

WAYS OF MEASURING THE COMPANY PERFORMANCE

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Abstract: : The information about a company's performance is necessary in order to evaluate the potential modifications of the economic resources that the entity will be able to control in the future, to anticipate the ability to generate treasury fluxes with the available resources, and to establish the efficiency with which it can employ and make use of new resources. In current practice, the information regarding financial performance are mainly given by "the profit and loss account", respectively "the budgetary execution account", but things are not so simple as to reduce them to the synthetic data in a certain periodic report form since it would be a pity to ignore the real - time information given by the account itself. In our paper we have tried to resume the most important indicators (financial and non-financial, traditional and modern) through which the performance of a company is measured.

JEL classification: M21, G30

Key words: performance; profitability; financial indicators; non-financial indicators; performance indicators

1. INTRODUCTION

"A performance" is generally used to describe a measured result which has a degree of comparison and a positive connotation. Performance can be both positive and negative and refers to past results. To be well-performing means to achieve or to exceed certain goals. The word performance has three basic meanings (Bourguignon, 1996): success, the result of the action, action. Success refers to the well-doing of a business, being a general notion that characterizes more than one favorable state, and thus it is difficult to find only one result in order to measure success. Therefore, we may assume that performance per se does not exist, since it varies according to the goals set by each company. The second meaning that is attributed to performance, i.e. the result of an action, embeds only value. Performance represents the result obtained following the development of a certain process or activity. The third meaning of performance does not only represent the result measured at the end of a transaction, but the whole forming process of performance. In a narrow sense, performance is the effect of an action undertaken by the company; in a more general sense, it is the ensemble of the logical stages of the action, of the intention of the actual result.

In this sense, we are interested in those aspects connected to performance measurement and analysis which are at the centre of a debatable approach, regarding the measurement of the company's performance with the help of two categories of indicators: financial and non-financial. Although the theoretical opinions in the field of

analysis differ in regard to one approach or the other, practice demonstrated the necessity of approaching performance not only in terms of productivity, lucratively and profitability, but also in terms of non-financial aspects which influence the increase in performance. That is why we aim to explain performance in terms of productivity or profitability, as well as the performance measured by means of quality, innovation, the satisfaction of clients and employees.

2. MEASURING THE COMPANY PERFORMANCE

Indicators are the main instruments for measuring economic performance. An indicator is “a measure which expresses numerically one aspect or a group of aspects which characterize a phenomenon, a process or an economic activity, defined in time, space or organizational structure” (Buglea et al., 2006).

Generally, the given definitions deal with indicators as:

- numerical data which express the evolution of a key-factor;
- data which faithfully render the image of a phenomenon that is under observation;
- objective data which describe a phenomenon.

Over time, the financial analysis has used different criteria in order to evaluate the companies' economic performance. These criteria have a dynamic character and change periodically.

- the period between 1960 – 1970: the performance criterion consisted in the size of the company, which was assessed by means of two indicators: asset value and turnover.
- the period between 1970 – 1980: performance was given by the so-called “accounting performance”, which was measured using three indicators: net profit, net profit on shares, PER (price earning ratio).
- the period between 1980 – 1990: the criterion based on which performance was assessed was “the value of the generated liquidity”, measured itself by means of various indicators of the cash flow.

The traditional period (1960 – 1990) is characterized by approaching the company's performance in growth terms, i.e. the company's ability to extend the volume of its activity (Niculescu, 1997:228). The indicators used in order to describe this growth are: exercise production, turnover, added value, analyzed in relation to the total assets, to the human and material resources, social, economic and financial profitability.

- the period between 1990 – present day: the concept of performance bends to the necessity of value creation. Value creation is a new concept which replaces the traditional one. Investors mainly keep track of the evolution of the following indicators: the profitability of the invested capital, EVA (economic value added) and MVA (market value added).

