

DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft
ZBW – Leibniz Information Centre for Economics

Avakmovic, Jelena

Article

Method of financial analysis and impact on quality of decision making

Provided in Cooperation with:
Danubius University of Galati

Reference: Avakmovic, Jelena Method of financial analysis and impact on quality of decision making.

This Version is available at:
<http://hdl.handle.net/11159/389>

Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics
Düsternbrooker Weg 120
24105 Kiel (Germany)
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)
<https://www.zbw.eu/econis-archiv/>

Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.
<https://zbw.eu/econis-archiv/terms-of-use>

Terms of use:

This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.

Method of Financial Analysis and Impact on Quality of Decision Making

Jelena Avakmovic¹, Julija Avakumovic²

Abstract: The financial analysis has a major contribution in making basic business decisions. Implementation and realization of business decision means directing business processes and activities towards this goal. Makers and implementers of business decisions should accept full responsibility for the funding to these decisions, for success or failure. Modern business decisions have been based on previous detailed and comprehensive analysis. Bring good business decision means and the methods used financial analysis that have a significant impact on the quality of the decision which will be the topic of this work.

Keywords: financial analysis; financial ratios; liquidity ratios; profitability ratios

JEL Classification: M16

1. Introduction

In the past, if we have been successful in making decisions, then it is a good indicator of future success. Usually investor or creditor looks at the trend of previous sales, expenses, net income, cash flows and the movement of investment income, not only as a means for assessing early successfully of the company, but also as possible indicators of future success. (Mikerević, 2005) Analysis of the current situation will show what the situation is, for example, means that owns the company, and that the obligations should be paid. It will show you what the situation is with cash, how long Business Company has relative to equity and what is the state of the commodity funds and claim. Information about the past and the present are useful only as help to make the right decisions about the future. Since, the investor estimates possible earnings potential viability of a company because this ability will affect the market price of shares of that company, as well as on the amount of dividends that will be paid to business organization. The creditor assesses the potential ability to repay debts of the company. The risk of an investment or a loan depends, on how it is possible to predict future profitability or liquidity. A financial analysis helps participants in the operations of companies to responsibly realize and understand the position of the company, and based on them make good decisions. It is important to note that financial analysis based on the accuracy and credibility of the financial statements on the basis of which builds.

For results (inputs – outputs) of financial analysis are interested:

- Legal Management of each of the Company, according to them, directing operations and possibly correct the performance of its business entity;

¹ UNION University Nikola Tesla, Faculty of Management, jelenalav@yahoo.com.

² DTM, Belgrade, julija09@yahoo.com.

- The owners are interested, if their equity increases, as well as how well managed business management;
- Shareholders, of whether their dividends satisfactory in relation to the economic operators of similar or the same branch;
- Creditors, because of whether their claims will be returned, both principal and interest accrued,
- Banks and investment funds, whether to approve the requested loan;
- Employed whether their wages be paid and whether it will grow, whether it will be able to count on retaining jobs and other work benefits;
- State and its authorities whether the economic operator will be able to settle its outstanding liabilities, contribute and are socially responsible.

Integral parts of the financial analysis are the financial ratios.

2. Financial Ratios

When we say “Ratio” in the sense in which we use this word when analyzing the financial statements, we refer to each number that represents the ratio between the two values in their annual reports. It is usually expressed as a percentage, ratio or fractions. To ratios were useful in evaluation of companies, should be possible confrontation of those partial values in their annual reports that the rational link. (Avakumović, 2014).

Ratio analysis is engaged in research and quantifying the relationship between the balance sheet position of an economic entity, in order to enable the assessment of the credibility of financial position and activities of the enterprise. It is a tool that an analyst is using to reach the numerical view of the situation in which the economic operator is, and that this information is compared with the prior period, or the period as a whole. The significance of ratio numbers is the fact that absolute numbers usually themselves do not speak much, and that is another difficult or impossible to compare the two entities if there is another comparable size.

