UNIVERSITY OF BABEŞ-BOLYAI CLUJ-NAPOCA

FACULTY OF ECONOMIC SCIENCES AND BUSINESS ADMINISTRATION

FINANCE DEPARTMENT

Doctorate thesis
- Short presentation -

PRIVATE EQUITY
PRIVATE INVESTMENTS (WITH RISK CAPITAL)

Phd. Student:
Tudor Popescu

Scientific coordinator:
Proff. Ioan Bătrâncea

Cluj-Napoca,
2012

TABLE OF CONTENTS

ABBREVIATION LIST………………………………………………………………… 4

INTRODUCTION…………………………………………………………………… 5

CHAPTER 1. THEORETICAL FRAMEWORK FOR PRIVATE EQUITY OPERATIONS …………………………………………………………………… 10

1.1. Private equity activity…………………………………………………... 10
1.1.1. The definition of private equity activity…………………………………….. 10
1.1.2. Operations of private equity………………………………………………… 13
1.1.3. Participants on the private equity market…………………………………… 18
1.1.4. The cycle of private equity………………………………………………….. 32
1.2. The history of private equity activities……………………………………… 36
1.3. The evolution of the private equity market…………………………………… 42

CHAPTER 2. SELECTION, EVALUATION AND ORGANIZATION OF THE INVESTMENT…………………………………………………………………….. 53

2.1. Selection of potential investments…………………………………………… 53
2.2. Evaluation of the selected company…………………………………………… 55
2.2.1. Asset based evaluation (patrimony)……………………………………….. 62
2.2.1.1. Adjusted net asset method…………………………………………… 62
2.2.1.2. Liquidated net asset method……………………………………….. 70
2.2.2. Income based evaluation…………………………………………………….. 71
2.2.2.1. Risk concept……………………………………………………… 75
2.2.2.2. Risk-free rate and risk bonus……………………………… 79
2.2.2.3. Funding cost……………………………………………………….. 80
2.2.2.4. Future growth estimation…………………………………………… 86
2.2.2.5. Terminal value……………………………………………………… 88
2.2.2.6. Share evaluation model using up to date dividends………..………… 89
2.2.2.7. Company evaluation based on capital cost and adjusted present value.. 91
2.2.2.8. Specific case: private companies' evaluation (non-transactioned)……. 94
2.2.3. Comparison based evaluation (relative)…………………………………… 97
2.2.4. Option based evaluation…………………………………………………… 101
2.2.5. Adjustments applied to resulted value and outcome reconciliation………… 105
2.3. Establishing investment terms………………………………………………… 108

CHAPTER 3. INVESTMENT MONITORING……………………………….. 112

3.1. Economical-financial analysis of the company…………………………….. 112
3.1.1. Production activity and materialization analysis…………………………….. 115
3.1.2. Production costs analysis……………………………………………………. 123
3.1.3. Profitability analysis……………………………………………………… 126
3.1.4. The company's financial-patrimonial situation analysis…………………… 132

3.1.5. The company's internal potential analysis………………………………….. 136
3.1.6. The company's risks analysis……………………………………………... 143
3.2. Restructuring approaches………………………………………………….. 147
3.3. Main models to increase the company's value………………………….. 157
3.3.1. The restructuring pentagon………………………………………………. 157
3.3.2. Potential and resistance evaluation model…………………………………... 159
3.3.3. The value chain…………………………………………………………. 160
3.3.4. The value network model……………………………………………… 162

CHAPTER 4. INVESTMENT FRUCTIFICATION AND PERFORMANCE MEASUREMENT……………………………………………………………….. 165

4.1. The exit stage in the private equity cycle……………………………………… 165
4.2. The agent theory as a frame for the exits of private equity………………….. 168
4.3. The moment to perform the exit……………………………………………… 170
4.4. Choosing the type of exit…………………………………………………….. 172
4.5. The exit process…………………………………………………………… 174
4.5.1. Planning and starting the exit process……………………………………….. 175
4.5.2. Fulfilling the exit process…………………………………………………. 180
4.5.2.1. Direct sales and secondary takeovers – fusion or acquisition type of exit…………………………………………………………………….. 181
4.5.2.2. Initial public offer………………………………………………….. 186
4.5.2.3. The buy-back……………………………………………………….. 196
4.5.2.4. The recapitalize…………………………………………………….. 196
4.6. Final aspects regarding the exit…………………………………………… 198
4.7. Measuring the investment performance…………………………………… 200
4.7.1. The "J" curve…………………………………………………………… 200
4.7.2. Private equity activity performance evaluation…………………………... 201

CHAPTER 5. CASE STUDY………………………………………………... 209

5.1. Presentation of the case study elements ……………………………………… 209
5.2. Company valuation at the three major moments ……………………………. 212
5.2.1. Company valuation in 1997 ………………………………………………. 212
5.2.2. Company valuation in 2003 ………………………………………………. 221
5.2.3. Company valuation in 2006 ………………………………………………. 229
5.3. Investment monitoring …………………………………………………... 237
5.4. Investment exit ……………………………………………………………. 246
5.5. Measuring investment performance ……………………………………….. 248

CONCLUSIONS…………………………………………………… 253

DIAGRAMS LIST, CHARTS, TABLES……………………………..……....... 259

BIBLIOGRAPHYCAL REPHERENCES…………………………………………… 262

KEY WORDS: companies' funding, private equity, expertise, venture capital, buyout, company evaluation, investment monitoring, economical-financial analysis, company restructuring, investment fructification, investment performance measurement.

INTRODUCTION

This doctorate thesis proposes the study of the private equity phenomenon, the different approaches regarding the private equity activity, the specific techniques of every stage throughout a private equity investment, as well as the following of an investment on a real case, applied in a case study. The originality of the thesis consists in the integrating presentation of all the stages of a private equity investment, by capturing the specific aspects and procedures of every stage, as well as applying these procedures on a real case, namely SC Terapia SA Cluj-Napoca.

The thesis is composed of four parts (Presentation of the Private Equity industry; PE operation techniques; Case study; Conclusions) and it is structured in five chapters and conclusions.

In **chapter 1**, is presented a description of the private equity industry. Thus, the **private equity term** represents in a classical way any investment in the share capital of a company that is not listed on the stock market. The private equity funding investment was originally designed to finance ideas or companies which did not have access to classical forms of funding. Subsequently, the acceptation of the term changed, so that private equity operations also include now companies listed on the stock market. Beside the funding component, private equity investors also bring an expertise contribution to the companies in which they are investing. After defining the term, which is controversial and its acceptance is in a continuous change, the **specific operations of the private equity activity** are presented, divided into two categories – venture capital and buyout, depending on the quota held in the share capital of the company in the portfolio (minor, respectively major). The operations have their specific risk and reward, being considered at the same time art and science. Further, we have the three major categories of **participants on the private equity market,** which are represented by the demand, the offer and the intermediaries. Thus, as investors we identify the pension funds, investment banks, insurance agencies, rich families, etc. The issuers are companies situated in different stages of development and financial and operational stability which need funding and can not or do not want to apply to classical methods of funding. The intermediaries are those who facilitate the contact between the demand and the offer, the private equity funds being between them, managed by administrative firms (private equity firms), as well as consultants involved in the private equity process. In the last part of the definition of the phenomenon, there is the **private equity cycle** (which will be dealt with in the thesis), being the process through which the necessary investment money are raised, the investments are realized, followed and liquidated and the earnings are distributed, and then the cycle will be repeated. In the final part of the chapter, the **evolution in time of the private equity activity** is presented, surprised in the modern period as four big cycles of boom and bust, following the global economical cycle, as well as a quantitative evolution of the market in the recent period.

Chapters 2, 3, 4, present the techniques of selecting, evaluating, accomplishing, monitoring, liquidating and measuring the performance of the private equity investments.

Thus, are described in detail the stages that a private equity investment must follow, according to the private equity cycle presented in chapter 1. After selecting the possible investments, follows their **evaluation**. The evaluation begins with an intense process of gathering information about the company and the environment in which it activates, followed by a detailed due diligence, after which the three evaluation methods (asset based, income based and comparison based) are applied, generating values for the analyzed company, and after the reconciliation of these values, the basis of discussion between the investors and the company regarding the value of the company and the structuring of the transaction must be established. **Monitoring the company** after the investment differs from investor to investor and depending on the share held from the share capital (from a passive involvement and an advisory part in the case of a minor ownership, to an active involvement, with major restructurings in the case of a major ownership). The purpose of this monitoring is the increase in the company's value after the acquisition and the preparation of the owned package to be sold. All the decisions regarding the company's activity are taken after a detailed analysis of the internal and external status of the company. **The exit** (fructification or liquidation of the investment) is a complex process with the purpose of getting of out the investment with the highest profit possible, and it can be realized in different ways: merging with another company, listing the company in the stock market through a public initial offer, selling the package back to those from which the initial acquisition has been made, or recapitalizing the company. After accomplishing the exit, we have to **measure the performance of the investment**, by calculating specific indicators, in absolute or relative measures based on the cash fluxes generated by the investment.

Chapter 5 presents a case study based on real data, of a Romanian company which was the object of several private equity operations and namely S.C. Terapia S.A. Cluj-Napoca. In this chapter we follow all the stages present in the previous chapters, applying the evaluation methods, monitoring, exit and measuring the efficiency of each stage.

The last part presents the conclusions of the whole theoretical approach. These are presented in two parts, the conclusions to the theoretical part and the conclusions to the applied part of the thesis.

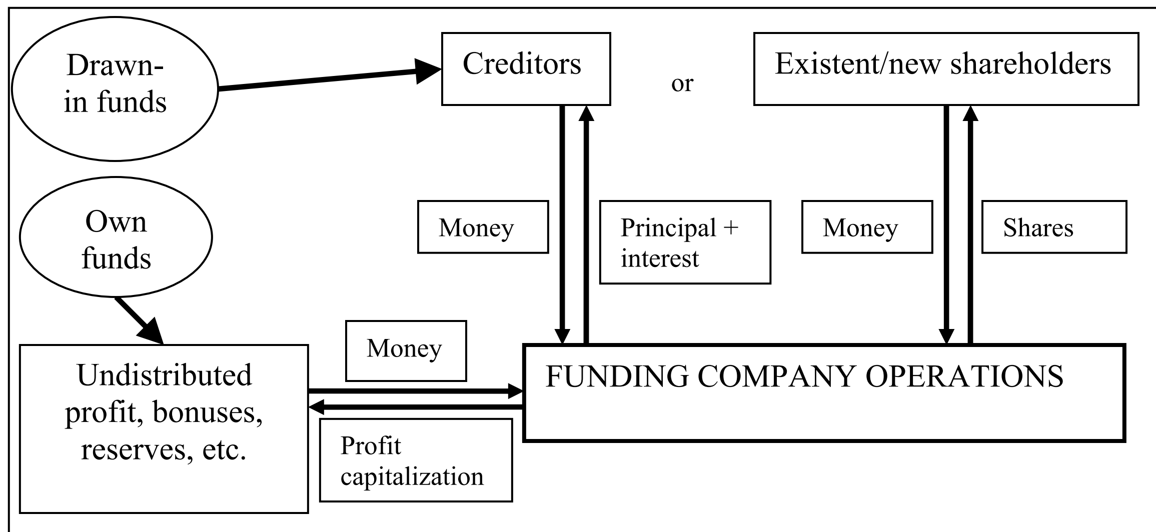
CHAPTER 1. THEORETICAL FRAMEWORK FOR PRIVATE EQUITY OPERATIONS

As it is known, funding the operations of a company (current and for development) can be realized on two different ways: using **personal capital** (already in the company), or using **drawn-in capital** (from outside the company). In the case on funding with *personal capital*, the sums already in the company, and at its disposal (such as undistributed profits from previous years, issue bonuses, reserves, etc.), are used to finance current activities and new projects or developing the company. For funding, the company can also draw-in outside capital. Funding using *drawn-in* capital can be made in two ways: either by applying to bank loans or bonds, either by appealing to existent or new (investors) shareholders, by raising the share capital.