A system of indicators used in order to quantify the company's global performance must also include, beside financial indicators, which record the historical results of the activity, non-financial indicators, which record especially the qualitative aspects that generate value on a long term. We are interested in those aspects concerned with performance measuring and analyzing which constitute the basis for a polemic approach, regarding the measurement of a company's performance by means of two categories of indicators: financial and non-financial. Although the theoretical opinions in the field of analysis differ in regard to one approach or the other, practice demonstrated the necessity of approaching performance not only in terms of

productivity and profitability, but also in terms of non-financial aspects which influence the increase in performance.

2.1. Quantifying performance based on traditional analysis indicators

For the creation of return rates various forms of profit indicators are reported in the case of indicators displaying the effort of the society to ensure deployment conditions of business (total assets or capital). The most common forms of return rate refer to the economic return and financial return.

The economical return rate measures the performance of the total of assets of a company, regardless of the procurement method of capital (owned or borrowed), allocated for the existence of this asset. In this respect, the economic rate of return is independent of the funding policy promoted by the company. The formula for calculating the economic rate of return is:

$$ER = \frac{GOS_{OR}}{TA} \times 100$$

Where:

GOS – Gross operating surplus;

OR – operation result;

TA –total assets.

The economic rate of return combines the operating result with the effort indicator and can be divided into a rotation rate and a margin rate to highlight the impact of asset and margin rotation acceleration on the growth of the economic return.

$$ER = \frac{RE}{A_i + A_c} = \frac{CA}{A_i + A_c} \times \frac{RE}{CA} \times 100$$

To obtain a more accurate value from the result of the operating activity this has to be revised as follows:

Revised = ER + Interest - Income tax

$$R_e = ROA = \frac{EBIT - \text{impoz}_{pr}}{A_i + A_c} \times 100$$

R_e = ROA (Return on Assets)

EBIT = Gross profit + Interests = NP + Interest + income tax = Earnings before interest and taxes

The financial return compensates the owners of companies by offering dividends and own capital growth, in order to motivate the participation to social capital growth, for both existent and new shareholders (Buglea & Lala, 2009).

The net financial rate of return, which is remunerated directly to owners of companies by grant of dividends and reserve growth and indirectly through increased allocation of funds for company development, is calculated according to the formula:

$$R_f = \frac{NP}{O_c} \times 100$$

Where:

N_p –net profit

O_c – own capital

The financial return rate is dependent on the modalities of funding the work, being receptive to the changes in financial structure, in particular to the grade of indebtedness. It is also influenced by the regime for the calculation of depreciation and

provisions, of the insured and uninsured expenses to determine the base of the income tax calculation.

The gross financial rate of return is used instead of the net income of self-financing capacity to eliminate incidents of depreciation practices. The formula for the calculation is:

$$R_f = \frac{\text{Self-financing capacity}}{\text{Own capital}} \times 100$$

2.2. Quantifying performance based on modern analysis indicators

The traditional management based on accounting data analysis and interpretation has proved its inability to evaluate and express in a clear and correct manner the actual performance of companies. Accounting data have proved to be characterized by bias and lack of transparency. These can not represent a decisive foundation because they do not take into account the risk related to investments or the opportunity cost of attracted capital.

As a solution to the challenges faced by the traditional management systems it was proposed to implement a value-based management. In these circumstances, a change in attitude and practice management has been imposed. The emphasis shifted from maximizing revenue towards maximizing the value created for shareholders, from the important use of accounting data into the use of cash flows dynamics.

Financial experts from Stern Stewart & Company (consulting firm in New York) called this change of approach the transition from income-based management towards value-based management, "the switch from managing for earnings to managing for value" (Stern Stewart, 1999:4).

The newly created value is the best tool for measuring performance as it incorporates a larger amount of information regarding the efficiency of a company's actions as well as the environmental constraints of a company (Copeland *et al.*, 2000:550). Creating value is a long-term strategic objective and it has to underpin all financial decisions.

Modern analysis indicators of the companies' performance are constructed using the concept of value creation. This concept is used in the Anglo - Saxon literature to give substance to a new integrated approach of a company's activity, namely creation of a value-based management.

