# Indicators for Measuring the Financial Performance of Economic Entities

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## Abstract

In an ever-changing competitive environment, entities have become aware of the importance of monitoring the performance. Profit was and continues to be considered the most important indicator of measuring financial performance, but good performance does not depend only on the profitability of the entity. There are a multitude of performance measurement indicators in order to accurately assess the financial health of the entity. In this regard, the principal objective of this research is to present the indicators used in the activity of measuring financial performance. The research results show that depending on the interests of users of accounting information, performance is perceived differently, either by profit, results, sustainable development, liquidity, profitability, efficiency, cash flow, and in the context of measurement performance we have a series of indicators to measure it, which derives from the consideration that an assessment of the health of an entity based on the profit obtained is not sufficient.

Key words: intermediate management balances, liquidity indicators, solvency, profitability, financial performance

J.E.L. classification: L25, M40, M41

## 1. Introduction

Financial performance is a major point of interest for both the internal and external environment of the entity. Thus, the measurement of financial performance must also to a certain extent address the needs or interests of the participants in the economic life of the entity. The need to know the financial performances brings with it the need to analyze, measure, diagnose profitability as a tool to monitor the financial health of the entity, thus representing a measure to assess the entity's health and identify deficiencies, irregularities, anomalies, risks that threaten the smooth running of the economic activity of the entity. Profit was and continues to be considered the best indicator of performance appreciation, but good performance does not depend only on the profitability of the entity. In most cases, the profit recorded by an entity in a reporting period does not accurately reflect the actual benefits of the activity performed. There are a multitude of performance measurement indicators in order to accurately assess the health of the entity. Knowing different assertions, the performance of an entity must be measured depending on the interests of users, in: profitability, intermediate balances, liquidity, solvency, economic balance, value added. All these aspects do nothing but highlight the major importance that the activity of measuring financial performance has in monitoring the health of economic entities, being a complex activity of determining the course of an entity, used mainly by decision makers for substantiation of opinions.

#### 2. Literature review

Financial performance is a major point of interest for both the internal and external environment of the entity. Thus, the measurement of financial performance must to a certain extent also address the needs or interests of the participants in the economic and social life of any economic entity. The literature is very rich in terms of assertions, considerations related to measuring performance. Much of the academic research on performance appraisal has been focused on measurement issues (DeNisi & al, 2006). Companies have understood that for a constantly changing competitive environment it is necessary to monitor and understand the company's performance, through a performance measurement and management system, which supports decision-making processes by collecting and analyzing information (Taticchi & al, 2010). According to Atkinson et al. (1997) performance measurement should help the economic entity to understand and assess the value received from suppliers and employees, the value provided by the stakeholders and the effectiveness of processes implemented in the economic entity and its strategic properties, we can say that performance measurement plays the role of diagnosis, analyzing, and monitoring of financial entity's activities.

Profit was and continues to be considered today the main indicator for evaluating the financial performance of the company. There are a number of studies on the notion of profit. Profit is the best known performance indicator, being a consequence of risk, a reward that the company can receive for risking its capital (Barbuță-Mişu, 2009). The analysis of specialized studies shows that the profitability of an entity is essential in the conditions of a dynamic economic environment, and making a profit as a measure of profitability (increasing revenues versus reducing expenses) is the main objective of an economic entity. The state of profitability represents the first level of ensuring the performance of an economic activity; this can be highlighted both in absolute form (by calculating profitability levels) and relative - by calculating profitability rates (Achim, Borlea, 2017).

