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FINANCIAL RATIOS FOR ASSESSMENT OF OPERATIONS SUCCESS IN ENTERPRISES OF MACEDONIAN HOSPITALITY INDUSTRY

Abstract

This article is focused on issues related to operating efficiency and effectiveness of hospitality industry in the Republic of Macedonia. For that purpose, financial ratios for assessment of operations success in hospitality industry will be analyzed.

Financial ratios are measures of operating efficiency in the use of funds of enterprises. They show whether the available capacity of enterprises is properly utilized and whether assets are effectively managed. Indicators of efficiency of operation bind the income statement and balance sheet and associate relationship workload of the enterprise and the necessary funds for its maintenance. Higher values of these ratios indicates that operation of the enterprise is more efficient. The trend of these factors can serve as a guideline for planning of the increased workload or additional capital investment. In contrast, the trend of declining indicators of turnover of assets indicates that enterprises had not sufficiently exploit their facilities, or has a lower efficiency of use of funds, leading to a drop in profits.

The results of research in this paper show real trend of financial ratios in hospitality industry in the Republic of Macedonia for the analyzed period, due to different factors. For better operating results of those enterprises there are measures that should be undertaken in the forthcoming period on micro (enterprise) level as well as on macro (industry and national) level.

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Introduction

The financial analysis is mainly focused on analysis of data in intra-statements and official financial statements of enterprises. Number of indicators used can be different for different enterprises and depends on the analyst, the methodology applied, and the type of industry that enterprise belongs to.

That means that in enterprises that belongs to hospitality industry, also record all activities and transactions in financial statements, which are then used in decision-making of different parts as: managers, owners, government, banks and other financial institutions, business partners, competitors and other stakeholders. Depending on the nature of the user it is distinguished: internal and external accounting. Internal accounting relates primarily to internal users in hotels and restaurants, that first serve managers and it is called management accounting, and second one is external accounting that refers to external users or so called financial accounting.

However, there are evident shortcomings in making business decisions in hospitality industry based solely on the financial analysis. Major weaknesses are related to: the use of only historical data, overlooked market value of assets in the balance sheet, high level of use of figurative accounting, neglect of important economic information on micro and macro level and the like.

1. GOALS AND NEEDS OF ANALYSIS OF FINANCIAL STATEMENTS OF ENTERPRISES IN HOSPITALITY INDUSTRY

In order to obtain relevant data and information of financial condition of enterprise, analysts and users of financial statements, in spite of analysis of financial statements, are using additional data. They may be related to: the activity of the enterprise, environment, business relations with other companies and the like. Analysis of financial reports should not be confined to the financial statements a year, but should apply for at least 5 years.

This means that the analysis should be extended to examination of trends of certain financial indicators for longer periods, comparing the financial performance of one enterprise with another, because only in this way can be made realistic assessments of operational situation in enterprises. Analysis of financial statements is part of the overall system of economic analysis and covers the area of utilization of financial statements to evaluate the company's performance.[1]

In the literature financial analysis is defined as:

- "Research, quantification, description and assessment of the financial status and performance of the enterprise. "[2]
- "Permanent process of systematic testing, evaluation of results and internal sources for financing of reproduction and by way of comparison, a breakdown and generalization in order to working people to be informed about the possibilities for improving the financial function of the enterprise."[3]

On the other hand, according to the consulted literature financial analysis includes analysis of:[4]

- cash flows of the company, or inflows and outflows of funds or analysis of the liquidity of the company;
- factors of liquidity, i.e. analysis of financial results, revenues and expenses;
- relationships between assets and liabilities and
- relationships between financial and other functions in an enterprise.

