

Financial Perspective in the System for Measuring Organizational Performance – Case Study Food Industry in Republic of Macedonia

Marija Midovska Petkoska, Snezana Mojsovska
Salamovska, Dragica Odzaklieska

**DR.SC. M. MIDOVSKA-PETKOSKA, DR.SC. S. MOJSOVSKA
– SALAMOVSKA, DR.SC. D. ODZAKLIESKA**

Abstract

Systems for measuring and managing organizational performance are designed to help managers in this complex business environment. Organizational performance as a category must be considered from multiple perspectives. Today, most of the designed systems for measuring organizational performance have an integrated and balanced approach to the measurement. They incorporate multiple perspectives for measuring. This is primarily due to the multidimensionality of the concept. The financial perspective is one of the most important perspectives in any system for measuring organizational performance. This perspective was the only one perspective for measuring performance in the past. That's why it still has the primacy among other perspectives today.

The main aim of this paper is to research the role of the financial perspective in the systems for measuring organizational performance, with special accent on the designed adaptable system for measuring organizational performance in the companies of food industry in the Republic of Macedonia. The paper continuous to research the most common Key Performance Indicators used by the companies in this industry when it comes to financial perspective. In the end the paper researches the relationships between selected indicators.

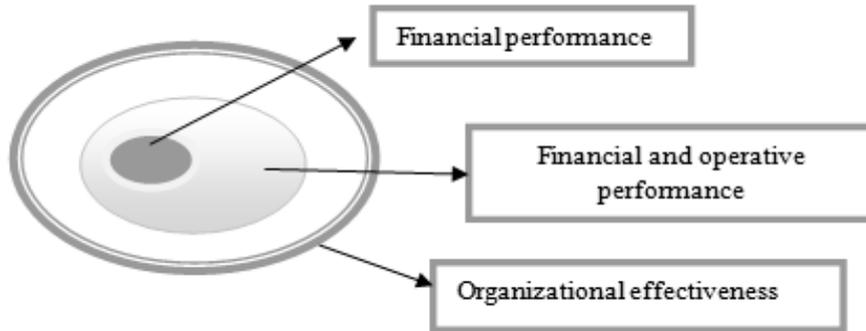
Key words: financial perspective; organizational performance; performance measurement and management; systems;

1. Introduction

Organizational performance is one of the most important criteria for assessing organization and its activities. There are various definitions for this concept. Thus, according to Kaplan, the performance is a set of financial and non-financial indicators that provide information for the extent to which goals and results have been achieved (Robert S. Kaplan, 1996). Organizational performance as a category can be considered from multiple perspectives. There is a relatively small agreement between the authors regarding definition of this concept. This is primarily due to the multidimensionality of the concept. Also, what is specific to organizational performance is that each organization has its own distinctive features that differ from one another, and thus its organizational performance. Hence, there is not one general model for measuring organizational performance that can be designed. Literature confirms this with the existence of a large number of different models for measuring organizational performance, each applicable to a certain extent.

When we want to research the construction of organizational performance, it is crucial to define and distinguish them from some others that are closely related to them, such as organizational effectiveness. Many authors have attempted to establish the conceptual framework of organizational performance. Thus, the first attempt to distinguish organizational performance is by Vent Katerman and Ramanujam in 1986 (V, Venkatraman, & Ramanujam, 1986). They demonstrated the distinction between organizational performance and organizational effectiveness as in

Figure 1: Defining the field of organizational performance according to Venkatraman and Ramanujam



Source: (V, Venkatraman, & Ramanujam)

According to them the narrowest concept of performance is financial performance, such as sales growth or profitability. Wider definition of performance emphasizes non-financial performance such as product quality and marketing effectiveness also. In this research, organizational performance is considered from a broader perspective. The research in the paper includes both financial and non-financial performance in order to make an integrated approach to organizational performance from multiple perspectives. The accent in this paper is on the financial perspective as one of the most important perspective in the systems for measuring organizational performance.

There are three approaches that are used for measuring organizational performance in general (Pierre J., Devinney, Yip, & Johnson, 2005). The first approach is to use one indicator, which is assumed to be closely related to organizational performance. The second approach is the adoption of several different indicators. The third most widely used approach is the use of several different indicators and their aggregation in a dependent variable. Key Performance Indicators are set of indicators that focus on those aspects of organizational performance that are important for the organization's success. (Taylor & Gibbon, 1990).