Measurement of financial performance is based on the financial statements, and we can say that the performance is influenced by applied accounting and reporting methods (Beranova &al). The content of annual financial reports aims the performance assessment based on revenues and expenditures, and these are the principal elements use to establish the results and profitability. The performance assessment is considered by many authors a particularly useful method to determine the current financial situation compared with the competitors' situation and their own expectations [Tehrani et al, 2012]. Since the easiest way to reflect the performance of an economic unit is through its earnings, expressed either in absolute values (profit) or relative values (profitability), and the company's performance is considered based on the profit and loss account, calculating various indicators in this regard (Paliu-Popa,2011). The relationship between financial performance and the entity's interaction with the environment is the subject of many specialized studies. An example in this sense is provided by the author Yilmaz (2013) who mentions that in order to achieve sustainable development and growth, companies must assume several duties, which are called social responsibilities. A complex approach in this regard is found in some authors (Akisik, Gal, 2014) who mention that although financial reporting still provides the basis for assessing the performance of the business, these reports do not contain all the information required by users of accounting information's. Stakeholders, such as customers and employees, are looking for other types of information, such as the impact of the company's operations on society and the environment. In this respect, the perspective of measuring performance through financial and nonfinancial indicators is presented. To assess the performance of economic entities it is required that performance evaluation to be done with a balanced multidimensional system, including both financial ratios and non-financial indicators in order to reduce the limits of the two categories of indicators (Pintea, 2012).

Financial indicators offer a short-term perspective upon performance, which represents one of the limits most frequently formulated. Another limit is represented by the fact that financial indicators are often the result of complex and even debatable calculations, requiring complex economic and financial knowledge. Generally, the information provided to the deciding factors must be obtained rapidly and it must be intelligible in order to facilitate quick decision-making. The fields of interest concerning management, investors and creditors are presented in the following table, together with the most frequently used methods of performance measurement. The same bibliographic source mentions that another limitation is that financial indicators are often the result of complex and even questionable calculations, which require complex economic and financial knowledge, and, in general, the information provided to decision makers must be obtained quickly and must be intelligible to facilitate rapid decision-making (Nicu, 2012). Even though more and more analysts confirm the importance of analyzing non-financial indicators, the financial indicators will hold the supremacy in consolidating the measurement of the company's

performance due to ease with which the results can be analyzed and interpreted (Nicu, 2012).

In her work, the author Berheci (2011) deals with performance measurement indicators in close connection with stakeholders. In this sense, it considers that the interests of stakeholders require that performance measurement indicators be different. In this sense, in the table below (Table no 1.) we find the most important performance measurement indicators, grouped by categories of user objectives:

USERS	<b>OBJECTIVES AIMED</b>	Performance measurement indicators		
Shareholders	Evaluating the value of the entity and the ability to remunerate the invested capital	<ul> <li>Net profit and rates built on it</li> <li>Indicators that express value creation</li> </ul>		
Managers	Estimating the strategic and tactical objectives and the degree of their achievement	<ul> <li>Indicators of resource use (cost and expenditure indicators)</li> <li>Indicators of result, efficiency, effectiveness</li> <li>Activity indicators (management)</li> <li>Indicators specific to sustainable development</li> </ul>		
Creditors	Determining the company's ability to generate cash or cash equivalents	<ul><li>Liquidity indicators</li><li>Solvency indicators</li><li>Cash flow indicators</li></ul>		
Employees	Establishing the form and level of remuneration, as well as assessing the stability of the enterprise	<ul><li>Activity indicators</li><li>Efficiency indicators</li></ul>		
Customers	Estimating the quality of production and assessing the stability of the entity	<ul><li>Production quality indicators</li><li>Total quality indicators</li></ul>		
Public	Appreciation of sustainable development	-Specific sustainable development indicators		

Table no. 1. Performance measurement indicators

Source: (Berheci, 2010, pg. 377)

Analyzing the content of the table above, the following highlights can be made: depending on the interests of users of accounting information, performance is perceived differently, either by profit, results, sustainable development, liquidity, profitability, efficiency, cash flow, and in the context of measurement performance exist a series of indicators to measure it, which derives from the consideration that an assessment of the health of an entity based on the profit obtained is not sufficient.

