# THE EVOLUTION OF ADDED VALUE CREATED BY THE MAIN ROMANIAN COMPANIES FROM OIL AND RETAIL TRADE INDUSTRIES

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**Abstract:** In a period of time in which companies still experience the effects of the financial crisis and are hardly recovering their position held prior to it, it is important for an investor (and for the company itself) to determine to which extent these are capable, along with a satisfactory profitability, to also bring added value to their shareholders. In this respect, I see as opportune the fulfilment of a study in which there are analysed, both in comparison and in dynamics, the main indicators which point out the added value created by the main romanian companies from the oil and retail trade industries, listed on Bucharest Stock Exchange.Thus, the study aims to determine, by analysing indicators like Economic Value Added, Market Value Added, Cash-Flow Return on Investment, Cash Value Added or Total Shareholder Return, which of the targeted companies have increased their value in the recent period of time.

#### JEL classification: G01,G32

# Key words: added value; financial crisis; indicators; financial analysis; dividend policy

#### **1. INTRODUCTION**

The classic performance measurement indicators, although extremely valuable, present the downside that they do not take into consideration the cost of the invested capital, especially the cost of equity, thus, using strictly these indicators in the economical and financial analysis can lead to erroneous conclusions because it is possible to come across companies that are performant, but which do not create value, on the contrary, they consume the existing one.

Both in specialized literature and practice the techniques for quantifying the newly created value of a company are relatively recent. Thus, Colasse B. defines the growth of an entity's value as "the capability of a company to raise its size", also mentioning several more measurement criteria: turnover, production, added value, fixed or total assets.

Essential contributions to this theme were added by the American financial consulting cabinets (Stern Stewart,Boston Consulting Group,CSFB Holt LLC,Applied Finance Group) by promoting new indicators for measuring financial performance. In Romania, most authors have started using the new indicators promoted by the consulting cabinets, in order to measure the added value created by the company.

Thus, Petrescu S. considers that added value is "the main element in determining some indicators of creating value of major significance in the activity of any entity listed or not on the capital market".

In this context, appears the opportunity to realize a study on the evolution of added value created by the main romanian companies from oil and retail trade industry listed on Bucharest Stock Exchange in the recent period of time (2010-30.06.2012). There have been selected six of the most important companies from the above mentioned areas of activity, in order to deliver relevant conclusions relating to which extent investing in these industries brings added value to (potential) shareholders.

## 2. OBJECTIVES

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

1. Which enterprises brought economic value added to their shareholders.

2. Which industry registered a higher cash flow return on investment and when.

3. How many companies have a positive total shareholders return and why.

# 3. METHODOLOGY

The added value indicators represent ways of expressing the increase of value created by the company for its shareholders, both from an economic and from the capital market's point of view. Confrunting the opinions of international specialised literature and practice with those of local literature, there have been selected in order to be determined the main indicators that express added value, presented along with their main components:

Economic Value Added = Net Operating Profit After Taxes - Cost of invested capital;

Market value Added = Trade capitalization - Invested capital;

Cash Flow Return on Investment = Gross Cash Flow - Economic Depreciation\*100/Gross Investment;

Cash Value Added= Gross Cash Flow - Economic Depreciation - Cost of invested capital;

Total Shareholder Return = [Dividend per Share + (Market Share Price at the end of the period - Market Share Price at the begining of the period)]\*100/Market Share Price at the begining of the period;

Cost of invested capital = Weight Average Cost of Capital( invested capital cost rate)\*Invested capital;

Weight Average Cost of Capital = Equity cost rate\*Equity/Invested capital+ Borrowed capital cost rate\*Borrowed capital/Invested capital\*(1-profit tax rate);

Equity cost rate = Low(No)risk rate of return + Risk bonus;

Risk bonus = Low(No)risk rate of return\*Risk rate;

Return on Equity = Net profit\*100/Equity;

Gross Cash Flow = Net Profit + Interest Expenses + Economic Depreciation; Sustainable Cash Flow = Gross Cash Flow - Economic Depreciation;

### 4. ANALYSES

The companies belonging to the two areas of activity are presented in Table no.1.

