THE USV ANNALS OF ECONOMICS AND PUBLIC ADMINISTRATION | VOLUME 13, ISSUE 1(17), 2013

THE ECONOMIC ADDED VALUE – MAJOR CRITERION ON ANALYZING THE FINANCIAL PERFORMANCES ON THE LEVEL OF HIGH DEVELOPED COMPANIES

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Abstract:
Implemented on large scale within successful companies of USA and Europe, the value based management has represented the most indicated manner on approaching the business, especially for the Romanian enterprises quoted on money market, which should be helped to connect unto international economic and financial environments, but as matter of fact, the applicability is much larger, thus including the unquoted enterprises, as well.
The research carried out in this field has many times stopped on a thorough analysis of the concept, as or the management technique analysis of basic indicators, and on the economic added value, the market added value, the liquid added value, the liquid investments profitability, the total profitableness of stockholders or the stock-exchange value etc.

Key words: economic added value, value management, financial performance, company, analysis.

JEL classification: M41.

1. INTRODUCTION

Creating the value has become a middlemost issue within the enterprises or managers concern, the value being especially invoked by the stock-holders, and managers and financial analysis, as well. This occurs as an imperative reason for enterprises, and as key factor on justifying the major decisions, such as: de-investment operations, the activities assignment or staff dismissal carried out in this view.

Creating value specific to an enterprise has had the origin in achieving the profitableness from invested capitals that are superior to the cost of resources mobilized in order to finance them. The over-plus thus achieved represents the economic annuity known under the name of *stock-holding value* (if this is shared to the stock-holders), being able to transpose on the enterprise global level those principles of financial theory on investments choosing.

The concept regarding the value creation will modify the traditional optics as concerns the performance measured by means of accountancy net benefit, where the debt cost is seen as expenditure, and the own capitals are not seen as resources that impose a cost for the enterprise. New issues have occurred on enterprises management, as regards the performance concept, its evaluation models, the levers and models on creating value, which will be able to maximize the actions value.

The performance concept involves new approaches as regards the enterprise, which should be treated in systematic vision, as well as in interdisciplinary perspective or in evaluating the performance, depending upon the activity sector. This can also be evaluated in accordance to the enterprise type, the managerial and entrepreneurship strategy, the competition environment, the human and material resources available by using a system of indicators in order to measure the performance.

2. THE ADDED VALUE – SEEN AS FINANCIAL PERFORMANCE SUPPORT REGARDING THE STOCK-HOLDERS

The added value quantifies the wealth or the value created by an enterprise, by means of technical-productive activity (Dragotă, V., Ciobanu, A., Obreja, L., Dragotă, M., 2003), explaining the value growth that results by means of the production factors, especially by the labor force and

the capital, as value above the goods and services achieved from third parties and consumed within the manufacturing process; within the current activity of an enterprise, this has become one of the most pertinent indicators of the enterprise's growth (Vintilă, G., 2004). In other words, the difference between the value of goods and services outworked or sold and the value of goods and services bought or consumed signifies *the added value* created by an enterprise (Mironiuc, M, 2006). The indicator measures the economical-financial performance of an enterprise, where the growth index of the added value should exceed that specific to taxable year production and to perform in continuous growth (http://macrostandard.blogspot.com).

The added value submits many valences in order to measure and evaluate the performance, signifying the basic element in determining some indicators of value creation, by major significance to the activity of any enterprise quoted or not quoted on the capital market.

The traditional financial indicators reflect the historical performance of companies, having a limited relevance in estimating the future progress of them. The accounting profit offers information as regards the ability of a company on controlling the expenditures and on achieving the incomes superior to expenditures. The profitableness rates that offer comparability in time and space have been also useful in appreciating the efficiency of using the company's capitals or assets, taking into consideration that their information content has been limited to the historical results level.