Any form of funding must be rewarded. If the funding is done using the internal resources of the company, this generates future profits inside the firm, which are

capitalized. If the funding is done with drawn-in funds, we have two situations: in the case of funding through bank loans or bonds, which are not contracted for a part of the share capital of the company, these are reimbursed by paying the loan, alongside an interest; if the funding is done by appealing to new or existent shareholders, these receive in exchange share in the company, being paid in dividends to which is added the diagram achieved by the eventual sale of the shares. The next diagram presents the method of funding the company's activities and rewarding the financial sources:

Diagram 1. **Funding the company**

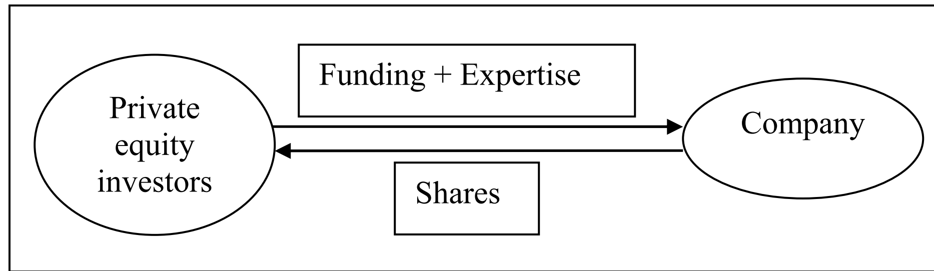


(*Source:* own work)

Private equity funding is an alternative form of funding companies, besides classical methods of funding (bank loan or bonds), which is done in exchange of a part of the share capital of the company. This funding is realized by investors interested in the company. The diagram resulted by these investors is represented by the dividends which they cash in and the sums of money that they receive by selling the packages they own at higher prices than the acquisition price. This gap between the two values (the acquisition and the sell price) is due to the active involvement of the investors in the company's activity, resulting in the increased value of the firm and implicitly in the increased price of the shares.

Another essential feature of the private equity activity is that besides the funding activity, the private equity investors also offer expertise to the companies in the portfolio. Thus, they get involved in the activity of the company to contribute to the development and the increase of its value.

Diagram 2. **Private equity activity**



(*Source:* own work)

The definition of the private equity activity has changed in time, including today any investment in share packages of companies, listed or not, accompanied by the active involvement of investors in their activity, through a well developed strategy, with the express purpose of helping in the increase in value of the respective companies and of realizing diagram by selling owned packages at a higher price than the acquisition one.

Being an alternative form of funding, this method is usually used by companies which can not access the classical forms of funding. Also, it is considered as being the most expensive form of funding, because you have to yield a part of the business.

Thee private equity activity can be divided into two categories, depending on different criteria: venture capital and buyout. In the next table we will present the main features of the two forms of funding:

Table 1. **The main features of the venture capital and buyout operations**

Form of funding	Venture capital	Buyout
Owned share	Minor (under 50%)	Almost always major, over 50% (minor holdings in the case of “development capital” or “expansion capital”)
Expansion of the firms in which we invest	Relatively small companies in course of development	Big, mature companies
Level of involvement	Passive (advisory part – know-how, business relationships)	Active (involvement in the activity of the company, going all the way to restructuring)
The stage in the life of a company in which the investment is being made	Early (start-up, establishment, early-stage, development, late-stage, expansion)	Advanced (mature or in bust)
Sectors in which to invest	Emerging sectors, with a high capacity of innovating	Traditional, mature, settled sectors, with a well known business model
Using loaned money	Almost never	Almost always
Necessity of profit for	Not essential in the	Essential, for paying the debts

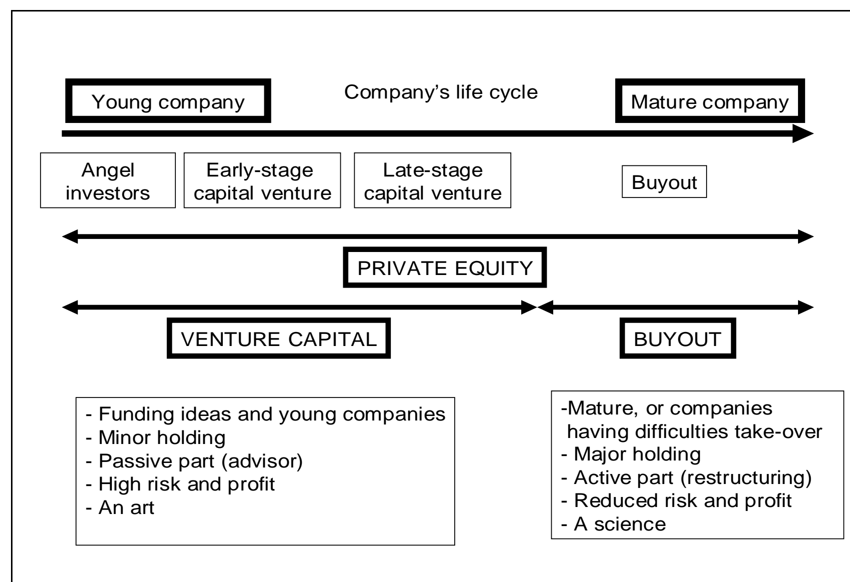
the company in the portfolio	beginning	
Funding stages	Continuous funding through rounds of financing	Single funding
Advantageousness and risk profile	High (due to the uncertainty about the future of the company)	High, but lower then in the case of the VC (high, due to the necessity of reimbursing the acquired credit from the acquisition of the company, and lower due to the higher uncertainty about the future of the company)
Types of people involved	Former managers, business owners	CFO's, Accountants
Advantageousness of the investment depends on	Flair of the investor, sense of business(art)	Preparing an accurate financial plan (science)

(*Source:* own work)

The two types of operations, even though they posses different features, have the same objective, namely acquiring profits, and follow the same pattern, buying a share package, raising the value of the package and selling it at a higher price.

Private equity investments can be realized in any moment in the life cycle of a company: from the establishment of the company, to the initial development of the products, the growth, the maturity, all the way to the bust of the company.

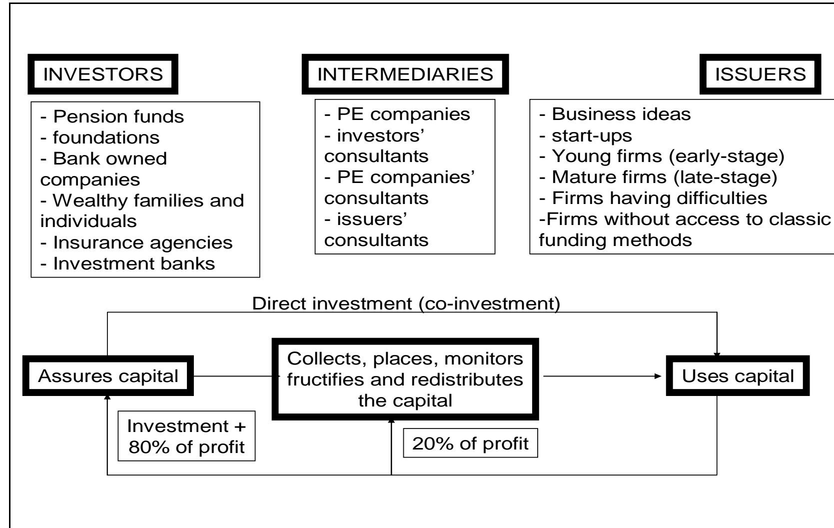
Diagram 3. **Operations regarding private equity**



(*Source:* own work)

The participants on the private equity market represent, like on any other market, the demand the offer and the intermediaries of private equity.

Diagram 4. **Private equity market**



(*Source:* own work)

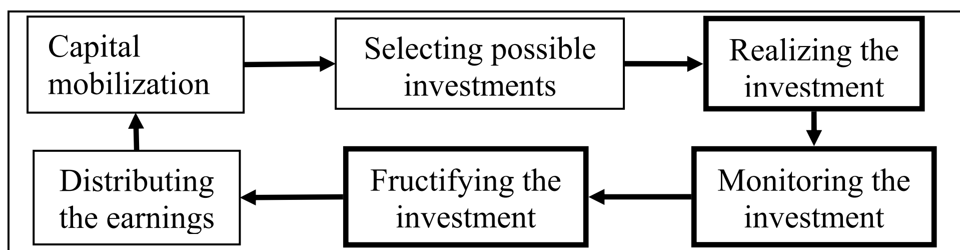
Thus, **the investors** are the participants on the market with sums of money which gives them at a certain point to the private equity action. They are represented by the investment funds, investment banks, insurance agencies, wealthy families and individuals, etc. Private equity types of investments that they realize, can be direct investments in companies, or can be made by applying to the services of an intermediary.

The issuers are companies or ideas that are in need of funding in order to work or develop. They use the investors' money, offering in exchange parts of their share capital.

The purpose of the **intermediaries** is to facilitate the relationship between the investors and issuers and to generate as many transactions as possible. The actual form of organization of the intermediaries is as management companies that manage funds of private equity. These companies are established by people with a vast investment experience, and are former investment bankers, former business owners, entrepreneurs, CFOs, etc. and manage private equity funds that can reach astonishing sums. In exchange for their services, these companies perceive management fees and a share of the obtained profit (usually between 1% and 3% per year from the managed funds, management fee and 20% of the profit).

The activity of the managements companies has a redundant feature, the stages of a fund (or an investment) following a cycle, called the private equity cycle.

Diagram 5. **Private equity cycle**



(*Source:* own work)

Thus, the cycle begins with mobilizing the necessary capital for future investments, continues with selecting and realizing the investments, monitoring and raising the value, fructifying the investments and ends with distributing the earnings, and then the cycle is restarted. Depending on the specifics of the fund, the private equity cycle can last between 3-5 years in the case of the buyout type and 7-10 years in the case of venture capital type of investments.

Regarding the evolution in time of these kind of operations, they track their origins back to the times of the industrial revolution, when commercial banks from Europe and later America have funded in the 1850's industrial projects an the construction of the Transcontinental Railroad. With all these, the activity starts to develop only after the Second World War, when we can talk about the modern activity of private equity. In literature, the evolution of the activity from then until the present can be divided into four big stages, as it can be seen in the next table:

Table 2. **Stages of modern private equity activity**

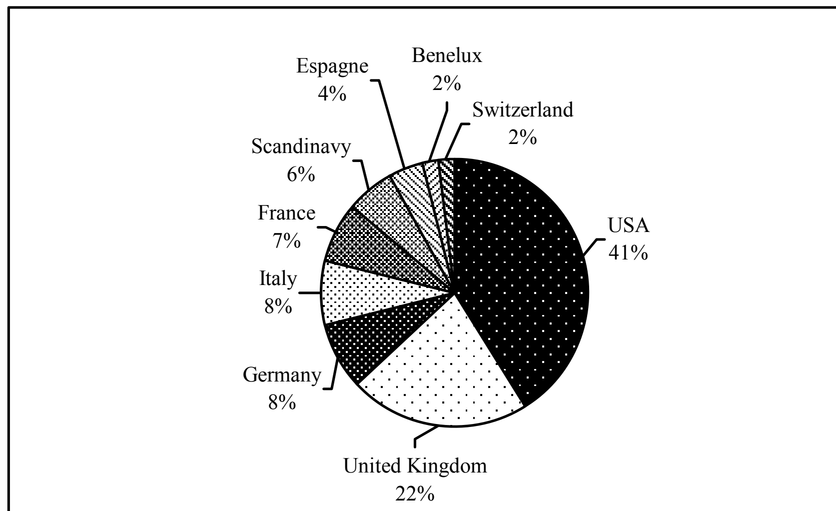
Period	Stage	Features
1946-1981	Early stage	- small volumes of PE investments; - basic organization structures; - limited recognition of PE operations
1982-1993	Boom and bust	- exploding development of the buyout activities; - funding through "junkbonds" (speculative bonds); - negative part of "corporate raiders"; - bust of "leveraged buyout" industry
1992-2002	Boom and bust	- origins in the bust of the real-estate market in 1990; - "insider traders" scandal; - debt crisis; - rise in the number of PE companies; - cycle culminates with the speculative bubble "dot-com"
2003-2007	Boom and bust	-origin in the bust of the "dot-com" bubble (2002); - accomplishment of "gigantic" transactions; - institutionalization of PE activity; - listing of PE Blackstone Group at the New York stock market (1997); - closing with mortgage crisis

(*Source:* own work)

After the year 1998, it entered a cycle, which is not yet closed and is not yes captured in literature.

As activity volume of private equity activity worldwide, The United States hold the biggest weight, with more than 41% of the operations carried.