Ratio analysis includes:

- Calculation of characteristic ratio, and
- Interpretation of ratio.

Calculation of characteristic ratios is easy analytical technique. Interpretation of ratio has much greater significance because it shows the informational value of ratios, how they are used etc.

Based on the criteria of information goals we can differentiate ratio analysis and ratio analysis realization.

2.1. Types of Financial Ratios

Using financial analysis assesses the situation financially and activities of the enterprise. It is based on the accountancy data which contain a balance sheet and income statement, and the performance of

analysts directly dependent on the correctness, completeness and timeliness of accounting data. Putting the relative position of the individual positions of the balance sheet and income statement will be given the appropriate indicators, i.e. ratio numbers. Conditionality between the balance sheet positions that are expressed ratio numbers it is necessary to check, measure, adjust, and of course, pay special attention if the operation is seasonal, and thus should be aligned and compared the same periods in different years. (Benković, 2006)

It can be monitoring interdependence of individual positions between them only if there is a causal link.

In order to evaluate the individual indicators should be calculated in advance to set standards. As standards can be used: (Bojović, 2010).

- Empirical Standards of analysts;
- Indicators of the past - time analysis;
- Indicators of other undertakings - spatial analysis;
- Standards based on the planned size;
- Indicators branches where companies belong - spacious analysis.

In the literature there are different classification and grouping of ratio numbers. One of these groups the ratio numbers into five groups (Ruth, 2003):

- Indicators of Liquidity;
- Indicators of Activity;
- Indicators of Financial structure;
- Indicator of Profitability;
- Indicator of Market value.

2.1.1. Indicators of Liquidity

Liquidity is the ability of the economic entity of the undertaking to pay on time due to its short-term liabilities. In addition to the ability to pay off its outstanding short-term liabilities, the undertaking after that must have sufficient working capital to be able to make a business. Liquidity ratios indicate excess current assets over current liabilities that will remain after total liquidation account of the undertaking.

Liquidity ratios demonstrates the ability of the undertaking to pay outstanding liabilities, while maintaining the necessary scope and structure of working capital and the preservation of good credit standing.

Indicators of liquidity are:

- Current Ratio;
- Quick Ratio;

- Net Working Capital.

Current ratio is obtained by dividing total current assets to total short-term liabilities. It could prove to be like:

$$\text{Current ratio} = \frac{\text{current assets}}{\text{short-term liabilities}}$$

From this equation we conclude that the current ratio shows how much working capital is covered by each euro short-term liabilities and believes that the standard of comparison "2: 1" 2 euros of working capital covers 1 euro obligations. It is an indicator of short-term security that protected the interests of creditors.

The ratio of reduced liquidity enables the analysis of whether the company was able to cover its financial obligations. It is possible to make a very quick conclusion about whether more assets of the undertaking have to sell, or have to find some other solutions, so that the undertaking was unable to pay its outstanding bills.

It's obtained as the ratio of liquid assets and short-term liabilities.

$$\text{Quick ratio} = \frac{\text{liquid assets}}{\text{short-term liabilities.}}$$

The standard for comparison is 1: 1. The value of this ratio below 1 indicates that the company has entered a zone which begins to grow cautious creditors.

Net working capital represents the absolute difference between current assets and short-term funding sources, i.e.: the long-term financing of working capital.

Net Working Capital = Current Assets – Short-term Liabilities

2.1.2. Indicators of Activity

These indicators are used to track the usefulness of resources and cost control, and monitor the adequacy of the use of funds in a given volume of activity. Craft means the period of time necessary for the return on investment in its own cash position.

Comparison of indicators and control activities is of great importance in terms of financial management of the undertaking, as a relation and effects of the investment directly determine the level of liquidity and profitability of the enterprise. Although indicators of activity (turnover ratio) can be defined for each category of business assets of the undertaking, like as: (Žakić-Joksimović & Blagojević-Aksić, 1998).

