THE IMPORTANCE OF PROFITABILITY INDICATORS IN ASSESSING THE FINANCIAL PERFORMANCE OF ECONOMIC ENTITIES

HADA Izabela Diana, MIHALCEA Mihaela Maria

Department of Doctoral Accounting Studies, "1 Decembrie 1918" University of Alba Iulia, România izabela_hada@yahoo.com miha.ela_89@yahoo.com

Abstract: Financial performance is a major point of interest for both the internal and external environment of an economic entity. To be prosperous, attractive, efficient and promising development, a company must obtain a profit. In the conditions of a dynamic economic environment, assailed by many changes, maximizing profitability or the ability to make a profit as a measure of performance is the main objective of the activity of an economic entity. Profitability is one of the forms of expressing economic efficiency with summarizing the efforts made to obtain the expected results. Profitability rates measure the results obtained in relation to the activity of companies (commercial profitability) with economic means (economic profitability) or financial means (financial profitability). The main purpose of this research is to highlight the importance of profitability indicators in assessing financial performance. The research also aims to present the current state of knowledge, by calling for specialized bibliographic references, highlighting current concepts on the notion of profitability, outlining the importance of profitability indicators in the activity of measuring financial performance. In order to assess the efficiency of the activity of an economic entity, the research is based on an empirical study at a company in the pharmaceutical industry by determining rates of return based on information from the financial statements of the entity for the period 2009-2018. The research results show us that, in the activity of measuring financial performance, the profitability indicators show us the economic efficiency of the entire economic activity. Being essential in the conditions of a dynamic economic environment, assailed by numerous changes, profitability is the expression of any entity earnings, and obtaining the profit as a measure of profitability (income increase in relation to the reduction of costs) represents the main objective of the activity of an economic entity. Return on assets (ROA), return on equity (ROE) and return on sales (ROS) are some of the key indicators in assessing financial performance, indicators that must be used by stakeholders to substantiate decisions.

Keywords: profitability; financial performance; return on assets; return on equity; return on sales.

JEL Classification: L25; M41; M42.

1. Introduction

The economic space in which the entities operate is frequently assailed by numerous changes, both in economic and social, financial, accounting, legislative. In a competitive environment, entities should focus on assessing the extent to which

The Annals of the University of Oradea. Economic Sciences Tom XXIX 2020, Issue 1 (July 2020) ISSN 1222-569X, eISSN 1582-5450

strategic objectives have been met, making a profit as a measure of financial performance, and identifying ways to grow and develop the entity's business. 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. Profitability is one of the forms of expressing economic efficiency with edifying synthesis power, so that it includes all economic and financial aspects of companies and is a reference indicator for substantiating decisions and guiding their behavior (Burja, 2006). Regarding the measurement of financial performance, it was found that ROA (return on assets) is the most common indicator of performance measurement (Lim, 2019).

The main purpose of this article is to highlight the importance of profitability indicators in assessing financial performance. In order to assess the efficiency of the activity of an economic entity, in order to measure the financial performance, we conducted a case study at a company in the pharmaceutical industry to determine profitability indicators based on information from the financial statements of the entity for the period 2009-2018. The research results show us that, in the activity of measuring financial performance, the profitability indicators show us the economic efficiency of the entire economic activity. Return on assets (ROA), return on equity (ROE) and return on sales (ROS) are some of the key indicators in assessing financial performance, indicators that must be used by decision makers to substantiate opinions.

2. Research Methodology

In the paper, the presentation of the current state of knowledge, by calling for specialized bibliographic references, highlighting current concepts on the notion of profitability, financial performance, profitability indicators was achieved by using as a research method to review the literature. At the same time, the theoretical documentation allowed the presentation of some concepts considered significant in relation to the studied topic, as well as the highlighting of the importance that profitability indicators have in the assessment of financial performance. The study of synthesis documents as a research method was chosen as the basis for the case study on financial performance evaluation. The case study aims to illustrate how to assess the economic performance of a company through profitability indicators. Participatory observation was used for the analysis and interpretation of the results of the case study and last but not least, the substantiation of opinions based on the results obtained and the achievement of the proposed objectives.

3. Literature Review

The analysis of literature review 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, which can be highlighted both in

> The Annals of the University of Oradea. Economic Sciences Tom XXIX 2020, Issue 1 (July 2020) ISSN 1222-569X, eISSN 1582-5450

absolute form (by calculating profitability levels) and relative - by calculating profitability rates (Achim MV, Borlea SN, 2017).