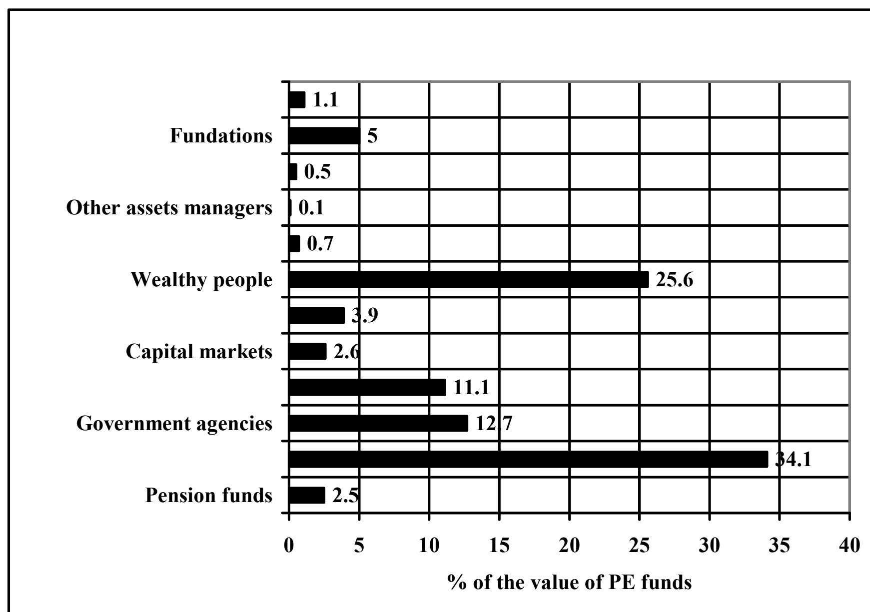
Chart 1. **Countries share in the private equity operations**



(*Source:* www.evca.com)

As a source of funding private equity operations, the most important contributors are the wealthy persons.

Chart 2. **Sources of private equity operations funding 2011**

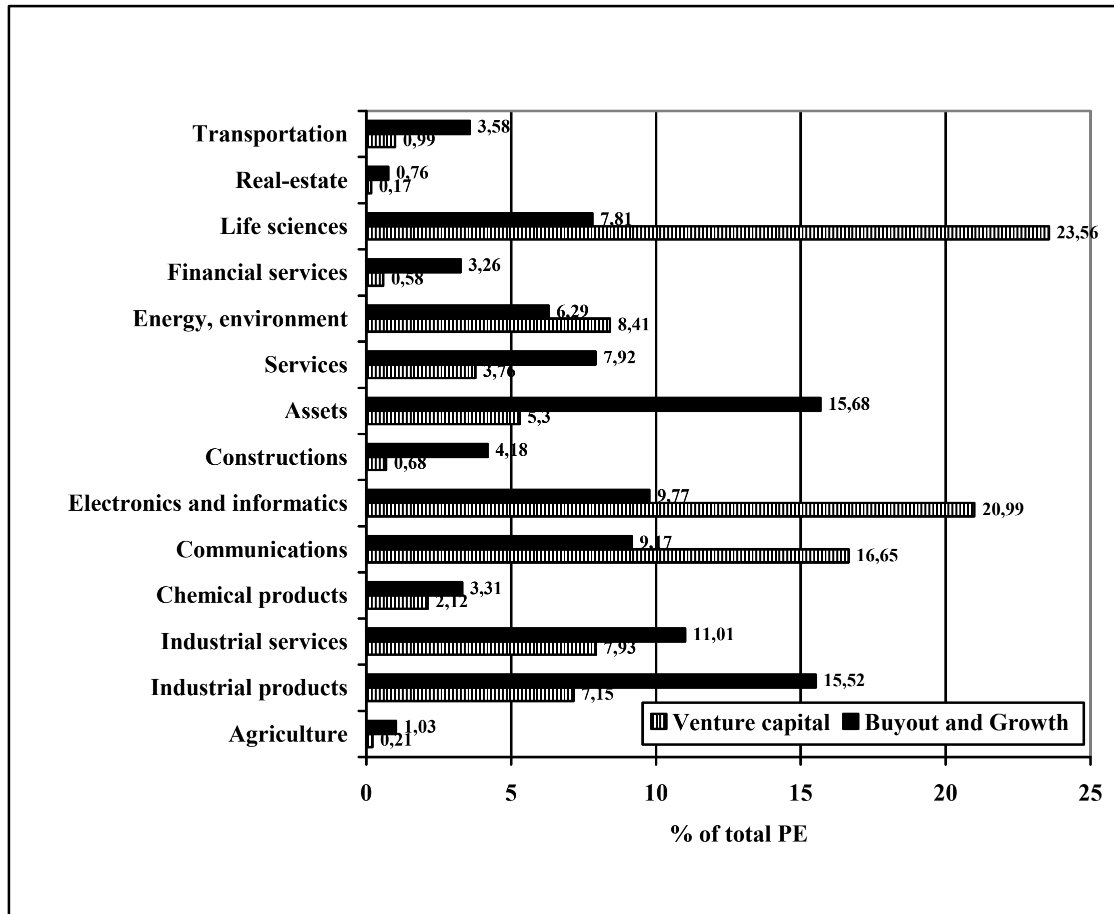


(*Source:* www.evca.com)

Investments are done in fields with great innovative capacity (such as life sciences – medicine, pharmacy, etc. or electronics and informatics), in the case of venture capital

investments, or mature fields, with a well known business model (such as commodities, or industrial production), in the case of buyout investments.

Chart 3. **Private equity investment sectors 2011**



(*Source:* www.evca.com)

The share in PIB of private equity activities is low, the European average not passing 0.5%.

CHAPTER 2. SELECTION, EVALUATION AND ORGANIZATION OF THE INVESTMENT

Generating potential investments can be done using one of the four methods:

a. experienced investors rely on their already well established contact network from collaborating companies, partners, etc. These kinds of opportunities (from reliable sources) are taken much more serious than other proposals. A business plan received this way is not just passed from one investment firm to another; it is more carefully analyzed, avoiding the situation where it can reach other companies, because that would lead to competition between the firms for the transaction, resulting in a higher buying price.

b. investment companies are invited to participate in the transactions of another firm; these types of "**syndicated**" transactions allow investment firms to limit their

exposure and diminish the risk by allocating only a part of the necessary money. Companies which make transactions together are strongly aligned and have worked together in the past. It is very important that investing partners know very well each other's motives and goals because these are going to guide them in the decision making related to the company they are investing in. This is also very important for the exit. Complications arise when partner companies have different objectives or risk tolerance (for example, during the development stage of the company, if a competing company is interested buying it, one of the partners may want this sale to assure a certain gain, while the other can refuse the offer, continue with developing the firm, then selling it at a higher price or listing it on the stock market);

c. the financial market intermediaries (brokers, accountants, lawyers, investment bankers) offer investment firms a lot of opportunities. Many brokers help companies in need of an investor by presenting their data in an easy to accept and understand form to the investment companies. Brokers are also interested in completing the transaction at the highest price possible, because this affects their bonus, and therefore presents the offer to multiple investors, in order to create a competition between them.

d. investment companies receive business plans directly from companies. The probability of companies receiving funding this way is very slim. Usually, investors choose companies from those which were recommended to them or which come from a much more certain source.

In one year time, an investment company receives thousands of business plans. Less than 10% of these pass the preliminary analysis stage and go through the **due diligence** process. From all these, less than 10% receive funding.

Most of the companies rank the transactions according to their interest, based on certain investing criteria established in time in the company. These criteria may be:

- activity field
- growth potential
- development stage
- competitive advantages
- management
- transaction terms

An entrepreneur may speed up the process by presenting a concise and complete document which addresses directly to the interests of the investors. The entrepreneur's ability to communicate his ideas efficiently through a **business plan** is critical to receiving funding.

After a business plan passes the first stage, the investment company begins an exhaustive analysis of the field, the management and financial projections of the potential investment. This due diligence process may also include hiring consultants. The process may last between 30 and 90 days for a company which receives funding.

Most investment companies consider the **management** a very important element in the success of the investment. The management is assessed based on qualities such as:

- managing capability
- experience
- reputation

- known accomplishments
- team spirit
- professional ethics
- devotion
- integrity

Investment companies use a variety of methods to verify information supplied by the company, including thorough interviews, background checks on the personnel, private investigators, etc. During the interview, the entrepreneur has to provide evidence regarding the qualities of the business plan and the management capability to see it through.

Once the potential investments are selected, follows an intense analysis to determine if they truly correspond to the profile of the investor and if they have the potential to generate a profit. Thus, there is the evaluation of the companies, the purpose of the process being to establish the worth of the companies and their growth potential.

Business evaluation is a crucial component in the private equity activity. Before entering in any business, an evaluation is mandatory to determine the basis of discussion and the entering price. Furthermore, a business evaluation is completed at the moment of the exit (mainly in the case of the companies listed on the stock market).

An asset must be acquired for the incomes that it may generate in the future. The value perception has to be reality-based, which means that the paid price must reflect the cash flow that will be generated by the investment.

The evaluation process of a business is a complex one, with several stages, each one having the purpose to complete the ensemble image of the business. The process starts by identifying, by the assessor, the company which needs to be evaluated and the basis of evaluation and ends by transmitting the conclusions of the evaluation.

Thus, the stages are as follows:

Table 3. **Stages of the evaluation process**

<table>
<tr><td colspan="6">1. DEFINING THE PROBLEM</td></tr>
<tr><td>a. Identifying the company</td><td>b. Identifying the evaluated activity package</td><td>c. Purpose of the evaluation, client / recipient of the report</td><td>d. Defining the estimate value</td><td>e. Date of evaluation and date of the report</td><td>f. Hypothesis and limitative conditions</td></tr>
<tr><td colspan="6">2. COMPANY’S DIAGNOSIS</td></tr>
<tr><td>Commercial</td><td>Judicial</td><td>Operational</td><td colspan="2">Human resources and management</td><td>Financial-economic</td></tr>
<tr><td>- estimation of the current and potential company’s market and it’s market</td><td>- analysis of the legal aspects regarding the company’s</td><td>- analysis of the technical factors, manufacturing technologies and operational organization of</td><td colspan="2">- knowing the human resources and management potential</td><td>- accomplished performances and risks
- adjusting historical financial situations</td></tr>
</table>

<table>
<tr><td>position</td><td>activity</td><td>the activity</td><td></td><td>- comparison with similar companies</td></tr>
<tr><td colspan="5">3. APPLYING THE THREE APPROACHES</td></tr>
<tr><td colspan="2">Asset</td><td colspan="2">Income</td><td>Comparison</td></tr>
<tr><td colspan="2">- adjusted net asset (ANA)
- liquidated net asset (LNA)</td><td colspan="2">- profit capitalization
- up-to-date financial flows</td><td>- comparison with similar companies' transactions or previous transactions with the company under evaluation</td></tr>
<tr><td colspan="5">4. VALUE RECONCILIATION AND FINAL VALUE ESTIMATION</td></tr>
</table>

(*Source*: after Robu, 1999)

Asset based approach consists of estimating the value of a company using methods based on the market value of every asset of the company from which we subtract its total debt. This approach is based on the subtraction principle, according to which an asset is not worth more than the cost of replacing all of its components. Therefore, a buyer will not pay for a property (business) more than it would cost him to create an entity with an equivalent utility.

The balanced values of the assets and debts have to be adjusted to current, real values, in order to accomplish a reliable evaluation of the company. The applied adjustments are based on one of the following value premises:

- the continuity of the exploitation, which will involve, in the adjusted net asset (ANA) approach, the evaluation of all the assets and debts at the market value or another adequate current value;
- liquidation, which will involve, in the liquidated net asset (LNA) approach, the evaluation and debts at the net value of the market.

With the asset based approach, the accountant balance, based specially on cost expressing values, is replaced with the balance that reflects all the assets, corporate and non-corporate and all the debts, at their market value or an adequate current value in the case of adjusted net asset (ANA) method or at their net market value in the case of the liquidated net asset (LNA) method.

With the asset based approach we recognize two basic methods: adjusted net asset (ANA) and liquidated net asset (LNA).

$$\mathbf{ANC = (At + \Delta A) - (Dt + \Delta D)}$$

Where:
At = total asset of the accountant balance
ΔA = sum of adjustments of the asset's patrimony elements
Dt = total debts of the accountant balance
ΔD = sum of adjustments of the debt's passive elements

Liquidated net asset represents a particular evaluation case, for the companies that cease their activity.

The liquidation operation can be conceived in two situations:

a) The company is in difficulty and according to the legal procedure it ceases its activity. To this purpose, the liquidated net asset (LNA) is established as a

difference between the evaluated value of all the assets and debts (including all the costs of the liquidation);

b) The company is in temporary difficulty, but it can recover. In such a situation, it is liquidated as a company, but it will continue to function, by merging with another company or with new owners.

