Mendel University in Brno Faculty of Business and Economics

Evaluation of Financial Situation of Selected Company

Bachelor Thesis

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Vote of Thanks

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Abstract

Hrušková, D. Evaluation of Financial Situation of Selected Company. Bachelor thesis.

Brno: Mendel University in Brno, 2015

The aim of this bachelor thesis is to evaluate the financial position of chosen company, through the financial analysis during the five years period from 2009 to 2013. The thesis is divided into two main parts. The first part, the theoretical research, explains all important terms connected with the financial analysis of the company. The second – practical part, introduces the analyzed company and provides an evaluation of the financial situation of the company based on the data from the financial statements mostly balance sheet and profit and loss statement. The thesis utilizes horizontal and vertical analysis financial ratios analysis as well as bankruptcy model analysis.

Keywords

Financial analysis, financial statements, horizontal analysis, vertical analysis, ratio analysis, bankruptcy models.

Abstrakt

Hrušková, D. Zhodnotenie finančnej situácie vybranej spoločnosti. Bakalárska práca. Brno: Mendelova Univerzita v Brne, 2013.

Cieľom tejto bakalárskej práce je zhodnotenie finančnej situácie vybranej spoločnosti, prostredníctvom finančnej analýzy, počas obdobia piatich rokov od r. 2009 do r. 2013. Táto práca je rozdelená do dvoch častí. Prvá teoretická časť oboznamuje so základnými termínmi spojenými s finančnou analýzou. Druhá – praktická časť stručne predstavuje analyzovanú spoločnosť a hodnotí jej finančnú situáciu na základe informácií z finančných výkazov najmä súvahy a výkazu zisku a strát. Práca využíva horizontálnu, vertikálnu, pomerové analýzy a analýzu bankrotnými modelmi.

Kľúčové slová

Finančná analýza, finančné výkazy, horizontálna analýza, vertikálna analýza, pomerová analýza, bankrotné modely.

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1 INTRODUCTION

If the company want to be successful on today's market is necessary to keep developing their abilities, improving performance and be one step in front of the competitors. The main role of the financial analysis in the business finance is reinsurance suitable structure of financial sources and their allocation as well as in resolving other financial issues within the company. Financial analysis helps to unveil causalities which have led to current state of business finance thus current financial situation of the company. Therefore the financial analysis represents the important area of the company's financial management.

According to Brigham the third key attribute of successful company is to have enough funding to perform their plans and support their operations. Most companies need cash to purchase land, buildings, equipment, and materials. Companies can reinvest a portion of their earnings as well. The answer if company has enough founding for financing its activity is hidden in financial analysis.

The starting point for the analysis of the financial situation are the data obtained from the accounting statements, which are processed and financial indicators are count and results are evaluated, subsequently the final assessment of the financial situation of the company is done. So there is an indispensable role of accounting in the financial analysis.

The aim of this bachelor thesis is evaluation of the financial situation of the selected company and prevail the bankruptcy risk, and offer any options and recommendations for improvement. For this thesis was chosen the company HRT, s. r. o., which is the construction company in Slovakia where I have done my practical training.

2 OBJECTIVES AND METHODOLOGY

The aim of this bachelor thesis is to evaluate the financial situation of company HRT, s. r. o. through the financial analysis and to suggest any possible options for improvements of its structure or operation. The observed period is from the year 2009 to 2013. The balance sheet and profit and loss statement are used for analyzing the past and current financial situation of the company.

The structure of this thesis is divided into two main parts. The first part, the literature review, describes all important terms connected with making and understanding the financial analysis. It concentrates on the definition of financial analysis, users of financial analysis and the sources used for providing the necessary information about the company. Subsequently are describes the several methods of making the financial analysis.