Profit was and continues to be considered today the main indicator for measuring the performance of the company. In the literature there are a number of conceptual approaches to the notion of "profit". In the vision of the author Barbuță-Mişu N. (2009), profit is "the best known performance indicator, being a consequence of risk, a reward that the company can receive for risking its capital, and the main sources of profit being: uncertainty and innovation, both having as common denominator the presence of entrepreneurship ".

According to a study, profitability can be defined as the ability of an enterprise to make a profit by using factors of production and capital regardless of their origin, being one of the most synthetic forms of expressing the efficiency of the entire economic and financial activity of the enterprise, respectively of all the production factors, from all the stages of the economic circuit (Gruian, 2010).

The literature review brings to light different visions related to profitability, such an important component that must be analyzed, interpreted, but especially, capitalized. In a study published by Căruntu C., Lăpăduși M.L, (2012) states that profitability is a form of macroeconomic efficiency that reflects the net effects (results) obtained per unit of effort (expenditure) with factors of production. In other words, the same bibliographic source mentions that the activity of characterizing economic and financial performance requires the use of information provided by rates of return (expressions of dynamic realities), and the quality of decisions and the actual presentation of diagnostic results depends on the quality the information they provide, which must be relevant, reliable and comparable.

Regarding the importance of performance appraisal, specialized studies, Tehrani et al (2012) quoted by Burja V. & Burja C (2017), outline the idea that the content of annual financial reports aims to assess performance based on income and expenditure, these being the elements of necessary basis for determining results and profitability, and performance appraisal is considered by many authors to be a particularly useful method for determining the current financial situation compared to the situation of competitors and their own expectations. 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) (Paliu-Popa, 2011)

4. The importance of profitability indicators in assessing the financial performance

Profitability ratios measure the firm's ability to generate profits and central investment to security analysis, shareholders, and investors. Profitability is the primary measure of the overall success of enterprise and the analysis of profitability ratios is important for the shareholders, creditors, prospective investors, bankers and government alike (Nishanthini & Nimalathasan, 2013). Profitability is one of the forms of expressing economic efficiency with edifying synthesis power, so that it includes all economic and financial aspects of companies and is a reference indicator for substantiating decisions and guiding their behavior (Burja, 2006). Much of the academic research on performance appraisal has been focused on

The Annals of the University of Oradea. Economic Sciences Tom XXIX 2020, Issue 1 (July 2020) ISSN 1222-569X, eISSN 1582-5450

measurement issues (although we will discuss some recent exceptions), which has not really been helpful to practitioners who must find ways to improve performance (DeNissi, Pritcard, 2006). 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. Therefore, we can say that performance measurement plays the role of coordination, monitoring and diagnosis of economic entity's activities (Pintea, 2012). Financial statements are a necessary basis for measuring the financial position and performance of a company, and the clearly proven fact is that the view on financial position and performance is influenced by applied accounting and reporting methods (Beranova & al).

In the paper Financial intelligence in predicting the credibility risk of the company: evidence from the approach of vector assistance technology, the authors (Nesrin, IkraM, Amina, Abdelouahid, 2013) seek to explore the usefulness of financial indicators in measuring the financial health of companies and how to use these relevant attributes to design intelligent financial solution provided to investors and financial institutions to predict financial crashes. Such indicators are of the utmost importance since financial risks have significantly increased in the context of the current global financial crisis.

The use of financial indicators as a measure to assess the financial performance also has certain limitations. In the opinion of author Nicu (2012) the financial indicators offer a short-term perspective upon performance, they are indicators of result and not of process; they are the effect of decisions of various origins and, through time reporting, of various durations. Also, financial indicators are often the result of complex and even debatable calculations, requiring complex economic and financial knowledge and, generally, the information provided to the deciding factors must be obtained rapidly and it must be intelligible in order to facilitate quick decision-making.

Information about a company's performance, especially its profitability, is useful for assessing potential changes in economic resources that the company will be able to control in the future and for anticipating the ability to generate cash flows with existing resources. Also based on performance, reasoning is formulated regarding the efficiency with which the enterprise can use new resources (Burja, 2006).

In a modern market economy, maximizing profitability is the fundamental criterion of firms' decisions to employ the costs of organizing production, expanding or restricting it. It should be noted that economic efficiency has a much wider scope than the notion of profitability, as it covers the entire system of indicators that reflect the various specific forms of economic efficiency - a system grouped into subsystems including the subsystem of profitability indicators. However, profitability mirrors the final economic efficiency of the entire economic and financial activity, constituting a true quintessence of all aspects of economic efficiency (Ghic, Grigorescu, 2012).

