

# **THE EVOLUTION OF PROFITABILITY OF ROMANIAN ENTERPRISES FROM KEY AREAS OF ACTIVITY DURING THE WORLD-WIDE FINANCIAL CRISIS**

**Ec. Iulia Oana Stefan Ph. D Student  
University of Craiova  
Faculty of Economics and Business Administration  
Craiova, Romania**

**Abstract:** : It is well known that the over-publicized financial crisis has endangered, and continues to do so, the wellbeing and even the survival of most companies, both worldwide and in Romania. In the present paper I intend to analyse, in both comparison and dynamics, for the last three years of crisis (2009,2010,2011), the evolution of profitability of 12 Romanian companies, listed on Bucharest Stock Exchange, from 4 areas of activity, respectively, food industry, constructions, oil industry and device manufacturing.

In order to achieve this goal, based on the data from both the balance sheets and profit and loss accounts of these companies, in the framework of the article have been calculated the main rates of return, respectively, the economic, the financial, the operational costs and the sales rates of return, in order to observe the remuneration level of certain key elements, such as assets, capitals, revenues or expenses. The level of these rates has been calculated both for each company and as a domain average. Also, certain specific ratios for listed companies, such as Price to Earnings Ratio or Price to Book Value have been determined, in order to observe correlations with the capital market evolution.

**JEL classification: G01, G39**

**Key words: profitability; rates of return; financial crisis; listed companies specific ratios; correlations**

## **1. INTRODUCTION**

Even if maximizing the profit no longer represents, in all cases, the primary objective of an enterprise, because of certain conceptual and practical issues, such as not considering the risk or its static character, the study of the profitability is of real importance in analysing the activity of a company.

Profitability appears as a decisive instrument in the mechanism of market economy, in orientating the production based on customer demand, and its increase represents the point where the interest of several categories of people/entities (managers, shareholders, employees, financial creditors, government) become as one.

The importance of profitability analysis at enterprise level is admitted in the specialized literature. Vernimmen P. considers that "you can not talk about profitability unless you compare the invested capitals to the result of these capitals". Another well-known author, Colasse B., defines profitability starting from "the capability of a company that is considered an investment, to obtain a result[...] is measured with the help of the ratio of that result and the investment that the company represents". Another opinion is that of Brigham E.F., who considers that "profitability represents the net result of all the

policies and managerial decision and the rates of return represent the net operational result of the combined effects of liquidity, assets management and debt management”.

In this context, the opportunity of a study regarding the evolution of profitability of Romanian enterprises listed on Bucharest Stock Exchange, as well as the correlations existing between these and certain listed companies specific ratios across three years of financial crisis (2009, 2010, 2011) arises. A number of 12 companies, from 4 different sectors of activity have been selected in order to extract the most pertinent and relevant conclusions regarding the way in which the profitability of different industries has evolved in this unfavourable period of time.

## **2. OBJECTIVES**

After the study is complete, its potential readers will be able to observe aspects like:

1. Which Romanian industries have maintained a satisfactory evolution during the economic and financial crisis and which haven't.

2. How did the main rates of return fluctuate for twelve companies from different areas of activity.

3. Correlations between the evolution of profitability rates and the evolution of trade indicators.

## **3. METHODOLOGY**

The organization and the exercising of each economic activity must be useful, as in to respond to real needs of the society, as well as profitable, insuring a profit, besides covering the expenses.

The profitability of an activity represents its capacity to produce income that must cover the expenses created by the activity itself and to lead to net income, regardless of the formulas that represent the income. In this sense, the profitability, as a financial aspect of the economic activity, represents a primary criteria for economic decisions, that are adopted at micro or even macroeconomic level. Profitability is important because the enterprise must not satisfy the increasingly large demand and the increasingly diverse needs by reducing net income. Economies that result from increasing the productivity of labor must be reflected in increases of net income that are used to further develop the societies.

Profitability, as a form of economic efficiency, is characterized at a macroeconomic level by the rate of return, as follows.