Purpose of analyzing the financial statements relating to:[5]

- Assessment of the reasons for deviations in operations (positive or

[1] Spasic Vesna, Cerovic Slobodan: Ekonomsko –finansijska analiza poslovanja preduzeca u hotelijerstvu i turizmu, Univerzitet Singidunum, Beograd, 2013, p.161-215.
[2] Stojiljkovic M. and Krstic J: Finansiska analiza, Ekonosmki fakultet, Nis, 2000, p 12.
[3] Dohchevikj Sima : Finansiska analiza kako instrument upravljanja finansijama u preduzeca, Beograd, 1979, p.23.
[4] Stojanovikj Todor:Analiza na rabotenjeto na pretprijatijata, Sijuz na smstkovodstvenite I finansiskite rabotnici na Makedonija, 1990, p. 35-44.
[5] Ibid.

negative) in order to improve the future operations of enterprises by undertaken of adequate measures to promote the positives;

- Better management enterprise, because the appropriate analysis provides additional data that are necessary for making quality business decisions;
- Better performance of other functions in the enterprise, especially the functions of planning;
- The provision of appropriate information and conclusions about the needs of a wider range of users of financial statements, which contributes to making appropriate business decisions and so on.

What refers to enterprises in hospitality industry, the aim of financial analysis is the same as it is already mentioned, having in mind the specific of hospitality industry. It is especially important to mention that there are specific indicators that arise from the financial analysis of operating of hospitality industry that will be presented in this paper. They refer to liquidity, financial structure and safety and profitability of hospitality industry.

2. REVIEW OF KEY FINANCIAL RATIOS OF OPERATION SUCCESS IN ENTERPRISES OF HOSPITALITY INDUSTRY

Financial indicators are obtained as the ratio between the figures of two or more balance sheet items, based on the obtained certain result. Thus the result, because by itself does not provide useful information and cannot serve as an adequate analysis of financial statements, commonly are compared to appropriate standards in order to see what is the financial and operating status of the enterprise in relation to standards. As standards for comparison and proper interpretation can be used as follows:

- targeted performance of the enterprise in hospitality industry, as defined by management;
- indicators of enterprise in hospitality industry realized in previous years;
- indicators of leading enterprises or competitors that belongs to the same industry as analyzed enterprise;
- the average of the operation indicators of to the enterprise;

- the interpretation of financial indicators should always be careful because there are limitations on their use;
- lack of appropriate standards for comparison (benchmarks).

It should be noted that there are no pre-defined standards that could be used at any time and in any situation for financial analysis in hospitality industry. They change depending on the purpose of the analysis and the need for making different conclusions and decisions. For example, the high liquidity ratio for short-term lender is a good indicator, but for investors it can be inadequate management of working capital. Furthermore, attention should be paid to: the point in time of calculation of ratios, the impact of inflation on the balance sheet items, the possibility of negative numbers to be unnoticed, the use of different accounting methods for different companies and so on.

It should be notice that for the purpose of this paper liquidity ratios, financial structure and safety indicators and profitability indicators of hospitality industry will be taken into account.[6]

♣*Liquidity ratios in hospitality industry*

Liquidity ratios indicate the ability of the company to settle its obligations at maturity. Maintaining liquidity is one of the primary tasks of management. Gaining of better liquidity status leads to confidence among financial institutions that can provide sources of funds through the capital market at low interest rates. Also, the benefit can be found by avoiding costs for late payment etc. The liquidity of the company, generally depends on the amount of current assets, their structure and funding. But not always an enterprise should attempt to keep large amounts of working capital because it could adversely affect the profitability of operations or the financial result. Commonly used indicators of liquidity of enterprises are as follows: current liquidity ratio, quick liquidity ratio, cash liquidity ratio, net-working capital, operating profit quality, net income quality, efficiency in collection of receivables (revenues quality).[7]

[6] Spasic Vesna, Cerovic Slobodan: Ekonomsko –finansijska analiza poslovanja preduzeca u hotelijerstvu i turizmu, Univerzitet Singidunum, Beograd, 2013, p. 128-133.
[7] Brigham F. Eugene, Daves R. Philip: Intermediate financial management, Gengage learning Company, (izdadeno na makedonski jazik od ARS lamina 2014) 2010, p. 726-758.

