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**UNIVERSITY "AL. I. CUZA" OF IASI
FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION
DOCTORAL SCHOOL IN ECONOMICS AND BUSINESS ADMINISTRATION**

**ANALYSIS OF THE MERGER'S IMPACT ON THE
ABSORBING COMPANIES' FINANCIAL POSITION
AND PERFORMANCE**

-Abstract of the doctoral dissertation-

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Introduction

*The truth asks for one thing: before we damn it, we should research it
(Tertullian)*

Title and thematic area wherein the research is classified

The realities of modern society demonstrate that the business of the entrepreneurs are conducted in an economic and competitive environment, which requires the improvement and development of relations of production and sales. In this context, for economic and financial reasons, companies may resort to a process of concentration, by means of a merger, of the factors involved in developing and diversifying its activities.

The paper refers to the analysis of the impact of the merger on the financial position and on the performance of the companies. I chose this topic because the financial and economic crisis covered the world and its consequences are difficult to assess. One thing is certain - the fear of tomorrow with all its consequences. Within this framework of uncertainties and unknown, one of the modalities, where appropriate, to rescue companies, to strengthen a certain position on the market and to obtain some tax advantages is called restructuring by merger. This operation is a viable solution for companies in payment default, as one of the legal and economic modalities enabling the continuation of financial recovery.

Globalization is undoubtedly a great challenge nowadays. Who is not taking part in the globalization process is lost. But how to survive in an economy, that is subject to globalization? It seems pretty simple: who is stronger, who is faster.

The current business world relies on expanding markets globally. Therefore, the gradual shift from the international economy to the global economy occurs. The main actors of this new economy, an interconnected economy, become transnational corporations.

Globalization determines companies to sell their products by means of global assembly lines. For example, the Boeing 767 passenger plane was designed in Seattle (USA), where they made the wings and the cockpit; front part and some of the components of the wings were manufactured in Italy, the back side in Canada, the windshields and the

engines in UK and the fuselage and the components, that embedded the cutting edge technology in Japan.

To meet the challenges of business globalization, many companies form strategic alliances or merge with other companies, even competitors. Mergers, acquisitions and strategic alliances are the logical and inevitable consequence of the competition in a global economy without barriers and increasingly integrated.

Motivated by changes in our society and wanting to capture the impact of these changes on companies, we decided to entitle our research "Analysis of the impact of the merger on the absorbing companies' financial position and performance ".

Understanding mergers and acquisitions is very important in the current economic climate as it is known that most mergers fail due to lack of knowledge of the managers involved.

General guidelines of the dissertation's structure

The topic regarding mergers is vast and reflects the reality of the current economic environment. After finding out that in our country there are few works, which have analyzed this topic comprehensively, we intend to analyze it in its many facets, starting from the conceptual framing of the strategy of mergers and acquisitions in the within the assembly of the company's reorganization strategies, continuing with the mechanism of mergers and acquisitions, the economic determinants of this operation, the investigation of the merger's development at a global, European or national level and finalizing with the analysis of the merger's impact on companies' financial position and performance .

The Ph.D. thesis is structured in two parts: the first part is entitled The stage of knowledge in the field of the companies' restructuring through merger, which comprises three chapters and Part II The analysis framework of the merger's effects on the absorbing company's financial position and performance, which includes two chapters.

The place and the role of mergers within the assembly of the companies' reorganization strategies is to analyze the causes of the companies' difficulties, of mechanisms for the detection and prevention of difficulties, the classification of merger strategy within the company's strategies, followed by an analysis of the reasons for resorting to such strategy. This chapter presents also the reorganization strategy of the merger under competitive conditions.

Based on the objectives of financial statements, *in the second chapter conceptual delimitations are made* regarding the balance and financial position and also foundations regarding the economic and financial performance of an entity.

The third chapter presents the Mechanism of mergers and acquisitions, which aims at determining the goals for which the merger was intended, then a incursion into the evolution of the phenomenon by reviewing the wave of mergers was performed and also a presentation of the types of operations. Also in this chapter we discussed the key steps related to the success of the merger process and presented ways to measure the performance of mergers.

The fourth chapter entitled The analysis of the influential factors in the context of economic recession has two objectives, namely: the analysis of the mergers' evolution in time and space and the determination of the factors influencing mergers and the mergers' activity.

The analysis in time and space of mergers, has as a goal the analysis of the impact of the economic crisis on mergers on a global, European level and also on the level of Romania, taking into account that our economy is connected to the global economy. The analysis is performed on regions, countries and areas.

The study on the factors influencing the companies' reorganization strategies by mergern at an international, European and national level, aims to analyze the impact of the macroeconomic factors on mergers. This section studies the link between the distribution and evolution of mergers and a number of macroeconomic factors such as: economic growth, stock index, the degree of openness of the economy, the central bank's base rate and inflation, with the ultimate goal of generating a statistical regression model to analyze which factor has the greatest influence on the number of firms that have merged.

In *Chapter 5* we aim to analyze the impact of the merger on the absorbing companies' financial position and performance. The goal of this chapter is to analyze the merger's impact on the structure rates of the assets, on the financial balance, on the liquidity, solvability and also the merger's impact on the management. This chapter presents also the merger's impact on the absorbing companies' financial performance, by selecting the profitability of the equity as a measure of performance.

In order to assess the performance of the absorbing companies after the merger, we intend to analyze to what extent this is influenced by a

series of factors such as: rotation speed of the current assets, the balance of current assets altogether assets, leverage, turnover rate and company's size.

Goal and objectives of the research

The goal of our research is to determine the impact of the merger on the absorbing companies by knowing the context in which the companies involved operate and by determining the merger's influence on the financial position and performance.

With our research we intend to fulfill the following objectives:

- *The knowledge of the context in which the companies involved in the merger operate, having the following secondary objectives:*

O1: Determining the merger progress registered globally, in Europe and particularly in Romania, both in terms of numbers and value;

O2: Determining the geographic area (the countries and the continent) where the economic crisis has influenced the most the merger activity;

O3: Determining the field of activity, that has influenced the most the merger activity;

O4: Establishing the link between the mergers' evolution and a series of macroeconomic factors such as economic growth, stock index, the degree of openness of the economy, the central bank's base rate globally, in Europe and in Romania;

O5: Determining the extent to which the macroeconomic factors affect the number of mergers.

- *Determining the merger's influence on the Romanian companies' financial position and performance, having the following sub-objectives:*

O6: Determining the merger's impact on the Romanian absorbing companies' financial position and performance;

O7: Determining the influential factors of the absorbing companies' performance.