- Turnover Ratio of Customers;
- Turnover Ratio of Inventory;
- Turnover Ratio of Supplies;
- Turnover Ratio of Fix Assets;
- Turnover Ratio of Turn Assets;
- Turnover Ratio of total Business Funds.



1) *Turnover Ratio of Customers calculated so when revenues from sales division average balance of accounts receivable:*

$$\text{Turnover Ratio of Customers} = \frac{\text{revenues from sales division}}{\text{balance of accounts receivable.}}$$

$$\text{The average days outstanding} = \frac{365}{\text{customer turnover ratio}}$$

$$\text{The average amount of daily sales} = \frac{\text{Net income from realization}}{360 \text{ dana}}$$

$$\text{Period of debt collection} = \frac{\text{The balance of customers at the end}}{\text{The average amount of daily sales}}$$

2) *Turnover Ratio of Inventory can be determined as the ratio of the cost of realized products and the average value of inventories:*

$$\text{Turnover Ratio of Inventory} = \frac{\text{Price of realized productsda}}{\text{The average balance of inventories}}$$

$$\text{Average inventory turnover period} = \frac{365}{\text{The coefficient of inventory turnover}}$$

$$\text{The average period of conversion of inventories} = \frac{\text{Average inventory turnover period}}{\text{Average collection period}}$$

$$\text{Turnover of finished products} = \frac{\text{Cost of goods sold}}{\text{Average total inventories}}$$

$$\text{Turnover of unfinished products} = \frac{\text{The cost of finished goods warehouse submitted}}{\text{Average inventories of unfinished products}}$$

$$\text{Turnover of craft materials} = \frac{\text{Cost of materials submitted in the production}}{\text{Average stocks of materials}}$$

$$\text{Average duration of a craft store} = \frac{\text{number of days in a year}}{\text{Coefficient of turnover supplier}}$$

3) *Turnover Ratio of Supplies is calculated by dividing the net income from sales, the division with the average balances and receivables from customers:*

$$\text{Turnover Ratio of Supplies} = \frac{\text{Net income from realization}}{\text{the average balance of customer}}$$

$$\text{Average accounts} = \frac{360 \text{ days}}{\text{Coefficient of turnover supplier}}$$

4) *Turnover Ratio of Fixed Assets to demonstrate the efficiency of capital investment in a company, and how much capital investment returns revenue:*

$$\text{Turnover Ratio of Fixed Assets} = \frac{\text{Net income from realization}}{\text{Cost of fixed assets}}$$

5) *Turnover Ratio of total Business Funds represents the relative position of net revenues from sales and the average book value of the total business assets:*

$$\text{Turnover Ratio of total Business Funds} = \frac{\text{net sales}}{\text{Total business debt}}$$

2.1.3. Indicators of Financial Structure

The total assets of the undertaking can be funded from various sources, which are the population share ownership on their own and borrowed.

Indebtedness ratios are:

- The ratio of total debt to total assets;
- The ratio of long-term debt to total assets;
- The ratio of long-term debt to equity;
- The ratio of coverage interest, and
- The ratio of total debt.

The ratio of total debt to total assets = $\frac{\text{Borrowed funds}}{\text{Total sources}}$

The ratio of long-term debt to total assets = $\frac{\text{long term debts}}{\text{total assets}}$

The ratio of coverage interest = $\frac{\text{Operating profit}}{\text{Expenditures for interest}}$

The ratio of total debt = $\frac{\text{Operating profit}}{\text{Interest} * \text{Repayment of principal} \times \frac{1}{1-p(\text{income tax})}}$

2.1.4. Indicator of Profitability

Indicators of profitability can be partial and global (synthetic). Indicators of profitability could be:

- The rate of business profit, and
- The rate of net income.

This indication and analysis are making on the basis of income statement.

Other indicators included:

- The rate of return on total assets;
- The net rate of return on total assets, and
- The net rate of return on own assets.

The rate of business profit is the rate that is obtained by placing the relative ratio of business net income and net income from sales.