The indicator of current liquidity is calculated as the ratio of current assets (cash, short-term securities, receivables and inventories) and current liabilities (trade payables, liabilities for short-term loans, taxes and supplies). The higher level of this indicator means better of liquidity and conversely, a lower ratio indicates that the company falls into insolvency, and requires the use of foreign funds. This is as a general attitude in the literature, but more appropriate for determining the level of this indicator should take into account several factors including the activity of enterprises, and then all other elements related to the functioning of the operating process.

The indicator of current liquidity excludes inventory from the calculation due to their least liquid form as current assets. The ratios of current liquidity and quick liquidity are based on transformation of inventories and accounts receivable into cash. Therefore, these factors should be analyzed together with other indicators of performance, especially with the turnover ratio of receivables, inventories and liabilities.

If we take into account accounts receivable and inventories in the calculation of liquidity indicators, as is the case with the previous two indicators, a problem of achieving real liquidity can arise. In fact, claims are a category of current assets that may be uncollectible, while the quantities to be obsolete and thus cannot achieve full liquidity operations. To overcome such anomalies in the application of these factors, in the literature another factor is known- cash ratio of liquidity.

Cash ratio is the most conservative indicator of liquidity because it takes into account only cash and securities the most liquid form of current assets. But despite this ratio exceeds the disadvantages enterprises faced with current and quick liquidity, weaknesses of all three factors, still remain.

Apart from the aforementioned liquidity indicators, is net working capital, which represents the difference between current assets and current liabilities. Ratio for this indicator is shown as follows:

Net working capital = *Current assets - Current liabilities*

In fact, a positive amount of this indicator suggests that the company has a certain degree of liquidity, i.e. that time can perform their duties.

The practice showed that the liquidity is not conditional on the static relationship between the individual elements of the balance sheet, but is closely linked and dependent on the cash inflows and cash outflows and their balance. The enterprises, that have a high level of current liquidity, while in current assets structure, levels of inventory and accounts receiv-

able that are difficult to convert into cash, dominate, may become illiquid if more obligations come to maturity. To avoid this drawback, it is necessary to analyze data from the statement of cash flows. In this regard, all significant inflows and outflows, especially should pay attention to the net inflow from operating activities. Based on these data can assess the quality of business profits, the quality of net income, earnings quality - efficiency in collection process.

$$\text{Business profit quality} = \frac{\text{net cashflow from operating activities}}{\text{business profit}}$$

The results of the calculations show how denars net cash flow from operating activities generated by a penny business profit (the lower the risk of insolvency is higher) . in practice, this is a significant indicator to detect different aspects of undercover accounting data such as shown higher revenues, lower costs and consequently shown a higher financial result. The risk is higher because it also displayed financial result is not usually accompanied by a stream of cash.

$$\text{Net income quality} = \frac{\text{net cashflow}}{\textit{net income}}$$

Net income quality in its calculation takes into account cash flows from the activities and shows how the company draws money and generate free cash flow of investment, operational and financial activities.

$$\text{Efficiency in collection process} = \frac{\text{net cashflow}}{\textit{operating revenues}}$$

Efficiency in collection of receivables (revenues quality) shows percentage of collected revenues from operating activities during the accounting period, ie how many of them remain outstanding. So, results from this indicator can also be used in the process of appreciating the degree of risk of insolvency of enterprises un hospitality industry.

♣*Financial structure ratios in hospitality industry*

The ratio between own and borrowed sources of funds indicates the quality of the financial structure of enterprise and its financial security. These indicators, also belong to the group - solvency ratios, that can be

taken into consideration also as the ratio of cash inflows and outflows in the long term. As important indicators of the solvency of enterprises in hospitality industry in this paper are analyzed: the level of indebtedness, ratio of capital and financial leverage factor.

