

## **ASSET MANAGEMENT RATIOS**

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**ABSTRACT:** *The purpose of the paper is to present the main financial ratios which provide a picture about company's use of its assets in order to generate revenues or earnings. Discussion is focused on: assets management ratios (also known as asset turnover ratios or asset efficiency ratios), which help us to measure the capacity of the company to use its assets and capital efficiently. These are financial ratios concerning the assets management and help financial statement users to evaluate levels of output generated by assets. Also, will try to answer at the following main questions: What asset management ratios analysis tells us? What the users of these needs to know?*

**KEY WORDS:** *assets management, ratio, efficiency, asset efficiency ratios, turnover ratios.*

**JEL CLASSIFICATION:** *G30, M21.*

### **1. INTRODUCTION**

One of the best indicators of a business's potential in order to provide long-term growth is the company's financial health. To assess financial health of a company, a usefull tool is financial statement analysis.

Financial statements provide useful information regarding the financial position and performances of an entity, the success of its operations, the policies and strategies of managerial team. Information provided by the financial statement analysis are useful to a wide range of users, helping in the decision making process: owners, investors, managers, creditors, government regulators.

One of the most important attributes that reveal the usefulness of the information provided by financial statements is a qualitative features of information, specifically - relevance (the information must be relevant in order to satisfy informational user's needs).

Financial statement is considered the raw material of financial analysis and it is an helpful technique which have no significance only by reading the financial statement,

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being necessarily to calculate financial ratios, interpreting those financial ratios, and also, by using other techniques of financial analysis. Financial statements analysis and its tools and techniques provide messages that are not revealed simply by reading the financial statements (Griffin, 2009).

Financial statements are the output of an accounting period and in the same time became an input of the financial analysis and the decision-making process.

Financial ratios, usually, show financial relationship by dividing one financial item by another, and are an important tool for management.

Ratios are a management tools which allow managers to assess performances, express business trends, monitor entities activity, and helps in the decision making process, for making strategic and operating decisions.

Financial ratios provide meaningful information about a company, a business, and are grouped into different categories, including asset management ratios.

Asset management ratios (also known as asset turnover ratios or asset efficiency ratios) measure the ability of assets to generate revenues or earnings. Asset management ratios analysis is important and helpful, and allows us to understand the overall level of efficiency of which a business is performing.

## 2. ASSET MANAGEMENT RATIOS IN FINANCIAL ANALYSIS

### 2.1. General framework

Asset management ratios tell us how well a company is managing its assets, and help financial statement users to evaluate levels of output generated by assets.

Speed and time are important aspects of asset management ratios, and also, it is recommended that after their calculation to compare those ratios with a standard.

Asset management ratios are useful, especially when these are compared with standards taking into account industry averages.

Generally, all these asset management ratios can be express in number of rotation of one item through turnover (how quickly an item is generated sales), or in terms of the number of days needed by one item to generate sales.

$$\text{Number of rotation} = \frac{\text{Turnover}}{\text{Element}} \quad (1)$$

$$\text{Days of one rotation} = \frac{\text{Element}}{\text{Turnover}} \times T \quad ; T = \text{time} \quad (2)$$

When calculating these ratios, it is recommended that the elements from financial statement to be considered at an average value in order to avoid random static values (too high or too low).

The turnover incorporates through sales all the elements necessary to cover operating expenses, the payment of debts, remuneration of shareholders and self-financing resources.

Time (T) refers to the period of time and it is expressed in number of days from the analysed period of time (month – 30 days, semester -180 days, year – 365 days, et.)

Higher asset management ratios are preferable, because a high level of asset turnover ratios mean that the entity is utilizing its assets efficiently to produce sales. The higher is the asset turnover ratios, the more sales the entity is generating from its assets.

Although it is recommended to take into consideration the activity sector of the entity, because what is considered to be high for one sector (field of activity), may be low for another sector. Also, it is not recommended to compare asset turnover ratios of different activity sectors, because they may have different requirements with regard to assets.