	Table no. 1				
No.	Area of activity	Company			
1.	Retail trade	Mercur			
2.		Napotex			
3.		Unirea Shopping Center			
4.	Oil industry	OMV Petrom			
5.		Rompetrol Well Services			
6.		Oil Terminal			

Before analyzing the added value indicators, certain things must be mentioned regarding to determining the elements that lay at the foundation of these indicators calculation.

Thus, in order to determine two of the five added value indicators, Economic Value Added – EVA and Cash Value Added – CVA, the cost of the invested capital must be determined and so, the rate of the invested capital cost via the weighted average cost of capital. Within this, determining the equity cost rate encounters some difficulties and is not lacking subjectivism. Although some authors recommend approximating this rate with the return on equity, for ease of use, within this study I have determined the equity cost rate based on the low risk rate of return and the risk bonus because I consider that if a company is not able to generate net profit and thus has a low financial profitability, this does not mean that the invested capitals also present such a low cost.

With this purpose, I have selected five emissions of state bonds with the interest in RON, issued in the timeframe of closure of the financial exercises taken into consideration and with a residual maturity of approximately 5 years, the details being presented in Table no.2.

Issue	Year			
characteristics	2010	2011	2012	2013
ISIN	RO1015DB	RO1116DB	RO1217DB	RO1318DB
	N010	N024	N046	N034
Туре	SB interest	SB interest	SB interest	SB interest
Date of emission/	24.01.2011	23.01.2012	21.01.2013	29.07.2013
re-opening				
Due date	30.04.2015	30.04.2016	26.07.2017	28.11.2018
Rezidual	51	51	54	64
Maturity(months)				
Currency	RON	RON	RON	RON
Average intereset	7,16	7,00	5,4	4,72
for adjudecation				
(% p.y)				

Table no. 2

As far as the risk rates used, these are presented in Table no.3.

Company	Risk rate/Risk		Risk rate/Risk		Risk rate/Risk		Risk rate/Risk	
		2010		2011	2012		2013	
Mercur	1	slightly	1	slightly	1	slightly	1	slightly
		elevated		elevated		elevated		elevated
Napotex	1	slightly	1	slightly	1	slightly	1	slightly
		elevated		elevated		elevated		elevated
Unirea Shopping	1	slightly	1	slightly	1	slightly	1	slightly
Center		elevated		elevated		elevated		elevated
OMV Petrom	0,5	medium	0,5	medium	0,5	medium	0,5	medium
Rompetrol Well	0,5	medium	0,5	medium	0,5	medium	0,5	medium
Services								
Oil Terminal	0,5	medium	1	slightly	1	slightly	1	slightly
				elevated		elevated		elevated

Table no 3

Considering that based on the existing risk degree, the risk rate can take values between 0.25, for a small risk and 2 for a very high risk, I have chosen a risk rate equal to 1 for a slightly elevated risk for Mercur, Napotex and Unirea Shopping because of their average evolution and as such, investing in these businesses brings a certain degree of risk. Also, considering generic evolution indicators, this time favorable, I have chosen a risk rate of 0.5, corresponding to a medium risk for OMV Petrom and Rompetrol Well Services. Last but not least, the reason for allocating Oil Terminal a medium risk in 2010 and slightly elevated in the following period is based on the considerable downsizing of the results indicators, especially the operational profit correlated with the growth of financial debts starting with the year 2011 and peaking with the loss recorded in 2013.

As far as the borrowed capital cost rate is concerned, it has been determined as an arithmetic average among the monthly interest rates used by credit institutions for new credits, in RON, offered to non-financial companies, with a value under or over the equivalent of 1 million euro in RON, the selection between the 2 categories, being done based on the amounts in the balance sheets of the companies owed to credit institutions. These are presented in Table no. 4.

l able no. 4				
	Average rate of interest (%)			
Credit value	2010	2011	2012	2013
<1 mil euro equivalent	12,47	-	-	-
>1 mil euro equivalent	10,14	8,67	8,75	8,68

Table no. 1

Another important information that has to be mentioned is the fact that for the data of 30.06.2013, the elements of the nature of income, expenses and the results used for determining the majority of indicators that express value creation were corrected in order to be afferent to the last four consecutive trimesters and, thus, avoiding distortions due to scale, between the elements from the balance sheet and those from the profit and loss account. The period 30.06.2013 was selected based on availability of information, up to the date this study was completed (February 2014), the yearly financial statements for 2013 not being available.