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, Yunwen & al, 2019) attribute to accounting-based methods

The Annals of the University of Oradea. Economic Sciences Tom XXIX 2020, Issue 1 (July 2020) ISSN 1222-569X, eISSN 1582-5450

the use mainly of information in financial statements to build measurement indicators that reflect the organizational capabilities of the enterprise, indicators such as return on assets (ROA) (Muhammad et al. 2016), profitability 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. Tobin's Q (TBQ) is the ratio of a company's market value to the cost of replacing its assets, an indicator that the company can appreciate not only in accounting, but also from a market perspective. Gruszczynski (2006) presents the most important indicators used to measure the company's performance, indicators such as market value, ROA, ROE, EBIT, Tobin's Q; noting that these variables are sometimes uncorrelated, it they measure the same performance differently. ROA is defined as the difference between net income and total assets, while Tobin's g is the carrying amount of debt and the market value of equity minus total assets (Yilun Shi). The Return on Assets (ROA) indicator expresses the company's ability to generate profit as a consequence of the productive use of resources and of the efficient management, and it's used as a dependent variable in the assessment of economic performance. It is computed as a ratio between Net Income and Total Assets (Burja, 2010).

Profitability rates measure the results obtained in relation to the activity of companies (commercial profitability) with economic means (economic profitability) or financial means (financial profitability).By summarizing the above, we can say that measuring financial performance based on profitability indicators involves the calculation and analysis of so-called rates of return: Return on assets (ROA), return on equity (ROE) and return on sales (ROS).

5. Empirical study on the assessment of financial performance of an entity in the pharmaceutical industry based on profitability indicators

In order to assess the efficiency of the activity of an economic entity, in order to measure the financial performance, we conducted a case study at a company in the pharmaceutical industry to determine profitability indicators based on information from the financial statements of the entity for the period 2009-2018. The table below (Table no. 1) presents the situation of the main elements taken into account in determining the profitability indicators:

Year	Turnover	Gross profit	Net Income	Equity	Liability	Total Assets
2009	815.370.111	21.299.293	21.270.626	46.260.685	358.866.343	404.824.026
2010	989.768.497	41.118.208	40.941.647	87.433.972	594.612.161	679.539.189
2011	920.786.955	4.465.039	1.166.452	88.190.537	694.442.894	790.273.981
2012	1.090.217.856	-63.513.725	-63.513.725	24.535.393	836.796.925	858.185.210
2013	1.299.265.379	-38.895.796	-38.895.796	-14.837.450	614.427.456	595.017.573
2014	1.250.586.655	8.053.117	8.053.117	-6.380.347	512.468.837	502.382.109

Table 1: Indicators of the analyzed company

The Annals of the University of Oradea. Economic Sciences Tom XXIX 2020, Issue 1 (July 2020) ISSN 1222-569X, eISSN 1582-5450

Year	Turnover	Gross profit	Net Income	Equity	Liability	Total Assets
2015	1.186.232.851	31.238.425	31.238.425	20.754.448	451.220.385	469.254.398
2016	1.670.039.157	31.934.924	31.864.532	52.618.601	834.418.118	884.015.461
2017	1.652.550.590	21.543.640	17.785.413	68.643.187	846.179.874	911.058.313
2018	1.739.893.747	44.267.709	37.400.628	106.043.815	782.728.623	884.866.879

Source: Data from the financial statements of the company

From the data analysis we can observe a favorable evolution of the turnover which registered a progressive increase throughout the analyzed duration. However, we cannot yet talk about the profitability of the business. There is a drastic decrease in gross and net profit in the period 2012-2013, a period in which the company records a loss, mainly due to the increase in expenses in relation to the revenues obtained. However, one year later, the entity manages to overcome this impasse, recording a significant profit in 2014, and starting this year and until the end of the analyzed period, the entity manages to record a significant increase in profit. Also, the entity records for the period 2013-2014 negative equity due to the entity's support for the losses recorded in previous years.

On the basis of this indicators, from the financial statements, we determinate the return on assets (ROA), return on equity (ROE) and return on sales (ROS) in the period 2009-2018. Research results are presented in table no.2.

Year	Return on Assets (ROA)	Return on Equity (ROE)	Return on Sales (ROS)
2009	5,26	45,98	2,61
2010	6,05	46,83	4,15
2011	0,56	1,32	0,48
2012	-7,40	-258,87	-5,83
2013	-6,54	262,15	-2,99
2014	1,60	-126,22	0,64
2015	6,66	150,51	2,63
2016	3,61	60,56	1,91
2017	2,36	25,91	1,30
2018	5,00	35,27	2,54

 Table 2: The profitability indicators of the company

Source: Indicators were calculated using data from the financial of the company

Registering a loss in the period 2012-2013, and negative equity in the period 2013-2014, the rates of return for the period 2012-2014 have a negative value. In the figure below (Figure no. 1) we find the evolution of the return on equity.