The rate of exchange includes not only the information regarding the past financial performances of an enterprise, but especially the estimations of stock-holders on future results. Moreover, not a classical financial indicator has taken into account the capital cost invested into a business, but only the effects of their use. For this reason, there are companies, which apparently have superior financial performances, have proven to carry out activities that do not generate value, but lead on permanent value loss (Chebac, N., Onica Obinceanu, M.C., http://proceedings.univ-danubius.ro).

The modern financial indicators are based upon the value creation concept, having a strong relevance as regards the real financial performance formulation. Maximizing the value of these indicators has lead towards value creation, therefore on raising the global value of a company.

The main modern indicators on measuring the companies' performances, promoted by their authors and respectively by well-known consultancy offices, can be represented by the following (Șușu, Ș., 2012):

- the economic added value
- the market added value
- the cash added value
- cash flow return on investments
- total shareholders return

All these indicators have been underlying upon the concept of value creation, fact that offers them a superior relevance as comparing to the classical financial indicators. The specialists in the field have considered such indicators as efficient criteria on the managerial team, as regards their results establishment and remuneration, or as regards the lever on improving the corporative governance of the quoted enterprises.

3. THE ECONOMIC ADDED VALUE – ESSENTIAL PART ON FINANCIAL PERFORMANCE COMMENSURABILITY

The economic added value was introduced in 1989 by Stern Stewart&Co American Consultancy Company, whose aim consisted in commensurate the financial performance achieved by an enterprise, performance that might influence the market value of the company's stock holdings (Popa, G., Mihăilescu, L., Caragea, C., 2009). The economic added value signifies the most known indicator on measuring the economic profit, being able to measure the enterprise's performance; simultaneously with the technical analysis, this will emphasize the cash flow growth over the weighted mean cost of the capital (http://www.free.org.ro).

The reasoning that is underlying such indicator is quite simple: the own capital, seen as the loan capital, has a specific cost. In contradistinction to the loan capital cost, which occurs explicitly into the profit and loss account, the own capital cost that is represented by the investors' remuneration and will be managed in a different accounting way.

In order to create value, an enterprise should earn enough in order to cover the financial debt cost, as well as the opportunity cost of the own capital. These ascertainments will lead towards the conclusion according to which the economic value created by an enterprise during a period of time should take into account not only the expenditures registered into the accountancy book, as well as the opportunity cost of the own capital.

The calculation relationship of the economic added value, proposed by Stern-Stewart&Co office consists in the following formula:

The economic added value = the operational net result – the invested capital cost

In this way, the economic added value represents an operational net profit, from where the opportunity cost of the entire invested capital will be deducted, practically signifying the measure of *the real economic profit* achieved by an enterprise; in other words, the following formula explains (Popa, G., Mihăilescu, L., Caragea, C., 2009):

$$EVA = (Ri - CMPC) \times Ci \quad (1)$$, where:

- *Ri* signifies the profitableness rate on the invested capital;
- *CMPC* signifies the weighted mean cost of the capital in terms of percentage (similar to the mean remuneration rate of the total capital);
- *Ci* signifies the total capital invested by a company (the total assets own by an enterprise).

The economic added value can also be determined (abbreviated as *EVA*), using the most known formula, by means of total capital cost deduction that is used from the operational net profit *(Net Operating Profit after Taxes – NOPAT)*, respectively the exploitation profit, in accordance to the following relationship (http://en.wikipedia.org):

$$EVA = Operational\ net\ profit - Invested\ capital \times Capital\ cost \quad (2)$$

In order to understand the above mentioned indicators, these will be explained in the following paragraphs included in this paper.

The operational net result signifies the result achieved by exerting the company's professional calling, in terms of accountancy – *the exploitation result* after the deduction of the profit tax. Deduction of tax has become compulsory, in order to approach the achieved result towards an economic result. It is about the terms emphasized within the Anglo-Saxon literature, meaning *Net Operating Profit after Taxes (NOPAT).*

The invested capital is formed out of the own capital and financial net debts (exclusively the liabilities treasury), wherewith the economic assets are financed.