Thus, the values registered in the period 2010-30.06-2013 by the Economic Value Added – EVA, Market Value Added – MVA, Cash Flow Return on Investment – CFROI, Cash Value Added – CVA and Total Shareholders Return – TSR are presented in the Tables no.5 to no.9.

Area of	Company	EVA (RON)			
activity		2010	2011	2012	2013
Retail	Mercur	-1.035.779	-1.018.228	-1.461.668	-1.703.220
trade	Napotex	-1.273.427	-1.177.812	-739.518	-513.387
	Unirea Shopping	-57.659.804	-58.904.911	-40.774.311	-34.964.096
	Center				
Oil	OMV Petrom	626.004.961	2.059.064.371	2.397.719.280	2.761.976.025
industry	Rompetrol Well	-990.118	-376.429	7.819.689	17.382.763
	Services				
	Oil Terminal	-17.280.820	-47.209.542	-41.612.224	-39.919.994

Table no. 5

Analyzing the evolution of Economic Value Added, it can be observed that all three companies from the retail trade area have registered negative values of this indicator on the whole monitored period, a sign that their net operational profit was not sufficient to cover the cost of capital invested by creditors and shareholders. Thus, Mercur S.A has registered an EVA relatively constant in 2010 and 2011, but in 2012 this has dropped by 43.55%, so that in 2013 to reach the minimum of this period of -1.703.220, mainly due to the considerable drop, of about 50%, of the operational profit. At the same time, it can be noticed that Napotex, although it also has registered negative values of EVA, they have risen considerably from one year to the next, fluctuating from -1.273.427 to -513.387 on 30 June 2013, mainly due to an increase in operational profit along with a decrease in invested capital cost. The third company in the retail trade business, Unirea Shopping Center, follows a trend similar to that of Napotex, its EVA, although constantly negative, rising by 30,78% in 2012 and an additional 14,25% in 2013. A notable aspect in this case is that in 2012 the company has succeeded in a major increase in their operational profit along with a decrease in their invested capital cost, while in 2013 it was achieved only a small decrease in the employed capital, under the conditions of a relatively constant operational profit.

Analyzing the EVA evolution of the oil industry companies, favorable evolutions are found in OMV Petrom and satisfactory evolutions in Rompetrol, who have succeeded in an increase in their net operational profit along with maintaining a relatively constant or even diminishing their invested capital cost, a sign that the companies have created value for their shareholders, so their investment is an efficient one. On the other side of the spectrum, we find Oil Terminal, who has registered negative economic added values during the whole analyzed period of time, mainly because of a considerable increase of invested capital, both equity as well as borrowed and implicitly, of its cost, an increase that has not lead to an increase in the operational profit, but rather to its decrease, culminating with the loss registered in 2013. It is obvious that this is equivalent to a destruction of capital invested by the shareholders by achieving a rate of profitability per share lower than the average rate of profitability on the capital market.

Area of	Company	MVA (RON)			
activity		2010	2011	2012	2013
Retail	Mercur	5.971.808	1.995.640	798.681	-458.446
trade	Napotex	-5.581.660	-7.749.369	-7.464.632	-7.110.321
	Unirea Shopping	-242.510.571	-257.409.290	-300.820.131	-321.723.705
	Center				
Oil	OMV Petrom	-1.034.706.172	-5.049.049.740	-155.501.816	-2.028.227.796
industry	Rompetrol Well	-29.941.614	-50.177.602	-50.934.521	-40.530.961
	Services				
	Oil Terminal	-64.510.562	-245.758.947	-307.175.910	-321.145.985