The organizational performance measurement system has an important role in any organization. Through this system, organization can measure all the financial and others indicators that are important in decision making process. Financial indicators are the most important indicators for companies. Integrated performance management emphasizes the need for

strategic alignment and connection of performance. This mean that all activities and processes, starting from the setting goals and guidelines, activities in the operational processes, support processes, evaluation and control, and the processes of organizational behaviour, must be in line with the strategy. The system for measuring organizational performance connects all of these with the strategy.

In literature, organizational performance are reserch in various ways. For example, James measure organizational performance by evaluating the return on investment (ROI), sales revenue, capacity utilization, consumer satisfaction and product quality (James, Wendy, Zahirul, and Hoque, 2000). Similarly, Evans explores the relationships between the performance indicators (eg consumer satisfaction, market share and financial performance) compared with the ones of the competitors (Evans, 2004). Hoque later in 2004 applied a well tested questionnaire and measured 12 dimensions of organizational performance (operating profit, return on investment, sales growth, market share, cash flow, new product development, market development, development and research, cost-cutting programs, personal development, employee relations and employee protection) over three years. Ravi, Maheshkumar, & Stephen J., 2007 evaluate organizational performance through three-year reports for return on investment and ranking companies. In their case, the ranking is determined by three criteria: whether the company is perceived as a leader in the industry in the past three years, whether it is ranked in the top three companies in the industry according to the financial statements and whether it is successful in applying the latest achievements.

2. Financial perspective in the systems for measuring organizational performance

Traditional performance measurement systems measure only financial performance. In order to calculate these indicators, companies use their financial statements as sources for data. Financial performance measures the growth of business in general. For many years, they have been the most important for the companies and have been given the most attention. Today, measuring financial performance is just one aspect of the overall measurement of organizational performance. The financial perspective is one of the perspectives in any integrated and balanced system for measuring organizational performance. There are numbers of financial

indicators that can be measured from various aspects. Each company selects different key performance indicators for measuring. The most important indicators from the financial aspect are the indicators for profitability, liquidity, indebtedness, company's activity and equity investments. The accounting indicators are financial information that is obtained from: balance sheets, income statement, cash flow statements and other financial plans and reports.

2.1. Profitability indicators

All growing businesses are oriented towards increasing their profits. The profitability indicators measure the company's ability to generate profits. What matters is to know how to measure profitability. The most used key indicators for measuring profitability are:

- Gross profit margin;
- Operating margin;
- Net profit margin;
- Return on capital employed (ROCE);
- Return of investments (ROI);
- Return of assets (ROA).

Profitability measures include values and measures that include net profit or a net profit component such as profits from operations or pre-tax profits.

Net profit is the difference between sales and costs.

$$\text{net profit} = \text{profit} - \text{cost}$$

There are 6 basic problems when company uses net profit as an indicator for measuring financial performance. They refer to: 1) the use of alternative accounting methods, 2) risk-related issues are excluded, 3) investment needs and financial structure are excluded, 4) the effects of dividends are excluded, 5) time value of money is ignored, 6) conservative accountants for intangible assets neglect the total assets and net worth,

The Return on Assets (ROA) measures the effective use of the funds of the profit making company.

$$ROA = \frac{\text{net profit}}{\text{total assets}}$$

Return on Investment (ROI) is one of the most well-known indicators for measuring and evaluating the performance used in business analysis. By definition ROI is an indicator, a metric, a number, a ratio. In some cases ROI is a method or approach - ROI analysis. In such a case, the ROI or ROI analysis does not only include ROI's ratio, but also a few others financial (Mogollon & Raisinghani, 2003).

$$ROI = \frac{\text{net profit of the investment}}{\text{cost of the investment}}$$

2.2. Liquidity indicators

Another category of financial indicators are those that measure the liquidity of the company. These indicators measure the ability of the company to regularly pay out debts to its suppliers. These include different coefficients of liquidity such as:

Current liquidity coefficient

$$\text{current liquidity ratio} \equiv \frac{\text{current assets}}{\text{current liabilities}}$$

2.3. Indicators of indebtedness

The company's debt is also a category in financial indicators. These indicators show how much of the company's assets are financed through debt. The debt ratio is calculated using the following formula:

$$\text{coefficient of total indebtedness} = \frac{\text{total liabilities}}{\text{total assets}}$$