The indicator for the level of indebtedness of enterprises indicats the extent to which the company is financed by borrowed sources of funds, ie the share of liabilities in the financial structure. The lower level of this index indicates more solvent company.[8]

Capital ratio shows the level of financing by own capital of enterprise, i.e the share of own capital in total liabilities amount. This indicator, thereby indicates the financial risk or financial safety of enterprise.

Financial leverage factor indicator, also is used to measure financial risk of enterprise. The level of financial expenses arises from the level of financing through borrowed resources and shows the uncertainty of achieving a netincome related to oscillations in operating profit.

The impact of financial leverage depends on the difference in the return on equity and average interest rate, as well as on the share of liabilities in total sources of financing. As much as these factors are on higher level, the positive effect of financial leverage on profitability of capital.[9]

♣*Profitability ratios in hospitality industry*

Profitability as a principle for achieving maximum profit with less used assets, can be shown through the following indicators: indicator of business profit and net profit rate- as partial indicators, as well as through ROA (return on assets) and ROE (return of equity) indicators- as a synthetic one. Special system of analyzing the profitability of enterprises is through the Du Pont analysis system, where by disaggregating ROA and ROE on separate components, management is trying to perceive appropriate strategies for improving profitability of enterprise.

Business profit ratio shows the gross margin, ie how much denars of operating profit is generated by 100 denars operating income. Net profit rate is a result remaining after covering all expenses of the enterprise, income tax,

[8] Brealey A. Richard, Myers C. Steward, Allen Franklin: Principles of Corporate Finance, The McGraw-Hill Companies, (izdadeno na makedonski jazik od ARS lamina 2015) 2011, p. 440-465.
[9] Ibidem.

etc., or it shows the share of net profit in operating revenues. The meaning of this indicator comes to the fore if the results are compared with competing businesses in the same industry and is commonly used in practice.

ROA shows the profitability of total assets, ie the degree of growth of total operating assets involved in the enterprise. In fact, this indicator refers to the net profit and if it realizes unit engaged assets. Through this indicator data horizontal or trend analysis can be carried, or data might be compared with overall results of the industry, group of enterprises or separate competitive enterprise.

Operating income ratio can be divided, it it is already known that than ROA can be increased by increasing the operating income through higher sale prices, declining of number of employees etc, as well as by faster turnover of total assets over a shorter turnover of inventories and faster collection of receivables. The point is to put attention on management of turnover of total assets.

Closely related to ROA is ROE and it is showing the level of return on equity while taking into account the financial structure that shows the growth of equity at the end of the period compared to the beginning. The results of this indicator can be improved by better level of net income and faster turnover of capital.

3. IMPLEMENTATION OF KEY FINANCIAL RATIOS OF OPERATION SUCCESS IN ENTERPRISES OF MACEDONIAN HOSPITALITY INDUSTRY

Despite the theoretical approach for determining the operating performances of enterprises in hospitality industry, for the purpose of this paper quantitative research is conducted, too. Data that are further analyzed in the paper are derived through research conducted by questionnaire in period 2014/ 2015. The questionnaire was sent to 40 enterprises in hospitality industry in the Republic of Macedonia (selected at random), of which 32 enterprises have provided the answers to the questionnaire .

In Table 1 is shown an overview of the results obtained from the calculation of theoretical displayed indicators of surveyed enterprises for a period of 5 years.

Table 1: Financial ratios for operation success of enterprises in hospitality industry in the Republic of Macedonia