Used approaches and methods

In order to achieve the objectives stated on the subject matter, the study is based on a research methodology that is used to obtain the necessary information. In our approach we undertook *documentary research* that I conducted with the knowledge of the theoretical analysis and the *constructive research* by formulating hypotheses or personal opinions and their validation by means of interpretative demonstrations

using both scientific and experimental validations. I have structured our activity so as the stages of the research are met as they are structured in figure no. 1

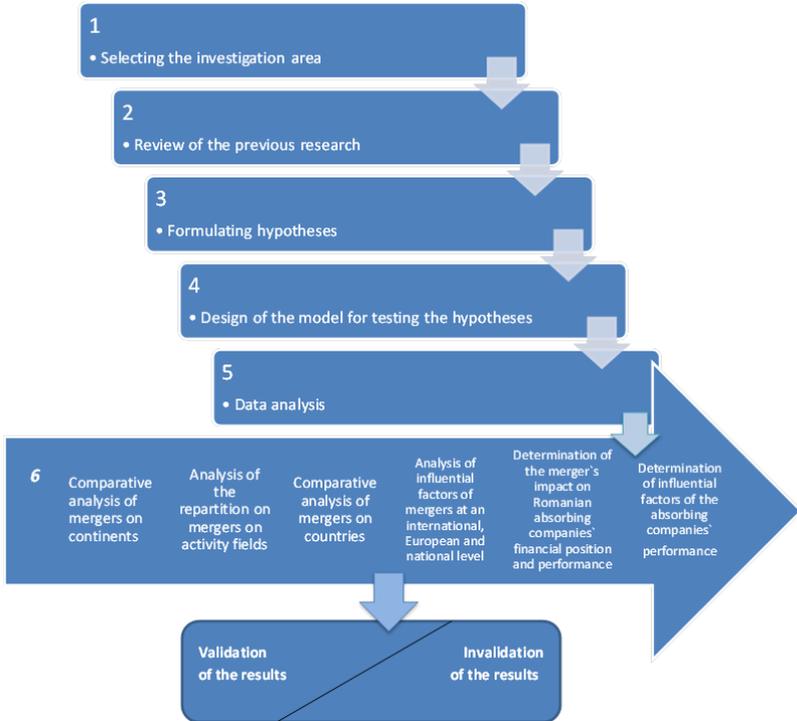


Figure no.1 Research stages

(Source: processing according to Boehm, V.R., *Research in the real world – A conceptual model, Personnel Psychology, 1980, pp. 495-504*)

Starting our research, we have stopped in the first place, at the demarcation of the research area, after which we went to the review of the previous researches on similar topics, and finally, to setting research goals and formulating hypotheses.

Hypotheses from which we started:

Hypothesis 1: *Between the number of mergers and the economic growth there is a direct link;*

Hypothesis 2: *Between the stock index and the number of mergers there is a direct link;*

Hypothesis 3: *The base rate of the central bank is inversely proportional with the number of mergers;*

Hypothesis 4: Between the degree of openness of the economy and the number of mergers, there is a direct link;

Hypothesis 5: Between the number of mergers and the inflation there is an indirect link;

Hypothesis 6: The merger operation has a positive impact on the absorbing companies' position and performance;

Hypothesis 7: There is a significant link between the performance of the companies that have merged and the speed rotation of the circulating assets, the weight of the circulating assets totally assets, the financial leverage, the income rates and the size of the company.

After establishing the hypotheses, a first goal of our research was the correct data and information collection (see table no. 1)

Table no.1. Data, population and sample

Target population	Analyzed period of time	Analyzed sample	Analysis instruments and methods	Analyzed data	Data source
O1	2005-2011	Mergers performed globally	Data collection by means of observation method, data classification and grouping by continent and the performance of graphics with the help of the computational table program Excel from the package Microsoft Office 2010.	Number and value of mergers expressed in billions \$	Database of the Institute for Mergers and Acquisitions I (IMAA) from Vienna available at http://www.imaa-institute.org/statistics_mergers_acquisitions.html
Mergers performed in Europe		43.500			
Mergers performed in Asia-Pacific		16.500			
Mergers performed in North-America		11.500			
Mergers performed in South-America		14.000			
		1.700			
O2	2005-2011	Aerospace and Defence Industry	Data collection by means of observation method, data classification and grouping by field of activity; performance of graphics with the help of the computational table program Excel from the package Microsoft Office 2010; statistical analysis using the ANOVA method, the program SPSS 19.0 and correlation indexes Pearson.	Number and value of mergers expressed in billions \$	Database of the Institute for Mergers and Acquisitions I (IMAA) from Vienna available at http://www.imaa-institute.org/statistics_mergers_acquisitions.html
Car industry		2.064			
Banking sector		7.400			
Biotechnology and Pharmacy industry		11.125			
Chemical industry		7.540			
Commodities and services		8.350			
Production of recipients and packages		61.250			
Energy		2.900			
Health		28.700			
Insurances		6.300			
Consultancy and IT services		6.840			
Equipments		12.200			
Media and Entertainment		10.890			
Sales		27.464			
Software		18.166			
Telecommunications	14.025				
		10.600			

O3	Mergers performed in Australia, Austria, Belgium, Brasil, Canada, China, France, Germany, India, Indonesia, Italy, Mexico, Netherlands, Norway, Poland, Russia, Saudi Arabia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Thailand, Turkey, United Arab Emirates, Great Britain, United States of America, Vietnam	2005-2011	1.350 104 231 560 1.475 973 895 855 570 690 175 428 280 129 275 428 3.040 11.300	Data collection by means of observation method, data classification and grouping by field of activity; performance of graphics with the help of the computational table program Excel from the package Microsoft Office 2010; statistical analysis using the ANOVA method, the program SPSS 19.0 and correlation indexes Pearson.	Number and value of mergers expressed in billions \$	Database of the Institute for Mergers and Acquisitions I (DMAA) from Vienna available at http://www.ima-institute.org/statistics/mergers_acquisitions.html
O4 and O5	Mergers performed globally Mergers performed in Europe Mergers performed in Romania	2005-2011	306.500 115.500 572	Data collection by means of observation method, statistical analysis using the method of multiple regression, the SPSS 19.0 program and 10 correlation index Pearson	Number of mergers, economic growth index, stock index, interest rate, the degree of openness of economy, inflation. Information is collected at a global, European level and also in Romania.	Database of the Institute for Mergers and Acquisitions I (DMAA) from Vienna available at http://www.ima-institute.org/statistics/mergers_acquisitions.html Database of the European Commission available at http://ep.eurostat.ec.europa
O6 and O7	Unlisted companies on the stock market Bucharest	2007-2008 for the companies that merged in 2008 and have published the merger project in MOR.p.IV 2009-2010 for the companies that merged in 2010 and have published the merger project MOR.p.IV	197 companies; absorbing companies that have published the merger project in the Official Gazette of Romania, part IV, in the analyzed period.	Data collection by means of observation method, data classification and grouping tables, graphics, the method of economical-financial analysis that contains a group of methodological stages and practices in order to establish and quantify the causal relations between the studied indicators and the determinant factors: comparison of financial situations, analysis by means of rates (Ratios), use of informatics instrument for data storage, rates' calculation, determining of financial equilibriums, determining the progress in time and space of the indicators	Data collection from the mergers' projects of the companies, more exactly from the merger financial situations	Romanian Official Gazette part IV, numbers 976 – 2825 Merger financial situations

Note: symbols O1 - O7 represent the objectives of the research

The analysis of the progress and of the influential factors of mergers in the context of economic recession

O1: Determining the merger progress registered globally, in Europe and particularly in Romania, both in terms of numbers and value.