In specialized works, value-based management is defined in terms of its process and outcome. "*Value based management is a new way for managing, focused on the creation of real value not paper profits. Real value is created when a company makes returns that fully compensate investors for the total costs involved in the investment, plus a premium that more than compensates for the additional risk incurred.*" (Ciobanu, 2006:15)

"Value based management can be all embracing. It aligns strategies, policies, performance, measures, rewards, organization, processes, people, and systems to deliver increased shareholder value." (Ciobanu, 2006:15).

Modern quantification indicators of economic performance perceived by the shareholders of the company are classified by their origin, into four categories:

1. quantification indicators of the company's performance promoted by the consulting firm Stern Stewart: economic value added (EVA) and market value added (MVA)
2. quantification indicators of the company's performance promoted by Boston Consulting Group and HOLT Value Associates from Chicago: TSR – Total

Shareholder Return, CVA – Cash Value Added and CFROI – Cash Flow Return on Investment;

3. quantification indicators of the company's performance promoted by Accor: ROCE – Return of Capital Employed);
4. quantification indicators of the company's performance promoted by Applied Finance Group: EM – Economic Margin.

2.2.1. Economic value added – EVA

The added economic value is a measure of final economic gain, obtained after deducting the cost of the entire employed capital. Peter Drucker said in this sense: "Until the revenue generated by a firm is not superior to the cost of the capital used in business financing, the company in question is experiencing loss. It has no practical relevance that it has obtained maybe book net profit. The company returns in the economy less than it has received as resources ... By that time the company does not operate economically healthy".

This indicator takes into account all the pluses and minuses involved in the process of generating value and is calculated by multiplying the difference between the ROI - Return on invested capital and WACC - weighted average cost of capital with the TC - total invested capital):

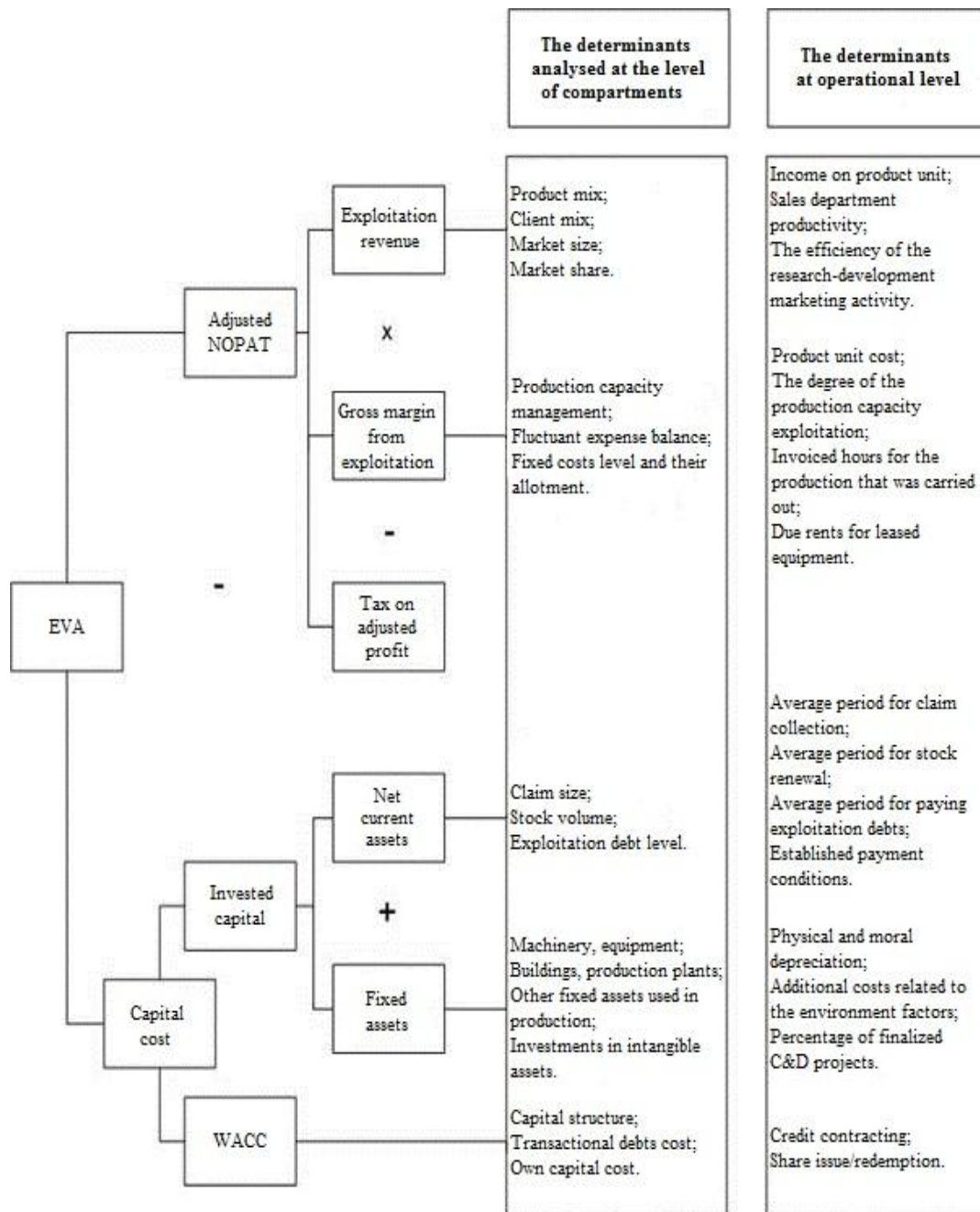
$$\mathbf{EVA = (ROI - WACC) \times TC}$$

