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# THE FIELD OF MEASURING FINANCIAL PERFORMANCE: AN OVERVIEW

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**Abstract:**
*The present research aims to present and describe the possibilities of measuring financial performance. It is known from the literature that measurement of performance involves applying and using a wide range of indicators, precisely its existence requires us to delimit an area of measuring the financil performance of the enterprise, starting from the generalization of this area, and then framing the different measurement methods performance in a performance measurement system. The current study contributes to the accountancy related literature, through presenting and describing of financial measurement possibilities, aspect to be treated in the first part of the work, respectively, through proposing of a performance measurement system, in the second part of the study.*

**Key words**: financial performance, enterprise performance, measurement method of performance, indicators.

**JEL classification:** M40

## 1. INTRODUCTION

The financial performance represents the study objective for many researchers in the international academic field (as displayed in figure no 1, the number of the published articles on financial performance from 1994 up to present time, according to the Web of Science data base, is 7419 in the Business field, respectively 7293 in Economics and 6235 articles in Business Finance), but in the same time, it represents the interest of all practitioners, business owners, potential investors, credit institutions and others.

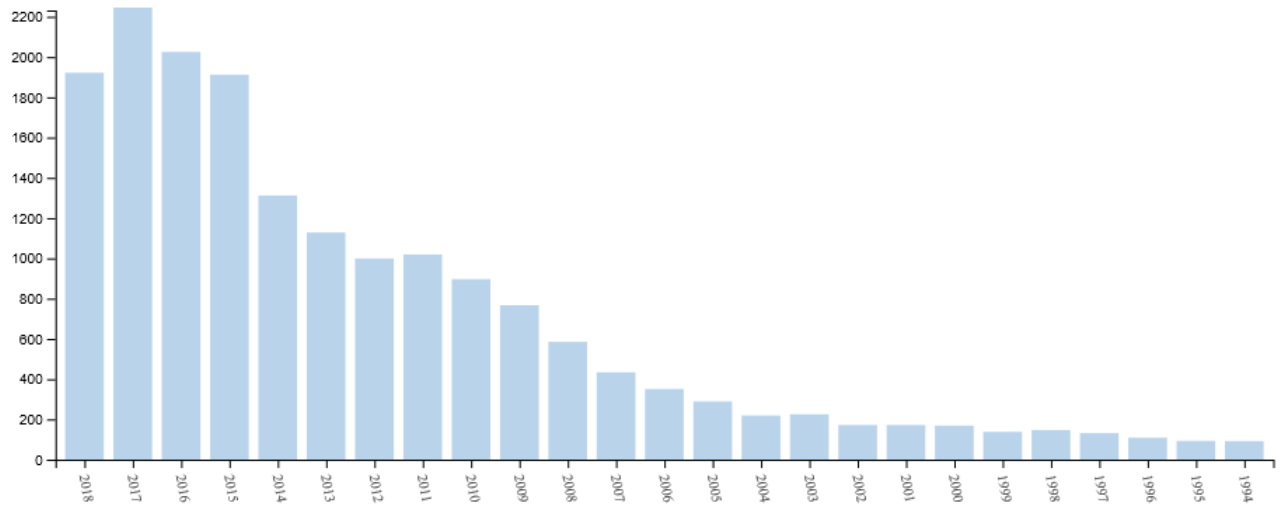


**Figure No. 1. Evolution of the international published articles on „financial performance" from 1994 up to 2018**
Source: Web of Science database

As per the national economic-financial literature (Colasse, 2009; Vâlceanu et all, 2009; Bătrâncea et all, 2012; Petcu, 2009; Petrescu, 2004; Siminică, 2008 and others), one may observe that the most recognized, accepted and used measurement method of performance is the

determinists, causality models, but the academic environment deals throughout the last two decades with enterprise performance measurement study through using the stochastic models, which have been thoroughly presented in a previous study (Deac and Hlaciuc, 2014).

We, therefore, firmly align with the opinion according to which the selection of the particular measurement methods „is a complex task and it is not going to turn easy at all, as the numberand types of the available measurement methods is continuously increasing" (Tangen, 2003).

As long as there is no clear general manner for performance measurement or an accepted system correlated with the entity strategy, which is recognized in various disciplinary backgrounds, not only in accountancy, we propose to find the answer for the following questions:

- which are the representative models for measurement and estimation of financial performance ?
- can a financial performance measurement area be defined ?
- how does a financial measurement system looks like ?

The current study contributes to the accountancy related literature, through presenting and describing of financial measurement possibilities, aspect to be treated in the first part of the work, respectively, through proposing of a performance measurement system, in the second part of the study.