The return on invested capital shows the economic performance of the enterprise and the way it uses the capital at its disposal, being a ratio between the operational profit and the invested capital.

The return on equity represents the capacity of the company to obtain net profit from its own capitals. From this reason, knowing its level presents importance first of all for shareholders, who can, in this way, decide if the remuneration received compensates the assumed risk. Another category interested in keeping the level of this rate high is the management, who wants to keep their positions by reaching the company's performance criteria.

The return on operational costs is expressed as a ratio between the operational profit and the operational costs.

The return on sales expresses the efficiency of the commercial activities of the enterprise, as a result of efforts put into promoting the products and specially the prices

policy adopted by the company. The return on sales is determined as a ratio between the operational profit and the turnover expressed in selling prices, without VAT.

#### 4. ANALYSES

The companies selected to be part of this study, as well as their areas of activity are presented in Table no.1.

**Table no.1**

No.	Area of activity	Company
1	<i>Food industry</i>	Agrana
2		Albalact
3		Moara Cibin
4	<i>Constructions</i>	Condmag
5		Napoca
6		SCT Bucuresti
7		Transilvania
8	<i>Oil industry</i>	Oil Terminal
9		OMV Petrom
10		Rompetrol Well Services
11	<i>Device manufacturing</i>	Electroarges
12		Electromagnetica

The values registered by the invested capital (economic) and financial rates of return , both individually as well as a domain average, are presented in Table no.2.

**Table no.2**

Area of activity	Company	Return on invested capital (%)			Return on equity (%)		
		2009	2010	2011	2009	2010	2011
Food industry	Agrana	17,86	-7,68	70,64	-2,04	-31,63	54,91
	Albalact	7,21	3,31	7,07	2,85	0,65	6,41
	Moara Cibin	5,85	1,56	3,92	3,59	0,59	4,19
	Domain average	10,31	-0,94	27,21	1,47	-10,13	21,84
Constructions	Condmag	19,24	11,09	0,36	17,52	10,04	0,64
	Napoca	-6,74	-8,18	-23,66	-19,51	-20,21	-69,85
	SCT Bucuresti	3,39	2,31	2,63	1,47	-0,16	0,14
	Transilvania	1,68	0,69	1,19	0,24	0,27	0,84
	Domain average	4,39	1,48	-4,87	-0,07	-2,52	-17,06
Oil industry	Oil Terminal	0,77	2,14	0,52	0,45	1,04	0,16
	OMV Petrom	7,28	16,32	23,29	9,71	11,46	19,51
	Rompetrol	12,13	11,72	12,14	12,5	12,44	12,31
	Domain average	6,73	10,06	11,98	7,55	8,31	10,66

Device manufacturing	Electroarges	30,13	55,74	31,86	26,87	49,39	27,84
	Electromagnetica	13,24	10,99	5,91	12,52	9,94	5,60
	Domain average	21,69	33,37	18,88	19,70	29,67	16,72

Analysing the evolution of the invested capital rate of return, it is ascertained that the only area of activity which has known an ascending evolution is the oil industry, though it doesn't come close to the optimum level of 20-25%, starting from 6,73% in 2009 and reaching 11,98% in 2011. The food industry registers at first a significant decrease, from 10,31% in 2009 to a negative value of -0,94% in 2010, only to increase spectacularly in 2011, reaching 27,21%. Regarding the device manufacturing branch, it has registered a significant increase in 2010, showing the highest value reached by an industry throughout the entire analysed period of time (33,37%), as compared to 2009 (21,69%), after which the trend turned into a downward one, registering 18,88% in 2011. Despite this fact, device manufacturing represents the only area of activity that registers the closest values to the rate of 20-25% previously mentioned as being optimum, indicating the capacity of economic capital to ensure both its renewal and remuneration as a production factor, renewal which takes place in a medium timeframe, of 4,6 years in 2009, 3 years in 2010 and 5,3 years in 2011.