Also, the relationship can be rewritten if we consider the profit and loss as being the difference between NOPAT - net operating profit after tax and the financial task, which is obtained by multiplying the weighted average cost of capital (WACC) with the total invested capital (TC).

$$\mathbf{EVA = NOPAT - WACC \times TC}$$

The cost of using attracted funding sources, thus a weighted average cost of all the sources used: the cost of own capital (dividends expected by shareholders), the cost of borrowed capital (interest payable to creditors).

The added economic value lies in the difference between the profits generated by the operational activity and the financial task that the invested business or project has to endure. EVA is entirely consistent with modern theory of financing economic agents according to which the total value of a business or project is determined either by the present/actualized value of future cash flows or by the same present value of future added economic value. This results in the equivalence among the terms of present net value of added economic value or the net cash flows, free of any tax obligation, interest, etc. (Dimbean-Creta, 2000:67-68).



Source: Dorgai, 2002:20

Figure 1

The analysis of the EVA determinants

Considering the practice of the companies that guided their performance management by means of the EVA, one may conclude there are advantages and disadvantages to its use.

The main advantages are:

- taking into account the cost of the invested capital, which reflects the company's ability to create capital gain. The company's profitability is related to the level of the costs (exploitation cost and financing cost) associated with its activity;
- a better alignment of the managers' objective with those of the entire company and its owners, orienting the managers' effort towards value creation for stockholders;
- when calculating this indicator one must bear in mind the quality of profits, which means that the profit is adjusted for a better reflection of its size in normal exploiting conditions.

The disadvantages are as follows:

- the EVA cannot be a basis for comparison between companies, because the EVA depends on the size of the company and the capital used. For instance, a smaller, but very efficient company may have a smaller EVA value than a larger, but less efficient company. However, this inconvenience is resolved if the EVA/Capital indicator is used. In this case, the company with a bigger EVA/Capital is more efficient;
- the EVA implies forecasts of the future cash flows and does not measure the current value. That is why it may offer an advantage to smaller projects with rapid amortization, discouraging the investment in innovative projects. For instance, in a pharmaceutical company the conception of a new product takes on average between 10 and 12 years. In the meantime, the research-development department will report extremely high costs, and the beneficial effects (incomes or cost savings) will appear only after the new drug is introduced to the market. The risks and the costs associated with the innovation may exceed in volume the size of the potential gain. The current decrease in EVA may lead to smaller remunerations and even the loss of promoting opportunities for the manager in question (Brealey & Myers, 2003:324).

