer of their portfolio company to a highly capitalized global fund also provided an exit potential, while their reputation served as a value for potential buyers.

The Czech software developer Systinet has been first shaped up by the local 3TS Capital Partners, however, Systinet appeared on the US market when it had already been transferred to the portfolio of Warburg Pincus, the global private equity fund. The company financed in several rounds, altogether with USD33 million, was sold by the private equity investors in 2006 to a US-based software company for USD105 million (Lainey, 2008). The change in the composition of investors similarly resulted in entering the US market in case of another Czech software company, AVG, initially developed by Benson Oak Capital and whose new owners later on jointly became Intel Capital and Enterprise Investors, a team well positioned to assist the company with a US strategy (Lainey, 2008). In addition to financing, global funds also brought significant expertise and connections for the company. This was important because the company's strategy and operation manner also had to be adjusted to the new conditions when entering new markets. Thus marketing, finance and strategy could equally be fit into a new framework. Intel was especially significant for AVG because it was a specialist on the areas of media. telecom and technology. During the course of implementing the planned strategy, the fund's network also provided support for the selection of the appropriate corporate experts.

It is most likely that the Hungarian healthcare provider Euromedic is the record-breaker among companies that were bought-out several times in a row by private equity investors, given that during nine years it has already been included in the portfolio of four different, yet very highly reputable private equity investors. In 1999 GE Equity and Dresdner Kleinwort Benson Private Equity invested USD8 million in the company. In 2000 these very same two funds together with an additional US fund, the Global Environmental Fund provided further USD8.4 million for the development of the company. In 2005 Warburg Pincus joined the panel of the company's owners until it sold its stake to Ares Life Sciences and Merrill Lynch Global Private Equity funds in 2008 for approximately €800 million, that is for more than three times

of its initial investment. The new owners, who covered almost 50% of the deal through a leveraged transaction were planning to further broaden the company's product range and reinforce its position in the region (Unquote, 2008/b).

At the end of the 2000s the so-called **recycling (repurchase)** was a relatively new phenomenon in the region, when investors re-bought their previously sold companies. Mid Europa Partners has concluded such a buyout, when in 2005 it re-acquired Aster City Cable just a year after selling it initially in late 2004. As a previous shareholder the buyout house was very familiar with the company (Unquote, 2008/b). Anothe example of repurchase is the deal planned at the end of 2008 by Mid Europa Partners and GMT Communications Partners. These two financers sold the Hungarian Invitel firm to Hungarian Telephone & Cable (HTCC) in early 2007 for €470 million. The potential investors intended to (indirectly) repurchase Invitel by planning an offer for the purchase of HTCC, to its owner TDC, who announced the sale. The plan finally was cancelled.

In order to make companies competitive, investors had to pick enterprises, which were anyway on an extremely fast growth curve. Whereas in Western Europe value creation also involved a large element of cost-cutting, in CEE the basis for **value creation was established to a much greater extent by top-line growth**, and financial engineering was „the cherry on the cake" (European LBO Report, 2006). Many portfolio companies operated in the region, which were capable of displaying an annual growth rate of even 30%. For instance Serbia Broadband acquired by Mid Europa Partners in the summer of 2007 from local venture capital fund, Bedminster Capital Management, which has doubled both its turnover and EBITDA between 2006 and 2007 (Private Equity Europe, 2007).

An increasing number of privately-held – family – enterprises that were established in the 90s reached a size in the middle of the 2000s, when owners had to decide whether to raise additional capital or sell their company to strategic investors. Whereas previously these companies were able to display fast growth on the relatively still immature market, they had to compete with an increasing number of competitors on the more and more saturated market to gain a market-leading position. This is why investments made in the region initially provided mainly development capital for companies and buyouts targeting the acquisition of already more stable companies started only after 2002.

Increasing the return on investments usually necessitated the **restructuring of acquired companies**, making them more efficient that also involved ensuring the professional competences of the management. In case of companies where chances were good to become competitive at an international level as well, cross-border company groups have been created as well during the course of acquiring several enterprises with a similar profile. The selected method for restructuring companies financed by private equity investors basically influenced the successfulness of an investment. Restructuring promoted by private equity

investors for companies included in their portfolio in many cases had an impact on the operation of the affected companies, their staffing level and financial position. Operational restructuring involved changes in strategy and in the organizational structure of the company, labour restructuring entailed layoffs or retraining, while financial restructuring altered the affected companies' debt structure.

Experiences show that regional venture capital funds achieved the greatest success with their companies when they modified the strategy of their portfolio company, assisted them in reorganization, extended them or merged them with other companies. The **most frequently** used solution by private equity investors for company restructuring was **operational restructuring**. According to EBRD survey published in 2006, this intervention occured in case of more than one-third of the regional investments (EBRD, 2006). Some 20 percent of investments were subject to mergers and acquisitions. However, of the surveyed companies the rate of those where important divisions were sold off, hasn't even reached a rate of one-tenth. Financial restructuring took place in also hardly one-tenth of the financed portfolio companies. Financial or labour restructuring delivered higher returns to investors to a lesser extent, namely VC&PE funds in the region achieved success first of all by enhancing the quality of management. (EBRD, 2006).

EMPEA's 2007 survey analyzing the private equity investments of emerging markets also reflected similar practices deployed by investors (EMPEA, 2007). According to this, a larger portion of value creation in the region arose from the financed companies' organic growth, performance enhancement and consolidation. Buyouts in the region were less dependant on financial planning and the level of leverage. Moreover, arising from faster growth potentials, bankruptcy risk was also lower given that leverage was lower and could be increased faster. The European LBO Report (2006) analysis also reinforced that in case of CEE companies **value creation** through VC&PE financing was a very labour-intensive task, namely it **required the active participation of investors** in the portfolio companies' daily business.

Former state-owned companies were in need of massive restructuring, while companies financed by entrepreneurs had to be expanded to a proper size in many cases through add-on acquisitions. A good example of the **stages of restructuring** of a formerly state-owned undertaking by a private equity investor is the acquisition of the Czech pharmaceutical company Zentiva by Warburg Pincus in 1998. The pharmaceutical company had just come out of state ownership and although it had a very talented senior management team, it was not used to having financially focused shareholders. The investor dramatically scaled down the company's product line, modernized R&D process, then in order to increase the company's size, it acquired Slovakfarma, another pharmaceutical company and only then floated the enlarged company, where it completed a USD211 million IPO in 2004 (Private Equity Intelligence, 2006). A public offer was made for Zentiva – which has continued to stay listed –

in September, 2008 by Sanofi-Aventis, considered as one of the largest pharmaceutical companies worldwide, which already held 25% of Zentiva and which evaluated the company at USD2.6 billion. Zentiva's management accepted the offer (Világgazdaság, 2008).