After comparing the obtained values, the least satisfactory evolution in terms of the economic rate of return is noticed in the constructions area, where the decrease is permanent throughout the three years of analysis, starting from 4,39% in 2009, diminishing to 1,48% in 2010 and registering the overall sector minimum of -4,87% in 2011.

A brief look on the values registered by the financial rate of return reveals the fact that the tendencies noticed at the previous rate are also maintained here. Thus, the oil industry follows the only upward trend, registering values of 7,55%, 8,31% and 10,66% in 2009, 2010 and 2011. This aspect indicates both an easy access to financial resources for enterprises in this branch, due to the trust of actual and potential owners to (re)invest in the company, and a doubtless development capacity. The food industry registers at first a significant reduction, from 1,47% in 2009 to a negative value of -10,13% in 2010, only to increase spectacularly in 2011 to the level of 21,84%. Regarding the industry of device manufacturing, it has seen a major increase in 2010, reaching, again, the highest value amongst all branches in the three years of analysis (29,67%), as compared to 2009 (19,7%), after which the trend turned into a downward one, registering 16,72% in 2011. Still, the areas of device manufacturing and oil industry show the lowest difference between the economic and financial rates of return, a sign that the average debt level is a properly sized one in these branches and that the significant economic profitability is not absorbed by financial debts, like it happens in the case of food industry and constructions. On the other hand, the least satisfactory evolution also in terms of financial profitability is noticed in the constructions branch, where negative and descending values are found throughout the entire analysed period of time, starting from -0,07% in 2009 and registering the overall sector minimum of -17,06% in 2011.

The values registered by the operational costs and sales rates of return are presented in Table no.3.

**Table no.3**

Area of activity	Company	Return on operational costs (%)	Rreturn on sales (%)
------------------	---------	---------------------------------	----------------------

		2009	2010	2011	2009	2010	2011
Food industry	Agrana	2,76	-0,8	11,77	2,54	-0,82	11,77
	Albalact	4,7	1,72	2,80	4,62	1,71	2,80
	Moara Cibin	7,15	1,73	2,52	7,66	1,9	2,84
	Domain average	4,87	0,88	5,70	4,94	0,93	5,80
Constructions	Condmag	10,54	7,66	0,45	9,69	7,01	0,47
	Napoca	-11,12	-12,76	-30,35	-11,74	-14,88	-43,33
	SCT Bucuresti	3,21	1,97	2,34	2,99	2,1	2,46
	Transilvania	7,57	2,13	3,02	7,87	2,54	4,53
	Domain average	2,55	-0,25	-6,14	2,20	-0,81	-8,97
Oil industry	Oil Terminal	0,99	3,19	1,58	0,99	3,13	1,59
	OMV Petrom	9,97	28,24	41,95	9,32	23,08	30,39
	Rompotrol Well Services	23,83	20,84	19,44	19,3	17,32	16,33
	Domain average	11,60	17,42	20,99	9,87	14,51	16,10
Device manufacturing	Electroarges	5,87	9,4	7,53	5,58	8,76	7,16
	Electromagnetica	8,11	6,5	3,40	7,52	6,13	3,32
	Domain average	6,99	7,95	5,47	6,55	7,45	5,24

Following the trend already mapped out, the return on operational costs also registers its only upwarding evolution in the oil industry, with values ranging between 11,6% and 20,99% ,this being the only branch with values above the aproximate minimum limit of 9%.The food industry registers at first a significant decrease, from 4,87% in 2009 to an extremely low value of 0,88% in 2010, only to increase spectacularly in 2011, reaching 5,7%. Regarding the device manufacturing branch, it has registered a reasonable increase in 2010, reaching 7,95% as compared to 6,99% in 2009, after which the trend turned into a downward one, registering 5,47% in 2011.Thus, it is ascertained that this industry is no longer registering the overall sector highest level in 2010, the position being substituted by the value registered in 2011 by the oil industry.Once again, the least satisfactory evolution also in terms of the operational costs rate of return is noticed in the constructions area, where the decrease is permanent throughout the three years of analysis, starting from 2,55% in 2009, diminishing to -0,25% in 2010 and registering the overall sector minimum of -6,14% in 2011.