The capital cost signifies the weighted mean cost (known under the abbreviation of WACC – *Weighted Average Cost of Capital*), specific to costs on the used financing sources. This is calculated as weighted arithmetic average on the own capital cost and the loan capital cost, upon basis of the following relationship:

$$CMPC = \frac{Kpr \times \overline{R} + Df \times \overline{d}(1-i)}{Ci} \quad (3)$$, where:

- *Kpr* signifies the own capitals;
- $\overline{R}$ signifies the mean cost of own capital (profitableness of the own capital);
- *Df* means the sum of net financial debts;
- $\overline{d}$ represents the interest rate;
- *i* signifies the profit tax quota;
- *Ci* is the invested capital (*Ci = Kpr + Df*).

A positive indicator's value means the wealth creation related to stock-holders, as value above the capital remuneration. A negative value explains that an enterprise does not cover the

capital's cost from the achieved operational result. In other words, it will lose money, even if it registers a positive accountancy result.

As can be seen, passing from a net exploitation result towards the economic added value will simply need the deduction of the invested capital cost. As matter of fact, this signifies *the economic result,* defined in accordance to the economist Alfred Marshall: *"The revenues value that remains to an enterprise, after the capital cost deduction to an accurate installment, can be taken into account as a benefit of the entrepreneur or leader".* In accountancy, this is known as *residual result.*

The calculation of value creating is tributary to the same accountancy distortions, which explain the classical limits of the accountancy profit on reflecting the performances. As Stern-Stewart model promoters, in order to achieve a real image of performances, almost 160 accountancy adjustments are necessary. But, as regards the economic practice, most of enterprises will carry out around ten or fifteen adjustments.

Since there is no standard methodology on applying these adjustments, each enterprise will carry out the own managing methods. The most important is that such enterprises should ensure the transacting progress continuity, in order to compare the time and space indicators. Any variation of the accountancy adjustments number will determine different values of the economic added value. In this way, the following indicators can be calculated:

- *the basic economic value* – by using the accountancy information not transacted (as residual result);
- *the declared economic value* (calculated by carrying out 12-15 adjustments);
- *The real economic value* (calculated by applying over 100 adjustments).

Passing from the *basic* economic added value towards *the real* value depends upon the number of carried out adjusting transactions.

As result, the economic added value signifies an indicator on measuring the value creation, based upon the following basic methodologies:

- removing the distortions of conventional accountancy;
- taking into account the cost of all resources used on financing the exploitation activity, resources that contribute on the incomes production;
- integration of the functioning operational cost and the capital cost into a single money indicator, on evaluating the performances, according to which:

The economic added value = Turnover – Operation Expenditures – Capital Cost (4)

Creating the value has aimed on becoming the major criterion on performances analysis, on the level of high-developed companies. Although some appreciations have considered this type of analysis in accordance to the companies quoted on stock-exchange, as matter of fact, their applicability is much larger, including simultaneously the not-quoted enterprises.

In this way, as instrument on leading a *Pilotage of stock-holders value* was proposed (Florence, P., 2004); such tool created the frame wherewith the management decisions might be analyzed and directed towards the value creation for the stock-holders. As result, one can analyze and rank an enterprise, by underlying upon the concept of created value. The key of carrying out such demarche is represented by the comparison between the profitableness of the invested capital to an enterprise and the mean cost of the market capital.

Starting from such comparison, one should take into consideration the following situations:

- *the capital cost < profitableness of the invested capital → positive added value;*
- *the capital cost = profitableness of the invested capital → null added value;*
- *The capital cost > profitableness of the invested capital → negative added value.*

Ranking an enterprise from the perspective of the economic added value is emphasized in Table 1 (Işfănescu, A., Robu, V., Anghel, I., 2001).