> The Annals of the University of Oradea. Economic Sciences Tom XXIX 2020, Issue 1 (July 2020) ISSN 1222-569X, eISSN 1582-5450

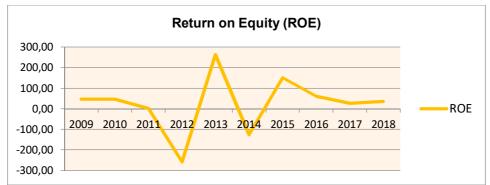


Figure 1: The evolution of the Return on Equity in period 2009-2018 Source: own screening

Return on equity shows us the company's ability to generate net profit. The indicator is followed in the practice of financial analysis because it expresses the net remuneration of shareholders and as such the support for the orientation of their strategic decisions towards the company. In the short term, the shareholders pursue the collection of dividends, and in the long term their interest is to increase the net profit and implicitly the value of the dividends to be collected, this being possible by reinvesting the net profit (Burja, 2006)

We see a significant increase in the return on equity in 2013, but we must take into account that this increase is due to a positive rate calculated as a ratio between a negative gross result and a negative equity. We can say that the entity registers a downward trend in the period 2012-2014 due to its registration of a loss that lasts two years. However, we conclude that the entity manages to recover and generate significant profits and income in the form of dividends for shareholders or associates.

In the figure below (Figure no. 2) we find the evolution of the return on assets.

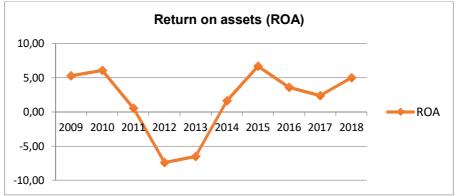


Figure 2: The evolution of the Return on Assets in period 2009-2018 Source: own screening

The Annals of the University of Oradea. Economic Sciences Tom XXIX 2020, Issue 1 (July 2020) ISSN 1222-569X, eISSN 1582-5450

The return on assets shows us the correlation between an economic result and the economic means (capital) employed to obtain it.

The return on assets shows us an upward trend, which confirms an efficient use of resources (assets) in relation to the results obtained. The entity manages to overcome the stalemate in the period 2012-2013, thus demonstrating a good organization and of course an increase in productivity and business efficiency. In the figure below (Figure no. 3) we find the evolution of the return on sales.

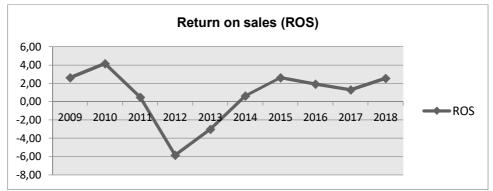


Figure 3: The evolution of the Return on Sales in period 2009-2018 Source: own screening

The return on Sales (ROS) shows us the economic efficiency from the point of view of the final stage of the economic circuit. Taking into account that the turnover (indicator used in determining the return on sales) has a significant increase from one year to another which also means a confirmation of the development of the economic activity of the entity, we note that the return on sales has a downward trend since with 2009 and until 2013, mainly due to the increase in expenditures made in relation to the revenues obtained. However, the entity also demonstrates to us in this case an increase in the efficiency of the activity.

Following the analysis, we conclude that, although an entity has a record turnover, in the activity of measuring financial performance we must also consider profitability indicators, in order to identify the entity's weaknesses or potential risks to which it may be subject.

6. Conclusions

Profitability is one of the forms of expressing economic efficiency with summarizing the efforts made to obtain the expected results. To deal with all challenges, and to be prosperous, attractive, efficient and promising development, an entity must obtain a profit. As a consequence of the risk assumed, the profit represents a reward for the sound management of resources. Being essential in the conditions of a dynamic economic environment, assailed by numerous changes, profitability is the expression of any entity earnings, and obtaining the profit as a measure of

> The Annals of the University of Oradea. Economic Sciences Tom XXIX 2020, Issue 1 (July 2020) ISSN 1222-569X, eISSN 1582-5450

profitability (income increase in relation to the reduction of costs) represents the main objective of the activity of an economic entity. Profitability has been, is, and will be, a major point of interest for both the internal environment and the external environment of an economic entity.