Analysing the values registered by the sales rate of return, it is noticed the same evolution as at the previous profitability rates.Thus, the oil industry follows the only upward trend, registering values of 9,87%,14,51%, 16,10% in 2009,2010 and 2011, fact that may indicate that enterprises from this branch are found in a privileged position to exploit the market and to ask for higher prices for their products. The food industry registers at first a significant reduction, from 4,94% in 2009 to a low but positive value of 0,93% in 2010, only to increase spectacularly in 2011 to the level of 5,8%,exceeding the level from the first year of analysis. Regarding the industry of device manufacturing, it has seen a reasonable increase in 2010, reaching 7,45%, as compared to 6,55% in 2009, after which the trend turned into a downward one, registering 5,24% in 2011.The reduction of this rate may indicate either a higher competition on the market which has as effect lower market prices, or an increase in the cost of raw materials.Like we have seen before, the

most unsatisfactory evolution also in terms of the sales rate of return is noticed in the constructions area, where the decrease is permanent throughout the three years of analysis, starting from 2,20% in 2009, diminishing to -0,81% in 2010 and registering the overall sector minimum of -8,97% in 2011.

In order to increase the paper's representativeness, the companies that form the object of the study were selected among joint-stock enterprises, listed on Bucharest Stock Exchange, an important aspect to be analysed being the indicators that are specific to listed companies.

Next it is shown the dividend per share granted by each company in the three years of analysis, through Table no 4.

**Table no.4**

Company	Dividend/share (RON/share)		
	2009	2010	2011
Agrana	0,000	0,000	0,000
Albalact	0,000	0,000	0,000
Moara Cibin	0,000	0,000	0,000
Condmag	0,000	0,000	0,000
Napoca	0,000	0,000	0,000
SCT Bucuresti	0,000	0,000	0,000
Transilvania	0,000	0,000	0,000
Oil Terminal	0,001	0,003	0,003
OMV Petrom	0,000	0,018	0,031
Rompetrol Well Services	0,015	0,015	0,029
Electroarges	0,059	0,000	0,000
Electromagnetica	0,000	0,004	0,004

At a brief observation of the previous table, it is noticed the lack of utility of determining a domain average dividend, given the fact that more than half of the studied enterprises have not granted any dividends throughout the three analysed years, either because there were previous accountant losses that needed to be covered or because they capitalized the obtained profits as reserve funds or as registered capital. Thus, the only branches in which dividends were granted are oil industry and device manufacturing. In the oil industry, only Oil Terminal and Rompetrol Well Services chose to pay their shareholders in all the three analysed years, OMV Petrom taking this decision only for the profits of 2010 and 2011. On the other hand, in the device manufacturing branch, Electroarges has granted dividends only in 2009 even though the obtained net profit per share is also significant in the following two years, meanwhile Electromagnetica chose to pay its shareholders only in 2010 and 2011.

As far as value is concerned, the highest dividend is the one granted by Electroarges in 2009, of 0,059 RON/share but an important aspect for shareholders that invest for obtaining dividends is also the frequency with which they are granted, OMV Petrom and Rompetrol representing a good compromise from this point of view.

Given the fact that Bucharest Stock Exchange only maintains in its trading history the operations from the last 180 days, and monthly reports are available only for the companies which activate on the BVB section, not for the ones which activate on the RASDAQ section, certain indicators that are calculated using the market rate from the last

trading day of the year could be determined only for the year 2011. Thus, in Table no.5 are presented the 2011 individual values of price to earnings ratio (PER), trade capitalization, stock rating performance, price to book value (PBV).