Table 1. Ranking an enterprise according to the economic added value view

Ranking the enterprise	Mentions
Performance	An enterprise owns the profitableness of the invested capital amongst the best known on the market; in such situation, the economic added value is positive.
Normal	Profitableness over or close to the average value; the stock-holders will benefit from the market positive added value.
Selling the business or assets / taking over the business	The enterprise will ensure profitableness on the no-risk investment level; a significant growth is not estimated in the near future. The stock-holders can decide the enterprise's close-out moment, but will initiate the normal procedure of closing-out, and will achieve a better price as comparing to the forced close-out.
Forced close-out/Taking over the business	The company registers casualties, and cannot pay its debts; in this way, the situation will not be improved. On the initiative of the creditors or stock-holders, the forced close-out procedure will be started. As result, the stock-holders and creditors can recover a part of the invested capital, which might be invested to other companies, in order to maximize its value.
Recovering the assets of an enterprise	The lack of demands as regards the offered products or services, the loss of supply market, the use of products that can be replaced or the equipment' usage etc. represent causes that determine not only casualties and residual payments, but also the impossibility on selling the business or the real assets; as result, their dismemberment might be a solution. In such cases, the highest casualties can be registered for the stock-holders and creditors.

Considering the conceptual point of view, the economic added value is superior to the accountancy net profit, since it brings the awareness over the cost concept on the capital and exploitation risk. Moreover, the economic added value is built so that it represents the value maximization target, while the profitableness rates will reflect the results generated by assets on their historical value, taking into account that such value can be distorted by inflation or any other factors.

The significance of economic added value is also given by its feature, representing an instrument on decentralized financial management; it can be used on all the enterprise's levels, in order to measure the performance if a specific profitableness rate is scattered.

Although, the economic added value can be maximized on the level of one year, in detriment of the following years by the under-investment process or by artificial reduction of the working capital need (Sichigea, N., Drăcea, I.E., 2006).

One might appreciate that the economic added value signifies an improvement instrument of the enterprise's global management, where its usage will remove the incoherencies series or will facilitate the decisions and applying. Using the economic added value doesn't mean forsaking the classical indicators on appreciating the performances. The managers can follow up the margins, the unitary costs or the rotations etc., but moving towards the effect over the value creation. The way how the economic added value influences the managers on taking better decisions is represented by "*the invoice*" upon the entire capital cost. Such manner will determine the carefully using of assets, putting into balance the real cost of stocks, customers or immovable. The economic added value signifies a motivation lever of managers and the operational staff. Using such indicator on measuring performances has also a series of *limits.*

Firstly, this indicator will privilege a single partner – *the investor.* The analysis demarche underlying on the economic added value signifies a short term demarche; this can be deformed, in certain conditions of long-term economic and financial reasoning. The lack of a standard model, the high number of proposed treatments, the lack of communication with the office, which has launched the model on the computing methodology have generated distances, as regards their pertinence. Some conflicts existing in the financial world have determined the increase of non-trust as regards the "commercial" models, on measuring the performances and ranking the enterprises underlying on them.

As concerns the methodology application on calculus and analysis, specific to the economic added value research carried out at S.C. Antibiotice S.A., Iaşi during 2009-2011, this is based upon the data illustrated in Table 2.

Table 2. The level and dynamics of economic added value

No.	Indicators	Taxable year			Turning off 2010/2009	Turning off 2011/2010	Indexes 2010/2009	Indexes 2011/2010
		2009	2010	2011				
1	Exploitation result	26172761	30562500	32062861	+4389739	+1500361	116,77	104,91
2	Profit tax	3730721	5933170	6098750	+2202449	+165580	159,04	102,79
3	Operational net profit	22442040	24629330	25964111	+2187290	+1334781	109,75	105,42
4	Tax quota	0,17	0,24	0,23	+0,07	-0,01	144,91	97,51
5	Total invested capital	316769938	331914049	369474983	+15144111	+37560934	104,78	111,32
6	Profitableness of the invested capital (%)	7,08	7,42	7,03	+0,34	-0,39	-	-
7	Own capital	242024210	262612444	287058407	+20588234	+24445963	108,51	109,31
8	Profitableness of the own capital (%)	9,27	9,38	9,04	+0,11	-0,33	-	-
9	Financial debts	74745728	69301605	82416576	-5444123	+13114971	92,72	118,92
10	Expenditures specific to installments	3384326	3317167	2549724	-67159	-767443	98,02	76,86
11	Rate of interest (%)	4,53	4,79	3,09	+0,26	-1,69	-	-
12	Weighted mean cost of the capital (%)	7,98	8,18	7,55	+0,20	-0,63	-	-
13	**Economic added value**	**-282172213,21**	**-251806610,99**	**-194216450,75**	**+30365602,22**	**+57590160,24**	**89,24**	**77,13**