The rate of business profit = $\frac{\text{Operating profit}}{\text{Net sales}}$

The rate of net profit = $\frac{\text{Net profit}}{\text{Net income from realization}}$

The rate on total assets = $\frac{\text{Operating profit}}{\text{Average assets}}$

The rate on own assets = $\frac{\text{Net profit}}{\text{Average assets}}$

2.1.5. Indicator of Market Value

Indicators of market value are often referred to as indicators of ownership. They are typical of joint stock companies. These indicators are among:

- Net earnings per share;
- The relationship between the market price per share and net earnings per share;
- Ratio of dividend payment;
- Dividend, and
- Accounting value per action.

Net earnings per share is calculated as the relative ratio of net income generated during the financial year and the total number of issued ordinary shares, and this can be shown by the following formula:

Net earnings per share = $\frac{\text{net profit}}{\text{number of common shares}}$

The relationship between the market price per share and net earnings per share jednak is equal to the quotient of market price per share and net income per share.

Ratio of dividend payment is obtained from the relative dividends paid per share and net income per share.

Ratio of dividend payment = $\frac{\text{dividends paid o shareholders}}{\text{net profit per share}}$

Dividend is derived from the relative ratio of dividends per share and the market price per share.

Dividend = $\frac{\text{dividend rate}}{\text{market prace per share}}$

Accounting value per action is obtained from the ratio of own capital and the number of issued ordinary shares.

Accounting value per action = $\frac{\text{total equity}}{\text{number of shares}}$

3. Conclusion

Analytical techniques used to obtain answers about the necessary resources including reports on the sources and use of funds, reports on cash flow and cash budgets. The techniques and methods used to determine the financial condition and performance of the undertaking are financial ratios.

Financial ratios in the financial analysis used to be a good way to determine the general health of the undertaking.

Based on the criteria of information goals we can differentiate ratio analysis and ratio analysis realization. (Stevanović, Malinić & Milićević, 2011)

BUSINESS ADMINISTRATION AND BUSINESS ECONOMICS

Ratio analysis of the situation includes:

- Ratio analysis of liquidity and safety characteristic of the company, and
- Solvency ratio analysis and long-term financial security of the undertaking.

Ratio analysis included:

- Turnover ratio analysis, and management efficiency investments and sources of financing, and
- Ratio analysis of profitability.

There are three main types of comparisons that are used for the assessment of financial ratios numbers: (Cvetković, 2004).

- With its own ratio numbers of undertaking from the past (the time of comparison),
- With the general rules of experience from the past,
- The ratio numbers of other undertakings or sections in a related branch (cross-comparison).

Methods of financial analysis and their impact on the quality of decision-making should be accurate and transparent.

References

- Avakumović, J. (2014). *Finasijski menadžment/Financial management*. Beograd: DTM.
- Benković, S. (2006). *Operativno finasijsko poslovanje – priručnik/Operational financial operations*. Beograd: FON.
- Bojović, P. (2010). *Poslovne i berzanske finasije/Business and Finance stock exchange*. Beograd: Alfa univerzite.
- Cvetković, N. (2004). *Analiza poslovanja preduzeća/The analysis of business enterprises*. Beograd: Megtrend.
- Krasulja, D., Ivanišević, M. (2007). *Poslovne finasije/Financial Poslovne*. Beograd: Ekonomski fakultet.
- Mikerević, D. (2005). *Strateški finasijski menadžment/Strategic Financial Management*. Banja Luka.
- Ruth, E.G. (2003). *Analyzing Financial Statements*. Washington: American Bankers Association.
- Stevanović, N.; Malinčić, D. & Milićević, V. (2011). *Upravljačko računovodstvo/Management Accounting*. Beograd: Ekonomski fakultet.
- Žakić-Joksimović, N. & Blagojević-Aksić, V. (1998). *Analiza finasijskih performansi preduzeća/Analysis of the financial performance of companies*. Beograd: Grafoslg.