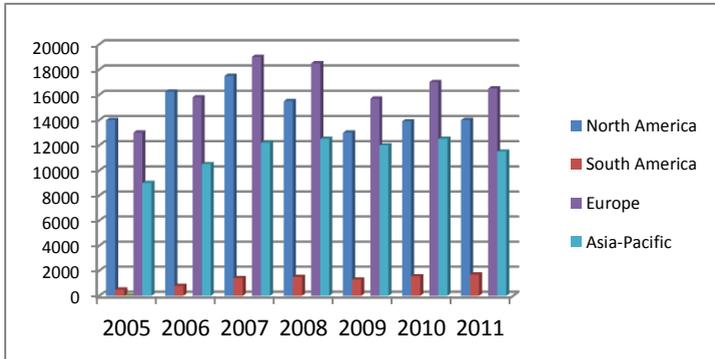


Figure no. 2 Progress of the mergers' number on geographical areas

O2: Determining the geographic area (the countries and the continent) where the economic crisis has influenced the most the merger activity.

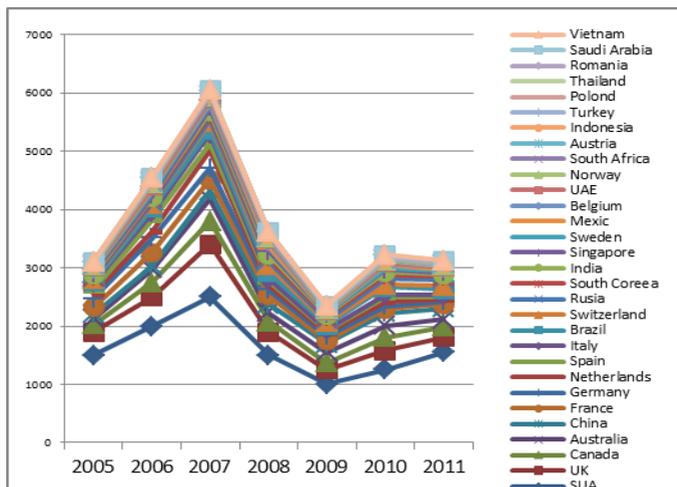


Figure no. 3 Number of mergers and acquisitions registered on countries

Table no. 2 Classification of countries according to the number of mergers

Number	Country
>30.000	USA
20001-30000	Canada, Great Britain
10001-20000	France, Rusia, Germany, Australia
4001-10000	Norway, Brasil, Switzerland, Singapore, Italy, the Netherlands, South Korea, Sweden, Spain, India
2000-4000	South Africa, Thailand, Austria, Indonesia, Belgium, Poland
1000-1999	United Arab Emirates, Turkey, Vietnam, Mexico
1-999	Romania, Saudi Arabia

(Source : personal elaboration according to <http://www.imaa-institute.org/statistics-mergers-acquisitions.html>, accessed on 08.07.2013, database from the Institute for Mergers and Aquisitions (IMAA) from Vienna)

Table no. 3 Economic growth registered at the level of each country, expressed in percentage

Country	2009	Country	2009	Country	2009
Austria	-3.8	Ireland	-7	Netherlands	-3.5
Belgium	-2.8	Iceland	-6.8	Poland	1.6
Bulgaria	-5.5	Italy	-5.5	Portugal	-2.9
Cyprus	-1.9	Japan	-5.5	Czech Republic	-4.7
Croatia	-6	Latvia	-17.7	Romania	-6.6
Denmark	-5.8	Lithuania	-14.8	Slovakia	-4.9
Switzerland	-1.9	Luxembourg	-5.3	Slovenia	-8
Estland	-14.3	Macedonia	-0.9	Spain	-3.7
Finland	-8.4	Malta	-2.7	United States of America	-3.5
France	-2.7	Great Britain	-4.4	Sweden	-5
Germany	-5.1	Montenegro	-5.7	Turkey	-4.8
Greece	-3.3	Norway	-1.7	Hungary	-6.8

(Source: Eurostat, http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_data_base, accessed on 08.07.2013)

The short and medium- term perspectives indicate a continuation of the upward trend of mergers and acquisitions activity observed since 2010, but speak rather of a moderate growth. The mergers and acquisitions activity is heavily influenced by economic factors that define the national, European and global framework.

Table no. 4 Economic growth for the year 2012 and the economic perspectives (in %)

	2011	2012	2013	2014
Europe	2,0	0,0	0,3	1,5
Developed Europe	1,4	-0,3	0,0	1,2
Europe's emerging countries	5,3	1,6	2,2	2,8
United States	1,8	2,2	1,9	3,0
Japan	-0,8	2,0	1,6	1,4

(Source: IMF, *World Economic Outlook April 2013: Hopes, Realities and Risks*, Washington, 2013, pp.48-56, available at <http://www.imf.org/external/pubs/ft/weo/2013/01>, accessed on 17.08.2013)

According to IMF, the redressment in Europe after the recession is still faint but one can notice few disparities. Therefore, if in Europe's developed countries the redressment is modest and will be more obvious in 2014, the emerging countries grow rapidly, respectively with 2,2% in 2013 and 2,8% in 2014.

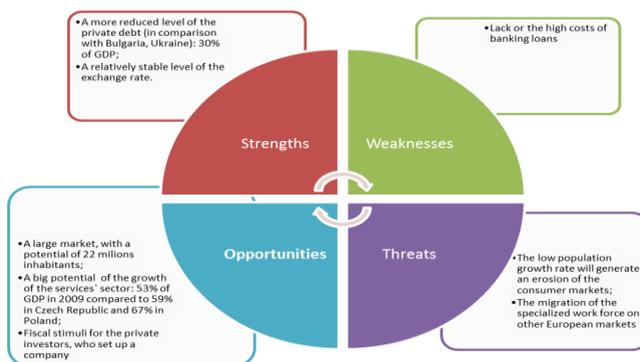


Figure no. 4 Romania's SWOT analysis

(Source: Groth, A., Liechtenstein, H., Lieser, K., *The Global Venture Capital and Private Equity Country Attractiveness Index*, IESE Business School, University of Navarra, p.192)

The sharp decline in merger and acquisition activity in 2008 and the increased descending trend in 2009 were determined by reducing the companies' to invest, after restricting the access of financial resources internally (due to reduced corporate profits) but also externally (due to the decline of the available funds and increase in the funding cost). On the other hand, the deterioration of markets following the economic

recession but also the unfavorable economic prospects have affected negatively the companies' disposition to invest. Thus, due to the recession that affected most economies, to the strong reduction of the companies' profits and the sharp decline on the stock market, many companies were forced to abandon their expansion plans and hence the mergers' or acquisitions' projects.