Low asset management ratios indicate inefficient utilization of assets, and mean that the entity is not managing its assets wisely. It is possible that entities registered low level of asset turnover ratios to operate below their full capacity.

Asset management ratio analysis is used by financial analysts and managers to assess company performance and status, don't mean anything when they are used singularly. It is important to monitor a group of ratio over time and to make a comparative analysis (a specific ratio for a group of companies in a field of activity) and a relative analysis by conversion of all financial statement items to a percentage of a given item.

## 2.2. Understanding the categories of asset management ratios

The main categories of asset management ratios which have to be considered in financial analysis are:

- Total Assets Turnover;
- Long term Assets Turnover;
- Current Assets Turnover;
- Inventory Turnover
- Inventory Period;
- Receivables Turnover
- Average Collection Period;
- Net Working Capital Turnover.

*Total assets turnover* is an overall activity measure, relating the turnover (sales revenue) to the total assets that the company has used to generate that sales, reflecting the efficiency of assets utilization, or otherwise how well the entity's management is using its total assets to generate sales.

$$\text{Total Assets Turnover} = \frac{\text{Turnover}}{\text{Total Assets}} \quad (\text{times}) \quad (3)$$

When calculating this ratio it is recommended to apply an average value of total assets – answer to the question how many sales are generated by each monetary unit of total assets). A higher level is preferable.

This ratio also, can be expressed in days, reflecting the average time to convert assets in sales.

$$\text{Total Assets Turnover in days} = \frac{\text{Total Assets}}{\text{Turnover}} \times 365 \quad (\text{days}) \quad (4)$$

A favourable evolution regarding these ratios is known as acceleration of total assets turnover, which means an increase of total asset turnover in times, and a decreased trend of the total asset turnover in days. Otherwise, it is registered a decreasing trend of total assets turnover in times and simultaneous an increasing trend of total assets turnover in days, the phenomenon is known as a slowdown of total assets turnover.

Total assets are split in long term assets and current assets, so we can token about the ratios which take into consideration that element (component part), and could be built others two activity ratios, as follow: fixed assets turnover (also expressed in times and in days) and current assets turnover (in times and in days).

*Long term assets turnover* show how well the company is using its long term assets to generate sales, and it is calculated by dividing turnover to long term assets. The higher is the level of the long term assets turnover ratio the better. Also this ratio could be express in days (long term assets turnover in days)

$$\text{Long term Assets Turnover} = \frac{\text{Turnover}}{\text{Long term assets}} \quad (\text{times}) \quad (5)$$

$$\text{Long term Assets Turnover in days} = \frac{\text{Long term Assets}}{\text{Turnover}} \times 365 \quad (\text{days}) \quad (6)$$

*Current assets turnover* show how well the company is using its current assets to generate sales, and it is calculated by dividing turnover to current assets Also, regarding the current assets there can be split, and we can calculate similar ratio such as inventory turnover, or receivable turnover.

$$\text{Current Assets Turnover} = \frac{\text{Turnover}}{\text{Current Assets}} \quad (\text{times}) \quad (7)$$

$$\text{Current Assets Turnover in days} = \frac{\text{Current Assets}}{\text{Turnover}} \times 365 \quad (\text{days}) \quad (8)$$

If the current assets turnover ratio is accelerated, the entity needs for investments, to keep up the same level of activity, is lower. If the current assets turnover ratio is slowing down the entity needs for investments, to keep up the same level of activity, is higher.

*The inventory turnover ratio* shows how effective the entity is managing inventory. Inventory is a very important asset that must to be managed. The inventory turnover ratio is one of the most important asset management or turnover ratios; specially in the case of entities selling physical products, it is the most important ratio This activity ratio could be express also through cost of goods sold in a time period divided by the average inventory level during a period.

$$\text{Inventory Turnover} = \frac{\text{Turnover}}{\text{Average Inventory}} \quad (\text{times}) \quad (9)$$

This signifies the number of times inventory is sold and restocked each year. If the level is high, entity may be in danger of stockouts. If the level is low, entity may wach out for obsolete inventory.