In the last scenario, the value of the company is determined by bringing up to date the difference between the term value (Vt) and the capital invested by the buyer in order to save the company (Kinv):

$$V = \frac{Vt}{(1+a)^n} - Kinv$$

In which:
Vt = the term value, established through an evaluation method
a = the up to date rate
n = number of years between the evaluation date and the date when it will restart its activity
Kinv = buyer invested capital in order to save the company

Income based evaluation method is based on the current value principle, according to which the value of any asset is the current value of the future cash flows generate by it.

$$\text{Company value} = \sum_{t=1}^{n} \frac{CF_t}{(1+r)^t}$$

Where:
n = life span of the asset
CF_t = cash flow during the t period
r = up to date rate which reflect the risk of unfulfilling the estimated cash flow

Estimating the parameters required to calculate the value of the company through this method is a complex process, hard to apply, explained in detail in the thesis, based on many assumptions regarding certain values. The general method of finding the company's value is by estimating the moment when the firm will grow at a constant pace, being under the growth pace of the economy, and finding the company's value until that time and after that. Therefore, the formula becomes:

$$\text{Company value} = \sum_{t=1}^{n} \frac{FCFF_t}{(1+WACC)^t} + \frac{[FCFF_{n+1}/(WACC - g_n)]}{(1+WACC)^n}$$

Where:
$FCFF_t$ = net cash flow toward the company in year t
WACC = capital balanced medium cost
n = number of years until the company reaches a constant growth
g_n = constant and stable growth rate

Comparison based approach is based on a logical process in which the market value is obtained by analyzing the transactions with other similar and relevant companies, comparing them with the company in question and, finally, estimating the value of the evaluated company by using a conversation key (multiplier). This approach does not request that the company with which it is compared should be identical, but similar and relevant.

In the relative approach we compare the evaluated subject with similar companies, with participants or stocks sold on the market. The transaction prices are analyzed by using adequate comparison elements and in many situations they are adjusted correspondingly to the differences between the comparison elements of the compared companies versus the evaluated company. The comparison elements represent those features of the evaluated business which are basis for the trading price differences.

Some of the important evaluation elements are:

- company size
- transaction date (as recent as possible)
- parties motivation (sales conditions)
- price
- share of the business
- type of transaction

Formally, the comparison elements are reduced to "evaluation rates" which usually represent ratios between the trading prices and financial indicators such as: profit, sales figure, accountant net asset, cash flow, etc.

The comparison based approach is only valid when there is enough market information. The credibility of this approach is limited in the case of sudden market conditions change or in the case of companies/firms which seldom trade.

Essential to this approach is the insurance of a good comparison basis. Therefore, companies with which the comparison is done must work in the same activity field as the evaluated firm, must have basically the same size with the evaluated firm and must have appropriate qualitative parameters.

The main methods applied in the comparison based approach are:

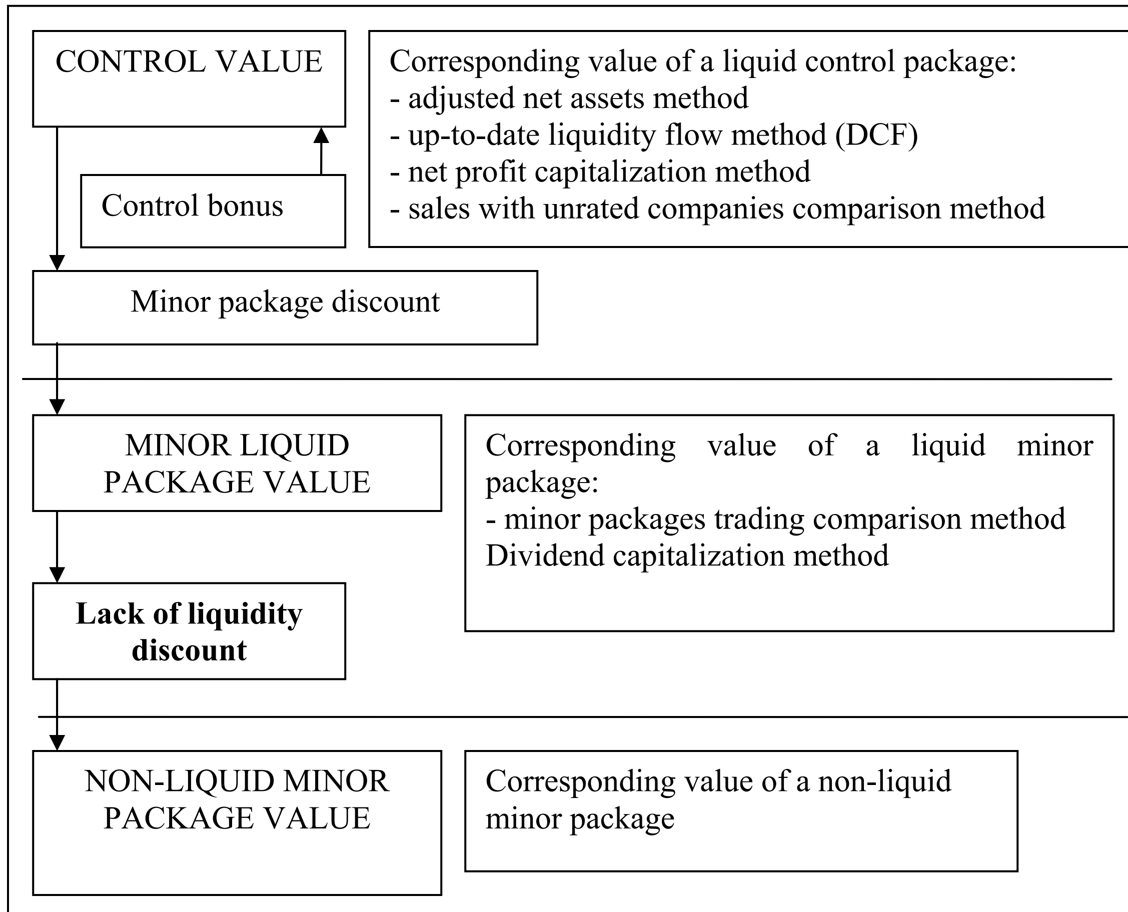
1. Comparison method with trading with minor share packages (stocks at rated companies)

2. Comparison method with sales with unrated companies (merging and acquisition market)

3. Comparison method with previous trades with the subject of evaluation

Once the three methods are applied to determine the company's value, we can apply adjustments based on the size of the acquired shares package, liquidation degree of the shares, etc.

Diagram 6. **Control value - minor package value - minor non-liquidated package value relationship**



(*Source:* after Robu, 1999)

In the evaluation process we can use all three methods. Using the methods depends on the type of company, its situation at the moment of evaluation, quantity and quality of available information, the purpose of evaluation, etc.

The final stage in the evaluation process is the systematic analysis of the obtained results and creating an opinion regarding the final value. This stage implies the lowest amount of work but involves the most the evaluators experience and judgment. He has to analyze the credibility and applicability of each approach to the current case, to understand and explain the difference between the results of applying more methods, to analyze the degree of credibility and relevance of all the information, etc. and this way to present a value (or a value interval).

The value established through the evaluation is only the starting point in the price negotiation, the payment method and the structure of investment in the analyzed company. These are established depending on the power of negotiation, objective of the acquisition, intents and plans of the buyer regarding the company, etc.

After the company has been evaluated, follows a negotiation regarding the features of the investment: the buying price, bought share package, types of issued shares (common or preferential), rights received with these shares, payment method, the performances of the company solicited by the investor, etc. All these features will be put down in the term sheets (accord regarding the terms of the transaction) and will be signed by the involved parties. The documents regarding the terms of the transaction are sketchy preliminary documents with the purpose of facilitating and assuring a negotiation frame for the investors and the entrepreneur. These documents are about the value of the company and the conditions in which the investors accept to offer funding and form a basis of formal agreements, amongst which the share acquisition agreement, a legal document which presents who buys what, from whom, at what price and when.

After establishing the investment terms, if an agreement regarding all the aspects is reached, the investment agreement is signed, and after finishing the payment, the investor receives the shares.

CHAPTER 3. MONITORING THE INVESTMENT

According to the percentage held, profile of the investor, type of operation (venture capital or buyout) the investment monitoring can be made active or passive. Therefore, the involvement of the investor can be from a simple advisory part to an involvement that assumes major company restructuring.

The general view about the investors is that they spend their whole time trading. This is not entirely true. After the investment is made, the investor works side by side with the management during a few years period to make sure that his investment will pay out. Most of the times the capability to respond to the market's demands and to face obstacles determine the success of that investment.

Investors get involved in important company decisions and usually have a representative in the Board of Directors. The level of involvement differs from company to company and from investment to investment. Investors are usually involved in: long term strategic planning, decisions regarding the hiring of new managers, selecting the service suppliers (accountant firms, lawyers, investment banks).

Long term strategic planning is linked to the growth of incomes and profitability. These are essential aspects to the success of an investment. Investors spend a lot of time with the management in order to come up with the highest success rate strategy. Investors expect managers to follow this strategy taking the necessary decisions every day.

Investors also get involved in the choosing of the managers. These decisions are necessary when the company has extended and there is a need to hire more managers. For example, if the company chooses to sell products using a new channel, they need an experienced person in that field. Also, investors make changes in the management, due to the change in company size, incompetence of old managers or promotion of specific persons.

Any decision is taken knowing very well the internal status of the company and the environment in which it activates. Thus, before taking any decision regarding the company, a careful analysis must be made. For this, there is a detailed financial-economical analysis of the production activity, production costs, profitability, financial-patrimonial situation, internal potential and company risks.

Regarding the **theoretical approach** about restructuring the company and enhancing its value**,** this involves any fundamental change in the company's activity or financial structure meant for the growth of the company's value for shareholders or creditors.

Restructuring assumes various activities, such as selling non-profitable activities, acquisitions, re-buying stocks, separations, which represent unique transactions, but also structural changes introduced in the day to day activity of the company. Rappaport defines unique transactions as Phase I restructurings and the changes that bring a constant change in the value of the company as being Phase II restructuring. This suggests that companies have to pass from Phase I to Phase II restructurings because here the approach regarding the shareholders value is not limited to buying or selling a business or changing the company's capital, but also to the planning and monitoring of the performance of all development strategies permanently. A successful implementation of a type II restructuring not only assures that the management have fulfilled their duties of creating evaluation systems compatible with those used by investors, but also a smaller chance of a hostile takeover, specific to Phase I.

Copeland, Koller and Murrin (1990) believe that managers have to restructure the companies to increase their value, eliminating the possibility of hostile takeovers. Thus, it is in the interest of both managers and shareholders that the difference between the actual value and the potential value of the company should be as small as possible. The management can improve the activity by raising incomes, or diminishing costs, buying or selling shares or improving the financial structure of the company.

Company managers restructure activity to increase productivity, reduce costs and raise the wealth of the shareholders. Bowman (1999) has presented the conclusions of the literature about the restructuring of the companies of the '90's. He classifies restructuring activities in three categories, namely *portfolio restructuring*, *financial restructuring* and *organizational restructuring*.

Portfolio restructuring includes meaningful changes in the assets held by a company or in the business lines in which the company operates, these being the company's liquidation, un-investments, asset sales or separations. The company management may restructure the activity by giving up certain core related business units, in order to gather capital. Also, assets sales and buys can be combined to restructure activity.

Financial restructuring means improvements to the capital structure of the company and includes meaningful changes in the structure of a company, as recapitalizations or changes between debts and own capitals. In this situation, we interfere in the funding structure of the company, changing the ratio between own capitals and loans. Thus, by increasing the loans, the pressure generated by the need to reimburse them determines managers to focus on the main field of activity, to realize incomes, and to only get involved in high profitability projects. An important operation of financial restructuring is the takeover of the company by the management, in which the management team, alongside a group of investors, borrows important sums of money to takeover the company from the shareholders and to transform it into a closed type of company. Through this, the management becomes an important shareholder in the company and this leads to reducing unjustified expenses. An alternative to taking over the

company by the management is a recapitalization of the company by making loans, used in various purposes (research investments, extraordinary dividends, etc.).

If the company is in bankruptcy, financial restructuring is part of the reorganizing plan.

Organizational restructuring is the process through which the economical viability of the business plan is increased. For instance, mergers, selling of divisions, stopping production of certain products which are not in demand any more, cost reduction methods such as closing unprofitable divisions. Organizational restructuring aims the increase of efficiency and managing capacity of the managerial team through meaningful changes in the organizational structure of the company, such as restructuring company divisions, ranking system, production processes, reducing product range, or personnel. This type of restructuring is usually accompanied by changes in the structure of the assets. In bankruptcy cases and reorganizing, financial as well as operational restructuring must work together in order to save the business.

Bowman's research (1999) have shown that only personnel reduction unaccompanied by other organizational changes have a negative impact on the performance.