A similar restructuring task was also performed by the investor in case of another regional company, although the magnitude of the deal was far smaller. Private equity fund Enterprise Investors made an investment in the Polish retail trade company Eldorado in 1999. As an outcome of the deal, Eldorado grew from a local wholesale trader into one of the largest food distributors in South-East Poland. The fund significantly improved the company's management control and by also deploying foreign consultants it enhanced the professional skills of the company's experts. In order to achieve further growth, the fund planned to increase available funds by floating the company. Therefore in the beginning of 2002 the fund floated the company's shares at the Warsaw Stock Exchange. Apart from facilitating the investor's exit from the company, it also provided the raising of a USD5 million fresh capital for the company (EBRD, 2006).

An example of increasing the size of portfolio companies by acquiring additional companies is the case of NetCentrum, which was held in the portfolio of Warburg Pincus and which bought Atlas.cz. company. The story was similar in case of a meat-processing plant held in the portfolio of the Slovakian Penta investment fund, besides which the fund acquired additional meat-processing plants in Hungary and in Slovakia (Deloitte, 2008). Penta Investments acquiring the Hungarian Debrecen Hus Group in 2008 had the definite goal to create a significant player on the meat market in CEE since it has already acquired Zbrojníky, the fourth largest meat producer in Slovakia, as well as it has become the owner of the largest Slovakian meet processor Mecom Group. Moreover after 2008 the fund was still planning to complete further acquisitions in the meat industry (Unquote, 2008/b).

The growing purchase power in the Polish health sector laid the foundation for Mid Europa's ambitious **"buy and build" strategy**. The private equity investor completed the acquisition of the Polish CM LIM healthcare clinic business in less than one year after having acquired Lux-Med and Medycyna Rodzinna companies in October, 2007. Then it merged the three companies in order to establish an adequate-sized clinic chain in Poland. In the autumn of 2008 CM LIM that was in the property of the investor, acquired an additional clinic-operator company, Promedis. Through its portfolio, Mid Europa now had the capabilities to cover each segment of the Polish health care market but in spite of this, it was planning a series of further health care company acquisitions (Unquote, 2008/b). Having consolidated the market, the investor was at that stage able to utilize the synergies achievable by strategic investors and was anticipated to become the largest player on the health care services market (Thomson, 2008).

In order to finance investments, to implement planned developments and financial consolidation as well as to achieve further expansion, namely to acquire additional companies, it was necessary to access to loans with appropriate terms. However, **leveraged loans for buyouts in the CEE region were provided only after 2003**. Most of the investments in the region so far has been in the range of €5-to-10 million with only a few financing deals of €100 million. Leveraged buyouts didn't take place in the region at all before 2003, neither was there any cash flow based lending that became accustomed in 2006. At that time debt reached 3 to 4x to EBITDA (Hart, 2006). Investors shared the opinion that the region was growing so fast that there was no need to over-leverage a company because apart from leveraging, profit could be also generated by other means, namely from growth. That's why company acquisitions have never been leveraged at more than 4x EBITDA (European LBO Report, 2006). (As for the whole of Europe, the debt to EBITDA multiple was already 5.5x in 2006, whereas in 2007 it was 6.12x, which dropped by 0.28 percentage points, to 5.84x in the first half of 2008 – already projecting a decreased level of liquidity (EVCA Barometer, 2008).)

Accession to the EU was dominant in triggering lending because after the accession banks already assessed regional risks much more preferably. The emergence of leveraged buyout meant that private equity investors had the opportunity to target those company acquisitions, which they were unable to finance previously (Hart, 2006). These new conditions called for a change in the approach of local lending banks because they had to acquire expertise in cash flow based lending since formerly they were involved only in asset based lending. Whereas in terms of credit amounts there continued to be a great difference between Eastern and Western investments, the conditions already more and more resembled those of the Western transactions. It wasn't unique in 2007 to see four-five banks compete for participation by offering Western European conditions, although the level of lending in the CEE region remained much more conservative as compared to Europe (James, 2007). The largest deals, namely those investments that exceeded €250 million were normally sold at auctions generally financed by London-based banks. These deals were offered with a ready-made financing package therefore applicants didn't really have the chance to compete in this respect. However, with the exception of these rare auctions the financing of most deals were made within the region. Deals were first normally refinanced by local or regional banks, which were willing to accept deal risk. In case a company has been reacquired by a major fund, then London-based and other investments banks also joined the transaction, which at that phase involved less risks. The worldwide downturn in the autumn of 2008 strongly affected the availability of loans to regional transactions as well, causing a halt in major deals.

With respect to loans taken for specific deals, Bulgaria – not even included in the first round of accession – deserves special attention, where in 2004 two deals were conducted that have by far outranged all previous regional investments. One was the privatization of BTC

telecommunication company and the other one was the takeover of the mobile operator company MobilTel Holding. BTC was acquired by a leveraged buyout of €230 million by the regional Advent International, including a €40 million proportion of mezzanine part, representing the highest ever mezzanine proportion in the region. The proportion of mezzanine in the CEE region usually involved a much lower amount as compared to the BTC deal and it typically didn't exceed €10 million tranche, often reaching only €2 million, whereas in Western Europe the typical volume was in the range of €80-to-100 million. Moreover, mezzanine loan was granted at a relatively higher price in the CEE region than on the more developed markets of Europe (Sormani, 2006). Advent International sold its stake in BTC in 2007 to the AIG Capital Partners at a then-record €1.08-billion price in the region (EVCJ, 2008).

In case of MobilTel an international consortium acquired 40% with its investment of €450 million in 2004. Among investors of MobilTel were ABN Amro Capital, Citigroup Investments and Communication Ventures Partners and creditors granted a syndicated corporate credit of €650 million for the until-then largest leveraged buyout transaction. Similar transactions could be concluded in 2005, too. Credit was available not only for leveraged buyouts, but also for mega-recapitalizations of portfolio companies. That's why Mid Europa's predecessor, EMP was able to refinance the Hungarian fixed-line operator Invitel with high-yield bonds and bank loans and the Czech mobile telephone operator also received a similar mix of bonds and loans. The volume of senior and mezzanine loan was €750 million within the €1.2-billion buyout deal, which was conducted in November, 2006 jointly by Mid Europa Partners, Lehman Brothers Private Equity and Al Bateen and by which 100% of the Czech Radiokomunikace and 32% of the also Czech T-Mobile Czech Republik was acquired (Private Equity Online, 2006).

Enterprise Investors also conducted several leveraged transactions. For instance in case of the buyout that resulted in acquiring 80% of DGS, a Polish manufacturer of metal closures for alcoholic beverage bottles, it covered 45% of the deal with credit, which it had received on the Polish market and which was entirely senior credit (Sormani, 2006). Mid Europa Partners in August, 2007, just at the time of the loan market storm closed the €415 million refinancing of the Polish cable operator, Aster, which represented the largest leveraged deal denominated in Polish currency on the Polish market and the largest senior credit (Private Equity International, 2008).