The second one is practical part, where the knowledge collected from the theoretical part are utilized. This section contain of the brief introduction of the analyzed company, calculation and evaluation of the financial indicators of the company based on the data collected from the financial statements. For the evaluation of suitable structure of the assets and equity was used horizontal and vertical analysis of balance sheet. Profit and loss statement was considered by horizontal analysis in absolute and relative changes. Subsequently the financial ratios was used to analyzed liquidity, solvency, efficiency and profitability of the company. Last calculations concerned the prediction of the future bankruptcy, for this evaluation was used Altman and Taffler indexes. This section also includes important part dedicated to suggested improvements to financial situation of the company HRT, s. r. o.

3 LITERATURE REVIEW

This part of the thesis explain all term and objectives connected with financial analysis and the ways how the analysis can be done. The theory helps us to understand the importance of financial analysis for the company as well as the external users.

3.1 Financial Analysis

The origin of the financial analysis is connected with the formation of the money. At the beginning it was simple handwrite analysis of the salesmen made for their personal needs. Over time this analysis passed thought progress at structural and also qualitative level but the principles stays practically the same. The financial analysis, as is known in the present, is modern method which was created in the USA. In this area the term financial analysis came into practice after 1989 with the creation of the market economy. (Kotulič, 2007)

The specification of analysis as a general method of knowledge in the relation to the examination subject is implemented as analysis of given object. If the object of the analysis are economic processes than we are talking about economic analysis. If we are making the economic analysis in which in the main role are money and time, it is the financial analysis.

Under the term of the financial analysis in overall we can visualize analysis of any economic action, where are in the main role money and time, i.e. objective of the analysis are different actions. The analysis can be done on the micro level, inside the company, or on the macro level, analysis of the whole industry, sector. In the case of the company the financial analysis is meant omnibus analysis of the financial situation of the company. (Kovanicová, 2005)

The financial analysis is oriented to complex evaluation of financial situation of the company. Helps uncover whatever the company is profitable, if it have suitable capital structure, effective usage of the assets, if is able to payback their liabilities at the time and many other significant facts. The continuous knowledge of the current situation of the company helps managers to make decision connected with obtaining financial sources, with allocation unused cash, with profit distribution and many other situations. (Knápková, 2010) The objective of financial statement analysis at all is to examine past and current financial data so that a company's performance and financial position can be evaluated and future risks and potential can be estimated. Financial statement analysis can yield valuable information about trends and relationships, the quality of a company's earnings, and the strengths and weaknesses of its financial position. (Woelfel, 1991)

3.2 The Objectives of the Financial Analysis Process

Due to the variety of reasons for performing financial analysis, the numerous available techniques, and the regularly substantial amount of import data, it is important that the analytical approach be modified to the specific situation. Prior to embarking on any financial analysis, the analyst should clarify purpose and context, and clearly understand the following:

What is the purpose of the analysis? What questions will this analysis answer?

What level of detail will be needed to accomplish this purpose?

What data are available for the analysis?

What are the factors or relationships that will influence the analysis?

What are the analytical limitations, and will these limitations potentially impair the analysis? (Robinson, 2009)

3.3 Users of Financial Statements

Information concerning the financial situation of the company are object of interest not just for the managers but also for other subjects which are direct or indirect contact with the company. (Kislingerová, 2010)

Classification of Users of Financial Statements

The financial statements are used by different categories of people for different purposes. The various users of financial statements are classified and describe in details below.

Internal Users

The internal users of financial statements are individuals who have direct relation with the organization. They may include:

Managers

For the smooth operation of the organization, the managers need the financial reports essential to make business decisions, to provide a more comprehensive view of the financial position of an organization. Financial analysis is performed with the information sources from the financial statements which are not available to external users. The financial statement is used to formulate contractual terms between the company and other organizations. (Kotulič, 2007)

Employees

The financial reports or the financial statements are of immense use to the employees of the company for making collective bargaining agreements. Such statements are used for discussing matters of promotion, rankings and salary hike. (finance.mapsofworld.com)

External users

External users are not involved in the operations of the company but hold some financial interest to the given company. The external users consist of:

Investors

Investors are providers of capital for the company, they follow the information about the financial situation for two main reasons. The first one is gain the sufficient amount of information needed for making the decision about potential investments in company. The second reason is the find out how the previous investments was used and information about the profitability of provided resources.