3. Research findings

The main purpose of this research is to determine the role of the financial perspective in the system for measuring organizational performance. For this purpose, the research primarily determines the situation regarding the concept of measuring organizational performance in companies in the food industry in the Republic of Macedonia. The research particular emphasis is the most common performance of indicators that are measured by companies in this industry. The collection of the primary data is done with a structured questionnaire and an

interview with the managers and employees of companies from the food industry in the Republic of Macedonia. For that purpose, a questionnaire with 26 questions was created. The questionnaire first was distributed electronically to the companies of the food industry in the Republic of Macedonia. The companies were selected randomly. After that a personal interview was made with the same questionnaire with employees and company managers.

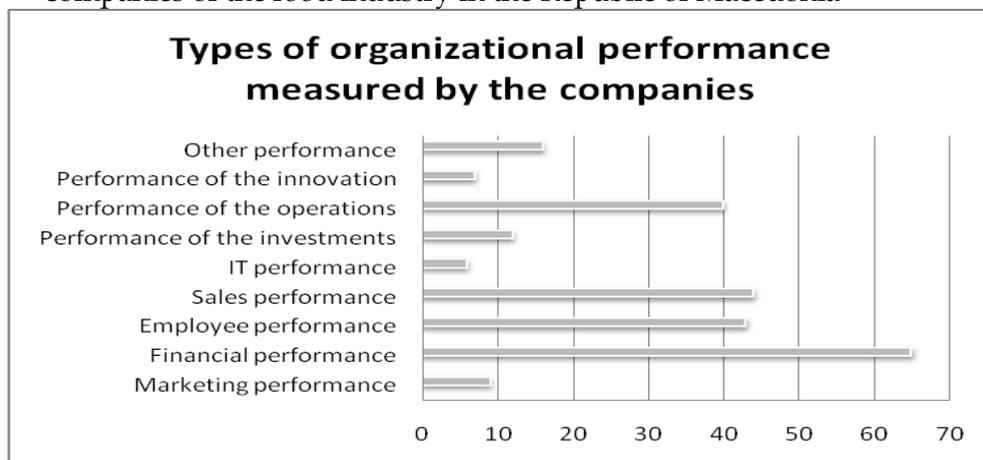
The key issues that further play a major role in creating the organizational performance measurement model is to determine the types of organizational performance that are measured by these companies. The obtained results confirm the hypothesis that most of the companies in the food industry in the Republic of Macedonia measure the financial performance; even 88.9% of the respondents gave this answer. According to them, the sales performance is measured by 62.5% and the performance of the employees are measured by 59.7% of the respondents. In the group of most often measured performances are also the performance of operations and internal processes with 58.3%. The second group of organizational performance that has a lower percentage in the measurement of organizational performance are: marketing performance, investment performance, IT performance, innovation performance and other performance. The following table lists the types of organizational performance that are usually measured according to the answers received by the respondents.

Table 1: Types of organizational performance measured by the companies of the food industry in the Republic of Macedonia

N	Type of organizational performance	%
1.	Financial performance	88,9 %
2.	Sales performance	62,5 %
3.	Employee performance	59,7 %
4.	Operational performance	58,3 %
5.	Other performance	20,8 %
6.	Performance of the investments	18,1 %
7.	Marketing performance	13,9 %
8.	Innovation performance	11,1 %
9.	IT performance	8,3 %

Source: original authors' research data

Graph 1: Types of organizational performance measured by the companies of the food industry in the Republic of Macedonia



Source: original authors' research data

The research further approaches with the identification and selection of the perspective for measuring organizational performance that later are included in the designed adaptable system for measuring organizational performance. The identification and selection is made in accordance with the defined strategy and strategic goals, as well as the identified key organizational performance that are measured by the companies in the food industry in the Republic of Macedonia. The selected perspectives are incorporate in the model for measuring organizational performance. The model provides five perspectives for measuring organizational performance: financial perspective, employee perspective, consumer perspective, market perspective, the perspective of internal processes and the perspective of other stakeholders. They are represented in the following picture.