The Private Equity Europe survey of October, 2007 on CEE also reinforced that the proportion of leverage in investments in the region was low, namely **deals were less dependant on credit conditions in the region** as compared to developed markets. Therefore experts projected that a better performance would be achieved in the region during the credit crisis. Moreover, since interest rates in the region were higher at the offset, analysts believed that the increase in interest rates would be less staggering (Private Equity Europe,

2007). As opposed to this, according to a survey published in February, 2008, based on surveying more than 100 CEE VC&PE investors in 2007, more than half of the respondents already took the view that the secondary US credit market crisis has already made an impact on the availability of loans in the region to a certain extend and due to a wider deployment of leverage than before, it was more difficult to get loans for regional deals (Squire Sanders, 2008). This survey also attested that investors in the region took a hands-on approach in company management and didn't expect to gain high returns simply by (over)leveraging acquired companies. According to the figures, in two-thirds of the deals the portfolio companies' senior management and financial management and in almost three-fourths of them other key personnel of the management was replaced after the capital investment. When asked about the factors that hinder VC&PE industry, almost half of the respondents mentioned the lack of sufficiently qualified professionals, one-third the standard of entrepreneurial culture, while less than ten percent mentioned that an appropriate legal framework is not in place (Squire Sanders, 2008).

6. DIVESTMENT OF VC&PE INVESTMENTS FROM COMPANIES IN THE CEE REGION

The success of venture capital financing is ultimately subject to the way of exit. That is adjusted to the nature of investment, of which the method and timing is already planned by the investors at the time of investment. Apart from carefully selecting companies to be included in the portfolio, profit to be realized greatly depends upon choosing the time and method of divestments. Namely VC&PE investors as such, always participate in the financing of selected companies for a temporary period, that is to say they always sell their stake when the usually predefined period of time expires. Capital divested from companies and profit realized is paid/repaid by investment fund managers – after deducting the management fee and carried interest owed to them – to (end)investors who had provided the capital for funds. Keeping in mind that profits realized during exits basically influence the investors' potentials for future fundraising, relevant figures are less publicized, funds treat such kind of figures as classified business secret.

The **value of exits** measured by the cost of investment by statistics, reached almost €600 million **in the CEE region in 2007**, which **was one-third higher than** the value achieved **in 2006**. At the same time with respect to Europe as a whole, the value of exits in 2007 dropped by one-fifth as compared to the previous year. This equally indicates the worsening conditions for exits and the increase in the value of exits in the region in 2007. The proportion of exits in the CEE region formerly reaching maximum 1.5% of the European exits has

increased to 2.2% by 2007. Although the proportion of exits in the region is still far below the proportion – otherwise also low there – measured for investments, exits can logically follow the trends in investments normally only with several years' delay. Of the nearly four and a half thousand ventures sold in the whole of Europe in 2007 only less than 80 were headquartered in CEE, which reflects a decline in comparison with the almost 90 companies sold in the region in 2006. In spite of this, the total value of exits in the region significantly grew in comparison with 2006 since the €7.5 million average value of stakes sold by investors in 2007 was much higher as compared to the €5 million measured in the preceding year (EVCA, 2008).

Trade sales have been the most preferred exit route in the region for many years. By 2007 they represented already more than half of the exit values. Trade investors in 2007 were buying a significantly higher volume of company stakes on average. The value of stakes acquired by trade investors from VC&PE investors grew from the almost €210 million in 2006 to more than €312 million during one year, whereas the number of companies sold dropped from 36 to 29. *(The significance of exit routes in the CEE region and in Europe is shown in Table 9.)*

Exits via stock markets have far smaller significance within sales in the region as compared to trade sales. Moreover, their role in 2007 further shrank. Whereas in 2006 the value of exits via stock market reached almost 40% of trade sales, in 2007 it was only 5%. In 2007 the proportion of exits via stock market during the period of one year dropped to one-sixth within the 2007 total annual value of exits in CEE. Namely the stock market offerings of companies in the CEE region declined even more than in the whole of Europe, where this type of exit route represented only one-tenth of total exits as opposed to the 16% in 2006.

Among investors wishing to float their portfolio companies on the regional stock markets, the Warsaw Stock Exchange (WSE) was most favoured because of the market size, the indirectly greater demand from pension funds and the higher risk assumed by the Stock Exchange (Világgazdaság, 2007).

Table 9.

The share of different exit routes' values in the CEE region and in the EU in 2003-2007 (in percentages)*

Type of exit	2003		2004		2005		2006		2007	
	CEE	EU	CEE	EU	CEE	EU	CEE	EU	CEE	EU
Divestment by trade sale	31,6	20,4	34,6	23,6	69,8	22,8	47,6	23,0	53,2	28,3
Divestment by public offering	10,9	11,7	21,4	11,8	10,7	8,9	18,1	16,0	2,8	10,0
Divestment by write-off	7,8	11,6	17,4	9,7	3,2	4,7	0,2	3,8	0,0	1,6
Repayment of preference shares/loans	9,6	15,9	3,7	21,3	1,9	23,3	8,2	17,0	3,8	15,8
Sale to another private equity house	2,5	20,2	4,8	13,1	5,9	18,3	12,7	16,6	23,6	30,4
Sale to financial institution	0,3	6,0	3,8	3,0	0,1	4,0	0,1	5,4	2,8	3,2
Sale to management (buy-back)	21,9	5,6	2,9	12,7	3,6	5,3	8,2	6,1	2,2	3,5
Divestment by other means	15,4	8,6	11,7	4,8	4,8	12,7	5,1	12,1	11,6	7,2
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

*Measured by cost of investment not by actual proceeds.

Source: PEREP_Analytics for 2007 data, EVCA/ThomsonReuters/PricewaterhouseCoopers for data of the previous years.

Based on EVCA (2004, 2005, 2006, 2007, 2008) and EVCA Yearbook (2003-2008)

With respect to the number and capitalization of companies floated in the region, the **Warsaw Stock Exchange is considered the largest public stock market**, where the securities of 366 companies were traded in the middle of 2008, the total value of which exceeded €126 billion. (Whilst the capitalization of the Vienna Stock Exchange was €117 billion, that of the Prague Stock Exchange was €49 billion, that of the Budapest Stock Exchange was €28 billion, that of the Bucharest Stock Exchange was €16 billion, that of the Ljubljana Stock Exchange was €14 billion, that of the Sofia Stock Exchange was €10 billion and that of the Bratislava Stock Exchange was €5 billion.) The value and route of exits made in the

region in the beginning of 2008 is yet unknown, however, it is remarkable that in the second quarter of 2008 the almost €2 billion value of initial public offerings (IPOs) at the Warsaw Stock Exchange was surpassed only by the London Stock Exchange (Napi Gazdaság, 2008). Thus it is not by accident that the number of company listings at the Warsaw Stock Exchange by far takes the lead even among exists via stock markets realized by regional investors.