As the environment in which the companies operate is in a continuous change, managers always have to be careful to new methods to structure and fund their company. The process of creating values described by Pike and Neale (1996) assumes:

1. Revising company's financial structure from the point of view of shareholders, following whether some changes in capital structure might increase the value.
2. Increasing efficiency and reducing capital cost by using loans.
3. Improving operational flows of capital by focusing mainly on profitable investment opportunities (with actual positive values), maximizing profit and reducing and un-investing operations.
4. Using financial engineering which increase the company's value.

Fruhan (1979) has identified the following approaches to increase value: the ability of having competitive priced products, realizing low production costs or lower than the average, a reduced intensity level of capital, the ability to obtain funding cheaper than the average, a more efficient capital structure than the competition, buying companies by using overrated assets, buying underrated assets and selling overrated ones.

Rappaport (1986) supports the idea of a value based management (VBM) in order to increase the value of a company. Also, Copeland, Koller and Murrin (1990) support the same idea. Value based management is a management approach through which the companies aims, management processes are all aligned to the idea of maximizing value. The authors claim that an important part of this type of management is the deep understanding of the variables that lead to the increase in value of a company. According to Knight (1998), the value is created by the operational and investment decisions that managers make on a daily basis. This means that the managers can increase the value of the company. It implies the translation of some abstract concepts about creating value into usual terms by using operational mechanisms. Focusing on increasing the value means judging every decision and action through the light of the value it creates. Establishing a culture within the firm focused on creating value means a major

organizational transformation and in many cases, it must be done at the top of the company.

Stewart (1991) claims that a good method of creating value is making the managers shareholders (owners). Also, he claims that the property must go beyond the financial gain, and that it has to reflect the responsibility of success of failure of the company. He militates for the sharing of the value, making everyone a part of the value creation. Value is created by improving operational efficiency, obtaining a profitable growth and giving up unproductive activities.

Restructuring implies assets and liabilities of a company, capital structure, so the necessary cash flow is assured, promoting efficiency, and company growth, maximizing shareholder value, creditors and other interested parties. These objectives should be actively followed by the managers and administrators. Although this happens in a lot of cases – stock re-buy, recapitalizations – there are situation where the existent structure is not changed until the rise of a crisis. Then the actions become defensive – against a hostile takeover – or difficulty generated case in which the creditors threaten with exercising their rights.

Practically, the value growth of a company can be realized using several methods. According to the income based evaluation method, the value of a company is the current value of cash flows generated by existent assets and by the future growth, being brought up to date using the capital cost. Thus, in order for an action to create value, it has to accomplish one or more of the following:

1. increase future cash flows generated by existent investments
2. increase growth rate of incomes
3. increase accelerated growth period
4. reduce capital cost applied in bringing the flows up to date

Therefore, an action which does not affect these situations does not affect the value.

Table 4. **Value creating actions**

Action type	**Immediate effect actions**	**Delayed effect actions**	**Long term effect actions**
For existent investments	- selling assets with a higher selling value than the value of using them - liquidating actives with a higher liquidation value than the value of using them - eliminating operational costs which do not generate incomes	- reducing the necessary work capital, by reducing stock objects and debts, or through increasing commercial debts - reducing maintenance costs of working capital - reducing marginal tax	-modifying price policy to maximize income and operational margin - introducing new technologies in order to reducing costs and increasing margins

	and growth - using fiscal facilities in order to increase cash flows		
For future growth	- eliminating capital costs with a lower profitability than the cost of funding them	- increasing re-investment rate of marginal capital profitability	- increasing re-investment rate of marginal capital profitability
For increasing accelerated development period	- protecting company products by patenting or other methods	- using scale economies or advantages through costs to increase capital profitability	- creating a strong trademark - reducing the cost of company products and increasing cost of replacing with other products
For funding cost	- correlating assets generated cash flows with required cash flows to pay the debts - optimum structuring of debt rate	- correlating asset generated cash flows with those required to pay the debts - using an optimum structure of funding new projects - optimizing cost structures to reduce operational lever	- reducing company's operational risk through actions meant to make products more accessible

(*Source:* own work after Damodaran, 2002)

Almost all companies are interested in value growth, but only a few of them are able to do it. That is because it is a difficult process and requires time and makes life difficult for the management, which has to implement painful strategies (reducing costs, layoffs, etc.). Moreover, to increase the company value, all the company must be involved in the process (you can not raise the value just thanks to the financial department, or the management). At the same time, the growth strategy must be specifically designed for the company, as there are not two identical companies with the same problems in order for the same strategy to work.

In literature, which presents restructuring and value creation, there are four models which give a general frame of analysis, namely: Copeland, Koller and Murrin's (1990) "restructuring pentagon", Crum and Goldberg's (1990) "potential evaluation model", Porter's (1985) " value chain" and Rappaport's (1986) "value network model", all presented in detail in the thesis.

CHAPTER 4. INVESTMENT FRUCTIFICATION AND PERFORMANCE MEASUREMENT

The exit (fructification or liquidation of the investment) is a process through which the founders, management and investors in a company find buyers and sell a part or all the shares of the company. Through an exit, the investors realize gains, and the company can receive an infusion of capital and/or a new strategic direction from the buyer.

Investors change their stocks in money when they liquidate the investment (exit – selling the owned quota). Most of them follow a profitability rate of 38% a 5 year profit 5 times bigger than the investment (Povaly, 2007).

The exit term in this context can be called un-investment and it means that the private equity investor sells his contribution to a company, totally or partially, to reduce his exposure. In order to make money from the investments, the private equity investors have to transform their non-liquid shares into cashed gains.

Private equity investments are non-liquid and therefore can not be sold as easily and fast as public companies' stocks on the market. While venture capital funds focus on start-up companies with a 7-10 years investment plan, private equity and buyout funds only have a 3 to 5 year plan. The successful selling of the shares is not critical only to realizing substantial gains, but also to attracting extra capital.

An essential feature of the private equity funding is the limited time of the investment, therefore the exit process being of utmost importance. Seeing as there is a limited period of investment time, private equity funds must finalize the investment relation with the companies in the portfolio after a certain period of time. In this way, investors have to liquidate investments at a certain point.

Potential exit routes. According to authors and practitioners in this field (Wright and Robbie, 1998:521-579; Gompers and Lerner, 1999; Cumming and Macintosh, 2003: 511-548), there are five important exit routes for an investment: direct transactions, secondary takeovers, initial public offers (IPO), buy-backs and divisions. Also, liquidation can be partial or complete, for all the five methods, with the mention that direct transactions are usually made for the entire owned package, and by initial public offer (IPO) a total and immediate exit is not very likely. Besides the five methods, some authors claim that recapitalization can also be a method of partial liquidation of an investment. With all these, recapitalization does not change the structure of the shareholders and therefore can not be called liquidation. Also, another method through which the investors may recover their money is liquidation of the company.

The process of every one of these methods is different and has distinct requirements based on the size and features of the company. Every method has different costs, different execution time, different requests regarding the necessary documents which have to be made public, impact on the fees that have to be paid, etc.

1. Direct transaction. Selling the company to a competitor or a partner is the most common way of liquidating in Europe. In the case of a major share hold and the whole company is sold, we are talking about merger or acquisition type of liquidation. The sale can also be made to a financial investor.

Direct sales are usually complete liquidations, and are made for money, in comparison with partial sales, much more rare, in which you usually receive shares at the buying company.

The buyer in a direct transaction is usually from the same activity field and follows product and technology integration of the bought company in the buying

company, either horizontally, either vertically. Strategic acquisitions may include the merge of two related companies (such as supplying raw materials, or companies that apply certain patents). Seeing as they activate in the same field, the buyer may evaluate the value of the bought and resulted company. Due to the synergies created, strategic buyers usually pay more. But a synergy is not always created by combining two entities. Many times, at the base of the acquisition lie different reasons, such as the desire to seize human personnel, certain patents, client data-base, etc. also, the desire to buy can be placed on the necessity of the buyer to have a certain technology and can be cheaper (in time and money) to acquire a company that already holds the technology rather than to develop in internally.

The anticipation of the buyer regarding the resulted gain by combining the two companies determines the sum that he is willing to pay for the targeted company. The price is negotiated between the two companies on the basis of the power of negotiation and held information by both the parties regarding the generated synergy.

2. Secondary sales and secondary takeovers. Specialized literature differentiates secondary sales and secondary takeovers. Different to the direct sale, the secondary sale is a method of liquidating the investment, where only de investment fund has to sale its shares, but not the managers or other investors. The buyers are usually strategic investors. They do not have access to inside information as in the case of a total buy. Also, synergies are harder to realize, as the two companies do not merge. Therefore, the prices are lower than in the case of direct sales. This is not such a common method.

By contrast, secondary takeovers are transactions through which the company is sold from one financial investor to another. This phenomenon grows due to the large sums of money used in the industry.

3. Initial public offer (IPO). Initial public offers are very attractive for investors as a way to fructify an investment. Primary public offers market gives the possibility to obtain liquidities and at the same time keep a certain quota of the business.

Companies which are just listed on the stock market have to have a very high growth potential in order to maintain a high course on the market after listing. Plus, they have to have a proved competitive advantage, capability to maintain the market quota, and to be situated in favored places by the analysts. The investor can bring an added value to the offer process by choosing an investment bank which can lead the offer. This has to be active in the company's field of activity and to have analytical experience and coverage in the respective field.

In the case of a public offer, the company is selling o part of the shares to the public. These public offers are followed (most of the times) by the listing of the company on the stock market. From all the methods of liquidating an investment, the initial public offer is the only one through which the company receives directly an infusion of capital, offering at the same time (if it is listed on the stock market) the possibility of shareholders to liquidate their investment at any time.

It is a form of un-investment which last a long period of time, because the private equity funds that have invested in the company are not allowed to sell their shares for 12 months (the lock-up period) after the company is listed on the market, as to not create panic amongst the investors, resulting in massive sales and low stock price. Doing an initial public offer does not represent a liquidation method in itself; it only precedes and facilitates such an option. Investors who buy the newly emitted shares have

a low degree of initiation, in comparison to the private equity funds, but this fact is countered by the interest of those involved in the emission to keep their reputation, and thus to evaluate accurately the stock price. One of the disadvantages of such a public offer is the high cost of the entire operation.

4. Buy-back. In a buy-back transaction, the private equity fund sells its shares back from where they were bought, from the owner or from the company. Buy-backs are very common in the case of investments which seem to be without success, companies that do not have growth potential, a reduced value and are at the beginning of the investment period. In many funding contracts, there is the clause which stipulates that investors can resell their stocks to the owner or to the company if certain established aims are not fulfilled, such as performance levels or the failure to list the company on the stock market.

With all these, most of the times, the owners do not have the necessary resources to buy them back. In order to go through with the buy-back, the entrepreneur or the firm must get a loan, thus raising the debt. The managing team can therefore discipline itself, having to deal with high credit interests.

5. Recapitalization. Recapitalizations do not truly represent a form of un-investing, because the share of the funds is not reduced. The financial exposure of the company is reduced by paying an extraordinary dividend possible only by contracting another credit.

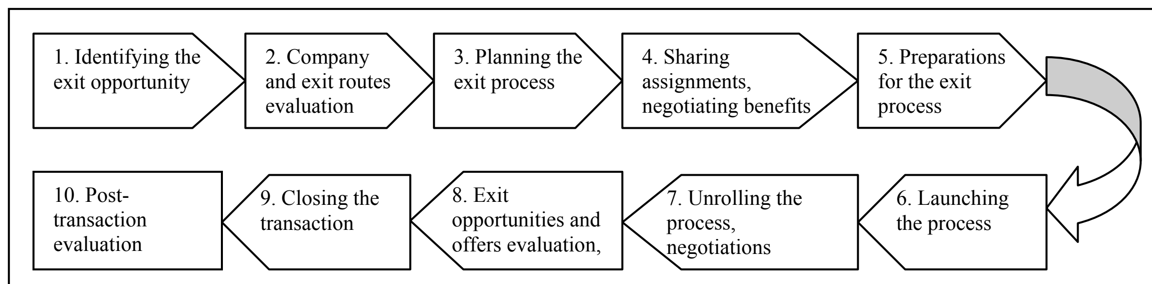
The idea is to re-debt the acquisitioned company after the reimbursement of a part of the initial credit has been made. There are several methods to recapitalize a company. A recapitalizing through loan means a credit to buy-back its own shares. The price that can be paid is limited to the company's potential to be in debt. These types of methods are usually applied in situations when there have been take-overs (LBO – leveraged buyout), because the acquired companies are big in size, mature and used to generate constant cash flows sufficiently large to be able to pay the debts.

Another method assumes the involvement of other investors. The company may be at a development stage which presents more interest to a more powerful investor.