Table no. 6

As far as Market Value Added is concerned, we can not speak about a favorable evolution in case of the companies from the retail trade sector unless through comparison. Thus, the only company that registers positive values is Mercur, however, these fall by about 60% each year, culminating with the year 2013, when the market gives the company a price deficit, MVA being of about -460.000 RON. In case of Napotex the price deficit assigned by the market grows considerable in 2011 compared to 2010 when MVA drops by 38,84%, in 2012 and 2013 following sensible increases, of around 4% per year. It is seen that these MVA fluctuations are triggered almost completely by the market price of the share, the value of the invested capital remaining relatively unchanged from one year to the other. Unirea Shopping Center registers the most unfavorable evolution in this sector from the MVA point of view, with important drops during the four years, caused, like in the case of Napotex, by the decrease in the stock exchange value of its shares, culminating with a value of -321.723.705 registered in 2013.

Regarding MVA, we encounter negative values in all three companies from the oil sector in the analyzed period of time, a sign that at least for two of these, Petrom and Rompetrol, the real economic performance measured via EVA is not directly proportional with their stock exchange performance. Thus, it can be concluded that the premise according to which the increase in the created economic value will trigger increase in the generated market value is not valid in this case. On the other hand, the most unfavorable evolution is encountered at Oil Terminal, for whom the market attributes a price deficit larger each year, compared to the capital invested in the company, the market price of its shares diminishing by 38.91% during the 4 years of analysis.

	lable no.7				
Area of	Company		CFRC	DI (%)	
activity		2010	2011	2012	2013
Retail trade	Mercur	12,14	11,82	9,68	7,24
	Napotex	2,52	3,16	4,04	4,69
	Unirea Shopping	2,01	1,59	1,92	2,18
	Center				
Oil industry	OMV Petrom	9,63	17,60	15,80	17,90
	Rompetrol Well	12,44	12,32	15,62	21,27
	Services				
	Oil Terminal	1,14	0,22	0,26	-0,90

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As far as Cash Flow Return On Investment, it must be mentioned that in determining its levels, in this study, the gross investment value to which the gross cash flow is reported, is assimilated to the invested capital and not to the total assets as some authors recommend, because in this case short-term non-financial debts, which are not related to investments, are not taken into consideration. Analyzing CFROI, it is observed that companies in the retail trade area did not have a favorable evolution, even if some of them registered an ascending trend of this indicator (Napotex) or a relatively constant one (Unirea Shopping Center) because none of the companies were able to register in the analyzed period of time a CFROI greater than the invested capital cost rate, and in this way, create results that are superior to capital cost and, therefore, value for its shareholders. From this point of view, even if Mercur registers a decline of its indicator, constantly falling from 12,14% in 2010 to 7,24% in 2013, it is the company that registers the lowest deficit between the annual values of CFROI and the invested capital cost rate, of about 2% annually. In the case of Napotex and Unirea, CFROI values oscillate between 1,6% and 4,7% yearly, considering a variation of the Weighted Average Cost of Capital of between 9.2% and 14.3%, the deficit being obvious.

When looking at the CFROI registered by the companies in the oil industry, a much more favorable evolution can be observed for two of them. Thus, Petrom succeeds on raising the rate from 9,63% in 2010 to 17,9% in 2013, starting with 2011 also registering an increase of 7-10% over the invested capital cost rate, an extremely favorably appreciated aspect. In the case of Rompetrol the situation is similar, starting with a CFROI of about 12% in 2010 and 2011 and reaching its peak value, of 21,27% in 2013, mentioning that only in 2012 and 2013 was possible an addition of 7% and 14% over the invested capital cost rate. Oil Terminal presents an evolution that is extremely unsatisfying starting from a CFROI of 1,14% in 2010 and registering -0,9% in 2013, on account of the net accounting loss from this year. It is obvious that the CFROI values are far inferior to the invested capital cost rate in all the four years of analysis.