## 2. RESEARCH METHODOLOGY

The present research is fundamental type, the research methodology is deductive. The applied research methods are: analysis of documents consisting of assessment of the information sources used for the completion of this study, comparison method and typological method. Also a search in the Web of Science database was performed in order to identify any published scientific articles on the subject of "performance measurement systems".

## 3. APPROACH

It is known from the literature that measurement of performance involves applying and using a wide range of indicators, precisely its existence requires us to delimit an area of measuring the financial performance of the enterprise, starting from the generalization of this area, and then framing the different measurement methods performance in a performance measurement system.

Therefore, following the literature, we have observed and considered it is necessary to treat three essential possibilities in measuring the performance of the enterprise, namely:

- classic financial indicators;
- modern financial indicators;
- non-financial indicators.

Along with these performance measurement capabilities, the academic environment aims to discover as many models as possible to measure performance by using stochastic models.

## 4. RESEARCH RESULTS

In the following, we will present the three possibilities for performance measurement and will motivate our approach to delimit a performance measurement area, finally presenting a personal idea of constructing a performance measurement system.

**Classic financial indicators**

Measuring enterprise performance is traditionally done through financial indicators that remain the most often used. They are recognized as classic indicators and modern indicators for performance measurement.

From the accounting literature, we find that selecting an appropriate measure to assess performance is a challenge for the company's partners (Bătrâncea, 2013; Bunea, 2006). Moreover,

Anghel, shows that from the literature, more than 150 financial rates can be identified, used in the financial diagnosis: "while the analysis of financial statements can be done through the use of one or more instruments (techniques), most often analysts call for rate-based analysis. Financial ratios can be used to develop a set of statistics to highlight the key financial characteristics of the undertaking concerned"(Anghel, 2002). A vision that complements this challenge, of financial indicators selection for measuring performance, is that of Colasse B., according to which "... the analyst can appreciate, according to his needs, the relevance of the accounting indicators applied to study the performance of the enterprise" (Colasse, 2009).

Nowadays, many business partners are concerned about company's performance, depending on its own interests, sometimes contradictory, as we have already mentioned. Naturally, economic and social actors are diverse, from investors - current or potential shareholders, to managers, financial creditors, clients, employees, the state, the public, financial analysts, etc. Each with different interests and trying to "decipher the performance of the economic and financial enterprise and the risks they take by working with it"(Colasse, 2009). In this respect, we present a grouping of the company partners concerns about its performance, in figure no. 2.