## **3.** Research methodology

The research aims to present the current state of knowledge, using specialized bibliographic references, highlighting current concepts on the indicators used in the activity of measuring financial performance, an objective achieved by using the review of the specialized literature as a research method. We use the theoretical to present important concepts in relation to the studied topic. Graphic representation as a research method was used in the paper to summarize the indicators use in the activity of assessing financial performance. We use participatory observation and substantiation of opinions for the analysis and interpretation of the results and for achievement of the proposed objectives.

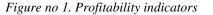
## 4. Findings

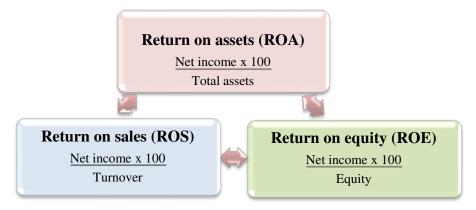
In an ever-changing competitive environment, entities have become aware of the importance of monitoring the performance. There are a series of performance measurement indicators in order to accurately assess the financial health of the entity.

## **4.1. Profitability indicators**

One of the forms of expression of economic efficiency is profitability with edifying synthesis power, so that it includes all economic and financial aspects of companies and is a reference indicator for substantiating decisions and guidance of enterprise behavior (Burja, 2017). Recent studies in the field bring into question the perspective of measuring financial performance through market-based or accounting-based methods. In this regard, some authors (Feng Shen & al, 2019) attribute to accounting-based methods the use mainly of information in financial statements to build measurement indicators that reflect the organizational capabilities of the enterprise, such as asset return (ROA) (Muhammad et al. 2016), return of sales (ROS) (Iwata and Okada 2011), return on investment (ROI) (Latan et al. 2018) and return on equity (ROE) (Wagner et al. 2012). Market-based methods use information from capital markets and focus on shareholder profitability. Gruszczynski (2006) presents the most important indicators used to measure the company's performance, indicators such as market value, ROA, ROE, EBIT; noting that these variables are sometimes uncorrelated, they measure the same performance differently. Regarding the assessment of financial performance, there are some studies that conclude that ROA (return on assets) is the most common indicator of performance measurement (Lim, 2019).

The assessment of financial performance based on profitability indicators involves the calculation and analysis of so-called rates of return: economic rate of return, commercial rate of return, financial rate of return. In the figure below (Figure no 1) we have represented the profitability indicators used in measuring financial performance:





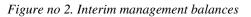
Source: Author's own projection based on the specialized literature

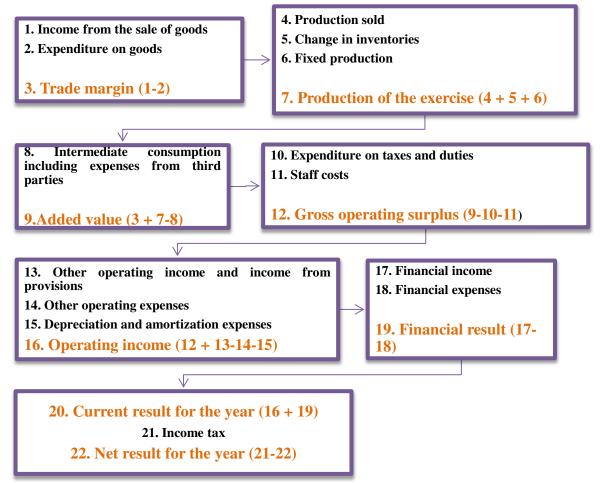
#### 4.2. Interim management balances - indicators for measuring financial performance

The assessment of financial performance is also possible through interim management balances, balances that provide us with information about an entity's capacity to obtain a profit, the profitability of the entity's activity at different levels. Highlighting how the result is formed, interim management balances are an important step in measuring an entity's financial performance. An example in this sense is given by the author Barbuță-Mişu (2009), who considers that the evaluation of performance is based on the profit and loss account, on the analysis of intermediate management balances. Intermediate management balances is a tool for assessing business growth; tool that helps to understand how to form the net result; it is also a profitability analysis tool