Area of	Company	CVA (RON)			
activity		2010	2011	2012	2013
Retail	Mercur	-591.707	-627.019	-322.808	-583.103
trade	Napotex	-1.295.684	-1.196.366	-758.849	-527.553
	Unirea Shopping Center	-58.488.912	-59.459.963	-43.056.227	-35.537.385
Oil	OMV Petrom	-135.418.480	1.611.119.967	1.948.469.415	2.795.551.228
industry	Rompetrol Well Services	1.986.576	2.336.659	10.617.596	21.147.037
	Oil Terminal	-18.549.035	-47.976.974	-42.248.501	-41.169.013

Table no. 8

Analyzing the Cash Value Added registered by companies in the retail trade industry, we can say that none of them is successful in generating extra cash to the invested capital cost, the values of the indicator being negative on the entire analyzed period of time. Still, in spite of the negative values, it can be observed a gradually increase in the indicator in the case of Napotex and Unirea Shopping, a sign that the difference between the invested capital cost rate and the Cash Flow Return On Investment has decreased each year. As for Mercur S.A, in spite of the combined evolution of the CVA both ascending and descending in the four years timeframe, it is the company with the corrected gross cash flow most close to the invested capital cost.

On the other hand, CVA registered by the oil industry companies has encountered both favorable and unfavorable evolutions. In Petrom's case the start value is negative, -135 mil RON in 2010, but reaching a positive value of 2.795 mil RON in 2013, so, a growth of 2.164%. A similar evolution can also be found in Rompetrol's case, this company only registering positive values of the indicator, though, and achieving a growth of 964,5% in 2013 as compared to 2010. The third company from the oil industry distances itself from the other two through the negative evolution of the CVA. This could have been anticipated from observing the low levels of the CFROI, being obvious that Oil Terminal generates a gross cash flow far inferior to the cost of capital invested in its activity.

Area of	Company		TSR (%)	
activity		2011	2012	2013
Retail trade	Mercur	0,71	5,00	-11,80
	Napotex	-34,51	24,29	6,25
	Unirea Shopping Center	-1,43	-22,02	-11,37
Oil industry	OMV Petrom	-4,18	61,38	-4,32
	Rompetrol Well Services	-0,96	25,77	20,19
	Oil Terminal	-17,03	-7,92	-18,13

Table	no. 9
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As far as Total Shareholder Return is concerned, this could not be calculated for the year 2010 because information regarding the market price of shares was not available for the beginning of the year 2010. At the same time, the value calculated for 30.06.2013 does not include the dividends distributed in this financial exercise, still, estimations can be made depending on each case.

Thus, in the case of Mercur S.A, we can observe a low profitability in 2011, of 0,71% and a favorable one in 2012, of 5%, in both years the dividend given to shareholders compensating for the market depreciation of the share. I do not consider that this will also be possible in 2013, since giving a dividend of even 2,4 RON/share still will not be sufficient to compensate for the loss of 2,95 RON/share, leading to a negative TSR.

For Napotex S.A the TSR registers a severely negative value in 2011, of - 34,51%, caused by the depreciation of its shares by 4,62 RON/share. In 2012 the TSR becomes 24,29% due to the appreciation of the equity securities by 1 RON/share, the same ascending tendency, but with only 0.5 RON/share, being encountered at 30<sup>th</sup> of June 2013 leading to a positive TSR in this period also.

In the case of Unirea Shopping Center, the evolution is profoundly unfavorable because, even though the company decided not to distribute dividends at all in the 2010 – 2013 period, the capitalization of profit does not influence the view of the capital market, its shares being depreciated by 1,3, with 19,75 and 7,95 RON/share in 2011,2012 and 2013, leading to negative values of TSR, peaking with the minimum of -22,02% in 2012.

For Petrom S.A, the dividend given in 2011 was not sufficient to compensate the market depreciation of shares, resulting in a negative TSR, of -4,18%. This aspect

changes in 2012, when the appreciation of the equity securities of 0,15 RON/share and the provided dividend of 0,028 RON/share has led to a total shareholder return of 61,38%. For the year 2013, although the calculated TSR is -4,32%, considering the history of the dividends given, it is noticed that even if distributing a minimum dividend of 0,02 RON/share, it would compensate the depreciation of 0,019 RON/share and, therefore, lead to a positive TSR.