A huge wave of mergers and acquisitions will take place once the global economic crisis will disappear. Managers will make strategic moves to fill the gaps related to products or services or to enter new markets.

O3: *Determining the field of activity, that has influenced the most the merger activity.*

Number of mergers and acquisitions	
La corrélation Pearson	
Number_mergers_acquisitions	1.000
Chemic_industry	.872
Commodities_Services	.980
Containers_packages	.689
Energy	.329
Health	.947
Insurances	.898
Consultancy_IT	.914
Equipments	.815
Media_Entertainment	.821
Software	.458
Sales	.828
Telecommunications	.783

Figura nr. 5 Link between industries and the number of mergers

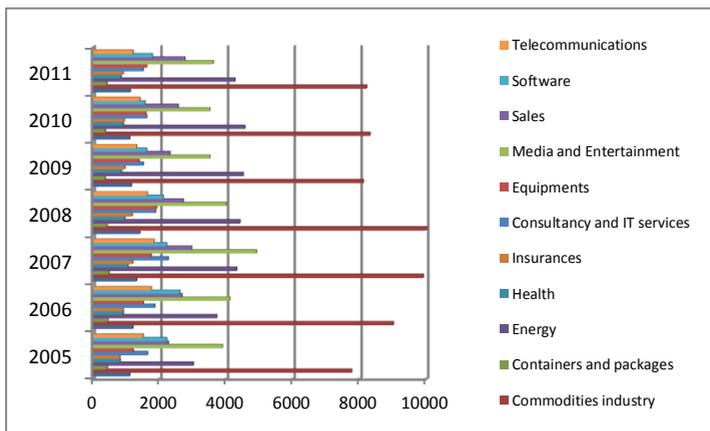


Figura nr. 6 Progress of the mergers' number on industries

Value of mergers and acquisitions	
La correlation Pearson	
Value_mergers_acquisitions	1.000
Chemic_industry	.872
Commodities_Services	.980
Containers_packages	.689
Energy	.329
Health	.947
Insurances	.898
Consultancy_IT	.914
Equipments	.815
Media_Entertainment	.821
Software	.458
Sales	.828
Telecommunications	.783

Figura nr.7 Link between industries and value of mergers

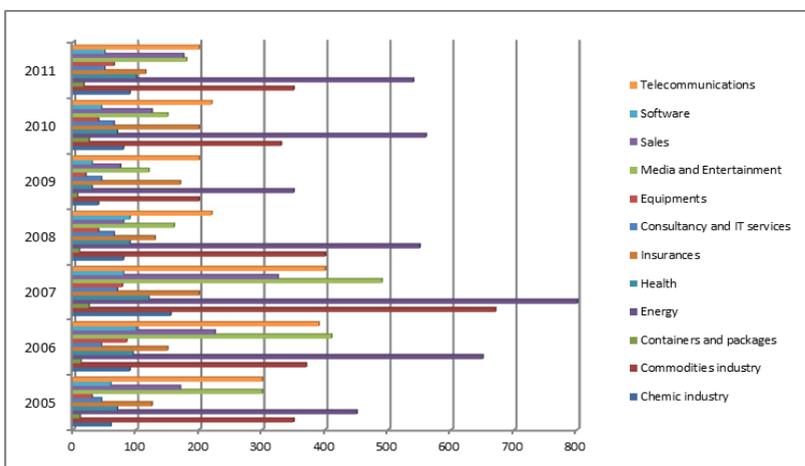


Figura nr. 8 Progress of mergers' value on industries

In order to determine the link between the field, on one hand, and the number and value of mergers, on the other hand, we have decided to use the statistical method by means of ANOVA procedure. As a statistical instrument I have used the SPSS 19.0 program. Figures no.5-7 indicate that between the commodities industry and the number and value of mergers there is a strong link of 98% resp. of 96%.Sig. <0. Thus the national economy sector, that should be more developed in order to generate more economic growth is the sector of commodities, because it affects the most the number and value of mergers.

The analysis of influential factors of mergers at an international, European and national level

Work hypotheses

H1: Between the number of mergers and the economic growth there is a direct link;

H2: Between the stock index and the number of mergers there is a direct link;

H3: The base rate of the central bank is inversely proportional with the number of mergers;

H4: Between the degree of openness of the economy and the number of mergers, there is a direct link;

H5: Between the number of mergers and the inflation there is an indirect link;

Table no. 5 The variables used in the econometric model

No. Crt.	Variables	Economic terms	Statistical terms
1	N	Number of mergers	Dependent variable Resultative variable Quantitative dimension
2	GDP (PIB)	Economic growth PIB = Gross Domestic Product, an index used to measure the economic growth at the level of Romania GDP = Gross Domestic Product, an index used to measure the economic growth at an European and global level	Independent variable Predictor variable Quantitative dimension
3	SMI	Stock index	Independent variable Predictor variable Quantitative dimension
4	G	The degree of openness of the economy $G = \frac{Import + Export}{GDP}$	Independent variable Predictor variable Quantitative dimension
5	D	Base rate of the central bank	Independent variable Predictor variable Quantitative dimension
6	I	Inflation	Independent variable Predictor variable Quantitative dimension

Regression equation:

$$N = \alpha + \beta_1 * GDP + \beta_2 * SMI + \beta_3 * G + \beta_4 * D + \beta_5 * I + \xi$$

The empirical analysis at a global level

	Correlations					
	Number of mergers	Economic growth	Stock index	The degree of openness of the economy	Base rate of the central bank	Inflation
Correlation: Pearson						
Number of merger	1.000	.109	.345	-.442	.899	.397
Economic growth	.109	1.000	.553	.357	.455	.341
Stock index	.345	.553	1.000	-.450	.376	-.294
The degree of openness of the economy	-.442	.357	-.450	1.000	-.070	.613
Base rate of the central bank	.899	.455	.376	-.070	1.000	.665
Inflation	.397	.341	-.294	.613	.665	1.000
Sig. (1-tailed)						
Number of merger	.	.408	.224	.160	.003	.189
Economic growth	.408	.	.099	.216	.152	.227
Stock index	.224	.099	.	.156	.203	.261
The degree of openness of the economy	.160	.216	.156	.	.441	.072
Base rate of the central bank	.003	.152	.203	.441	.	.051
Inflation	.189	.227	.261	.072	.052	.
N						
Number of merger	7	7	7	7	7	7
Economic growth	7	7	7	7	7	7
Stock index	7	7	7	7	7	7
The degree of openness of the economy	7	7	7	7	7	7
Base rate of the central bank	7	7	7	7	7	7
Inflation	7	7	7	7	7	7