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}} \quad (10)$$

*Inventory Period*, known also, as Days' Sales in Inventory means how many days, on average, it takes to sell inventory and it is calculated by dividing average inventory level to turnover, being expressed in days.

$$\text{Inventory Period} = \frac{\text{Average Inventory}}{\text{Turnover}} \times 365 \quad (\text{days}) \quad (11)$$

$$\text{Inventory Period} = \frac{\text{Average Inventory}}{\text{Cost of Goods Sold}} \times 365 \quad (\text{days}) \quad (12)$$

The value of the inventory is collectd from entity's latest balance sheet. The cost of goods sold is taken from the income statement. This ratio measures the company's financial performance for both the owners and the managers.

Inventory turnover ratio varies from a field of activity to another, but generally, a lower number of days' sales in inventory is better than a higher one.

**Receivable turnover** indicates how quickly the company collects his accounts receivables being calculated by dividing annual credit sales to accounts receivable. Receivable turnover ratio is recommended to be considered simultaneous with an average collection period to give the entity' owner a complete perspective about the state of the accounts receivable.

$$\text{Receivable Turnover} = \frac{\text{Annual Credit Sales}}{\text{Accounts Receivable}} \quad (13)$$

**Average Collection Period.** The receivable turnover is expressed in terms of the number of days that credit sales remain in accounts receivable before they are collected. This number of days is known as the average collection period.

$$\text{Average Collection Period} = \frac{\text{Accounts Receivable}}{\text{Annual Credit Sales}} \times 365 \quad (14)$$

Generally, it is better a higher receivables turnover ratio, because it means that the entity are collecting credit accounts on a timely basis. If the receivables turnover

ratio is low, entity need to take care of the credit and collections policy in order to be sure that they are on target.

These ratios can be used to determine whether the company is having trouble collecting on sales it provided customers on credit. Average collection period helps monitor the effectiveness of credit management policy and also, helps the company budget for cash flows.

*Net Working Capital Turnover ratio* - the relationship between turnover and working capital, show how effectively working capital is being used in terms of the turnover.

$$\text{Net Working Capital Turnover} = \frac{\text{Turnover}}{\text{Net Working Capital}} \quad (15)$$

Net working capital is used to assess current financial stability of the entity and entity's liquidity.

In order to calculate the value of net working capital there are two methods, and normally should have a positive value:

- Net working capital signifies an excess of current assets over the current liabilities:

$$\text{Net Working Capital} = \text{Current Assets} - \text{Current Liabilities} \quad (16)$$

- Net working capital signifies a part of permanent capital used to finance current assets:

$$\text{Net Working Capital} = \text{Permanent Capital} - \text{Long Term Assets} \quad (17)$$

Net Working Capital Turnover ratio is an asset management ratio that provide a global picture for the entity's owner, showing the effectiveness of management strategy. It measures how hard working capital is "working" for the entity. Working capital shows what left after the entity pays its short term obligations. There is no ideal values regarding this ratio, it is desirable to be a sufficient amount, and the higher is the better.

### 3. CONCLUSIONS

Financial analysis provides the information necessary for decision making, and also helps both the external and internal users of these. The results of the financial analysis are dependent on the quality, accuracy, relevance and effectiveness of the information collected, and processed. Essential sources of information for financial analysis are financial statements, which are considered the raw material of financial analysis.

Information collected from the components of the financial statement (balance sheet and income statement), are used to determine also the assets management ratios.

Financial ratios are a useful tool in the decision making process; ratio indicate trends but are more valuable on a comparative base, than are interpreted in individual circumstances.

Asset management ratios provide important insights into different financial areas of the entity and its highlights the strengths and weaknesses. Asset management ratios are the key indicators in order to analyzing how effectively is entity's activity, and how efficiently the entity is managing its assets to produce revenues through sales.