In Rompretrol S.A, we can observe a similar situation as in Petrom in 2011 and 2012, when the depreciation and later appreciation of the share value on the market determined major fluctuations of the TSR, this registering -0,96% in 2011 and 25.77% in 2012. In 2013 the two companies differentiate because Rompetrol benefits from a considerable appreciation of its equity securities on the market, registering a TSR of 20,19% in absence of dividend, so, if we consider granting it, TSR would be even higher than the calculated one.

For Oil Terminal, the constant unfavorable evolution is maintained also in respect to TSR, the extremely reduced granted dividends being unable to compensate for the depreciation of its shares, and leading to TSR values of -17,03, -7,92 and -18,13% in 2011,2012 and 2013.

#### 5. CONCLUSIONS

The analysis of the indicators that reflect the newly created value from an economic point of view, as well as from a stock market point of view, regarding the six companies from the oil and retail trade industries has allowed expressing some interesting conclusions.

Thus, a primary aspect that was brought to light is that the stock market does not always reflect the economical performances of a company, proving the subjectivism of investors. Such an example is Mercur S.A, who, even though between 2010 – 2012 has registered negative economical added values, the market did not react proportionally and, even though its shares did depreciate, it sill registered a positive market value added, being the only company that succeeded this. At the opposite side of the spectrum lies OMV Petrom (for the whole analyzed period of time) and Rompetrol Well Services (between 2012 - 2013), who although created economic value at relatively high levels, registered negative market added values. Thus, it is ascertained that the premise according to which the increase in the created economic value will trigger increase in the generated market value and vice versa is not universally true. At the same time the unfavorable evolution of Oil Terminal must be mentioned, whose constantly negative economic added values are caused by the considerable increase in the invested capital, both equity and borrowed, and therefore, in its cost, increase that did not lead to a raise in operational profit, but, on the contrary, even lead to its decrease, peaking with the loss registered in 2013, being the only company that did not succeed in obtaining profit in all four years of analysis.

As far as Cash Flow Return On Investment and Cash Value Added, the companies present a complementary evolution. Hence, the only companies with a CFROI superior to the cost rate of the invested capital and a positive CVA are Rompetrol, on the entire period, and Petrom, starting with 2011, when the corrected gross cash flow surpasses considerably the invested capital cost. This situation is

different for the companies in the retail trade industry, as none of them succeeded in obtaining results higher than the capital cost, but Mercur stands out in the branch as the company that registers the lowest deficit between the yearly values of CFROI and those of invested capital cost rate, of about 2% annually.

Analyzing the second indicator which reflects the added value created by the company at stock exchange level, Total Shareholder Return, we notice the most favorable evolution in Rompetrol Well Services, whose indicator, although almost null in 2011, surpasses 20% in 2012 and 2013, mainly due to the appreciation of the stock exchange value of the companies shares, as well as to the dividend granted, situation considered as ideal. At the opposite side of the spectrum lies Unirea Shopping Center, whose evolution is a profoundly unfavorable one, because, although the company has decided not to grant dividends at all during the 2010 - 2013 period, the capitalization of profit does not influence the view of the capital market, its shares being depreciated by 1,3,by 19,75 and by 7,95 RON/share in 2011,2012 and 2013, leading to negative values of TSR, peaking with the minimum of -22,02% in 2012.

Linking and matching together all the data and conclusions up to this point, it is my opinion that the only companies capable of creating added value, even if the stock exchange market often does not reflect this, are OMV Petrom and Rompetrol Well Services, and, therefore, a long term investment in their shares could generate substantial earnings. Second I would place Napotex, who, although registers negative absolute levels and low relative ones for the added value indicators, the ascendant trend of this company is obvious, the values improving considerably from year to year. Therefore, a long term investment in its shares could generate substantial earnings but the risk level involved would be a medium to high one. On the contrary, the companies in which an investment wouldn't be justified and could end in losses would be Oil Terminal, Unirea Shopping Center and Mercur, since they create no economic value but, on the contrary, they even consume the existing one, even if the stock market does not react proportionally to the change in the financial situation of the company, as is the case of Mercur S.A.

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