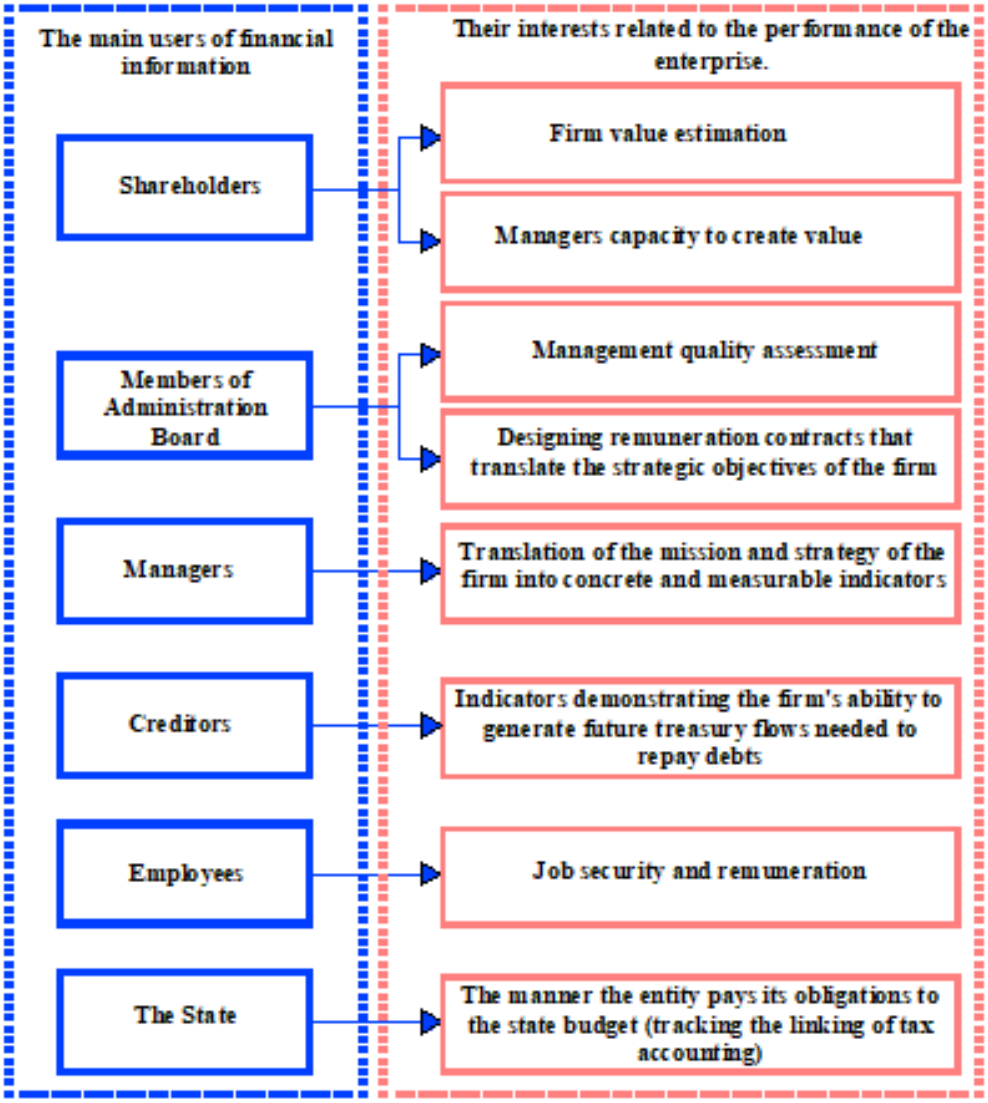


**Figure no.1. The main users of financial information and their interests related to the performance of the enterprise.**

Source: own processing after (Bătrâncea, 2013; Bunea, 2006)

We therefore learn that the diversity of business partner concerns generates a variety of analysis criteria. Each of these criteria gets a name that depends on the actor who uses it. Thus, we can talk about a parameter that is very common in the literature, but also the most pragmatic performance criterion used in practice, the rentability. The measurement of rentability is possible by absolute values, reflected by the results of the enterprise, and by relative sizes, reflected by the rates of return.The traditional rates used to express relative profitability are:the rate of return on trade, the rate of return on consumed resources, the rate of economic profitability and the rate of financial return. Other forms of "results used to measure cost-effectiveness are: result of turnover, operating result, financial result, current result, gross result of the year, net result of the year, overall result" (Robu et all, 2014).

Other indicators that provide information of interest to both business managers and shareholders and creditors are Interim Management Balances, that complete the results of the Profit and Loss Account and show how the result of a financial exercise is forming, at the exploitation activity level, respectively the use of material, financial and human resources in the enterprise's activity.

Interim Management Balances that are additionally calculated against the results that appear in the income statement are: trade margin, output of the exercise, value added and gross operating surplus.

**Modern financial indicators**

Modern performance measurement indicators are indicators that reflect value creation for shareholders. The concept of value creation is widely presented in the literature. A very succinct and clear perception of this concept is that of Robu, Anghel and Serban, who explains: "shareholders add value to the investments they make as long as they invest capital at a rate of return that exceeds its cost"(Robu et all, 2014). The same authors present and describe the system of indicators used in the value-added analysis by the firm as being composed of:

- added economic value;
- added market value;
- liquid added value;
- liquidity return on investments;
- total return of shareholders.

An interesting remark on one of the above mentioned indicators is that of Bostan, which states that "the added economic value method was not born as an entity evaluation method, but as a performance indicator ... therefore, the added economic value is an economic indicator that can complement the guidance obtained, given the dynamics of value" (Bostan, 2010).

**Non-financial indicators**

The literature also discusses about another form of indicators, namely their non-financial side. In this respect, some authors point out that "the lack of traditional measures based only on financial indicators has led to the emergence of performance measurement systems that include both financial and non-financial indicators.These performance measurement systems have a number of advantages compared to traditional ones" (Brătian, 2010), which is why more and more analysts are turning to this new type of indicators.

The purpose of non-financial indicators is to build a performance measurement system that allows the enterprise to identify the long-term financial performance generators. The interest in these indicators "flows from the awareness that financial indicators measuring performance are by their nature: simplistic measures of results, far from being familiar and intuitive for the people generating operations" (Diaconu, 2003), instead, the non-financial indicators complement the financial ones, characterizing "better the performance of the enterprise, because it directly touches the organization's sensitive points (such as the quality of management and intellectual capital in general)", (Robu, Sandu, 2006).