Financial Institutions

The users of financial statements are also the different financial institutions as a banks and other lending institutions who decide whether to help the company with working capital or to issue debt security to it.

Government

The financial statements of different companies are used by the government to determine whether the tax paid by them is accurate and is in line with their financial strength. They use this information for various statistic researches and also for allocation of financial subsidies.

Vendors

Vendors are representing by suppliers on the one side and customers on the other side. The vendors who extend credit to a business require financial statements to obtain the creditability of the business.

General Mass and Media

The common people as well as media also make part of the users of financial statements. (Kotulič, 2007)

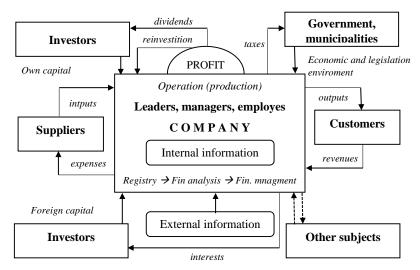


Fig. 1- Users of the financial analysis and their relations with company

3.4 Information sources for financial analysis

Essential information sources for financial analysis are financial statements of the company, as Balance Sheet, Profit and Lost Statement, Cash Flow Statement and notes to financial statements. Precision of the financial analysis depend on the quality of the information sources.

3.4.1 Balance Sheet

Balance Sheet is the basic statement of any company, this document include information about assets and equity. Balance Sheet is always made on particular day and side of assets and side of equity must be equal.

	Assets	Equity			
A. Total assets		А.	Owner's equity		
В.	Fixed assets	A.I.	Register capital		
B.I.	Intangible fixed assets	A.II.	Capital funds		
B.II.	Tangible fixed assets	A.III.	Reserve funds		

B.III.	Financial fixed assets	A.IV.	P/L of previous years	
		A.V.	P/L of current year	
С.	Current assets	В.	Liabilities	
C.I.	Inventories	B.I.	Provisions	
C.II.	Long-term receivables	B.II.	Long-term payables	
C.III.	Short-term receivables	B.III.	Short-term payables	
C.IV.	Short-term financial assets	B.IV.	Bank loans	
D.	Accruals	С.	Accruals	

Tab. 1 - Structure of the Balance Sheet

Balance sheet is the statement where are summarize all information about assets and liabilities, thus there are characterize the conditions in which the reproduction process was realized. On the basis of the structure of assets is analyze and evaluated especially liquidity and ability of the company to repay their liabilities. Structure of the equity is basis for analysis of indebtedness. (Zalai, 2006)

Assets are divided according to time of usability, alternatively the speed and difficulty of conversion assets into the cash for company to be able to pay theirs payables. Assets are economical resources which are results of past activities with expectation of future growth of economic benefits. (Kotulič, 2007)

Financial structure of the company is characterize in the side of equity and includes the financial sources the company was financed by. (Knápková, 2010)

Liabilities are a vital aspect of a company's operations because they are used to finance operations and pay for large expansions. For example, the outstanding money that a company owes to its suppliers would be considered a liability. Outside of accounting and finance, this term refers to any money or service that is currently owed to another party. One form of liability, would be the property taxes that a homeowner owes to the municipal government. Current liabilities are debts payable within one year, and long-term liabilities are debts payable over a longer period than one year. (financial-dictionary.thefreedictionary.com)

The main weaknesses of the accounting statement Balance-Sheet when taking the data for the financial analysis are especially the following:

- Balance-Sheet does not show exactly the value of the company. Accounting standards usually use the original acquisition price as the basis to evaluate the assets; the original acquisition price does not reflect the present value of the company, even though it is regularly changed by amortizations.
- Depreciations, which reduce the value of the property with respect to its wear, represent imprecise expression of the real process of wearing. In addition, companies reach different residual prices due to the different methods of depreciation used as a part of their tax policy; although the acquisition price might have been the same.
- Inventory as a part of floating asset of the company is not priced with up-to-date prices but rather its original acquisition price, which changes data describing their marketability and also the total current value of the company. At the same time, companies can choose the method of evaluation of its inventory, the price of which can be changed by this choice. (Živělová, 2013)

Most of the above mentioned drawbacks of Balance-Sheet are based on the evaluation and they do represent a brief list of examples. Price plays a very important role because it should take the course of inflation, technical development, etc. into consideration. That is why in financial decisions based on financial analysis reproductive acquisition price should be considered; however, it is usually not so due to difficulties with its specification.