Figure 2: Selected perspectives for measuring organizational performance in the system for measuring organizational performance



Source: original authors' research data

The main purpose of the model is to be adaptable and applicable to the companies of the food industry in the Republic of Macedonia. Because of this, it has the opportunity to add another perspective if it is determined that the company needs such. This is foreseen primarily because each company operates in a different way and is distinct in relation to others, even in companies in the same industry. The perspective that can be added is the Perspective of other stakeholders.

Since the focus of this paper is the financial perspective, the key performance indicators for this perspective are identified. Respondents ranked the indicators in an interval of 1 to 5 - with 1 of the most important and 5 not important. The results obtained are presented in the following table.

Table 2: The most measured key performance indicators by the companies of the food industry in the Republic of Macedonia

Key performance indicators	rang од 1-5
Financial perspective	
[Net profit]	1,47
[Return of investments (ROI)]	1,86
[Profit growth rate]	2,04
[Economic value added (EVA)]	2,49
[Profit before tax]	2,73

Source: original authors' research data

According to the results, the most significant financial indicator for the companies from the food industry is net profit.

Below is an analysis of the strength of the links between the selected Key Performance Indicators from the Financial Perspective. The coefficient of correlation is calculated between Key Performance Indicators from a Financial Perspective.

Table 3: Calculated coefficient of correlation between Key Performance Indicators from a Financial Perspective

	Return of investments (ROI)	Net profit	Economic value added (EVA)	Profit growth rate	Profit before tax
Return of investments (ROI)	1				
Net profit	0,43350314	1			
Economic value added (EVA)	0,157531618	0,421997939	1		
Profit growth rate	0,309463734	0,680759601	0,447720974	1	
Profit before tax	0,09453969	0,30179883	0,132276336	0,543927364	1

Source: original authors' research data

From the data obtained present in the table, the highest correlation coefficient is **0,680759601**. Accordingly, we can conclude that there is a high dependence between the Profit Growth rate and Net Profit.

Key performance indicators are selected through analytic hierarchy process methodology. Every company can select different Key performance indicators.

4. Conclusion

According to the obtained data from the survey, we can conclude that the most of the companies of the food industry in the Republic of Macedonia are small and medium-sized companies. Macedonian companies of the food industry mainly use their own method for measuring organizational performance. In fact, they measure performance according to some of their own criteria and do it separately for each

organizational unit. Companies measure just a few indicators that are important and necessary in the work for proper decision making process. The most important and most often measured performance in the companies of food industry in the Republic of Macedonia are financial performance. This practice is shared by most of the companies in the world. The most frequently measured indicators from a financial perspective are: Return on investment, net profit, pre-tax profit, economic value added. These indicators are calculated mainly by using data from internal company reports. The way of measuring organizational performance is usually for each organizational unit separately, and the data is drawn from an integrated internal database. Each of the companies use its own method for calculating organizational performance.

Measuring organizational performance is most commonly through identifying Key Performance Indicators. Most companies have set 11 to 20 performance indicators to measure organizational performance. Financial perspective is still one of the most important perspectives in the systems for measuring organizational performance.

List of References

- Bitici, U., Turner, T., & Mendibil, K. (2002). Integrated Performance Measurement Systems: A Reference Model. *International Journal of Business Performance Management*.
- Carlyle, P. E. (2013). *Business performance measurement use in a small to medium enterprise: case study*. New Zeland, Massey University.
- Gavrea, C., Ilies, Z., & Stegorean, R. (2011). *Determinant of organizational performance: the case of Romania*. Manage Market Challenge Knowg Soc.
- James, Wendy, Zahirul, & Hoque. (2000). Linking Balanced Scorecard Measures to Size and Market Factors: Impact on Organizational Performance. *Journal of Management Accounting Research*.
- Kaplan, R., & Norton, D. (1996). Using the BSC as a strategic management system. *Harvard Business Review*.
- Pierre J., R., Devinney, T., Yip, G., & Johnson, G. (2005). Measuring Organizational Performance as a Dependent Variable: Towards Methodological Best Practice. *Journal of Management, Vol. 35*.
- Ravi, K., Maheshkumar, J., & Stephen J., P. (2007). Organizational alignment and performance: Past, present and future. *Management Decision 45*.

Taylor, C., & Gibbon, F. (1990). Performance Indicators. Multilingual Matters

V, Venkatraman, N., & Ramanujam, V. (1986). Measurement of Business Performance in Strategy Research: A Comparison of Approaches. *Academy of Management Review*, 11.