# (Răscolean, Monea, 2014).

Interim management balances are indicators determined in cascade in the form of accumulation margins, designed to fulfill a certain function of remuneration of the factors of production and financing of the future activity, which highlights the stages of formation of the net result of the year closely related to the structure of incomes and expenses from the activity of company (Dumitru, 2014). In order to evaluate the financial performances obtained, to analyze and diagnose the risks to which it is subjected, based on the data from the financial statements, the table of intermediate management balances will be drawn up. Intermediate management balances is structured in (Figure 2):





Source: Author's own projection based on the specialized literature

Summarizing the above, we can say that the evaluation of performance is possible through interim management balances, balances that provide us with information about an entity's capacity to obtain a profit, profitability of the entity's activity at different levels. Highlighting the formation of the result, interim management balances are an important step in measuring the financial performance of an entity, but not enough. In addition to the intermediate management balances, the indicators of profitability, profitability are also a real importance in the activity of measuring performance.

## 4.3. Measuring financial performance based on added value

Creating value through performance is a point of interest for investors, suppliers, employees, and the state. At the entity level, managers aim to achieve the proposed objectives and make a profit. In addition to these aspects, by maximizing the results, the shareholders' wealth (mainly in

the form of dividends) will be directly influenced, and the shareholders satisfied. According to a study in the field, the global economic and financial crisis has forced the rethinking of the company's performance concept, and the reorientation of managers to maximize shareholder wealth (Baltes, Dragoe, 2015). Value added is a surplus value that an entity creates compared to what it receives from outside, a value indicator of production obtained from the activity carried out only due to its own effort, representing that part with which the entity contributes to national wealth. Thus it allows to quantify the contribution of the entity to the determination of the GDP (gross domestic product), the surplus of wealth obtained over the intermediate consumptions coming from third parties, by capitalizing the economic resources (Păvăloaia, Paraschivescu, Lepădatu, 2010). The added value measures the contribution that the company and its staff made to the economy of the country Brezeanu & al (2003). Referring to the added economic value, Peter Druker quoted by Păvăloaie & al (2010) states that it is a vital measure of the global productivity of factors of production that reflects all the dimensions through which managers can create value. The added value is determined by two methods: the subtractive method and the additive method. At the microeconomic level, value added is much more significant than turnover. In short, value added measures the value contribution created by capitalizing on the resources available to the entity, being a tool that quantifies the remuneration of participants in economic activity.

It is recommended that any entity, in addition to carrying out a profitable activity, focus its attention on meeting the needs of investors (by creating value), creditors (by paying of outstanding debts), employees (a stable workplace), state (by increasing budget incomes in the form of taxes and fees paid), and finally to increase the productivity of the factors of production, remunerate working capital and maintain a monetary surplus.

#### 4.4. Liquidity / solvency indicators

A very common subject in the scientific literature is liquidity. Liquidity represents a principal indicator of the entity's capacity to pay its liabilities and its credit, representing a primary condition for the company's survival (Căruntu G.A., 2016). Like liquidity, solvency is known as an important part of the business activity. Solvency can also be translated by the security enjoyed by the company towards the bank and creditors (Păvăloaie & al, 2010). The company is solvent in so far as the real assets are sufficient to allow the payment of all debts (Serban C. quoted by Căruntu). In this sense, solvency represents the capability to pay obligations to creditors in the specified date. Some author (Petcu M. quoted by Căruntu), refers to the disposition to use cash flow when the entity have long time financial debts. Solvency is the ability of the company to meet long- and medium-term maturities and depends on the size of debts with such maturities and financial expenses (cost of borrowing) and it is a priority objective of the entrepreneur who wants to maintain financial autonomy and management flexibility and results from the balance between cash flows and payment flows, but also from a positive net working capital, ie from a good adequacy between the necessary long-term financing (in tangible and financial assets) and permanent financing resources (equity and term indebtedness) (Petrescu, 2005).