Biddle, Bowen and Wallace (1999:35) identified a few modifications that emerged in the managerial style of the companies that adopted the EVA type of indicators as basis for management remuneration or companies that didn't adopt such a reference system. The research results indicate the fact that those companies that have the EVA as basis for management remuneration reported a doubled asset resolution, their purchase of new assets has dropped by 21% and the redemption of their own shares increased by 112% compared to the other companies.

2.2.2. Market value added – MVA

When the company makes judicious investments, which means that their value is superior to the cost of their production recorded in the accountancy, it is possible to assess that a process of value creation took place. The MVA corresponds to this increase in value which is measured as a performance in relation to the market.

According to the company's concrete situation, listed or unlisted on the stock exchange, the calculation of the MVA differs.

If the company is listed on the exchange and its stocks are systematically used in transactions at the stock exchange, the MVA is determined by comparing the market value (exchange value) to the value of the invested capital. The MVA may be determined as follows:

$MVA = \text{stock exchange capitalization (SEC)} - \text{net book value (NBV)}$

or

MVA = the market value of the capital employed (VB) – the book value of the capital employed (CE)

The market value of the capital employed can be measured as follows:

$$VB = O_s * S_p$$

Where:

O_s – the average number of outstanding shares

S_p – share price

The factorial study of the MVA can be illustrated as in Figure 2.

The economic value added and the market value added are directly correlated, as presented in specialized literature. The MVA reflects an increase in shareholder value for a listed company, and may be considered an assessment of the future fluxes of the EVA, which the latter will generate:

$$MVA = \sum_{t=1}^{t=n} \frac{EVA}{(1+k)^t}$$

k – balanced average cost of the capital;

t – the number of years of the time horizon.

The existent correlation between the economic value added and the market value added has implications for the company's economic value. Research in this field have shown that those companies which have the ability to create economic value also report a favorable evolution of the market value.

2.2.3. Total shareholder return (TSR)

The total shareholder return (TSR) is used on a large scale in order to determine the economic benefit of a share investment, provided that the investor has reinvested the received dividends.

The shareholder return is used to compare the performance of the securities issued by various companies or to relate the performance of some companies' securities to the performance corresponding to the entire sector of activity (synthesized by the Stanford & Poor's 500 coefficient), because, compared to the simplistic method which implies calculating updated benefits, determining the TSR also takes into account the dividends generated by those shares.

The TSR indicator may be expressed in two ways:

- as annual profitability rate for the shares held;
- as total profitability rate for the entire period of shareholding, from acquisition until the TSR is calculated.

The TSR is determined as follows:

$$TSR = \frac{\text{variation of the stock exchange capitalization + dividends}}{\text{initial stock exchange capitalization}}$$

The TSR was developed by Boston Consulting Group and it rivals with the market value added indicator.

The use of this indicator is recommended because it meets the expectations of the company's management, as well as those of the shareholders. An adequate value of the TSR can be obtained by comparing it with the values recorded by similar companies. Its calculation formula is based on the share price, and therefore all the factors that influence the stock exchange rate will also influence the value of the TSR.

The disadvantage of this indicator is that it doesn't necessarily reflect the company's financial performance, but the market expectations regarding the company's future.

2.2.4. Cash value added – CVA

The indicator of liquid value creation, namely cash value added denoted CVA, was conceptualized by the American consulting firm Boston Consulting Group. There are strong similarities between the economic value added and cash value added, except that the CVA indicator includes only cash items.

Many models have been developed starting from the CVA concept, but in this paper we will present two of these models, widely used in practice because of their applicability:

1. Boston Model
2. Ottosson and Weissenrieder model

The two models are fundamentally different, both because of the method of profit calculation and the way they present their results.

The Boston model of the cash value added determines CVA from gross cash flow (GCF) achieved during the period, from which are deducted the depreciation (D) and the total cost of capital used for financing activities (TCC).

$$CVA = \text{gross cash} - \text{flow} - \text{Depreciation} - \text{total cost of capital} = GCF - D - TCC$$

Often in specialized literature the difference between gross cash - flow (GCF) and depreciation (D) is called sustainable cash - flow (SCF).