The research highlights the major importance that profitability indicators have in assessing the financial performance. The research results show us that, in the activity of measuring financial performance, the profitability indicators show us the economic efficiency of the entire economic activity. Return on assets (ROA), return on equity (ROE) and return on sales (ROS) are some of the key indicators in assessing financial performance, indicators that must be used by decision makers to substantiate opinions.

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. Performance measurement and management can't be separated; performance management is a philosophy that is supported by performance measurement (Pintea, 2012)

7. Acknowledgement

This work is supported by project POCU 125040, entitled "Development of the tertiary university education to support the economic growth - PROGRESSIO", co-financed by the European Social Fund under the Human Capital Operational Program 2014-2020

References

1. Achim M.V, Borlea S.N., Ghid pentru analiza-diagnostic a stării financiare, Cluj Napoca, editura Risoprint, 2017

2. Bărbuță-Mișu N., Finanțarea și performanța întreprinderii, Editura Didactică și Pedagogică, București, 2009

3. Beranova M., Polak J, Changes in view of financial position and performance of a company at application of the IFRS in the Czech Republic, pg. 16, articol disponibil la adresa https://aak.slu.cz/pdfs/aak/2014/01/02.pdf

4. Burja V., The analysis of the financial statements of companies, 2010. Aeternitas Publishing, Alba Iulia

5. Burja C., ANALIZĂ ECONOMICO-FINANCIARĂ - Aspecte metodologice și aplicații practice, Editura Casa Cărții de Știință Cluj-Napoca, 2009

6. Burja V., Burja C., Financial performance and the business risk in agricultural sector of Romania, Annals of the Constantin Brâncuşi University of Târgu Jiu, Economy Series, Issue 3/2017, pp. 75-82

7. Căruntu C., Lăpăduși L.M., Measures to increase the rates of return based on the diagnosis analysis on factors, Annals of the Constantin Brâncuși University of Târgu Jiu, Economy Series, Issue 2/2012, pg. 57-68

8. Christopher L., The Impact of Social Variables on Financial Performance, RAIS Conference Proceedings, April 3-4, 2019, Pg 11-19

The Annals of the University of Oradea. Economic Sciences Tom XXIX 2020, Issue 1 (July 2020) ISSN 1222-569X, eISSN 1582-5450

9. DeNisi A. S., Pritchard R., Performance Appraisal, performance management and improving individual performance: a motivational framework, 2006, Management and Organization Review, vol. 2, no. 2, pp. 253-277

10. Feng Shen, Yunwen Ma, Run Wang, Ningning Pan, Zhiyi Meng, Does environmental performance affect financial performance? Evidence from Chinese listed companies in heavily polluting industries, July 2019, Volume 53, Issue 4, pp 1941–1958

11. Ghic G., Grigorescu C., ANALIZA ECONOMICO- FINANCIARA -Manual de studiu individual, 2012, Editura Pro Universitaria

12. Gruian C.M., Ce înțelegem prin performanța întreprinderii, Analele Universității "Constantin Brâncuş, din Târgu Jiu, Seria Economie, nr. 4/2010

13. Marek G., Corporate Governance and Financial Performance of Companies in Poland, International Advances in Economic Research, May 2006, Volume 12, Issue 2, pp 251–259

14. Nesrin B., Ikram C., Amina El G., Abdelouahid L., Financial Intelligence in prediction of firm's creditworthiness risk: evidence from support vector machine approach, Procedia Economics and Finance, 2013, 5 (2013), pp. 102-112

15. Nicu I.E., Company performance measurement and reporting methods, Annals of Faculty of Economics, 2012, vol. 1, issue 2, pp. 700-707

16. Nishanthini A. & Nimalathasan B., Determinants of Profitability: A Case Study of Listed Manufacturing Companies in Sri Lanka, 2013. Journal of Management, Volume VIII No. 1, pp. 42-50

17. Paliu-Popa L., Cosneanu L., Profit and loss account in the international context, Annals of the Constantin Brâncuși University of Târgu Jiu, Economy Series, Issue 2/2011, pp. 18-25

18. Pintea M.O., Performance evaluation: literature review and time evolution, 2012, Annals of Faculty of Economics, University of Oradea, Faculty of Economics, vol 1 (1), pages 753-758

19. Yilun S., Financial Performnace, and industry competition, The International Journal of Business and Finance Research, The Institute for Business and Finance Research, vol 10 (2), pages 1-16

The Annals of the University of Oradea. Economic Sciences Tom XXIX 2020, Issue 1 (July 2020) ISSN 1222-569X, eISSN 1582-5450