The financial balance of companies is a necessary condition for achieving their fundamental objective of maximizing profit and equity value, which ensures adequate remuneration of shareholders and strengthening competitiveness in their market (Burja, 2013). For the characterization of the financial balance, the working capital (FR), the working capital requirement (NFR), the treasury, the NFR financing rate, the financing rate of operating assets, the short-term debt coverage rate are used as indicators, turnover rate, and turnover of NFR. Regarding the working capital, Suciu G. (2013) brings us a presentation of the factors that determine the increase or decrease of the working capital. Thus, according to the author, a positive working capital means a long-term financial balance, the surplus financing in the short term the need to finance the operating cycle, and the increase in working capital can have several causes: increase in equity, increase medium and long-term debt; and the decrease in net fixed assets, either through the sale of fixed assets or through depreciation.

The assessment of financial performance based on liquidity, solvency and financial balance indicators involves the calculation and analysis of so-called rates: the current liquidity ratio, the immediate liquidity ratio, the effective liquidity ratio, the general solvency ratio, the equity solvency ratio, debit repayment capacity, working capital, working capital requirement and net treasury. In the figure below (Figure no 3) we have represented the indicators used in measuring financial performance:

Figure no 3. Liquidity,	solvency and j	financial balan	ce indicators
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Liquidity indicators	Solvency indicators	Financial balance indicators
• The current liquidity ratio =Curent assets/Curent liabilities	• The general solvency ratio =Total assets/total debt	• Working capital (WK) = Permanent capital – Fixed Assets
• The immediate liquidity ratio = (Curent assets - inventories)/Curent liabilities	<ul> <li>The equity solvency ratio = Equity/ (Equity + Long term debt)</li> <li>Debit repayment</li> </ul>	<ul> <li>Working capital requirement (WKR)         = (Stocks + Claims) – Short term debt</li> <li>Net Treasury = WK-</li> </ul>
• The effective liquidity ratio = Treasury/Curent liabilities	<b>capacity</b> = Total debt/total equity	WKR

Source: Author's own projection based on the specialized literature

#### 5. Conclusions

The evolution of the economic environment emphasizes the relevance and need for knowledge of performance, a complex indicator that has been and is a priority, ensuring profitable economic results, a measure of profit, growth, productivity, value creation, being also a hard to reach indicator. In this regard, the principal purpose of this article is to present the indicators used in the activity of measuring financial performance.

The measurement of financial performance is possible through interim management balances, balances that provide us with information about an entity's capacity to obtain a profit, profitability of the entity's activity at different levels. Highlighting the formation of the result, interim management balances are an important step in measuring the financial performance of an entity, but not enough. In addition to the intermediate management balances, the indicators of profitability, profitability are also a real significance in assessing the performance.

An important part of performance is value creation. It is recommended that any entity, in addition to carrying out a profitable activity, focus its attention on meeting the needs of investors (by creating value), creditors (by ensuring the payment of outstanding debts), employees (a stable workplace), state (by increasing budget income in the form of taxes and fees paid), and finally, to increase the productivity of the factors of production, remunerate working capital and maintain a monetary surplus.

The research results show that depending on the interests of users of accounting information, performance is perceived differently, either by profit, results, sustainable development, liquidity, profitability, efficiency, cash flow, and in the context of measurement performance we have a series of indicators to measure it, which derives from the consideration that an assessment of the health of an entity based on the profit obtained is not sufficient. In its activity, the entity must focus its attention on value growth, sustainable development, and remuneration of production factors and the achievement of a surplus value, essential in measuring performance. A good and correct assessment of financial performance involves both the use of profit for profitability indicators, intermediate management balances, value added, and the use of cash as the main pillar in the

calculation of liquidity, solvency and equilibrium indicators, thus reflecting a high degree of comparability of financial performance, which leads to increased transparency of the operational and financial activities of the entities.

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