Gross Cash - flow (GCF) is determined by adding the net profit (PN) obtained by the firm on interest expenses and depreciation (D) value:

$$GCF = PN + D + A$$

The second model of CVA calculation is the Ottosson and Weissenrieder model of cash value added. It represents the net present value (NPV) that calculates and classifies investments into two categories: strategic and non – strategic ones.

Strategic investments are those investments whose main objective is to create new value for shareholders, while non-strategic investments are those made to maintain the value of the strategic investments created.

Strategic investments are the base of capital within this model because the financial requirements of the shareholders must derive from business related activities. Investments made in order to maintain the original value of the enterprise must be considered costs.

The basis for the capital in this model is called the operating cash – flow demand (OCFD), calculated for each strategic investment made and through their aggregation results the basis of the company's capital. This model of the CVA does not measure the opportunity cost of capital in cash terms, but provides a good estimate of the generated cash - flow compared with the requirements of the investors for the given period.

The operating cash – flow demand is calculated as equal cash - flow in real terms annually, using the correct amount of capital cost, which gives the investment a zero net present value at the end of the economic life of the investment strategy. The operating cash – flow demand is a real annuity, yet it is adjusted by the annual inflation, being constant over the period of the investment.

The operating cash – flow demand must be covered by the operating cash – flow (OCF) so that strategic investments could create value.

$OCF - OCFD = CVA$

A strategic investment creates value if the operating cash – flow surpasses the operating cash – flow demand in time:

+ sales

- operating costs

= earnings before interest, tax, depreciation and amortization (EBITDA)

+/- variations of the working capital or the need for working capital

- non – strategic investments

= operating cash – flow (OCF)

- operating cash – flow demand (OCFD)

= cash value added

Operating cash – flow demand (OCFD) is calculated as follows:

- identifying the initial costs for each strategic investment;
- estimating the economic life for each strategic investment;
- the nominal cash – flow is determined for each strategic investment required to produce at every period in order to provide this strategic investment a net present value (NPV) equaling zero.

The operating cash – flow demand total (OCFD total) equals with the sum of OCFDs for each strategic investment of the company for each period. The organization adds value to its shareholders if the net present value (NPV) of the CVA is positive.

This model of the CVA can be expressed also in index form:

$CVA = OCF/OCFD$

With this expression of CVA we can compare the profitability of the various units in a manner approved by the financial theory. If the CVA index is larger than 1 this indicates that the strategic investment produces enough operating cash - flow (OCF).

The cash value added indicator is relatively easy to use, focusing on value created for shareholders. This indicator can be used by providers of capital as a guide in making decisions, but also by managers to understand the situation of a company.

2.2.5. Cash - flow return on investment (CFROI)

Anglo-Saxon specialized literature (Madden Bartley, 2002:9) describes the CFROI (Cash Flow Return on Investment) indicator as one built on the theory of cash flows, but one that has two advantages related to the valuation of dividends:

-it overcomes the CAPM model imperfections (Capital Assets Price Management) regarding the determination of the cost of capital;

-it is not affected by the relevancy scarcity of the accounting data in need to be processed from a purely economic signification to a fiscal one.

The CFROI indicator was promoted by the Holt Value Associates consulting firm from Chicago, considered by some authors as the best measure of value creation.

The CFROI indicator specific to a company's activity represents the internal return rate of cash flows of existing investments. In order to assess the quality of the investments made, these cash flows must be compared to the invested cost of capital.

Here are two methods used to calculate the rate of return on cash flows.

The first method calculates CFROI using four variables:

- gross capital invested (GCI) in the existing assets; gross value is determined by adjusting the residual value of assets acquired through investments with a recorded depreciation up to that point and with a depreciation caused by inflation.

- gross cash flow (GCF) – shows the gross cash flow generated in the current year by the gross capital invested and it is calculated according to the formula:

GCF = operating net income + depreciation

- the normal life expectancy of existing assets (n) in the initial investment, usually expressed in years;

- residual value of assets (RV) at the end of normal life duration; residual value is expressed in updated terms and is part of the initial invested capital.