Ratios	2011	2012	2013	2014	2015
Liquidity ratios in hospitality industry					
Current liquidity ratio	5, 76	1, 26	4, 41	4, 31	4, 7
Quick liquidity ratio	5, 23	1, 00	4, 03	3, 95	4, 2
Cash liquidity ratio	4, 10	0, 42	1, 32	1, 2	2, 14
Net working capital (in million MKD denars)	24.157	2.684	24.685	23.817	26.259
Operating profit quality	1, 59	2, 21	1, 29	1, 22	1, 37
Net income quality	0, 53	-1, 04	0, 17	0, 16	1, 17
Efficiency in collection of receivables	1, 12	1, 13	1, 13	1, 12	1, 13
Financial structure ratios in hospitality industry					
Level of indebtedness	1, 23%	2, 52%	1, 73%	1, 72%	1, 74%
Own capital ratio	98, 08%	96, 63%	97, 27%	97, 28%	97, 26%
Financial leverage	1, 02	0, 95	1, 04	1, 04	1, 04
Profitability ratios in hospitality industry					
Business profit ratio	14, 53%	9, 17%	16, 56%	16, 5%	16, 58%
Net profit rate	14, 31%	9, 62%	15, 98%	15, 95%	15, 99%
ROA (Return on assets)	2, 16%	3, 64%	6, 52%	6, 5%	6, 55%
ROE (Return on equity)	2, 16%	3, 92%	6, 49%	6, 47%	6, 49%

Source: Calculated ratios based on data in financial statements for appropriate years of surveyed enterprises in hospitality industry

According to data in the table 1 it can be considered that the index of current liquidity for the analyzed period was the highest in 2011, where the coverage of current liabilities with current assets is 5.76, while at the end of the period the amount is 4.7 (due to the synthetic character of current assets, the results cannot be taken as favorable one without depth analysis of current assets structure) . This indicator shows least favorable result in 2012, where coverage is at a level of 1.26 or every MKD denar of current liabilities of the analyzed enterprises is covered by 1.26 denars of current assets.

Reduced liquidity indicator or quick liquidity ratio shows that surveyed enterprises from hospitality industry in the Republic of Macedonia,

to settle 100 denars current liabilities have to use 523 denars in 2011, 100 denars, 403 denars, 395 denars, 420 denars liquid assets (cash and receivables) respectively per year. This indicator is most unfavorable in 2012, too. As we mention before this indicator doesn't take into consideration the level of uncollected receivables, which is one of the crucial problems in macedonian economy.

Results of cash ratio concerning coverage of current liabilities with cash, for the analyzed period in years, is as follows: 410 denars, 42 denars, 132 denars, 120 denars and 214 denars. As it can be seen the best coverage of current liabilities with cash there is in 2011, but it doesn't mean that this is optimal one. This means that the profitability of enterprises might be problematic issue. Liquidity ratios must be taken into consideration together with net working capital amount, that is on highest level in 2015 year which is positive indicator for the liquidity degree.

From the above table, it is evident that observed enterprises don't have significant level of indebtedness for all analyzed period. Business profit ratio and net profit rate data show that the highest level is generated in period 2013-2015, and the same conclusion for that period can be made for ROA and ROE indicator in hospitality industry in the Republic of Macedonia.

As we can see, in almost all indicators for operations success in hospitality industry it is evident improved substantially, over the last three years of the analyzed period. However, positive influence on this data has the process of gradually overcoming the economic crisis world while and on European continent. Consequently, indirect impact of economic crisis on Macedonian economy is lower. Also, the situation is a result of good policy making in recent period and measures that are undertaken toward special affirmation of tourism on international level.

Conclusion

The essence of financial analysis of operations of companies consists of using the results obtained by calculating the indicators of balance sheet items and their comparison with the standard, theoretical and empirical sizes. Conclusions from the analysis process are useful for internal and external, current and potential stakeholders in decision-making process.

That approach gives more reliable picture for the enterprise operation success. That means that it's possible to have more accurate amount of revenue and operating expenses of the enterprise as a whole and in parts, i.e. monitoring of profitability trends by units, which is very important element for successful management in enterprises of hospitality industry.

In order successfully to manage businesses in hospitality industry, it important and required according to the stated criteria periodically to compare performances among competitors in the same industry. In that way, hospitality industry enterprises will go on in better direction, through improvement of their offer and better cost - effectiveness.

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