Source: own processing based on the financial statements of S.C. ANTIBIOTICE S.A., Iaşi

In accordance to the data included in the above illustrated table, one might conclude the following affirmations:

1. The economic added value has registered negative values, as result of the weighted mean cost of capital, which exceeded the profitableness average rate of the total capital used, tough this is reduced from one year to another by 10. 76% and 22.87%, respectively.
2. The increase of operational net profit by 9.75% in 2010, as comparing to 2009, in conditions of the invested capital growth by 4.78%, which determine the growth of profitableness average rate (the average cost of the total capital) by 0.34%; on the other hand, the operational net profit growth in 2011 as comparing to 2010 by only 5.42%, upon basis of increasing the invested capital with 11.32%; such situations determined a reduction of the total capital mean cost by 0.39%.
3. Most of the invested capital by 4.78%, and 11.32% respectively, underlying on the reduction of negative difference between the invested capital profitableness and the weighted average cost of the capital (-0.89% in 2009, -0.76% in 2010, -0.53% in 2011), facts that brought on increasing the economic added value (although there are negative).
4. The difference between the profitableness rate on invested capital (+0.34% in 2010 as comparing to 2009) and the increase of weighted mean cost on capital (+0.20% in the same period of time) has determined the increase of the economic added value by +30365602.22 lei, which remained although negative; on the other hand, the reduction of profitableness rate on invested capital (-0.39% in 2011 as comparing to 2010), based on reducing the weighted mean cost on capital (-0.63% in the same period of time), has determined the increase of economic added value by +57590160.24 lei, thus maintaining a negative value. This aspect can be explained by taking into consideration the accountancy values that were used for the exploitation and invested capital results.
5. The use of economic value added does not mean giving up basic indicators for assessing performance. Company managers can still watch margins, unit costs, rates of return, but with concern for their effect on value creation.

4. CONCLUSIONS

The economic added value indicator has represented a measure of performances, by means of the real economic profit achieved by an enterprise, which allows the measuring of success (or failure), in short of long terms of time. Such measuring method can be useful to those investors that wish to determine as accurate as possible the value of an enterprise, being able to be used for fast comparative analysis by similar industrial units. The economic added value has signified a modern tool on measuring the profitableness, thus showing a business that generates earnings higher than the real cost of the invested capital. Including within its calculations the cost of capital using, the economic added value is making a differentiation upon the popular measures on performances; as example, one might think at the assets profitableness, at the economic profitableness or the net revenues and the efficiency indicators, which do not take into account the cost of capital used. As result, these classical indicators might suggest in a certain way if an enterprise achieves performance, while as matter of fact, such enterprise proves a reduction in value for its investors. The economic added value represents an accurate tool for the motivation system within an enterprise, stimulating the managers to think beyond limits, as stock-holders, as well; such thinking will generate a common language within the organizational culture. Applying the economic added value to enterprises is relatively new and it is not as well-known as the other methods on measuring performance (Şuşu, Ş., 2012). Considering that such tool of measuring performance within the Romanian enterprises is not so familiar or too much used, the aim of the current paper consists in emphasizing and studying both this concept and its advantages as well, as comparing to other performance indicators. Underlying on the above mentioned research, this study can be implemented within the Romanian enterprises in the near future.

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