According to this method, CFROI is the internal rate of return that causes the net present value of gross cash flows and residual value equal to the invested gross capital.

A second method to determine the CFROI indicator is based on establishing an annuity, called the economic depreciation (ED) to cover the cost of asset replacement at the end of their normal life.

$$Ed = \frac{\text{Replacement cost} \times k}{(1+k)^n + 1}$$

Replacement cost = GCI – RV;

k – cost of capital;

n – normal life duration.

Based on the facts defined before, the formula to calculate the rate of return of cash flows can be written as follows:

$$CFROI = \frac{GCF - ED}{GCI}$$

The two methods provide similar results. The first method assumes the reinvestment of cash flow generated at a rate of return equal to the internal rate of return, and the second method uses a rate of return, which is reinvested in cash flow, cost of capital, at least on the portion of cash flow meant to cover the cost of asset replacement.

The relationship between CFROI and company value is less intuitive than the relationship between EVA and company value.

In general, companies that have a high rate of return on cash flows are rewarded with a high value market, although not the market value, but the changes in the market value of the company are the ones creating profit.

The correlation between changes in the rate of return on cash flows and the surplus of returns is difficult to predict. Any increase of CFROI represents a positive signal to investors and the companies with the highest levels of CFROI should get more profit.

2.2.6. Non - financial indicators of performance quantification

Performance is multi-dimensional, covering issues of productivity, profitability, innovation, product design, quality and growth. All these issues either financial or non-financial, intertwine and interact, influencing each other, and are all based on their effective management. Thus, an approach of the company's performance only from the financial perspective (productivity, profitability, and advantageousness) cannot provide an overview of the performance. This view is based on the idea that non-financial indicators better explain than traditional financial indicators the changes in own profit value (Stern and others). Chen and Dodd have examined the explanatory power of various financial-accounting indicators (profit per share, return on assets, financial return) compared with the residual income and other indicators to measure the created

value. The authors found that the explanatory power of performance measurement indicators is lower than the one supported by those who promoted it.

Unlike the "old economy" which was based on physical and financial capital, the "new economy" is based primarily on intangible assets. It is not sufficient allocating financial and physical resources to achieve business success, and the added value comes predominantly from knowledge and skills, namely from the intellectual capital. Intellectual capital is the knowledge that transforms raw materials and makes them more valuable. Intellectual capital requires knowledge which, through a dynamic process, is transformed into valuable assets that bring profit and generate a competitive advantage.

The intellectual capital consists of human capital (talent), structural capital (intellectual property, methodologies, documents, software, databases) and relationship with customers. The human capital is the driving force behind innovation and intellectual capital; the structural capital allows the creation of value through the transformation of resources; the relation with customers is the ability of a company to positively interact with the members of the business community to unlock the potential of creating wealth.

In 1995, Skandia, one of the insurance companies and major global financial service, has published its first annual report on intellectual capital, using the reported "Navigator" model. Skandia Navigator was one of the first methods of calculation and visualization of the value of intangible capital. This method is based on the fact that intellectual capital is the difference between accounted value and market value of the company.

Since the measurement of the value added was not fully accomplished because of some factors that could not be determined (establishing whether the operation destroys or creates value or measuring the intellectual potential), a new method was developed, the VAIC (Value added intellectual coefficient), which was conceived to help managers determine their companies' potential based on the current performance.

Companies which have acknowledged the importance of the intellectual capital as key-factor in achieving success are looking for ways to measure and control this factor. Measuring financial performances does not suffice because it does not reflect how much of the profit is due to the intellectual capital. In the knowledge-based economy, wealth is created through a combination of products and services that generate value. Every company has its unique set of knowledge, skills, values, and solutions, which are all intangible assets. The supervision and administration of these resources can be carried out by analyzing the value creation efficiency, because it is of utmost importance for managers to obtain and maintain productivity and efficiency in the company. The VAIC indicates the value creation efficiency of all resources, expressing a company's intellectual abilities. The more qualitative the resources used are (human and intellectual capital), the greater the company's value creation efficiency will be.