Figure no.9 The relationship between the variables at a global level

The equation of the regression model at a global level:

$$N = 32130,846 - 423,148 * GDP - 15,537 * SMI - 0,003 * G + 39573,119 * D - 5209,844 * I$$

Model Summary ^d				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999 ^a	.997	.984	1228.70921
2	.998 ^b	.997	.991	915.22206
3	.995 ^c	.989	.979	1404.49828

a. Predictors: (Constant), Inflatia, Indicele bursier, Gradul de deschidere al economiei, Crestere economica, Rata dobanzii
b. Predictors: (Constant), Inflatia, Indicele bursier, Crestere economica, Rata dobanzii
c. Predictors: (Constant), Inflatia, Indicele bursier, Rata dobanzii
d. Dependent Variable: Numar fuziuni si achizitii

Figure no. 10 The percentage of the link between the variables at a global level

Model	Coefficients					Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
	B	Erreur std.					
1. (Constant)							
Economic growth	32130.846	8246.375		3.896	.160		
Stock index	-423.148	319.642	-.155	-1.324	.412	.198	5.063
The degree of openness of the economy	-15.537	8.525	-.329	-1.823	.319	.083	12.055
Base rate of the central bank	-.003	.010	-.075	-.331	.796	.052	19.166
Inflation	39573.119	9048.783	1.475	4.373	.143	.024	42.031
	-5209.844	3484.138	-.581	-1.495	.375	.018	55.906
2. (Constant)							
Economic growth	33407.988	5429.181		6.153	.025		
Stock index	-472.913	210.132	-.173	-2.251	.153	.254	3.944
Base rate of the central bank	-16.832	5.643	-.357	-2.983	.096	.105	9.519
Inflation	42260.465	2980.942	1.575	14.177	.005	.122	8.221
	-6237.324	1180.296	-.696	-5.285	.034	.086	11.564
3. (Constant)							
Base rate of the central bank	43530.615	4666.136		9.329	.003		
Inflation	-27.296	4.906	-.578	-5.564	.011	.327	3.056
	46456.321	3569.431	1.731	13.015	.001	.200	5.005
	-8283.030	1155.393	-.924	-7.169	.006	.213	4.705

Figure no. 11 The regression coefficients at a global level

The empirical analysis at the European level

	Correlations					
	Number of mergers	Economic growth	Stock index	The degree of openness of the economy	Base rate of the central bank	Inflation
Correlations: Pearson						
Number of merger	1.000	.104	.584	.127	.849	-.047
Economic growth	.104	1.000	.444	.023	-.537	.435
Stock index	.584	.444	1.000	-.500	.621	-.471
The degree of openness of the economy	.127	.023	-.500	1.000	.227	.825
Base rate of the central bank	.849	-.537	.621	.227	1.000	-.266
Inflation	-.047	.435	-.471	.825	-.266	1.000
Sig. (1-tailed)						
Number of merger	.	.413	.084	.393	.008	.460
Economic growth	.413	.	.159	.480	.107	.165
Stock index	.084	.159	.	.126	.068	.143
The degree of openness of the economy	.393	.480	.126	.	.312	.011
Base rate of the central bank	.008	.107	.068	.312	.	.282
Inflation	.460	.165	.143	.011	.282	.
N						
Number of merger	7	7	7	7	7	7
Economic growth	7	7	7	7	7	7
Stock index	7	7	7	7	7	7
The degree of openness of the economy	7	7	7	7	7	7
Base rate of the central bank	7	7	7	7	7	7
Inflation	7	7	7	7	7	7

Figure no. 12 The link between variables at the European level

The equation of the regression model at the European level:

$$N = 30222.896 + 418.584 * GDP - 1,640 * SMI - 0,000 * G + 5398.247 * D - 6611.128 * I$$

Model Summary ^a				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.958 ^b	.918	.505	2901.84993
2	.958 ^b	.917	.752	2053.02667
3	.946 ^b	.896	.793	1885.44819
4	.895 ^b	.801	.701	2255.88465
5	.849 ^b	.720	.665	2300.06021

a. Predictors: (Constant), Infatia, Rata dobanzii, Crestea economica, Gradul de deschidere al economiei, Indicele bursei
b. Predictors: (Constant), Infatia, Rata dobanzii, Gradul de deschidere al economiei, Indicele bursei
c. Predictors: (Constant), Infatia, Rata dobanzii, Indicele bursei
d. Predictors: (Constant), Infatia, Rata dobanzii
e. Predictors: (Constant), Rata dobanzii
f. Dependent Variable: Bursei fiziale si anizatii

Figure no. 13 The percentage of the link between variables at the European level

Model	Coefficients					Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
1. (Constant)	30222.896	192468.866		.157	.901		
Economic growth	418.584	9136.176	.265	.046	.971	.002	405.445
Stock index	-1.640	14.639	-.895	-.112	.929	.001	772.599
The degree of openness of the economy	.000	.001	.449	.137	.913	.008	130.630
Base rate of the central bank	5398.247	13464.585	1.521	.401	.757	.006	174.568
Inflation	-6611.128	48329.407	-1.359	-.137	.913	.001	1196.856
2. (Constant)	21426.133	9487.930		2.258	.152		
Economic growth	-.973	1.015	-.531	-.959	.439	.135	7.413
Stock index	.000	.000	.301	.727	.548	.241	4.153
Base rate of the central bank	4791.858	1751.510	1.350	2.736	.112	.170	5.691
Inflation	-4400.821	2044.664	-.905	-2.152	.164	.234	4.275
3. (Constant)	23020.999	8473.407		2.717	.073		
Stock index	-1.337	.810	-.729	-1.651	.197	.178	5.604
Base rate of the central bank	5367.209	1434.170	1.513	3.742	.033	.213	4.691
Inflation	-3857.041	1746.714	-.793	-2.208	.114	.270	3.703
4. (Constant)	9534.826	2742.920		3.483	.025		
Base rate of the central bank	3288.870	821.757	.927	4.002	.016	.929	1.076
Inflation	-1428.377	1126.478	-.294	-1.268	.274	.929	1.076
4. (Constant)	6543.280	1453.173		4.503	.006		
Base rate of the central bank	3012.004	838.990	.849	3.590	.016	1.000	1.000