6. Flat lining, in case of a failed investment. In case the acquired company does not manage to reach the initial performance level, but only manages to survive, the investors are no longer involved in restructuring it, the investment flat lining temporarily. These types of investments sustain only the life-style of the employees and the shareholders, not having the hoped growth potential.

The entire exit process can be detailed over several steps, as it is shown in the following diagram:

Diagram 7. **The exit process**



(*Source:* own work after Povaly, 2007:183)

1. Identifying the exit opportunity. At the beginning of every exit process there is the opportunity identification to complete the exit. Lieber (Lieber, 2004: 72-82) believes that there must be periodical evaluation of the investments in order to identify the exit opportunities. The preparations for the exit process have to be made as early as possible, even before beginning the investment.

2. Evaluating the companies in the portfolio and the exit routes. The second step presumes the detailed evaluation of the company and the possible exit routes. Although in the first step we have an evaluation, here the evaluation is more thorough. In this step we also appeal to field experts, analysts, evaluators, investment banks, etc.

3. Planning the exit process and mandating the consultants. In this stage, the private equity company, alongside the management, start to prepare the exit plan, this being known only by those directly involved.

4. Sharing assignments, negotiating benefits. While most of the duties have been assigned in step three, follows the informing of more persons regarding the exit intention. Preparing for an exit requires many human resources, and can distract the management's attention from the current operations. It is required the involvement of more people and the exact assignment of the tasks. In this stage there can still be discussions of benefits given to certain key persons.

5. Preparations before beginning the exit process. Before beginning the process, a lot of preparations are required: advertising materials, legal, financial documents, financial projections, and everything that leads to the accurate evaluation of the business. Most of the times, the company can be visited by potential buyers.

6. Launching the exit process. After the preparations and analysis of potential buyers, the exit process begins, formally or informally, by offering potential buyers pertinent information. The information is revealed only after signing a confidentiality agreement, thus protecting the interests of the company. If there are several exit possibilities, those are not revealed to the investors.

7. Unrolling the process, client negotiations. Once the exit process is launched, extra information is given to potential buyers, if solicited.

8. Exit opportunities and options evaluation. After receiving offers, the private equity company and the consultants must evaluate the possible exit routes and offers. This process can last a few weeks, and interested buyers may be called to bid for the company.

9. Closing the transaction. After a few rounds of detailed negotiations, the transaction can be completed, which will lead to the change in company owners.

10. Post-transactional evaluation. After closing the transaction, an evaluation regarding how it went can be made, in order to identify aspects which can be improved.

Once the sale process has come to an end, a performance measurement of the entire operation can be made, or in case of several investments of a private equity fund, an evaluation of the entire fund. While standard methods of quantitative evaluation of risks and profitability have made great progresses, for other "alternative" forms of investments, including risk funds, a standard profitability evaluation of the private equity activity has not been established. The lack of trustworthy data about the performances

and secret nature of the transactions is completed by the attempt of background managers to avoid publicity regarding the earnings generated by the funds they run. This means that most of the performance based reports are incomplete. With all these, as investors become more and more sophisticated, and funds start to attract a more diverse range of investors, the transparency in this field is beginning to grow.

The difficulty of measuring the profitability and risk profile of private equity funds is not owed entirely to the lack of information, but to a lack of perfection of the secondary markets for such share packages. As a consequence, for every investment there are only two moments when the price of the transactions can be observed objectively – at the moment of purchasing and exiting. Therefore, there is not a series of winnings recorded, and evaluating the performance of a private equity fund becomes complex.

Seeing as investments in private equity can be made either through a fund either direct (co-investment), there are two ways of measuring the performance from the point of view of an investor: either by analyzing risk and profitability features in a fund, either by analyzing the performance of the investment in a certain company. While the first approach is relevant for all the investors in a fund, the second one is important only for the manager of the fund and its investors. Seeing as the first one is more relevant to all the investors, it is more rarely used. Next we have three methods of measuring the performance that can be applied in both situations. Cash flows represent the basis of analysis for all the three methods.

a) Investment multipliers. Because of the long term orientation and lack of liquidity of private equity investments, we can use as a method of measuring the performance, the ratio between the invested and returned capital. The ratio between the invested and return capital is an easy method to measure the profitability of an investment and it represents the multiplying rate of the invested capital. Unfortunately, this method does not take into account the period of time in which these earnings are made. This fact makes it almost impossible to compare the performance of two different funds. The following concept offer solutions to this problem and are used with a higher rate of success.

b) Internal rate of return (IRR) based on cash flows. Internal profitability rate has become the standard measurement system of the profitability of a private equity activity at the level of investor, singular investments, as well as at background and field investments level. This rate represents the up-to-date rate for which the present value of cash flows is zero. Mathematically, the internal return rate can be expressed as being the solution to the following equation, where T represents the life span of the fund, and CF_t represents the cash flow generate in the t period:

$$\sum_{t=0}^{T} CF_t (1 + RIR)^{-t} = 0$$

c) "Public market equivalent" (PME) based on cash flows. Kaserer and Diller (2004) explain the objective of the approach through the public market equivalent as: "If an investor invests 1 Euro in a private equity fund, how many Euros should he invest on a public market in order to generate the same cash flow and in the end to have the same amount? The public market equivalent is the answer to this question". This indicator represents the ratio between the profitability obtained by investing in a private equity

fund and reinvesting the intermediary gain on the public market, and the profitability obtained by investing the same amount on the public market. This permits calculating the performance of a fund by eliminating the problem connected to reinvesting at the same internal profitability rate. Mathematically, the indicator can be expressed through the following formula:

$$PME = \frac{\sum_{t=1}^{T} cf_t \prod_{i=t+1}^{T} (1 + R_{Ii})}{\prod_{t=1}^{T} (1 + R_{It})},$$

where:
R_{It} = The net profitability obtained on the public market in the t period
cf_t = the positive cash flow generated by the private equity fund in the t period.

If the private equity fund has a superior performance to the investment on the public market, the PME value is greater than 1. The public market equivalent can be used to compare the profitability of the funds, as well as to compare the individual investments.

CHAPTER 5. CASE STUDY

In the case study we will go through all the stages of a private equity investment presented in the thesis, applied on a real case, namely **S.C. Terapia S.A Cluj-Napoca**, local producer of pharmaceutical products.

In 1997 the company had been listed on the Bucuresti Stock Market, and had been a part of the blue-chips of the stock market (the most traded stocks on the market, having great capitalization and being a part of one of the indexes of the market). After being listed, the investment companies **Romanian Investment Company**, **Romanian Investment Fund**, **Labrador Partner** (venture capital types of financial investors) have begun to acquire shares of the issuer, holding in 2003 60% (183.958.208 shares) of the social capital of the firm. In 2003 these companies have sold their shares to the investment fund **Advent International** (buyout type of financial investor). This, after a public offer of takeover in order to un-list the company and increase the social capital, has managed to hold 96,7% (1.229.790.643 shares) of the social capital of the issuer, after which, from 2004, he withdraws the company from the market. In 2006 the american investment fund sells his shares to the indian company **Ranbaxy Laboratories Limited** (strategic investor).

The case study goes through these operations, following the stages of every investment, according to the cycle of private equity described in the thesis. The case follows the process of these operations, highlighting the important aspects, throughout the unrolling of the operations, as:

1. I have calculated **the value of the company at the three key moments**, using the presented approaches (based on shares, based on income, based on comparison):

a) 1997, before the issuer was listed on the market and the venture capital investors to start buying shares

b) 2003, the moment when the venture capital investor held package is sold out to the buyout investor

c) 2006, when the buyout investor sells the company to the strategic investor

2. then I have analyzed **the evolution of the imminent** (internal and external)during the whole process, highlighting the evolution of the company's performances which indicate the effect of the involvement of the investors in the activity of the company over its value.

3. in the next stage I have presented the **exit method** chosen by the investors.

4. in the last stage I have measured the **profit** obtained by each of the investors.

To simplify the steps and to avoid repeating the names of those involved, I have marked their names as follows:

- S.C. Terapia S.A Cluj-Napoca, the issuing company (issuer), which is the object of this case study, will be company "A".
- the competing and comparing companies with the issuer, namely S.C. Biofarm S.A. Bucureşti, S.C. Sicomed S.A. Bucureşti, şi S.C. Antibiotice S.A. Iaşi, will be named "B", "C", and respectively "D".
- venture capital financial investors, namely Romanian Investment Company, Romanian Investment Fund, Labrador Partner, will be marked with "X1", "X2, and "X3".
- buyout financial investor, Advent International, is "Y".
- strategic investor Ranbaxy Laboratories Limited is "Z"

After applying the three evaluation methods, resulted the following **company values** at the key moments:

Table 5. **Company value in 1997, 2003, 2006**

Company value using the method based on:	1997 (lei)	2003 (lei)	2006 (lei)
1. Asset	14.370.959	114.388.921	143.061.028
2. Income, using:			
- constant growth rate	18.591.613	203.628.577	312.549.055
- two growth rates	70.040.618	563.480.292	1.053.295.245
3. Comparisons using:			
- european companies multipliers	70.222.095	657.526.123	839.761.704
- romanian companies multipliers	n.a.	120.904.973 (558.154.364, Using company B)	999.311.833

(*Source:* own work)

Regarding the **internal evolution** of the issuer during the analyzed period, this is presented based on the financial indicators in the next table:

Table 6. **Evolution of economic indicators for the issuer**

Indicators/Years	1997	2003	2006
Sales figure (lei)	25.816.300	116.387.676	247.718.883
Net profit (lei)	6.639.841	15.466.916	46.787.483
Costs at 1000 lei incomes (lei)	673,60	798,09	777,51

Costs at 1000 lei sales figure	790,81	848,68	833,73
Commercial profitability rate (PB/CA)	38,32%	21,47%	23,86%
Used resources profitability rate (PB/CT)	48,46%	25,30%	28,62%
Economical profitability rate(ROA - PB/AT)	44,77%	8,04%	16,53%
Financial profitability rate (ROE - PN/CP)	49,74%	7,21%	19,58%
Capital profitability rate (ROC - PN/C)	31,51%	5,15%	14,07%
Net accounting asset (AT-DT)	14.370.959	224.862.504	264.136.678
Total debt rate (Dt/Tp)	34,96%	27,63%	26,14%
Patrimony solvency rate (Cpr/(Cpr+Cred.totale)	0,63	0,71	0,72
General solvency rate (AT/DT)	2,86	3,62	3,83
Self-financing assets rate (Cpr/(AF+AC))	0,63	0,69	0,67
Debt rate (DT/AT)	0,35	0,28	0,26
Circulating assets rotation speed (CA/AC)	1,89	0,90	1,21
Work productivity (CA/N)	17.108,22	161.425,35	284.407,44
Financial lever (D/CP)	57,86%	40,04%	39,11%
Debt pounder in total capital (D/(D+CP))	36,65%	28,59%	28,12%
Own capital pounder in total capital (CP/(D+CP))	63,35%	71,41%	71,88%

(*Source:* own work)

In comparison with comparing companies, during the analyzed period the **evolution of the issuer** was:

Table 7. **Comparative evolution of the issuer for the analyzed period**

Indicator[1]	Firm	1999	2003	2006
Sales figure evolution	Firm A	100.00%	250.65%	534.48%
	Firm B	100.00%	323.38%	557.69%
	Firm C	100.00%	247.93%	392.86%
	Firm D	100.00%	297.12%	478.05%
Net profit evolution	Firm A	100.00%	216.54%	671.43%
	Firm B	100.00%	822.31%	1444.44%
	Firm C	100.00%	138.06%	242.11%
	Firm D	100.00%	867.58%	1724.29%
Average employees number	Firm A	100.00%	48.81%	60.00%
	Firm B	100.00%	86.65%	60.00%
	Firm C	100.00%	51.82%	50.00%
	Firm D	100.00%	82.16%	72.73%
Work productivity evolution	Firm A	100.00%	513.46%	916.13%
	Firm B	100.00%	373.18%	921.05%
	Firm C	100.00%	475.02%	919,23%
	Firm D	100.00%	361.61%	631.16%

[1] Source: Own calculus after BVB financial situations and Ministerul Finanţelor

(*Source:* own work)

As chosen methods by the investors to **liquidate** their investment, in both cases the exit was realized through a sale to another investor.

Regarding the **profitability** of the investment, we can say the following:

The profitability of the investors X1, X2, X3 can be highlighted as:
1) absolute sum = Income – Investment = 46.124.272,023544 lei
2) relative sum (investment multiplier) = Income / Investments = 1,91 or 191%
Thus, the investors have almost doubled their investment.
3) internal profitability rate

Corresponds to the value for which the equation is verified:

$$\frac{\sum_{i=0}^{5} fluxnet_i}{(1+IRR)^i} = 0$$

The equation is resolved by attributing values to the IRR indicator and verifying the equation, until we find an approximate value that bring near the equality.