At the same time what notably **increased** among exits were the so-called **secondary buyouts** that took a leading role in Europe as well, namely – as already described under the section on investments –, when portfolio companies are repeatedly bought by private equity investors. As a reaction by investors to the increasingly deteriorating exit environment, the €138 million value by 10 companies using this type of exit in 2007 represented almost one-fourth of the exit deal value in the region, coming more and more close to the exit proportion in Europe as a whole that increased to 30% (EVCA, 2008). Exits from companies by repayment of loans originally granted by investors to the companies they bought, have a restricted significance, given the more scarce occurrence of leveraged deals as compared to Europe.

By making a country-by-country analysis of the regional figures published by EVCA Task Force since 2003, it is apparent that **Poland mostly took the lead in terms of exit value**. In which, apart from the size of the country the opportunities provided by its stock exchange presumably also played a significant role. Hungary registered the largest exit activity only in 2007 in value terms. The permanently growing activity since 2005 in the area of exits from regional companies indicates that an increasingly high portion of the first-time investments of regional funds appearing in 2002 now reach their exit stage. However, the rising proportion of sales to another private equity investor – similarly to Europe as a whole – in addition to the deteriorating conditions in the exit environment also reveals that more highly capitalized and more experienced private equity investors provide the ability of further growth for financed companies in the region. *(Exit values by country in the CEE region are shown in Table 10.)*

The most important indicator of exits is the return realized on the individual deals, more precisely the total profit gained by the pooled sale of companies in the funds'' portfolio. The attractiveness of VC&PE industry is determined by this consolidated return in the first place, its magnitude as compared to the return on other investment alternatives.

Table 10.

**Venture capital and private equity divestments at cost*
in the CEE countries in 2003-2007 (in € millions)**

Country	2002	2003	2004	2005	2006	2007
Baltic states	7,3	27,0	3,5	16,4	20,0	69,3
Bulgaria	0,0	0,0	0,0	22,4	58,9	57,2
Czech Republic	20,6	13,7	18,4	60,7	115,0	8,0
Hungary	13,3	41,6	0,9	36,8	31,7	229,7
Poland	79,5	108,2	85,9	106,9	137,6	175,8
Romania	12,9	26,2	10,8	87,5	63,2	44,4
Slovakia	1,0	13,2	1,7	69,9	8,2	NA
Other CEE countries	0,0	6,0	1,5	21,2	7,1	1,6
Total divestments in the CEE	134,7	253,9	122,6	421,7	441,6	586,0
Divestments in the CEE in percentage of divestments in the EU (%)	0,1	1,7	0,6	1,4	1,3	2,2

*Measured by cost of investment not by actual proceeds.
Source: PEREP_Analytics for 2007 data, EVCA/ThomsonReuters/PricewaterhouseCoopers for data of the previous years.
Based on EVCA (2004, 2005, 2006, 2007, 2008) and EVCA Yearbook (2003-2008)

However, published statistical **data are not available on the consolidated return on investments executed in the region**. Thomson Reuters (formerly Thomson Financial) that is commissioned by EVCA to collect and process the rate of internal return data based on surveying investors, publishes only aggregate data relevant to the whole of Europe, that is to say it doesn't separately publish the consolidated figures on the CEE region. However, certain guidance is provided for the assessment of regional returns by those data published by EBRD that set out the return indicators of EBRD's regional funds. (However, EBRD data cover the region in a broader sense also including performance data of funds operating in Russia and other CIS countries.) Capturing information on VC&PE funds is also facilitated by news published in the press about specific exit deals, when – practically with the aim of advertising – the funds themselves publish their actually achieved returns. Nonetheless, investors rarely

disclose the method of calculating the figures, thus the numbers cited in different announcements are difficult to compare.

Without questioning the authenticity of published figures, it should be also concluded that investors are obviously unwilling to reveal information on their unsuccessful investments, nevertheless, capital and profit repaid to (end)investors by the funds is computed as the balance of successful and unsuccessful deals.

According to EBRD, the largest (end)investor of the CEE region's VC&PE funds, the **return figures of funds investing in the CEE region far exceed returns on VC&PE realized elsewhere**. Taking into account for instance the five-year period – until the end of 2007 – that is considered to be the most reliable time duration required for an investment to reach its maturity stage, the 31.2% return on EBRD funds calculated in Euro terms (40.0% calculated in Dollar terms) well exceeded the 11.6% level of All Private Equity index measured for Europe by EVCA in Euro for the same period (and also exceeded the Cambridge Emerging Markets Venture Capital and Private Equity Index of 18.2% return in Dollar terms) (EBRD, 2008).

The Transition Report issued by EBRD in 2006 (EBRD, 2006) makes a detailed analysis of the 450 investments in the region's almost 400 companies between 1992 and 2005, which were invested by 44 funds partly financed by EBRD. The pooled internal rate of return (IRR) of these funds was 19.7%, whereas the return achieved only by those investments where investors had completely exited from was 20.5%. The average IRR weighted by investment size was 11.1% for all the investments, and 7.7% only for those completely exited. Based on the opinion of the authors of the survey, the average IRR of similar investments included in FTSE index was 5.7% and 3.8% respectively, that is to say regional investments produced better returns for their investors.

The survey also provided an overview of the relative profitability of the different sectors in the region on the basis of return figures of those deals, where the investors had already exited from. According to this, among the **most profitable sectors in the region are financial services, telecommunications and in general high-technology**. In contrast, the so-called other sectors (covering services, hotels and restaurants and other miscellaneous gropups) as well as retail-and wholesale trading sectors produced lower returns. Investments in the high-tech sector were normally more risky, thus investors were compensated by the higher returns for assumed higher risks. In case of investments in the much more complex and technology-intensive sectors higher performance indicated that VC&PE must have been as successful as it was in case of Western European and US projects (EBRD, 2006).

Fresh figures published by EBRD demonstrate the probability of returns realized by investors according to the exit methods and to the life cycles of companies involved in the

actual investments. According to this, **those private equity investors achieved the best results in the region, who made investments in the expansion stage and sold their companies via trade sales**. These investors could even quadruplicate their capital during these deals. Good results for private equity investors were also delivered by buyouts in case they were finally sold via trade sales or stock markets. This could even bear a 3.55-3.37x return. The least profitable business for investors was presumably when their early-stage companies were sold to the managers of the respective companies. In case of these letter scenarios they may have definitely suffered losses on the whole (EBRD, 2008). *(The different return multipliers for the investments of EBRD-financed funds by life cycle and exit route are demonstrated in Table 11.)*

Table 11.