Figure no. 14 The regression coefficients at the European level

The empirical analysis for Romania

	Correlations					
	Number of mergers	Economic growth	Stock index	The degree of openness of the economy	Base rate of the central bank	Inflation
Correlations: Pearson						
Number of merger	1.000	.060	-.020	.151	-.226	-.464
Economic growth	.060	1.000	.512	.422	-.117	-.342
Stock index	-.020	.512	1.000	.176	-.687	-.471
The degree of openness of the economy	.151	.422	.176	1.000	-.075	.825
Base rate of the central bank	-.226	-.117	-.687	-.075	1.000	.266
Inflation	-.454	.342	-.282	.073	.063	1.000
Sig. (1-tailed)						
Number of merger	.	.349	.583	.383	.213	.018
Economic growth	.349	.	.120	.173	.401	.226
Stock index	.583	.123	.	.353	.044	.270
The degree of openness of the economy	.383	.175	.353	.	.437	.438
Base rate of the central bank	.213	.402	.044	.437	.	.447
Inflation	.018	.225	.270	.438	.447	.
N						
Number of merger	7	7	7	7	7	7
Economic growth	7	7	7	7	7	7
Stock index	7	7	7	7	7	7
The degree of openness of the economy	7	7	7	7	7	7
Base rate of the central bank	7	7	7	7	7	7
Inflation	7	7	7	7	7	7

Figure no. 15 The link between the variables for Romania

The equation of the regression model for Romania:

$$N = 392.412 + 7.124 * GDP - 9.669 * SMI - 8.371 * G - 19.163 * D - 23.678 * I$$

Model Summary ^c				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.987 ^a	.975	.848	9.45297
2	.981 ^b	.962	.887	8.12859

a. Predictors: (Constant), Inflatia, Rata dobanzii, Gradul de deschidere al economiei, Crestere economica, Indicele bursier
b. Predictors: (Constant), Inflatia, Rata dobanzii, Crestere economica, Indicele bursier
c. Dependent Variable: Numar fuziuni si achizitii

Figure no. 16 The percentage of the link between variables for Romania

Model	Coefficients						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Error std.				Tolerance	VIF
1. (Constant)	392.412	51.440		7.629	.083		
Economic growth	7.124	1.470	1.563	4.847	.130	.244	4.095
Stock index	-9.669	1.766	-2.222	-5.476	.115	.154	6.482
The degree of openness of the economy	-8.371	.000	-.126	-.692	.615	.769	1.300
Base rate of the central bank	-19.163	3.720	-1.489	-5.152	.122	.304	3.287
Inflation	-23.678	4.202	-1.424	-5.635	.112	.398	2.512
2. (Constant)	383.559	42.843		8.953	.012		
Economic growth	6.685	1.140	1.467	5.863	.028	.300	3.333
Stock index	-9.376	1.474	-2.155	-6.360	.024	.164	6.111
Base rate of the central bank	-18.625	3.128	-1.447	-5.955	.027	.318	3.144
Inflation	-23.012	3.517	-1.384	-6.543	.023	.420	2.380

Figure no. 17 The regression coefficients for Romania

Determining the impact of the merger on the financial position and performance of acquiring companies in Romania

Working hypothesis

H6: The merger has a positive impact on the position and performance of the acquiring companies

Table no. 6 The evaluation method used by the Romanian companies

Valid	Frequencies	
	Discounted cash flow method	14
Patrimonial method	197	
Comparison method	0	
Total	211	

(Source: own processing using SPSS 19.0 statistical software, based on the data from the fusion projects in the Official Gazette of Romania, 4th part, 2008-2010, no. 976-2801)

Table no. 7 Variation of the average rate of fixed assets

Indicators	Value before merger	Value after merger	Explanations
The rate of the fixed assets	61%	53%	$R_{ai}=A_i/At$
Accepted value	60%	60%	MAXIMUM
Growth index of A_i	100%	114	$A_i=A_{in}/A_{i0}$
Growth index of At	100%	127%	$At=A_{tn}/At_0$
Growth index of CA	100%	206%	$CA=C_{an}/Ca_0$

Table no. 8 Variation of the average rate of current assets

Indicators	Value before merger	Value after merger	Explanations
The rate of the current assets	36%	43%	$R_{ac}=Ac/At$
Accepted value	40%	40%	Maximum
Growth index of Ac	100%	149%	$Ac=A_{cn}/Ac_0$
Growth index of At	100%	119%	$At=A_{tn}/At_0$

Table no. 9 Variation of the receivables average rate

Indicators	Value before merger	Value after merger	Explanations
Receivables' rate	8%	14%	$R_{cr}=Cr/At$
Receivables growth index	100%	249%	$Cr=C_{rn}/Cr_0$
Growth index of At	100%	119%	$At=A_{tn}/At_0$
Growth index of CA	100%	207%	$CA=C_{an}/Ca_0$

Table no. 10 Variation of the available funds average rate

Indicators	Value before merger	Value after merger	Explanations
Available funds' rate	1.3%	2.1%	$Rdp=Dp/At$
Accepted value	2%	2%	Maximum
Growth index of the available funds	100%	218%	$Dp=Dpn/Dp_0$
Growth index of At	100%	126%	$At=Atn/At_0$
Growth index of CA	100%	203%	$CA=Can/CA_0$

Table no. 11 Variation of the average financial stability

Indicators	Value before merger	Value after merger	Explanations
Financial stability rate	39%	59%	$Rs_f=Cpm/Pt$
Minimum value	50%	50%	Minimum
Growth index of Cpm	100%	183%	$Cpm=Cpmn/Cp_0$
Growth index of Pt	100%	139%	$Pt=Ptn/Pt_0$

Table no. 12 Average rate variation of the global financial autonomy

Indicators	Value before merger	Value after merger	Explanations
Global financial autonomy's rate	25%	12%	$Rat=Cpr/Pt$
Minimum value	33%	33%	Minimum
Growth index of Pt	100%	124%	$Pt=Ptn/Pt_0$
Growth index of Cpr	100%	51%	$Cpr=Cprn/Cpr_0$

Table no. 13 Average rate variation of global indebtedness

Indicators	Value before merger	Value after merger	Explanations
Global indebtedness rate	72%	67%	$Rig=Dt/Pt$
Maximum value	66%	66%	Maximum
Growth index of Dt	100%	115%	$Dt=Dtn/Dt$
Growth index of Pt	100%	128%	$Pt=Ptn/Pt_0$

Merger causes

- decrease in sales volume;
- decrease of population income;
- increase of the unemployment rate;
- increase of inflation;
- big variations of the rate of exchange;
- significant price increases for the raw materials, utilities;
- drastic decrease in demand for products or services;
- decrease of the enterprises available funds;
- over indebtedness;
- increase of the debts to suppliers, employees and social security budget ;
- late payments of receivables.