**Table no.5**

Company	PER	Trade capitalization (RON)	Stock rating performance (%)	PBV
Agrana	0,68	57.816.859	0,00	4,00
Albalact	19,82	114.289.323	0,00	1,75
Moara Cibin	10,74	23.056.515	0,00	2,30
Condmag	72,89	62.005.193	0,00	1,63
Napoca	-0,78	6.231.454	0,00	1,00
SCT Bucuresti	205,99	23.515.356	0,00	2,40
Transilvania	22,64	24.590.878	0,00	0,79
Oil Terminal	192,21	104.837.446	1,87	1,80
OMV Petrom	4,46	16.426.791.417	10,69	2,90
Rompetro Well Services	4,94	78.171.643	10,32	2,81
Electroarges	2,80	20.451.862	0,00	3,30
Electromagnetica	12,20	183.882.527	1,47	2,72

As known, PER is an indicator of the way profits are valued on the market, reflecting the number of years during which the investment in the company's shares is recovered, a favourable situation being when it registers the lowest levels. Analysing the data from Table no.5 it is noticed that the most convenient value for this indicator is that of Agrana (0,68), followed by Electroarges (2,80), OMV Petrom (4,46) and Rompetrol Well Services (4,94). On the contrary, the enterprises that show a major discrepancy between the market rate of a share, very high compared to the net profit per share, are SCT Bucuresti (205,99), Oil Terminal (192,21) and Condmag (72,89).

Regarding the trade capitalization, it reflects the market rate of a company's entire number of shares and is directly proportional to the number of shares, reaching its higher levels at enterprises with a large amount of capital bonds, like OMV Petrom, followed by Electromagnetica, Albalact and Oil Terminal.

Concerning the stock rating performance, which actually represents the percentage of the market rate of the share that is found as dividend, it registers positive values only for the oil industry companies and for Electromagnetica, these being the only enterprises that granted dividends in 2011. Thus, the highest values are registered by OMV Petrom and Rompetrol Well Services, with over 10%, fact which means that, if an investor would have bought shares of one of the two companies, at the market rate from 31.12.2011 and at a constant rate of dividend per share, it would take ten years for him to recover through dividends the initially invested amount.

Analysing the PBV indicator, it is noticed that it registers overunity values at the majority of the enterprises, fact that is equivalent to a trade overappreciation of their shares. Thus, the only company for which PBV is lower than 1 is Transilvania, which indicates that its shares are underappreciated on the market, and that the moment is ideal for an investment. On the other hand, the companies with the most overappreciated shares

are Agrana (4,0), Electroarges (3,3) and OMV Petrom (2,9) and the only enterprise for which the market appreciates in a fair way the value of a share is Napoca (1).

Carrying on, it is presented Table no.6 which contains the values of the dividend compensation rate registered by companies in 2009,2010,2011.

**Table no.6**

Company	Dividend compensation rate (%)		
	2009	2010	2011
Agrana	0,00	0,00	0,00
Albalact	0,00	0,00	0,00
Moara Cibin	0,00	0,00	0,00
Condmag	0,00	0,00	0,00
Napoca	0,00	0,00	0,00
SCT București	0,00	0,00	0,00
Transilvania	0,00	0,00	0,00
Oil Terminal	45,97	88,27	358,70
OMV Petrom	0,00	55,73	47,64
Rompotrol Well Services	30,52	29,20	51,02
Electroarges	63,34	0,00	0,00
Electromagnetica	0,00	11,42	17,94

The dividend compensation rate reflects in what proportion the net profit obtained by the company is used to remunerate shareholders for the risk they have taken, through the dividends paid to them. Thus, it is noticed that amongst companies that granted dividends to their shareholders, Oil Terminal did so in proportion of 358% of the profit obtained in 2011, this fact being caused by distributing also the carried over result proceeded from rectifying accountancy errors. Considering this case to be an extraordinary one, high and relative constant dividend compensation rates are noticed at OMV Petrom (which distributes in 2010 and 2011 approximately 50% of its net profit) and Rompotrol Well Services (distributes approximately 30% of its net profit in 2009 and 2010, going as far as 50% in 2011). Electroarges also shows a high dividend compensation rate, of 63% in 2009, rate which turns null in the following two years of analysis.