Venture capital and private equity performance of EBRD-financed funds in Central and South Eastern Europe, by life cycle stage and exit type (compared to the size of the original investment)

Exit Type	Investment Stage		
	Expansion	Sec. Purchase/ Buyout	Seed/ Early Stage
Sale to Management	1.84x	1.81x	0.62x
Flotation/ Secondary sales	4.28x	3.37x	3.23x
Trade Sale	3.25x	3.55x	1.94x
Other	1.95x	2.49x	2.33x

Central and South Easter Europe, fully realised and partly realised deals, excluding write-offs, data to end 2007.
Source: EBRD (http://www.ebrd.com)
In: EBRD (2008)

According to the survey that analyzed VC&PE fund investors' expectations for returns achievable in the different geographical regions worldwide with the participation of 81 major investors during the period between February and April, 2007, investors expected 5.4% higher returns on emerging markets as compared to the developed (US) markets (EMPEA, 2007). Investors surveyed expected the funds, which they finance to produce an overall return of 22.6%, whereas expectations for returns with respect to the US were only 17.2%. VC&PE fund investors, who were surveyed **in 2007 expected that the CEE/Russia-comprised region would deliver 23.1% returns, which practically represented a 5.9% higher additional rate of return as compared to the rate achievable in the US**. This returns

expectation was the same as for Asia and was the second highest after Africa. Obviously, by not really sensing the international credit crunch, at the time of the 2007 survey almost two-thirds of the respondents believed that these significantly high returns would remain for at least five more years (EMPEA, 2007).

The above expectations by investors was by and large over-performed by Mid Europa Partners, which was already managing the largest fund in the CEE region in 2008 and which realized an internal rate of return of about 40% by its seven exits performed during the eight years preceding 2006 (Hart, 2006). Funds managed by Enterprise Investors in 2005 also operated successfully because their investors were repaid less than USD300 million for their investments of almost USD200 million altogether. The fund, which among others exited from Stolica, Netia, LPP, Orange Romania and Orange Slovensko, reached more than threefold returns on their original investments (Sormani, 2006).

In its survey depicting the CEE market EMPEA (2006) also reports on a few particular divestments that brought very positive results for the investors. The Global Finance's investment in the Romanian Sicomed pharmaceutical company in 1999, which was bought by the strategic investor Zentiva pharmaceutical company, resulted in a 6.4x return and a higher than 55% IRR. As the owner of Zentiva at the time of the deal, Warburg Pincus **sold** its shareholding in 2006 **to a strategic investor** Sanofi Aventis, realizing more than 40% of IRR and a capital income of more than USD1 billion. According to Sormani (2006), Warburg Pincus reached an overall 9x return when it received a total of USD1.2 billion back with its original USD125 million investment. Its first investment was made back in 1998, when it bought 70% of Leciva, which had been privatised a few months before. In 2003 this company merged with Slovakfarma and then continued its operation under the name Zentiva. When Zentiva was floated on the stock exchange in 2004, Warburg Pincus still held 54% of its shareholding in the company, which it gradually sold afterwards. Thus it sold its last, 19.6% shareholding to Sanofi Aventis company in 2006.

Another, also major divestment that also took place in the region is associated with the name of Advent International. For three year prior to 2006, the fund has been the owner of the Romanian generic pharmaceuticals manufacturer Terapia, which was bought by a strategic investor, the Indian Ranbaxy Laboratories for USD324 million. Advent is reported to have made 10x return on its investment. The buyout of Terapia in 2003 was the first in the region, during the course of which a private equity investor **delisted a public company** from the stock exchange. It was following its privatization in 1997 that Terapia became listed on the Romanian stock exchange, where liquidity was not adequate for it. Advent paid USD44 million for the company's shares and an additional USD5.3 million to cover the deal costs. In 2005 Innova Capital sold 11% of its credit card company Polcard S.A. to a strategic investor, which generated a more than 60% of IRR for the fund (Sormani, 2006).

Another deal that provided data on the profitability of the **secondary buyouts**, was the sale of the Hungarian healthcare provider Euromedic by Warburg Pincus in 2008, when Ares Life Sciences and Merrill Lynch Global Private Equity jointly bought the company and where the seller requested the triple of its original equity investment (Unquote, 2008/b).

An example of successful **initial public offering** was the IPO of New World Resources (NWR), a Czech mining company, by which it raised Ł1.1 billion capital on the London, Warsaw and Prague stock exchanges. The company that was in the shareholding of Crossroads Capital and First Reserve Corporation reached a sevenfold oversubscription at the time of its floatation, which represented the largest IPO in Europe in 2008 (Unquote, 2008/b). According to Private Equity Intelligence (2006), when Enterprise Investors sold its 50% stake in Comp Rzeszów, a banking software company in an IPO on the Warsaw Stock Exchange, the sale yielded a 7.3x investment multiple and net proceeds of USD37.7 million.

7. THE PROSPECTS FOR VC&PE INVESTMENTS IN THE CEE REGION

During the almost two decades of its existence, the venture capital industry has been strengthened and with respect to its players, operating mechanism, function and efficiency it increasingly resembles to that of Western Europe. However, the level of VC&PE penetration is well below the European average, which still **offers substantial unexploited opportunities**. The question is whether in the context of the international credit crunch the positive trend that has been characteristic of recent years could be maintained or the distinguished interest shown by investors would cease.

Experts anticipated that in two to three years after the EU accession a major break-through would take place on the VC&PE market in CEE (Sormani, 2003, 2004). Apart from removing the administrative obstacles and a fast economic growth experienced in the countries in the region, another reason why they expected that the interest for the region would increase was that the North American and Western European VC&PE markets were already rather saturated, therefore in addition to Asia, this region also had the potentials to be a main attraction for investors. Positive impacts of the EU accession were awaited also because it was expected that the legal background and operational conditions of the market would be increasingly adjusted to the European norm. All in all, it was anticipated that the funds of institutional (end)investors targeting Europe would approach the CEE region's countries with reduced reservations due to reduced risks. In order to attract investors into the region, not only the transparent and foreseeable operation of the markets and the adaptation of community legal framework is essential but reliable performance figures are also required. However, these

figures are difficult to capture and should be handled with reservation because the data mostly apply to deals concluded without credit involvement, of which the profitability was lower at the offset. A clear indication of the reserves that lie in the CEE region's VC&PE markets was that the proportion of investments in the region compared to the GDP is lagging far behind that of the whole of Europe.

Experts' **positive expectations were reinforced** by the boom in the volume increase in capital made available for investments. Moreover, the overall upswing in VC&PE investments was indicated by the substantial rise in the inflow of foreign direct investment as well as the increased number of mergers and acquisitions of companies in the region. The inflows of foreign direct investment (FDI) in 2006 was USD60.2 billion and in 2007 it reached USD61.8 billion (UNCTAD, 2008). In addition to VC&PE investments exceeding all previous growth rates, the average value of investments also increased in the CEE region and with respect to the total of transactions, the average investment value is now similar to that of Europe.

The credit crisis that shook Western markets in the second half of 2007 redirected the focus on the importance of portfolio diversification. Keeping this in mind, it was not surprising that the attention of **investors seeking new geographical targets** for their investments **turned to the CEE region** that showed a relatively rapid growth rate. 2007 was already the sixth year in succession when the CEE region was capable of achieving a significantly faster growth rate as compared to Western Europe, which contributed to reducing the divergence between the two regions' living standards and productivity levels.