## REFERENCES:

- [1]. **Achim, M.; Borlea, S.N.** (2017) *Ghid pentru analiza-diagnostic a stării financiare*, Editura Risoprint Cluj Napoca
- [2]. **Bătrâncea, M.** (2006) *Raportări financiare*, Editura Risoprint, Cluj Napoca
- [3]. **Bragg, S.M.** (2007) *Business Ratios and Formulas. A Comprehensive Guide*, John Wiley & Sons Inc, USA
- [4]. **Buglea A.; Lala Popa, I.** (2009) *Analiza economico-financiară*, Editura Mirton, Timișoara
- [5]. **Bușe, L.; Siminică, M.; Simion, D.** (2010) *Analiza economico-financiară*, Editura Sitech, Craiova
- [6]. **Colasse, B.** (2009) *Analiza financiară a întreprinderii*, Editura Tipo Moldova, Iași
- [7]. **Gheorghiu, Al.** (2004) *Analiza economico-financiară la nivel microeconomic*, Editura Economică, București
- [8]. **Griffin, M.P.** (2009) *MBA Fundamentals. Accounting and Finance*, Kaplan Publishing, New York
- [9]. **Ebbers, G.; Flower, J.** (2002) *Global Financial Reporting*, Palgrave, New York
- [10]. **Helfert, E.** (2006) *Tehnici de analiză financiară*, BMT Publishing House, București
- [11]. **Hristea, A.M.** (2013) *Analiza economică și financiară a activității întreprinderii. De la intuiție la știință*, Editura Economică, București
- [12]. **Lala Popa, I.; Miculeac, M.E.** (2009) *Analiză economico – financiară. Elemente teoretice si studii de caz*, Editura Mirton, Timisoara
- [13]. **Mărgulescu, D.; Vâlceanu, Ghe.** (2007) *Analiză economico-financiară*, Editura Fundației România de Măine”, București
- [14]. **Mihai, I. (coord.)** (1997) *Analiza situației financiare a agenților economici*, Editura Mirton, Timișoara
- [15]. **Monea, M.** (2012) *Analiză financiară. Noțiuni teoretice și studii de caz*, Editura Sitech, Craiova
- [16]. **Monea, M.** (2012) *Analiza economico-financiară a activității firmei*, Editura Universitas, Petroșani
- [17]. **Monea, M.** (2013) *Information System of the Financial Analysis*, Annals of the University of Petroșani, Economics, vol.13(2), pp. 149-156
- [18]. **Monea, M.** (2009) *Financial Ratios – Reveal How a Business is Doing?* Annals of the University of Petroșani, Economics, Vol 9(2), pp. 137-144
- [19]. **Monea, M.** (2010) *Activity Ratios Analysis*, Agricultural Management, Lucrari Stiintifice Seria I, Management Agricol, Vol. 12, Issue 3
- [20]. **Needles, B.E.Jr.; Powers, M.; Crosson, S.V.** (2007) *Financial and Managerial Accounting*, Houghton Mifflin College, USA
- [21]. **Pantea, I.M.** (2017) *Analiza economico – financiară instrument al managementului întreprinderii*, Editura Universității de Vest, Timișoara
- [22]. **Popescu, D.D.** (2009) *Enterprise Analysis*, Editura ASE, București
- [22]. **Petrescu, S.** (2010) *Analiză și diagnostic financiar-contabil. Ghid teoretico-aplicativ*, Editura CECCAR, București
- [23]. **Robu, V.; Anghel, I.; Șerban, C.** (2014) *Analiza economico-financiară a firmei*, Editura Economică, București

- [24]. Ștefea, P. (2002) *Analiza rezultatelor întreprinderii*, Editura Mirton, Timișoara
- [25]. Țiriulnicova, N.; Muntean, N. (2017) *Financial Statement Analysis*, Publishing Office ASEM, Chișinău
- [26]. Vâlceanu, Ghe.; Robu, V.; Georgescu, N. (2005) *Analiză economico-financiară*, Editura Economică, București
- [27]. White, G.; Sondhi, A.; Fried, H. (2001) *The Analysis and Use of Financial Statements*, Second Edition, Wiley & Son, USA
- [28]. Walsh, C. (1996) *Key management ratios*, Pitman Publishing
- [29]. \* \* \*, <https://www.thebalancesmb.com>
- [30]. \* \* \*, <https://www.readyratios.com/>