Merger effects

- scale economies;
- increase of the negotiating power with suppliers, which lowers prices for raw materials, utilities;
- increase of the available funds;
- decrease of the short term debts;
- business financing from own resources;
- increase of the financial stability;
- decrease of the global debts and the diminuation of the insolvability risk.

Figure no. 18 Merger causes and effects regarding the balance sheet assets and liabilities structure

Table no. 14 Variation of the medium current liquidity

Indicators	Value before merger	Value after merger	Explanations
Current liquidity	0,56	1,09	$Lc=Ac/DTS$
Accepted value	1,2-2	1,2-2	Optim
Minimum value	1	1	Minim
Liquidity growth index	100%	172%	$Lc=Lcn/Lc0$
Growth index of Ac	100%	129%	$Ac=Actn/Ac0$
Growth index of Dts	100%	149%	$Dts=Dts/Dts0$

Table no. 15 Variation of the medium patrimonial solvency

Indicators	Value before merger	Value after merger	Explanations
Patrimonial solvency (Sp)	76%	63%	$Sp=Cpr/(Cpr+ITML)$
Accepted value	40-60%	40-60%	Optimal
Minimum value	30%	30%	Minimum
Solvency growth index	100%	83%	$Lp=Lpn/Lp0$
Growth index of Cpr	100%	51%	$Cpr=Cpm/Cpr0$
Growth index of the long and medium term debts ITMI	100%	267%	$ITML=ITMLn/ITML0$

Table no. 16 Medium rotation speed variation of the global debts

Indicators	Value before merger	Value after merger	Explanations
Rotations value	0,6	1,1	$Nr=CA/global\ debts$
Minimum value	4	4	rotations
Duration in days	542	304	$Dz=(global\ debts/CA) \times 365$
Maximum value	90	90	days

Table no. 17 Medium rotation speed variation of the total stocks

Indicators	Value before merger	Value after merger	Explanations
Rotations value	2,3	3,4	$Nr=CA/Stm$
Minimum value	8	8	rotations
Duration in days	157	108	$Dz=(Stm/CA) \times 365$
Maximum value	45	45	days

Table no. 18 Medium rotation speed variation of the receivables - clients

Indicators	Value before merger	Value after merger	SYMBOL
Rotations value	4	6	$Nr=CA/Clients$
Minimum value	8	8	rotations
Duration in days	85	60	$Dz=(Clients/CA) \times 365$
Maximum value	45	45	days
Optimal value	30	30	days

Table no. 19 Rotation speed variation of the supplier credit

Indicators	Value before merger	Value after merger	SYMBOL
Rotations value	5	9,6	$Nr=CA/Fz$
Minimum value	8	8	Rotations
Duration in days	69	38	$Dz=(Fz/CA) \times 365$
Maximum value	45	45	days
Optimal value	30	30	days

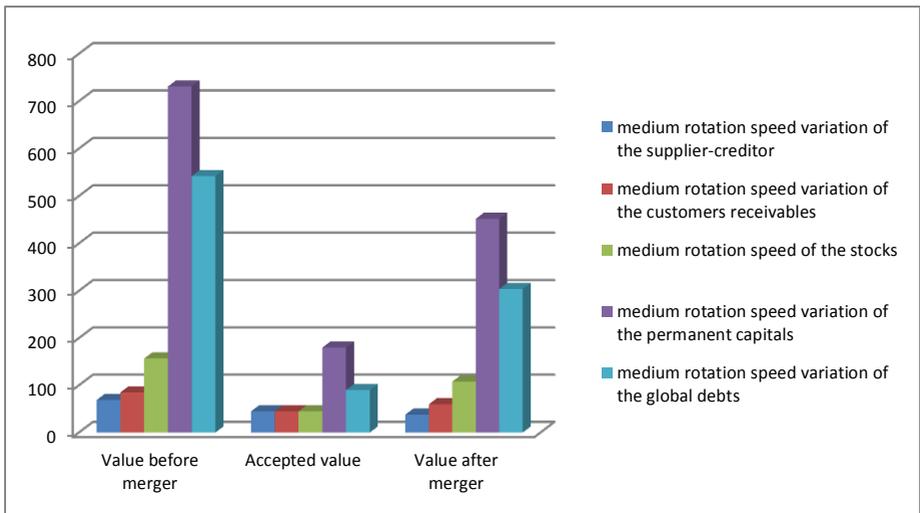


Figure no. 19 Duration in days of the permanent capitals recovery in cash, global debts, stocks, customers receivables and payables to suppliers

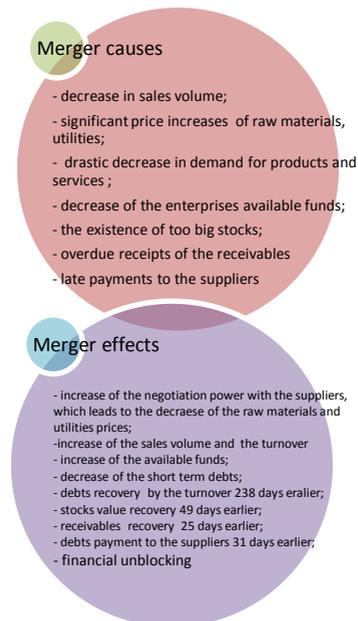


Figure no.20 Merger causes and effects from the financial management indicators perspective

Influence factors determination of the acquiring companies performance

Working hypothesis

H7: there is a significant link between the performance of the merging companies and the rotation speed of the current assets, the share of current assets to total assets, financial leverage, turnover rate and company's size

Table no. 20 Medium value evolution of the performance indicators

ROE, ROA, Rnet		Frequencies	Percent	Cumulative percent
Validly	improve	142	72,1	72,1
	decrease	55	27,9	100,0
	Total	197	100,0	

(Source: own processing with SPSS 19.0, Descriptive analysis)

Table no. 21 Averages equalisation test

	Wilks' Lambda	F	df1	df2	Sig.
Dimension	,614	122,815	1	195	,000
Object_activity	,971	5,840	1	195	,017

(Source: own processing with SPSS 19.0, Discriminant analysis)

The regression model equation is expressed as:

$$ROE = \alpha + \beta_1 * Nac + \beta_2 * Sac + \beta_3 * LF + \beta_4 * Rv + \beta_5 * D + \xi$$