In addition to the rapid growth of the CEE region and its geographical proximity to developed markets, its cost levels and the availability of skilled labour also offered preferential conditions. These conditions were further reinforced by the fact that as an outcome of the accession of its ten countries to the EU, the legal framework for economy became similar on the markets of these countries and its business environment converged to that of the developed European countries. Mainly as a consequence of EU accession, **investors considered the region much less risky**. Fundraising in the CEE region began to boost dynamically, the region has fallen on the radar of (end)investors of funds. The likelihood of maintaining attractive returns on the region's VC&PE market – that raised the interest of investors – was stimulated by the relative moderate level of leverage on the region's private equity market and the relatively high growth rate achieved in these countries.

Since the end of 2007 global funds have appeared in the region, therefore competition first of all with respect to large-scale investments has substantially increased. This was manifested both by the stronger bargaining position of local enterprises and by the never-before-seen rise in investment values. At the same time a relatively lower number of real mega deals – above 200 million € – were concluded in the region. Given that the size of companies has increased and loans for major deals have become more easily obtainable, it was already apparent that

buyout deals being already dominant in other parts of Europe increasingly gain ground in the region. Whereas in the middle of the 1990s buyouts in CEE were characterized by the dominance of privatization deals, in recent years buyouts affected the spin-off companies of privately-held local and international conglomerates. The size of companies operating in the regions was more and more alike that of the companies in the continent, of which an increasing number had regional focus. Thus given their size, more and more companies have become a suitable targeted for large-scale buyout transactions.

In the second half of the decade the **specialization of funds started**, namely mezzanine-, sector-and buyout funds that have been long operating in Europe, began to form in the CEE region, too. Since the region's credit market has also increasingly caught up with the European market, **sophisticated credit products also became available** for the development of private equity market. European medium-sized banks provided credits in the region for private equity investments and these banks' balance sheet totals were in the beginning less affected by the credit crunch because in most cases they weren't involved directly in the activities of the US mortgage loan market. The CEE region's outlooks for returns were also positively influenced by the fact that investors here did not have to place their offers on auctions, that is to say transactions were not organized by investment banks. Auctions were typical only for the mega-deals, therefore investors had the chance to compete not only for the price when acquiring a deal but also for other conditions. The impact of the mortgage loan crisis was felt initially mainly in case of large buyouts and so it less affected deals with more conservative financing. Whereas the „small is better than nothing" logic gave rise to the significance of the region.

In recent years in the area of investments in the CEE region biotechnology, health care, media and telecommunication as well as commerce were the most popular. The **fast-growing private consumption formed the main basis for VC&PE investments**, therefore it was anticipated that the main area of growth in the future would be retail trading, consumer and financial services as well as pharmaceutical sector. There was a significant demand for capital in constructions of road-and railway and airport and in the building industry, which made infrastructure the second potential area.

Not even at the time when the region was becoming popular did investors show interest in all development stages of the companies. The **demand for start-up companies remained low** since the investment needs of these companies were often so minimal that they didn't reach the „inducement threshold" of VC&PE funds'. As a contrast, the interest was rather focused on companies in their maturity stage, although the **emphasis was put on large-volume buyout transactions**. When investors expanded their portfolio companies, they increasingly preferred additional buyouts, namely when a company group of regional importance is built from an existing portfolio company by acquiring other, additional

companies. This way investors could sooner achieve an efficient size that was inevitable for stable business operation and realizing the returns they expected.

Returns were achieved in the course of exiting investments and similarly to Europe, most exits in the region were also made by trade sale. The practice of the relatively high return yielding exists by IPOsor POs on a stock exchange, which was mainly attributable to the Warsaw Stock Exchange, became less frequent in the region as in the whole of Europe. Relatively new exit methods, such as secondary buyouts by private equity investors, have become also characteristic of the region's markets. The emergence of new pan-European and global funds meant not only increased competition for regional funds but also **broadened exit possibilities** for them in case of those of their portfolio companies, whose worldwide expansion goals required significant new capital investments.

Corporate experiences showed that it was not primarily the professional expertise in the given industry, but the **corporate governance method** that were introduced by the investors, by which they could achieve the increase in their companies' value, which they have had **acknowledged by the market as an increased price at the time of exit**. The investors' involvement in deals didn't simply mean providing capital for the portfolio companies, but by utilizing their international experiences and well-established background network, they could also track down the most suitable managers for their goals, who then were able to put the portfolio companies into orbit of further development. Consequently not only the portfolio company and its market, but actually the companies' management was „built" by investors and thus they implemented a more efficient operation of their companies. Apart from exploiting the financial opportunities provided by loans, returns in the region also stemmed from the joint impact of value creation based on the organic growth of financed companies, performance improvement and consolidation. Buyouts were less dependant on the level of leverage and financial engineering, bankruptcy risk was also lower because of the greater potentials for growth and leverage could be increased faster.

The recession in world economy and the position of certain countries within the region equally leave their mark on the potential prospects for VC&PE investments. As a consequence of the international credit crisis, leveraged growth has become the synonym for risk. Therefore the region's countries as emerging markets are pushed into a disadvantageous position against developed markets, regardless of the greater caution anyway taken so far with respect to investments in the region as well as the relatively more difficult availability of large-volume credits and the higher credit interest rates from the offset.

From among the emerging markets, CEE is especially defenseless against the unfavourable effects of the global crisis, given that this is the region that is most dependant on foreign capital. This is where inflow in recent times was the most rapid, where the balance-of-payments deficit was the highest and this is where the most typically banks are in foreign

ownership. At the same time there are major differences between the individual countries of the region in terms of the over heatedness of economy, the level of indebtedness and the magnitude of domestic demand. **The vulnerability of the region's countries** is increased by specific problems that were **further magnified by the credit crisis**: the balance-of-payments deficit (the Baltic countries), the large public debt (Hungary) and the high proportion of foreign currency-based retail loans (Hungary, Poland). Even recession is not impossible on these markets, whereas in other EU member states a massive slow-down in growth is anticipated. Problems for the whole of the region might evolve if a severe crisis develops in one or two economies that are in a worse position because then all the countries in the region may easily be „judged by the same standard" by investors and they may even withdraw from the financing of better-positioned economies.

As it arises from the nature of operation of the VC&PE industry, it can react to altered conditions only with a few years' delay, namely several years elapse from fundraising for investments to capital placement. So chances are very high that **the region's fall-back in the area of VC&PE investments will take place only in a delayed, slowed-down manner**. Basically a major part of the extremely large amount of capital raised for investments in the CEE region in recent times presumably will be still invested by VC&PE funds, therefore in the coming one-to-two years a similar magnitude of dramatic decline as seen on developed markets cannot be expected yet in venture capital financing in the region. However, **fundraising for new funds will become more difficult** due to the shortage of money of the most significant investors of funds, so new funds will be presumably set up in the CEE region with a lower level of committed capital.