## 5. CONCLUSIONS

In terms of profitability rates, it is ascertained that the domains of activity maintain, in most cases, their evolution tendencies from one year to another, the upward or downward trends being usually found at all four rates of return.

Thus, the oil industry represents the only area of activity with an upward tendency of all rates of return during the entire analysed period of time, followed by the device manufacturing domain, which registers an ascending evolution only until 2010, in 2011 the trend being inverted. The food industry shows a contrary evolution to the previous branch, the rates of return diminishing drastically in 2010 as compared to 2009, but increasing spectacularly in 2011. Last but not least, the area of activity which reveals without doubt the most unsatisfactory evolution regarding profitability of all nature is the constructions branch, showing permanent and growing decreases from one year to the other, and registering in the last two years of analysis negative values at almost all rates of return.

Synthetically, the following relevant aspects were ascertained:



Even though the trend followed by the return on operational costs rate became a downward one in 2011, device manufacturing represents the only area of activity that registers the closest values to the optimum rate of 20-25% , indicating the capacity of economic capital to ensure both its renewal and remuneration as a production factor, renewal which takes place in a medium timeframe, of 4,6 years in 2009, 3 years in 2010 and 5,3 years in 2011.

Regarding the financial rate of return, the areas of device manufacturing and oil industry show the lowest difference between the economic and financial rates of return, a sign that the average debt level is a properly sized one in these branches and that the significant economic profitability is not absorbed by financial debts, like it happens in the case of food industry and constructions.

Analysing the return on operational costs, it is noticed that the oil industry registers the most favourable evolution, being the only branch that manages to exceed the minimum considered limit of 9%, reaching 11,6%,17,42%, 20,99% in 2009,2010 and 2011.

Observing the values registered by the sales rate of return, low levels throughout the entire period of time taken into account are noticed at branches like food industry or constructions and also in the area of device manufacturing in 2011, with the possibility that the reduction of this rate may indicate either a higher competition on the market which has as effect lower market prices, or an increase in the cost of raw materials.

At most of the enterprises taken into consideration are noticed correlations between the evolution of profitability rates and the evolution of trade indicators.

Thus, analysing the price to earnings ratio determined for 2011 it is ascertained that companies which have the highest profitability rates, respectively, OMV Petrom, Rompetrol Well Services, Agrana and Electroarges also register the most convenient results of PER, with the shortest period of time necessary to recover the investment in their own shares.

On the contrary, the enterprises with the lowest profitability rates, respectively, Condmag, Oil Terminal and SCT Bucuresti register an extremely high price to earnings ratio, equivalent to a long investment recovery period of time.

Also regarding the price to book value it is noticed the existent correlation, in the sense that the companies with the most favourable profitability rates, above mentioned, have the most overappreciated shares, registering the highest levels of PBV.

An other aspect that was noticed is that the company with the most unsatisfactory evolution through its negative profitability rates, namely Napoca S.A, does not register in 2011 an underappreciation of its shares (PBV=1), a sign that the market evolution does not necessarily comply with the financial position of companies. The last idea is confirmed by the fact that also the other enterprises with unsatisfactory evolutions(Condmag, Oil Terminal, SCT Bucuresti) show shares overappreciated by investors to a certain extent.

## **REFERENCES**

1. Achim, M.V., Analiza financiara a entitatii economice, Risoprint Publishing House, Borlea S.N. Cluj-Napoca,2011
2. Brigham,E.F., Financial Management,Theory and Practice-Ninth edition,The Gapenski,L.C., Dryden Press,Florida,1999  
Ehrhardt.

3. Bușe, L., Siminică, M., Cârciumar, D., Ganea, M. Analiză economico-financiară, Sitech Publishing House, Craiova, 2009
4. Colasse B., Le Gestion Financiare de L'entreprise, PUF, Paris, 1993
5. Siminica, M. Diagnosticul financiar al firmei, Sitech Publishing House, Craiova, 2010
6. Vernimmen, P. Finance d'Entreprise, Analyse et Gestion, 4 edition, Dalloz, 1988
7. \*\*\* <http://www.bvb.ro>