The VAIC depends on the employed human capital structure and on the results obtained in the past (patents, licenses, innovation, and customer care), the value added ($VA = \text{operational profit} + \text{income expenses} + \text{amortization and depreciations}$), the employee expenses (salaries, bonuses, courses) and the value of the assets employed.

In order to calculate the value creation efficiency of the two factors one uses the following indicators: CEE (capital employed efficiency = VA/CE), HCE (human capital efficiency = VA/HC), SCE (structural capital efficiency = SC/VA). SCE is

calculated differently from the HCE and the CCE, being in inverse ratio to the human capital efficiency. These indicators show how much value per monetary unit was created. If one adds up the indicators, the VAIC is obtained, which represents the total efficiency or the intellectual abilities of a company.

$$VAIC = HCE + SCE + CEE$$

This calculation method is focused on creating value rather than cost. For instance, if the value of the HCE is 5, it means that every monetary unit invested in the employees will create 5 new value monetary units. This information is important for the management, the shareholders and the employees.

VAIC method parameters are easily understood and easily communicated to managers. Being a relative measure, the indicator can be internationally applied and the benchmarking is easier to do. The analysis of the value creation efficiency can be applied to all the levels of the business activity: macroeconomic, sectorial, microeconomic, and at a private company level. By means of the VAIC, the management can detect the weak points of value creation at each level. The VAIC does not offer precise facts about what has to be changed in the company's management. The VAIC represents a value creation scanning instrument.

Companies become more efficient, more profitable and more competitive by evaluating the intellectual capital. The identification and measurement of intellectual capital can help managers to:

- confirm the capacity of the company to reach it's goal;
- plan and finance research and development;
- evaluate the value of the company for better comparison and benchmarking;
- broadening the organizational memory by identifying key resources, and avoiding reinvention;
- save money through the speed of communication and response time.

Based on the research on the companies' intellectual capital evaluation a number of evaluating methods were drafted:

- Methods based on the stock exchange capitalization – J. Tobin's Q factor
- Methods based on asset profitability – EVA, MVA
- Methods based on score – Skandia Navigator, Balanced Scorecard, IC Index
- Direct methods of calculating the intellectual capital - technology broker, Inclusive Valuation Methodology.

Methods based on asset profitability do not quantify the value of a company's intellectual capital directly, only its existence.

Evaluation methods based on scores consisted of the identification of various elements of the intellectual assets for which several indicators and index numbers are calculated which then transform into scores and charts. These methods do not estimate the monetary value of intangible assets.

The direct methods for calculating the intellectual capital implied estimating the monetary value of the separate physical assets, obtained by means of detailed questionnaires and/or by means of using updated cash-flow method.

The non-financial indicators for measuring performance can complete the information offered by the financial indicators, but the difficulty of the process of creating a relevant set for each company's activity accounts for their relatively reduce usage. The difficulties of use and analysis of these indicators arise not only from the complexity of the selection of the most important information for company in question, but also from the high costs involved in the creation of a set of indicators that are

specific to the activity. They will also provide insignificant information if the selection process is not based on the analysis of the factors that give quantitative and qualitative results.

3. CONCLUSIONS

Without choosing between the modern indicators of performance measurement in companies, some principal conclusions have resulted:

- these indicators offer the possibility of making comparisons between companies from the same country, but also between companies located in different countries;
- the regular use of the EVA, MVA, TSR, CVA, CFROI and EM indicators in case studies has shown that, generally, the results are not significantly dissimilar. If differences do appear, it is because of the heterogeneous choice of the analysis periods and of the assumptions on which the reprocessing of the accounting information is based;
- of all the indicators used, the market value added (MVA) is the best known indicator for quantifying the companies' performances from the investor's point of view.

Acknowledgements

This article is a result of the project "Creșterea calității și a competitivității cercetării doctorale prin acordarea de burse". This project is co-funded by the European Social Fund through The Sectorial Operational Programme for Human Resources Development 2007-2013, coordinated by the West University of Timisoara in partnership with the University of Craiova and Fraunhofer Institute for Integrated Systems and Device Technology - Fraunhofer IISB.

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