Given the higher costs of obtaining loans, regional funds in the future will be able to finance less companies and the anyway lower proportion of credit of the regional investments presumably will not be further increased, either. In addition to this, the increasingly more difficult availability of development loans will drive more and more ventures towards equity investments. Thus – although VC&PE investors will probably have less resources than before – their bargaining position well be reinforced. VC&PE investors will be more cautious in selecting companies, evaluate their assets more conservatively, set higher return expectations for higher risks and ensure tighter control for themselves in undertaking investments.

Portfolio company financing is likely to undergo substantial changes, too. Since the opportunities of obtaining bank loans are increasingly narrowed for investors as well, in case of new investments – company acquisitions – the **proportion of equity** invested by funds as compared to the proportion of loan **will increase**. Regional investors – similarly to their European colleagues – are anticipated to **exclude** several industries from their investments in the region at the end of this decade, namely those **industrial sectors that are boom-dependant** and sensitive to changes. Thus in coming years possibly the building industry, the

auto industry and their subcontractors, the chemical industry and the media will be excluded from the target sectors of investors, whereas health care as well as IT and telecommunication will continue to be attractive target sectors (Vigh, 2008). The **"buy and build" strategy is expected to remain popular** in the region, given that the declining outlooks for portfolio companies will slow down their growth, which will in itself restrict sources that can be invested and simply the **narrowed exit options** for investors will prolong the period of financing. Because of the recession, company sales will probably become impossible and depressed prices will become common on stock exchanges. Under these conditions, it will not be worthwhile for investors to exit their portfolio companies via IPOs, however, exiting will not be easy for them by any other means, either.

The prospects for VC&PE industry in the CEE region will be determined by what extent regional countries will be able to cope with the deteriorating external conditions in the period of recession paired with a reduced willingness for risk assumption on the money market. Since the financial institutional system of the new EU member states in the region is mostly stable and because chances are very high that EU institutes would provide temporary aid from their central sources to states that happen to face difficulties, it is expected that the countries of the region will survive post-crisis critical years, although with a substantial slowed-down growth. **The Golden Age of the VC&PE investments in the CEE region,** however, **ended** in the autumn of 2008.

APPENDICES

Appendix 1.

The list of venture capital and private equity funds' published (end)investors, closed in the CEE region, in 2005-2008 April

PE House	PE Fund	Value (€ million)	Closing year	Main (end)investors
Enterprise Investors	Enterprise Venture Fund I.	100	2008	George Kaiser Family Foundation
Advent International	ACEE IV.	1000	2008	GIC Special Investments; AlpInvest Partners; CalSTRS; EBRD
Mezzanine Management	AMC II.	261	2008	EBRD; Mtropolitan Life; Raiffeisen PE; Caisse des Depot; AXA PE; Bank of Scotland
Mid Europe Partners	Mid Europe Fund III.	1500	2007	AGF PE; AlpInvest; ATP PE Partners; AP2; Auda PE; AXA PE; Caisse des Depots et Consignation; CAM PE; Citigroup; EIB; Fer; Government Investment Corporation of Singapore; Goldman Sachs Asset Management; HarbourVest; MetLife; OP Trust; Pantheon; TIAA; Unigestion
ALPHA Associates	ALPHA CEE II.	309	2007	EBRD; SPV Merrill Lynch International
The Riverside Company	Riverside Europe Fund III.	315	2007	MIT; TIFF; Abbott Capital Mangement; MN Services; Hartford Investment Management
Krokus Private Equity	Nova Polonia Natexis II.	100	2007	Nataxis PE; EBRD; InvestKredit; Suomi Mutual Life Assurance Co; Amanda Capital
Societe Generale Asset Management Alternative Investment	SGAM Eastern Europe Fund	156	2007	EBRD; Société Générale
SigmaBleyzer	SigmaBleyzer SouthEast European Fund IV.	250	2007	Goldman Sachs; UBS; LVMH; Bank Austria; InvestKredit; EBRD

GED Capital Development	GED Eastern Europe Fund II.	150	2007	Caja Madrid; Bank Austria Creditanstalt; Instituto de Credito Official; EBRD
Argus Capital Partners	Argus Capital Partners II.	263	2006	EIF; EBRD
Innova Capital	Innova IV. LP Fund	225	2006	LODH PE; Adveq Management; Northwestern University; Parish Capital; Gartmore Investment Manager
Argan Capital (BA Capital Partners Europe)	Argan Capital Fund	425	2006	Bank of America
Enterprise Investors	Polish Enterprise Fund Fund VI.	658	2006	Adams Street Partners; Allianz PE Partners; Bregal; HRJ Capital; Morgan Stanley AIP; Pantheon, SUVA; Wilshire; AlpInvest; CalPERS, EIF; HarbouVest; LGT; MetLife;
Royalton Partners	Royalton Partners II.	250	2006	EBRD
Mid Europe Partners (EMP Europe)	Emerging Europe Convergence Fund II.	650	2005	AlpInvest; ABN Amro; GIC; AIG Global Investment; AXA; MetLife; MNServices; Citigroup; EBRD; EIB; IFC

Data collected from AltAssets and Private Equity Intelligence

Appendix 2.

Characteristics of venture capital and private equity funds in the CEE raised between 2005 and 2008 April

Management Company	Fund Name	Value under management (€ million)	Closing year
Enterprise Investors	Enterprise Venture Fund I.	100	2008
Advent International	ACEE IV.	1000	2008
Mezzanine Management	AMC II.	261	2008
Bancroft Private Equity	Bancroft III.	250	2008*
ARX Equity Partners	ARX CEE III.	125	2008*
BaltCap	BaltCap PE Fund	57	2007*
3TS / Cisco Systems	3TS-Cisco Fund	30	2007*
Mid Europe Partners	Mid Europe Fund III.	1500	2007
ALPHA Associates	ALPHA CEE II.**	309	2007
Darby Overseas Investment	DCEMF	313	2007
The Riverside Company	Riverside Europe Fund III.	315	2007
Krokus Private Equity	Nova Polonia Natexis II.	100	2007
SGAM Asset Management Alternative Investment	SGAM Eastern Europe Fund	156	2007
AIG Capital Partners	AIG New Europe Fund II.	523	2007
3i	15% of Eurofund V.	750	2007
KD Private Equity	South Eastern Europe Fund	31	2007
SigmaBleyzer	SigmaBleyzer SouthEast European Fund IV.	250	2007
GED Capital Development	GED Eastern Europe Fund II.	150	2007
Argus Capital Partners	Argus Capital Partners II.	263	2006
Innova Capital	Innova IV. LP Fund	225	2006
Argan Capital (BA Capital Partners Europe)	Argan Capital Fund	425	2006
Enterprise Investors	Polish Enterprise Fund Fund VI.	658	2006
Royalton Partners	Royalton Partners II.	250	2006
Euroventures	Euroventures	51	2005
3TS Capital Partnersi	3TS Central European Fund II.	100	2005
Advent International	Advent CEE III.	330	2005
Bridgepoint Capital	BE3	2500	2005
Firebird Management	Amber Trust II.	150	2005
Darby Overseas Investments	Mezzanine Fund	100	2005

Mid Europe Partners (EMP Europe)	Emerging Europe Convergence Fund II.	650	2005
Advent International	Advent CEE III.	250	2005
Euroventures Capital	Euroventures Hungary III.	51	2005

*Not yet closed

** Fund of funds

Data collected from AltAssets and Private Equity Intelligence

Appendix 3.