By resolving the equation, we get an IRR of 20%.
4) comparison with a market index

The average annual profitability during 1998-2003 of the BET-C index was 12%. Thus, investment profitability for investors X1, X2, X3 was superior to the market profitability during the analyzed period.

The gain of X1, X2, X3 investors was 0,2 / 0,12 = 1,6 times or with 66,6% more than the gain generated by stock investment in that period.

Investment profitability realized by investor Y can be highlighted as:
1) absolute sum = Income – Investments = 802.0810785,72 lei
2) relative sum (investment multiplier) = Income / Investments = 6,61
This, investor Y has multiplied its money over 6 times.
3) internal profitability rate

$$\frac{\sum_{i=0}^{3} fluxnet_i}{(1+IRR)^i} = 0$$

Therefore, IRR is 88 %.
4) comparison with a market index

Annual profitability average during 2003-2006 of BET-C index was 71%. Thus, Investment profitability for investor Y was superior to the market profitability in the analyzed period.

The gain of investors X1, X2, X3 was 0,88 / 0,71 = 1,24 times or with 24% more than the gain generated by the market investment in that period.

Therefore, the relative gain of investor Y compared to the gain generated from the market investment was lower than the relative gain of investors X1, X2, X3.

CONCLUSIONS

THEORETICAL CONCLUSIONS

1. Private equity activity dates back to the industrial revolution. Since then, the private equity operations have evolved, today being a distinctive class of assets in which you can invest. Also, the investment feature has changed. If classically, the private equity activity meant investment in private companies, nowadays you can also find investments in public companies.

Even though in the beginning the model of private equity investment was different in America and Europe, the two methods have become almost similar.

The tendency of the last years on the private equity market is towards a transparence of the activities, through more exact reports, a larger accessibility from the retail investors, as well as institutionalizing the activity, by listing the great private equity funds on the stock market, which leads to the possibility of making secondary transactions on this market so inaccessible until then. Thus, we see the appearance of hedging funds on the market, pension funds, which were not allowed to hold such assets before.

Regarding the private equity market in Romania, it is not well developed, in spite of the great potential our country has for such activities, acknowledged by the great private equity funds.

This situation happened because of the instability of the business and political environment in Romania, the weak development of the market capital, and a very bad evolution of listing on the stock market (due to a lack of money).

2. Initially, the private equity activity appeared as a complementary alternative to classical funding (through bank loans or bonds) or when these were not available (business ideas that do not find classical funding, companies that do not meet the funding terms, etc. – generally high risk investments) . Beside the funding part, the private equity activity assures an expertise component, investors involving themselves actively in the company's operations, bringing value through their knowledge and contacts.

3. The private equity activity can be divided in two big activity categories, depending on the quota of acquisitioned shares. Thus, we distinguish venture capital activities (or risk capital), which have as a feature the acquisition of a minor share in the company, and focuses mainly on young companies, with a big growth potential. The other category of activities are the buyout activities (or takeovers), which have as a feature the takeover of mature companies, with a reduced growth potential, but which have the capacity to pay the debts received while they are being taken over. Even though this classification is debatable, it represents the accepted general rule.

4. The private equity activity has a redundant character. Therefore, the private equity cycle assumes attracting necessary investment funds, structuring the investment, monitoring the investment, liquidating the investment and distributing the earnings, after which the cycle is repeated. Each of these stages has its own features and distinct and specific processes, which depend on the profile of the investor, his investment plan, etc.

5. Private equity operations come in different forms, from investing in innovating ideas, helping young companies develop, to restructuring companies, taking over

bankrupt companies, etc. All these operations are based on the value of the company, as a basis of discussion to acquisitioning a package in the company.

Thus, the settled price is only a basis of discussion between the investors and shareholders regarding the following investment. The paid price can be higher or lower than the one resulted after the evaluation, depending on the features of the company, the investors and the acquired package: there are some modifications to the price if the company is listed, if the package acquired in minor or major, or if the company is not listed. Structuring the transaction, which involves, beside the price and the acquisitioned package, clauses regarding vote rights, a place on the Board, performance criteria, reward schemes, sharing in case of liquidation, etc. is done through negotiations between investors and shareholders. Strategic investors are willing to pay more, due to the synergy effects created through acquisition, different to financial investors, who want to buy at the lowest price possible, in order to sell them at the highest price possible.

6. The level of involvement in the company's activity differs from investor to investor, from company to company, and depending on the percentage held (lower in the case of venture capital investments – passive management, and higher in the case of buyout investments – active management). The investors orientation towards creating value in the company assumes a detailed knowledge of the company's features, of the field in which it activates and the existing competition. Thus, before any decision regarding the activity of the company, an analysis has to be made: the things analyzed are the production activity, production costs, company profitability, financial-patrimonial situation, internal potential and associated risks. Decisions are made based on this analysis. Restructuring operations whose purpose are increasing the company value may be operational (optimizing operational activities), financial (changes in the funding structure in order to respond better to the financial needs and to reduce the cost of funding), or changes in the activity portfolio and divisions of the company (by selling division, closing unprofitable divisions, or acquisition of new necessary assets, or even a change in the basic business of the company).

7. Fructification of the investment and realizing profit represent for the private equity the main goal of the entire process described in the thesis. Thus, the words of the great player on the equity market, Henry Kravis, co-founder of one of the biggest private equity firm in the world, KKR (Kohlberg, Kravis, Roberts % Co), whom, being congratulated by consultant after an acquisition, replied to them: "Don't congratulate me when I buy it, congratulate me when I sell it". Therefore, the entire focus of the process is on making profit by any means. With all these, the entire process also has a human component, namely creating value for all the parties involved in the activity, necessary condition for selling the company at a superior price.

Liquidation of the investment can be done in different ways (IPO, selling to strategic or financial investors, buy-back from initial seller, etc.), but regardless of the chosen method, it has to be outlined even before making the investment, because depending on the exit the entire investment process is followed. Also, the liquidation process of the investment must involve, besides the investors, also the management of the company, which has a very important part in the whole process. For this, the management has to be included in the plans of the investors from the beginning, financial as well as activity related, lining the interests of the two parties, in order to ensure a successful investment.

8. Regarding the performance measurement of the investment, it can be realized following two plans.

One would be the financial plan, presented in the thesis as being the measurements of the financial gains throughout the investment (through money multiplying rate, profitability IPR, or comparing with capital market results).

Another aspect, which is not presented in the thesis, is related to the social impact of the private equity activity. We mean here the number of work places created, the multitude of products and applications from which we benefit due to those activities (all the ideas and businesses in the world have developed due to these activities), optimizing resource managing aiming to create value for all those involved, and other social benefits. The social impact of the private equity activity, besides the positive one presented above, it can also have a negative one. In the pioneering period of the buyout activity (80's), this was synonym with mass-layoffs, company liquidation and piece by piece selling, hostile takeovers with the purpose of realizing a profit at any cost, in a time as short as possible, through various financial devices, in other words robbing the company to the gain of the "investors" (shareholders) and against those involved in the company activity (stakeholders – employees, suppliers, clients, management, etc.). To the advantage of the industry, these types of operations are not so frequent anymore, and investors are focusing on creating value in the companies in the portfolio. If in the past, private equity investors (corporate riders) were looked on with fear and skepticism, nowadays private equity funding is accepted by the entrepreneurs and even welcomed, because beside the funding component (which many times is the only option, not being able to access other forms of funding), it also provides a consulting component, business expertise, used contacts, etc.

CASE STUDY CONCLUSIONS

1. Determining a risk free rate and a risk bonus for the romanian market cannot be made historically (due to lack of data), only by comparing it to a mature market. Although, in the last years, due to a mature local market, the rates have aligned to the international practices, the values determined by the two methods (comparison with a mature market or reporting to the internal market) starting to converge.

2. The risk bonus calculated through the implicit method better outlines the expectations of the investors regarding the future gains than the historical method. It can be observed how the BET-C index has spectacular growth from year to year in the analyzed period.

3. The beta indicator of the company and compared companies is difficult to calculate based on the existent data about Romania (generated values being very volatile, not being a long history of the risk free rate), and at the same time they have to be correlated with a mature market.

4. The DFC method is hard to apply for immature markets, due to the lack of information and the difficulty of calculating the indexes. Also, a lot of assumptions have to be made to reach an estimative value, thus risking losing sight of the realities of the environment in which the company activates.

5. The value of the company may differ a lot depending on the person who does the evaluation. Thus, the values generated by different methods are various (depending

on the up to date rates used), and attributing a final value depends on many aspects: the purpose of the evaluation, the intent of the buyer (seller) regarding the evolution of the company after it is bought (or estimating the future growth potential).

6. Based on the multipliers at which the transactions were made on the romanian and european market, we can conclude that up to 2003 this sector was under-evaluated on the romanian market, in 2006 the evaluation being aligned with the european markets.

7. During the analyzed period, the issuer had a similar evolution to the market and the compared companies. Thus, the involvement of the investors in the company's activity resulted in the development of the firm at the same pace as the field in which it activates. Changes to the companies in the field had to be applied to the analyzed company in order to maintain its position. The measures taken by the investors were necessary in order to maintain the market position of the company.

8. Stock market capitalization of the company in the first day of trading was 8.678.811 lei, very close to the net asset of 1996. The average capitalization in 1997 was 40.666.680 lei, under the established company value through the income based comparison method (with the european markets). Thus, the investment decision of investors X1, X2, X3 through stock acquisitions is justified, keeping in mind the growth potential of the field.

Selling of the package owned by investor Y was made at the existent prices in that period (2003) on the romanian market, but under the price level on the european market, leaving thus room for gain even for investor Y, once the two markets were aligned.
Moreover, the restructuring process of the company was not over, so investor Y could bring his contribution to increasing performances. In the last day of trading, stock market capitalization was 131.843.882,2 lei. The value attributed to the company through the transaction between investors X1, X2, X3 and investor Y is 143.525.863,608 lei, comparable to the value of 120.9040973 lei determined by comparing romanian companies under the value of 65705260123 lei using european companies (it is highlighted the gap between the trading multipliers of the field between the romanian and european market).

9. Acquiring the company by investor Y at the above price was justified due to the gap between the two markets (romanian and european). Furthermore, developing the field on an international level reflects the growth potential of the company, as well as the restructuring process which was not over.

In 2006, the exit moment for investor Y, the trading multipliers of the field were similar on the romanian and european markets. The sale would have been hard to accomplish toward a financial investor, seeing as the future growth potential of the price was low if the company would have been listed. Moreover, as the restructuring process was closed, a financial investor could not have done a lot to maximize its profit. Therefore, selling the company to a strategic investor was a normal step, as this type of investor was the only one capable to further develop the company. Exiting by re-listing the company on the stock market could have been another feasible exit, but it would have been longer and more complicated, the exit being done in time, and at the same prices (or lower) than the price received from investor Z.

The selling price of the package held by investor Y was similar to the value of the company determined through income based method and comparison to romanian companies as well as european ones (thus reflecting the alignment of the two markets).