The concept of non-financial indicators for performance measurement is associated with a balanced scorecard, which was designed by Kaplan R.S. and Norton D.P. in 1992, built on four

axes: investors satisfaction, customer satisfaction, the quality of internal processes, enterprise development and innovation capability, with the aim of improving decision-making by managers - providing a synthesis view through this scorecard of the main financial and non-financial indicators.

The definition and construction of a system for measuring the performance of the enterprise is widely debated in the literature. This concept is not a new one; various author shave studied and proposed systems for measuring the performance of the enterprise over the years, among which the most cited studies nowadays are (see table no. 1):

**Table no. 1. The most cited articles on the subject of "performance measurement systems" in 2018**

| Authors | Publication Year | Title | Times Cited |
|---|---|---|---|
| Chenhall, RH | 2003 | Management control systems design within its organizational context: findings from contingency-based research and directions for the future, Accounting Organizations And Society, Feb-Apr 2003, Vol. 28, Issue 2-3 | **811** |
| Chenhall, RH | 2005 | Integrative strategic performance measurement systems, strategic alignment of manufacturing, learning and strategic outcomes: an exploratory study, Accounting Organizations And Society, Jul. 2005, vol. 30, issue 5 | **298** |
| Hornsby, JS; Kuratko, DF; Zahra, SA | 2002 | Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale, Journal Of Business Venturing, May 2002 | **290** |
| Mohammed, Susan; Ferzandi, Lori; Hamilton, Katherine | 2010 | Metaphor No More: A 15-Year Review of the Team Mental Model Construct, Journal Of Management, Jul 2010, vol. 36, issue 4 | **260** |
| Chiesa, V; Coughlan, P; Voss, CA | 1996 | Development of a technical innovation audit, Journal Of Product Innovation Management, Mar 1996, Vol. 13, Issue 2 | **253** |
| Garengo, P; Biazzo, S; Bititci, US | 2005 | Performance measurement systems in SMEs: A review for a research agenda, International Journal Of Management Reviews, mar 2005, vol. 7, issue 1 | **205** |
| DiRomualdo, A; Gurbaxani, V | 1998 | Strategic intent for IT outsourcing, SUM 1998, vol. 39, issue 4 | **184** |
| Fawcett, Stanley E.; Magnan, Gregory M.; McCarter, Matthew W. | 2008 | Benefits, barriers, and bridges to effective supply chain management, Supply Chain Management-An International Journa | **183** |
| Henri, JF | 2006 | Organizational culture and performance measurement systems, Accounting Organizations And Society, Jan 2006, vol. 31, issue 1 | **182** |
| Abernethy, Ma; Lillis, Am | 1995 | The Impact Of Manufacturing Flexibility On Management Control-System Design, Accounting Organizations And Society, May 1995, Vol. 20, Issue 4 | **181** |

Source: own processing using Web of Science database

Andy Neely presents the evolution of the performance measurement system in a study conducted in 2005, which presents the most relevant and quoted research studies during the years 1981-2005. These are summarized in table no. 2.

**Table no. 2. The most cited articles on the subject of performance measurement systems**

| Authors | Publication Year | Title | Times Cited |
|---|---|---|---|
| Kaplan, R.S.,Norton, D.P. | 1992 | The balanced scorecard: measures that drive performance, Harvard Business Review, January-February, pag. 71-79 | 119 |
| Kaplan, R.S.,Norton, D.P. | 1996 | The balanced scorecard: Translating Strategy Into Action, Harvard Business School Press, Boston, MA | 63 |
| Charnes A.; Cooper, W.W. and Rhodes, E. | 1978 | Measuring efficiency of decision-making units, European Journal of Operations Research, 2, 6, pag. 429-444 | 56 |
| Dixon J.; Nanni, A., and Vollmann, T. | 1990 | The New Performance Challenge, Business One, Irwin, Burr Ridge, IL | 49 |
| Neely, A.D., Gregory, M. and Platts, K. | 1995 | Performance Measurement system design: a literature review and research agenda, International Journal of Operations & Production Management, 15, 4, pag.80-116 | 42 |
| Eccles, R.G. | 1991 | The performance measurement manifesto, Harvard Business Review, January-February, pag. 131-137 | 41 |
| Lynch R.L. and Cross K.F. | 1991 | Measure Up!, Blackwell Publishers, Cambridge, MA | 40 |
| Kaplan, R.S. and Norton, D.P. | 1993 | Putting the balanced scorecard to work , Harvard Business Review, September- October, pag. 134-147 | 36 |
| Banker, R.D.; Charnes, A. and Cooper , W.W. | 1984 | Some models for estimating technical and scale inneficiencies in data development analysis, Management Science, 30, 9, pag. 1078-1092 | 34 |
| Kaplan, R.S. | 1996 | Using the balanced scorecard as a strategic management system, Harvard Business Review, 74, 1, pag. 75-85 | 34 |

Source: personal interpretation after Neely, 2005

More recently, we can see that the international interest in this topic is steadily increasing. Figure no. 3. presents the evolution of the number of scientific publications and their interest in the topic of "performance measurement system design" in the past 20 years in the area of "Business Finance", "Business" or "Economics." A total of 522 articles were indexed in the database Web of Science. These articles were quoted - without auto- citations - 9505 times, with an average citation per article of 18.21.