The most significant venture capital and private equity funds in the CEE region by the size and by the primary investment target countries, 2008 April

Name of funds	**Primary target countries**
Fund of funds	
Alpha Associates	CEE*, Baltics, SEE**, Cyprus, Malta, Turkey
Upper-mid-funds	
Mid Europe Partners	CEE, SEE, Baltics
Advent International	CEE, SEE, Turkey
Enterprise Investors	CEE
Middle-sized funds	
3TS Capital Partners	CEE
Argus Capital Partners	CEE, SEE, Turkey
Askembla Asset Managemenet	Baltics
Balkan Accession Management Co.	SEE
Bedminster Capital Management	SEE, Turkey
Copernicus Capital Partners	SEE
DBG Eastern Europe	CEE, SEE
EuroVentures	Ukraine
Global Finance S.A.	SEE, Cyprus, Greek, CEE
Innova Capital Partners	CEE, Moldova
Royalton Partners	CEE, Baltics,
SigmaBleyzer	CEE, Ukraine
Turkven Private Equity	Turkey
Mezzanine funds	
Accession Mezzanine	CEE
Darby Overseas Investments	CEE
Syntaxis	CEE

*Central and Eastern Europe

**South and Eastern EuropeData collected from EMPEA, AltAssets and Private Equity Intelligence

Appendix 4.

The movements of fund managers among regional and global funds in 2006-2008 April

WHO HIRED	FROM WHERE	DETAILS
CVC Capital Partners	Advent International	Istvan Szoke joined April 2008. More hires likely.
Carlyle Group	3TS Capital Partnerset al	Opened Warsaw office in August 2007; three hiresin November; Janusz R Guy (ex pharma); Aleksander Kacprzyk (ex private investment firm); Piotr Nocen (ex 3TS).
3i	Advent International; Rotschild Polska	First deal February 2007; Euro-Druckservice. Zoltan Toth joined in April 2007; Andrzej Sztostak joined in July.
ICG	Baring Corilius Private Equity (formerly known as Baring Private Equity Partners)	Aleksander Ference joined in March 2007 to originate and execute CEE mezzanine.
Bridgepoint	Advent International	Khai Tan joined in February 2007 to head new Warsaw office; first deal done November (CTL).
Societé Générale Asset Management (SGAM PE)	Baring Corilius Private Equity	Acquired the entire teamin January 2006.

Source: Kimberly Romaine: If you can't beat 'em, join 'em, Private Equity Europe, May 2008, Issue 96, p. 16-17.

Appendix 5.

The split of venture capital and private equity investments in the CEE region* and in the EU by sector, 2006-2007 (in percentages)**

Szektorok	2006		2007	
	CEE	EU	CEE	EU
Agriculture	1,9	0,1	0,4	0,6
Chemicals & materials	41,0	2,9	7,6	3,9
Life sciences	0,2	10,7	10,0	10,4
Computer & consumer electronics	3,0	8,9	5,4	5,0
Communications	29,2	13,8	24,0	11,7
Consumer goods & retail	4,0	15,4	6,2	12,7
Consumer services: other	0,0	0,0	4,4	10,8
Business & industrial products	8,5	16,2	11,4	13,8
Business & industrial services	0,6	15,3	0,5	12,5
Transportation	0,7	2,9	10,0	4,4
Construction	2,2	2,2	2,2	3,0
Energy & environment	0,6	2,3	4,2	4,8
Financial services	3,8	3,3	10,7	4,9
Real estate	0,0	0,0	3,0	0,1
Unknown	4,3	6,0	0,0	1,3
Total investment	100,0	100,0	100,0	100,0

*Investments in the CEE countries.
**Investments by fund managers based in the EU.
Source: PEREP_Analytics for 2007 data, EVCA/ThomsonReuters/PricewaterhouseCoopers for data of the previous years.
Based on EVCA (2008) and EVCA Yearbook (2008)

Appendix 6.

The list of significant private equity investments in the CEE region in 2006 – 2008 April

Name of portfolio company	Country of portfolio company	PE House	Year of investment	Deal size (€ million)*	Stake (%)	Sector
Euromedic	Hungary	Merrill Lynch/ASL	2008	800,0	100	healthcare provider
Centrum Medyczne LIM	Poland	Mid Europa Partners LLP	2008	NA	100	medical services provider
GTS Central Europe	Poland	Columbia Capital, M/C Venture Partners, Innova Capital	2008	NA	NA	telecommunication services provider
LaborMed Pharma SA	Romania	Advent International	2008	123,0	100	pharmaceuticals producer and distributor
CertAsig	Romania	Royalton Partners	2007	NA	95	insurance company focused on property insurance
NetCentrum	Czech Republic	Warburg Pincus	2007	NA	NA	internet company and operator
Expander Sp. z.o.o.	Poland	Innova Capital	2007	115,3	60	financial consultancy and insurance broker
Budapest Airport Rt.	Hungary	CDP Canada, GIC Singapore	2007	1853,0	75	airport operator
Lattelecom SIA	Latvia	Blackstone Group Holding LLC	2007	424,8	51	telecommunications
BorsodChem Rt.	Hungary	Permira, VCP	2006	674,3	100	producer of chemicals and PVC
Eckes & Stock GmbH	Czech Republic	Oaktree Capital Management	2007	NA	100	alcoholic beverages producer
Zabka Polska SA	Poland	Penta Investments	2007	131,6	100	convenience stores chain
Bulgarian Telecom Company	Bulgaria	AIG Capital Partners	2007	1080,0	65	telecommunications
Antenna Hungaria Rt.	Hungary	Axa Private Equity, Charterhouse Capital Partners	2007	327	100	broadcasting provider

SBB Srpske Kablovske Mreze	Czech Republic	Mid Europa Partners, Bedminster Capital	2007	200	100	cable TV and broadbend internet service provider
Bite Group, a.s.	Baltics	MidEuropa Partners	2007	450	100	telecommunications
ITERA Group	Romania	Sun Capital Partners	2006	158	25	producer and trader of natural gas
Ceske Radiokomunikacije	Czech Republic	Mid Europa Partners	2006	1190	100	provider of telecommunication services
Aero Vodochody a.s.	Czech Republic	Penta Investments	2006	446	100	manufacturer of aircraft
Bratislava and Kosice Airports	Slovakia	Penta & Raiffeisen Zentral Bank	2006	305	66	airport operator

*Transaction value contains the equity and the loan part as well.

Data collected from Deloitte (2006, 2007,2008); MergerMarket, AltAssets, Köhler, P. (2007) p. 6.

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