Table no. 22 Partial correlations matrix

Correlations							
		ROE	Nac	Sac	LF	D	Rv
Pearson	ROE	1,000	,064	,129	-,716	,053	,120
	Nac	,064	1,000	-,182	-,165	,153	-,105
	Sac	,129	-,182	1,000	-,136	,241	-,152
	LF	-,716	-,165	-,136	1,000	,013	-,046
	D	,053	,153	,241	,013	1,000	,082
	Rv	,120	-,105	-,152	-,046	,082	1,000
Sig.	ROE		,366	,244	,000	,388	,259
	Nac	,036		,164	,188	,206	,287
	Sac	,024	,164		,233	,096	,207
	LF	,000	,188	,233		,473	,404
	D	,038	,206	,096	,473		,331
	Rv	,025	,287	,207	,404	,331	
N	ROE	197	197	197	197	197	197
	Nac	197	197	197	197	197	197
	Sac	197	197	197	197	197	197
	LF	197	197	197	197	197	197
	D	197	197	197	197	197	197
	Rv	197	197	197	197	197	197

(Source: own processing with the help of SPSS 19.0 statistics software)

Table no. 23 Regression coefficients

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-35,67	72,88		-,489	,629		
	Current assets rotation speed	-,050	,147	-,051	-,344	,734	,855	1,170
	The share of the current assets to total assets	,003	,026	,021	,136	,893	,816	1,226
	Financial leverage	-,213	,042	-,719	-5,02	,000	,925	1,081
	Company's size	6,918	17,507	,058	,395	,696	,870	1,150
	The share of ChTinVt	,237	,421	,081	,563	,578	,923	1,083

(Source: own processing with the help of SPSS 19.0 statistics software)

Conclusions, own contributions and the research perspectives

The mergers and acquisitions have known an important evolution in the last years and have become favourable instruments within the growing and development strategies, as for the large groups and also for more modest enterprises which deal with the issue of keeping their position within the domain or even with the issue of survival (especially during the periods of economic recession).

Validation or invalidation of the hypotheses are presented are presented in table no.24

Table no. 24 Validation/invalidation of the hypotheses

Formulated hypotheses	Decision with the help of the multiple regression model		
	At a global level	At European level	For Romania
H1: There is direct link between the number of mergers and the economic growth	The hypothesis is invalidated	The hypothesis is invalidated	The hypothesis is invalidated
H2: There is feedback between the stock index and the number of mergers	The hypothesis is invalidated	The hypothesis is invalidated	The hypothesis is invalidated
H3: The reference interest of the central bank is directly proportional with the number of mergers	The hypothesis is validated	The hypothesis is validated	The hypothesis is invalidated
H4: There is a direct link between the economy degree of openness and the number of mergers;	The hypothesis is invalidated	The hypothesis is invalidated	The hypothesis is invalidated
H5: There is an indirect link between the number of mergers and the inflation;	The hypothesis is invalidated	The hypothesis is invalidated	The hypothesis is validated
H6: The merger operation has a positive impact over the position and financial performance of the acquiring companies;			The hypothesis is validated
H7: There is a significant link between the performance of the companies that have merged and the rotation speed of the current assets, the share of the current assets to total assets, financial leverage, the income rate and the company's size.			The hypothesis is validated

Own contributions

Synthesizing the above mentioned issues we could consider that among the personal contributions structured on chapters, we could include:

- a. For the first chapter *The place and role of the mergers within the assembly of the reorganizational strategies of the commercial companies*:
 - ❖ determination of the difficulties underlying the reorganizational decision of the commercial companies;
 - ❖ determination of the detection and prevention mechanisms of difficulties;
 - ❖ determination of the merger advantages and disadvantages comparing to other strategies types of the company.
- b. For the second chapter *Financial statements - basis for assessing the financial position and performance of an activity*:
 - ❖ presentation of the measuring indicators of the commercial companies position and performance;
 - ❖ study on convergences and divergences in company performance reporting;

- c. For the third chapter *Mergers operations and acquisitions mechanism*:
- ❖ identifying merger waves and the characteristic features of each wave;
 - ❖ identifying merger types;
 - ❖ determining the objectives and considerations of the merger operation, by emphasising two main reasons, that is: the first one, of economic nature that refers to the obtaining of a better performance, the other one referring to personal motivations of the leaders;
 - ❖ determining the phases – success key of the merger process;
 - ❖ determining the measuring possibilities of the merger operations performances by a study of international specialized literature.
- d. For the fourth chapter *Evolution and influence factors analysis of the mergers in the context of the economic recession*:
- ❖ collecting the data from data bases regarding the number and value of the mergers performed between 2005-2011;
 - ❖ sorting the data by three criteria, namely: continent, country and by activity branch;
 - ❖ making graphs and tables with the help of the fixed-base indices change;
 - ❖ determining the geographical area (countries and continent) where the economic crisis has influenced the most the mergers activity;
 - ❖ determining the industry activity branch which influenced the most the mergers activity;
 - ❖ collecting the values of the macroeconomic indicators that are taken into account for the performing of the econometric study (economic growth, stock index, the openness degree of the economy, the reference interest of the central bank) from the data base of the European Committee and the data grouping according to years, continents, countries and activity branches;
 - ❖ establish the link between the mergers evolution and the macroeconomic factors, at a global, European level and for Romania;
 - ❖ determining the degree in which the macroeconomic factors taken in the analysis influence the number of mergers.
- e. For the fifth chapter *The merger impact analysis over the financial position and the acquiring companies performance. Romania's case*:
- ❖ revising the empirical studies regarding the merger impact over the position and acquiring companies performance;
 - ❖ collecting all the merger projects published in the Official Gazette of Romania, 4th part from 2008-2010;
 - ❖ revising of 3.417 Official Gazettes of Romania;
 - ❖ collecting all the merger financial statements, more exactly of 211 acquiring companies, from the merger projects published in the Official Gazette of Romania, 4th part for the analysed period;

- ❖ grouping of the acquiring companies according the utilised evaluation method and keeping within the study the companies which have applied the utilised method most frequently;
- ❖ calculation of the balance structure rates, the liquidity, solvency, financial management and performance rates, for 197 acquiring companies;
- ❖ calculation of the medium rates value of the financial position and performance measurement indicators and the determination of the registered variation;
- ❖ determining the merger impact over the financial position and performance of the acquiring companies in Romania;
- ❖ determining the influence factors of the acquiring companies performance.

Limits and future research directions

We appreciate that the performed research has been marked also by some limits determined by objective factors, as well by subjective factors, limits that are expected to be surpassed and transformed in openings of future researches. Thus, among the research limits, we may distinguish:

- ❖ The lack of information on the financial statements of companies unlisted on the Bucharest Stock Exchange;
- ❖ The collections of the Official Gazette, 4th part for 2011 and 2012 could not be consulted because they weren't available at the time of analysis;
- ❖ The analysis has been carried out for two years because these data are available in the merger financial statements from the merger projects published in the Official Gazette of Romania, 4th part;
- ❖ The impossibility to access complex databases regarding the mergers activity, such as Thomson One, the database offered by Thomson Reuters.

Epilogue

The conducted research approach does not provide exhaustive and universally valid conclusions. This fits only into a comprehensive effort for the explicitation of a field found in a constant dynamic.

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