10. The profit obtained by investors was superior to the gain realized by the BET-C index in that time.

BIBLIOGRAPHYCAL REPHERENCES

BOOKS:

1. Arzac Enrique, *„Valuation for mergers, buyouts, and restructuring"*, edit. Wiley, 2005
2. Aswath Damodaran, *Investment Valuation*, 2nd edition, www.damodaran.com
3. Bader, H., „*Private equity als anlagekategorie: theorie, praxis und portofoliomanagement fur institutionelle investoren*", Bern: Haupft, 1996.
4. Baker George, Smith David George, *„The new financial capitalists"*, edit. Camridge university press, 1998
5. Bătrâncea Ioan, *„Analiza economică şi financiară a societăţilor comerciale",* edit. ETA, 1996
6. Bătrâncea Ioan, *„Analiză financiară"*, edit. Dacia, 2000
7. Bătrâncea Ioan, *„Curs de Analiză Financiară"*, Universitatea „Babeş-Bolyai", Facultatea de Ştiinţe Economice şi Gestiunea Afacerilor, Cluj-Napoca 2006.
8. Bătrâncea Ioan, Bătrâncea L. M, Borlea S, *„Analiza financiară a entităţii economice"*, edit. Risoprint, 2007
9. Bierman Harold, *„Private equity – transforming public stock to create value"*, edit. Wiley, 2003
10. Bloomfield Stephen, *„Venture capital funding – a practical guide to raising finance"*, edit. Kogan Page, 2008
11. Burrough Bryan, Helyar John, *„Barbarians at the gate – the fall of RJR Nabisco"*, edit. Collins, 2003
12. Caselli Stefano, *„Private equity and venture capital in Europe – markets, techniques, and deals"*, edit. Elsevier, 2010
13. Cendrowski Harry, „*Private equity – History, Governance and Operations"*, Edit. Wiley, 2008
14. Copeland Tom, Koller Tim şi Murrin Jack, „*Valuation: Measuring and managing the value of companies"*, edit. Wiley and Sons, 1990
15. Cumming Douglas J. *„Venture capital – investment strategies, structures, and policies"*, edit. Wiley, 2010
16. Deaconu Adela, *„Evaluarea afacerilor"*, edit. Intelcredo, 2002
17. Evans Frank, Bishop David, *„Valuation for M&A – building value in private companies"*, edit. Wiley, 2001
18. Fraser-Sampson Guy, „*Private Equity as an Asset Class"*, Edit. Wiley Finance, 2007
19. Feldman Stanley, *„Principals of private firm valuation"*, edit. Wiley, 2005
20. Gad Sham, *„The business of value investing"*, edit. Wiley, 2009
21. Gaugan Patrick, *„Mergers, aquisitions, and corporate restructurings"*, edit. Wiley, 2011
22. Gilson Stuart, *„Creating value through corporate restructuring – case studies in bankruptcies, buyouts, and breakups"*, edit. Wiley, 2001
23. Gladstone David, Gladstone Laura, *„Venture capital investing – the complete handbook for investing in private businesses for outstanding profits"*, edit. Prentice Hall, 2004

24. Golis Cristopher, *„Enterprise and venture capital – a business builder's and investor's handbook"*, edit. Allen & Unwin, 2002
25. Gompers, P., Lerner, J., „*The venture capital cycle"*, Cambridge: MIT Press, 1999.
26. Graham Benjamin, Dodd David, *„Security analysis",* Edit. McGraw-Hill, 1976.
27. Graham Benjamin, Meredith Spencer, *„The interpretation of financial statements"*, edit. Harper Business, 1998
28. Işfănescu A. (coord.) şi colectivul, *„Analiza economico-financiară a societăţilor financiare"*, edit. ASE, Bucureşti, 2002
29. Kocis James, Bachman James, Long Austin, Nickels Craig, *„Inside private equity"*, edit. Wiley, 2009
30. Lerner Josh, *„Venture capital and Private equity – a casebook"*, edit. Wiley, 2000
31. Michel Allen, Shaked Israel, *„The complete guide to a successful leveraged buyout"*, edit. Legal Financial Press, 1995
32. Mizrahi Charles, *„Getting started in value investing"*, edit. Wiley, 2008
33. Porter, Michael, „*Competitive Advantage: creating and sustaining superior performance"*, The free press, 1985.
34. Povaly Stefan, „*Private equity exits*", edit. Springer, 2007
35. Pratt Shannon, Niculiţă Alina, *„Valuing a business – the analysis and appraisal of closely held companies"*, edit. McGrawHill, 2008
36. Rappaport, A., „*Creating shareholder value"*, edit. Macmillan Inc., 1986
37. Rickertsen Rick, Gunther Robert, *„Buyout – the insider's guide to buying your own company"*, edit. Amacom, 2001
38. Robu Vasile, „*Evaluarea Întreprinderii"*, http://www.biblioteca-digitala.ase.ro/biblioteca/carte2.asp, 1999
39. Sherman Andrew, Hart Milledge, *„Mergers and aquisitions from A to Z"*, edit. AMACOM, 2006
40. Stancu Ion, *„Finanţele întreprinderii"*, edit. Economică, 1996
41. Tiron Tudor Adriana, *„Combinări de întreprinderi – fuziuni şi achiziţii"*, edit. Accent, 2005
42. Tjia John, *„Building financial models – a guide to creating and interpreting financial statements"*, edit. McGrawHill, 2004
43. Todea Alexandru, *„Managementul investiţiilor pe piaţa de capital"*, edit. Casa Cărţii de Ştiinţă, 2003
44. Trenca Ioan, *„Managementul financiar al întreprinderii: abordări tehnico – metodologice"*, edit. Mesagerul, 1997
45. Vernimmen Pierre, *„Corporate finance – theory and practice"*, edit. Wiley, 2005
46. Wilmerding Alex, *"Term sheets & valuations",* edit. Aspatore books, 2004.

DOCTORATE THESIS:

1. Hailemariam Stifanos, *"Corporate value creation, governance and privatization"*, Rijksuniversiteit Groningen, 2001
2. Loos Nicolaus, *"Value creation in Leveraged Buyouts"*, University of St. Gallen, 2005

3. Kahlert Thorsten, *“Portofolio Restructuring: a decision-making perspective”*, University of St. Gallen, 2010
4. Rudisuli Roger, *“Value creation of spin-offs and carve-outs”*, Universitat Basel, 2005
5. Povaly Stafan, *“Private equity exits: an analysis of divestment process management in relation to leveraged buyouts”*, University of St. Gallen, 2006

PUBLICATIONS AND ARTICLES:

1. Achim Monica, Popescu Tudor, *„Other methods of predicting financial statements”,* în volumul *Impact of european integration on the national economy,* Facultatea de Ştiinţe Economice, Universitatea Babes-Bolyai, Cluj-Napoca, 28-29 oct. , 2005, pag.1-11
2. Achim Monica, Achim Sorin, Popescu Tudor, *„Ways of perfecting the data used in financial analysis”,* în revista Studia Univ. “Babeş-Bolyai” Oeconomica, Cluj-Napoca, nr. 2/2004, pag.181-190
3. Achim Monica, Popescu Tudor, *“Predicting financial statements”*, în revista Studia Univ. “Babeş-Bolyai” Oeconomica, Cluj-Napoca, nr. 1/2005, pag.109-116
4. Altman Edward, Kishore Vellore M, „*Almost Everything You Wanted to Know about Recoveries on Defaulted Bonds*”, Financial Analysts Journal, Vol. 52, No. 6, (November/December 1996)
5. Bauer, R., „*Risks, returns, and Fama French Factor exposures of Venture Capital and Leveraged Buyout investments*”, ESF workshop presentation, University of Oxford, 2005.
6. Black Fischer, and Scholes Myron S., “*The pricing of options and corporate liabilities”*, Journal of Political Economy, 81:3, 1973, pp. 637-654
7. Brav, A., Gompers, P., „*Myth or reality? The long-run underperformance of initial public offering: evidence from venture and non-venture backed companies*”, in Journal of Finance, vol. 4, no. 52, 1997
8. British Private Equity and Venture Capital Association (BVCA), *„A guide to Private Equity”, 2010*
9. CFA Institute, *„Dimensions in private equity”*, conference proceedings, 2004
10. Cumming, D. J., Machintosh, J. G., *„A cross-country comparison of full and partial exits”*, in Journal of banking and science, no. 27, 2003
11. Cumming, D. J., Machintosh, J. G., *„Venture capital exits in Canada and the United States”*, University of Toronto Law Journal, Vol. 53, 2003
12. Cumming, D. J., „*Agency costs, institutions, learning, and taxation in venture capital contracting*”, Journal of Business Venturing, 2004.
13. Goldman, Sachs & Co and Frank Rusell Co. *Publications* 1992-2010
14. Gompers, P., „*Grandstanding in the venture capital industry*”, in Journal of Financial Economics, no. 42, 2000
15. Gull, J., „*Methodologies of marketing returns*”, Venture Capital Journal, vol. 39, no. 6, 1999
16. Irish Venture Capital Association, *„A guide to venture capital”*, www.ivca.ie
17. Kaserer, C., Diller, C., „*European private equity funds – a cash flow based performance analysis*”, Technische Universitat Munchen, 2004

18. Lerner, Joshua, “*Venture capitalists and the decision to go public*”, Journal of Financial Economics, vol. 35 (Iunie 1994)
19. Kraft, V., „*Private equity fur turnaround-investitionen: erfolgsfaktoren in der managementpraxis*”, Frankfurt am Main: Campus, 2001.
20. Lieber, D., „*Proactive portofolio management: manage now to realize returns later*”, in The Journal of Private Equity, no. 1, 2004
21. Lin, T. H., Smith, R. L., „*Insider reputation and selling decisions: the unwinding of venture capital investments during IPOs*”, in Journal of Corporate Finance, no. 4, 1998
22. Mastracchio Nicholas, J. Jr., and Zunitch Victoria M., “*Differences Between Mergers and Acquisitions*,” Journal of Accountancy, November 2002.
23. Megginson, William L., si Kathleen A. Weiss, “*Venture capitalist Certification in Initial Public Offerings*”, Journal of Finance, vol. 46 (Iulie 1991)
24. Plummer, James R. – “*QED Report on Venture Capital Financial Anlysis*”, Palo Alto, California, QED Research, Inc. (1987)
25. Popescu Ionuţ, *„Întreprinderea şi politicile de finanţare ale acesteia”*, lucrare de diplomă, Universitatea Babeş-Bolyai, 2007
26. Popescu Tudor, *„Tranziţia şi privatizarea în România”*, Revista Tinerilor Economişti, Universitatea din Craiova, an III – nr. 4, Edit. Universitaria 2005, pag. 192-198
27. Popescu Tudor, *„Trecerea României la Euro”*, Revista Tinerilor Economişti, Universitatea din Craiova, an II – nr. 3, Edit. Universitaria 2004, pag. 156-161
28. Popescu Tudor, *„Investiţiile străine directe în Europa Centrală şi de Est”*, Universitatea Babeş-Bolyai, conferinţa „Dezvoltare şi integrare în condiţiile tranziţiei”, 2003
29. Popescu Tudor, *„Relaţiile economice dintre România şi CEFTA”*, Conferinţa Internaţională CEP Bucureşti, 2001
30. Popescu Tudor, *„Teoria lui Ricardo despre comerţul internaţional”*, Universitatea Babeş-Bolyai, Conferinţa internaţională „Creştere economică, dezvoltare şi progres”, 2000
31. Popescu Tudor, *„Modelele capitaliste contemporane: anglo-american şi renan”*, Universitatea Babeş-Bolyai, Facultatea de Ştiinţe Economice şi Gestiunea Afacerilor, Conferinţa ştiinţifică anuală, 2000
32. Popescu Tudor, *„Piaţa de capital din România”*, Universitatea Babeş-Bolyai, 2007
33. Popescu Tudor, *„Selecţia unui portofoliu eficient”*, Universitatea Babeş-Bolyai, 2008
34. Popescu Tudor, *„Evaluarea performanţei gestiunii portofoliului”*, Universitatea Babeş-Bolyai, 2008
35. Popescu Gheorghe, Popescu Tudor, *„Relaţia oferă – cerere în economia marfară”*, Simpozionul Ştiinţific Internaţional „Dezvoltarea naţională sub impactul globalizării”, Universitatea Dimitrie Cantemir, Târgu Mureş, Editura Dimitrie Cantemir 2005, pag. 369-386
36. “*Private Pensions Prepare To Recycle Gains from Prior Investments*”, in The Private Equity Analyst, Noiembrie 1992

37. Rogers, Steven, Erik Maurer, Doug Olds, Scott Ziffra, Elton Milton and Andrew Zacharias, "*Private Equity Industry"*, 2006
38. Spremann, K., „*Asymetrische Information*", Zeitung fur Betriebswirtschaft, no. 60, 1990
39. Sherman Andrew, *„Anatomy of a term sheet"*, Enterpreneur coffee and doughnuts event, North Bethesda, 2001
40. Wainwright Fred, Angela Groeninger, "*Note on exits*", Dartmouth College, 2003.
41. Wright, M., Robbie, K., „*Venture capital and private equity: a review and synthetisis"*, in Journal of business finance & accounting, vol. 25, no. 5-6, 1998
42. Yates Ian, Roberts Edward, *„Initiating successful corporate venture capital investments"*, MIT Sloan School of Management, 1991
43. www.wikipedia.org – „*Private Equity History*"

WEB SITES:

1. www.bvb.ro
2. www.cnvm.ro
3. www.mfinante.ro
4. www.londonstockexchange.com
5. www.aaf.ro
6. www.nvca.org
7. www.bvca.co/uk
8. www.evca.eu
9. www.seepea.org
10. www.valuebasedmanagement.net
11. www.mba.tuck.dartmouth.edu
12. www.wikipedia.org
13. www.damodaran.com
14. www.euronext.com
15. www.investopedia.com
16. www.wikipedia.com
17. www.nyse.com