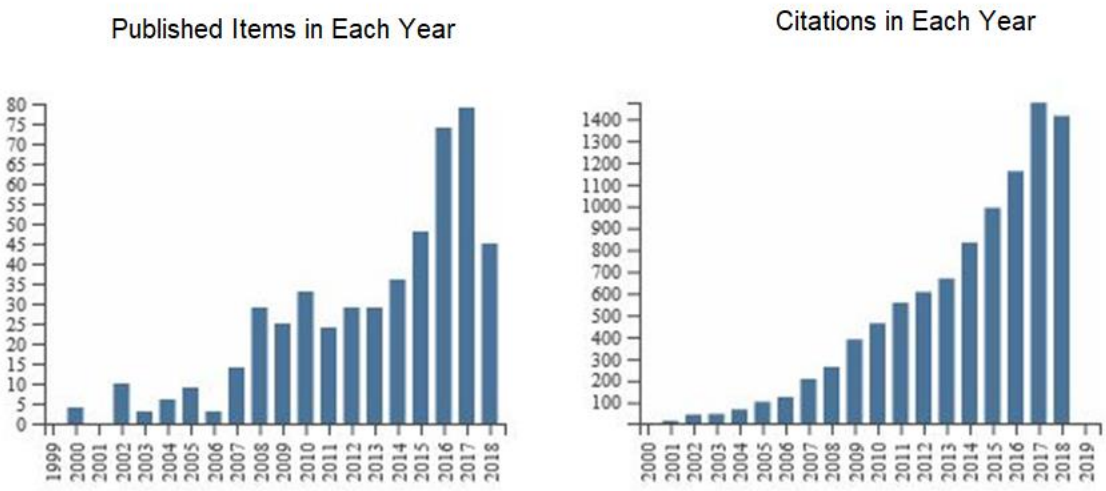


**Figure no. 3. The evolution of the number of scientific publications and their interest in the topic "performance measurement system design" in the past 20 years in the area of "Business Finance", "Business" or "Economics".**
Source: own processing using Web of Science database

As a result of the analysis performed based on the literature, we propose to put a brick on the research entitled performance measurement systems, without claiming exhaustiveness, which consists in proposing an idea, namely: building a measurement system of performance indicators that include classical financial indicators, modern financial indicators, non-financial indicators, performance measurement models using stochastic models but also the removal of the limit presented in a previous study (Deac, Hlaciuc, 2014) by modeling the uncertainty, represented by the impact of random variables on performance, specific to each enterprise's needs.

## 5. CONCLUSIONS

On the background of national economies opening towards exterior, in an increasingly competitive environment, managers were forced to find new solutions to reduce vulnerabilities, new solutions to measure enterprise performance, financial performance. Also, the needs of different categories of users of financial statements are increasingly "aspiring", they want to be able to anticipate future business developments based on financial information. Therefore, the specialists focused their attention on "the analysis of the financial health", which the various economic and social partners of the economic entity are interested of for managing the relations they establish with it. In adopting their specific decisions, they must study the financial situation and performance of the enterprise.

Following this purpose, the academic environment in various fields is concerned with the theme of "performance measurement". In this paper, the following questionswere addressed:

- which are the representative models for measurement and estimation of financial performance ?
- can a financial performance measurement area be defined ?
- how does a financial measurement system looks like ?

For the first question, based on the literature analysis, we considered that the most used models of performance measurement are deterministic models that include the three types of indicators: classical financial indicators, modern financial indicators and non-financial indicators. We deem that these indicators can be grouped in a performance measurement area, even if their number is large enough, and this would be the answer to the second question.

The answer to the third question is more ambiguous, following research conducted on articles published in the Web of Science database. In this scope, we have discovered that a

performance measurement system is designed from different domains, created differently depending on the sides of the research performance, but the international interest in this topic is steadily increasing.

As a result of the analysis performed based on the literature, we propose to put a brick on the research entitled performance measurement systems. Of course, our idea will have to be taken over and developed further, this issue being a long-lasting one, but with a great impact on the economic environment.

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