3.4.2 Profit and Loss Statement

- + Sales revenue
- Cost of goods sold
 - **COMERCIAL MARGIN**

Production

- + Operating revenues
- Operating costs
- OPERATING ECONOMIC RESULT
- + Financial revenues
- Financial expenses
- ECONOMIC RESULT FROM FINANCIAL OPERATIONS
- Income tax from ordinary activities
- ■ ECONOMIC RESULT FROM ORDINARY ACTIVITIES
 - + Extraordinary revenues
 - Extraordinary Expenses
 - Tax from extraordinary activities
 - EXTRAORDINARY ECONOMIC RESULT
- ■ ECONOMIC RESULT IN ACOUNTING PERIOD

Fig. 2 Structure of Profit and Loss Statement

Profit and loss statement is a detailed calculation of the money a company makes or loses over a specific time period. The profit and loss statements are prepared monthly, quarterly and annually, but never for a period longer than one calendar year. When profit and loss statements are prepared, accountants separate sales and other income totals along with totals of various expenses from internal accounting records. Once expenses are calculated, they are deducted from income and either a profit or loss is shown (Marinič, 2006).

Revenues can be define as money which company gain from operating activities in given accounting period regardless of encashment time. Conversely the expenses represent the sum of money which company spend to obtain profit in given accounting period even if the repayment was not realized in the same period. (Knápková, 2010)

The main drawbacks of Profit and Loss Statement are especially the following when gathering data for financial analysis:

• The Statement is focused on computation of profit as the difference between returns and costs of the company. Profit, however, does not equal to cash made

by the company in the given period. It is a mere accounting quantity, not a real cash income.

- The Statement is set on the accrual basis, i.e. receipts for sold products or services include receipts paid immediately in cash and also credit sales to customers. On the contrary, receipts do not include collection of payments from credit sales realized in previous accounting periods.
- Similar situation relate to costs as well. Costs in the actual accounting period include items which were not really paid in the given accounting period even though they are related to the actual accounting period.
- Extraordinary items appeared in Profit and Loss Statement are not included in the common period results; they can distort development tendencies used for further decision making. That is why they should not be considered by making the financial analysis.
- For the purpose of the company's financial management it is necessary to adapt input data collected from accounting statements. Various inter-company accounting summaries and outlines, internal company's directives, predictions of their own financial analysts, conclusions of budget inspections, etc. should be included as an information sources taken to the financial analysis. (Živělová, 2013)

3.4.3 Cash Flow Statement

Cash flow statement is statement informing about revenues and expenses of the company and their differences. So this statement also characterize the processes and results of reproduction process of the company. Nature of the cash flow statement is monitoring the changes in the cash. This statement explain the increase and decrease in cash and the reasons why is it happening according to different categories. (Zalai, 2006)

The cash and enough money at the bank account are more significant parameter than profitability for most of the small and medium size companies. If the company do not made a profit in one year, it do not put the company into the danger immediately. Otherwise if the company do not have enough money for current operations, it could have the negative impact on the existence of the company. Cash flow is rightly considered as very significant indicator of firm's succession. (Pavelková, 2010)

Cash flow statement can be done in two ways:

Direct method - consists in the reporting of the main groups of gross incomes and expenses in relevant activity.

Indirect method – is used only for operating activity cash flow. This method is based on the principle that the economical result from ordinary activity before tax is adjusted by influence of no cash items, changes in inventories, receivables and other items from investment and financial activities related to operating activities. (Kotulič, 2007)

Indeed, the company's cash position as reported on its balance sheet is affected by a great many factors, which include the following.

- Noncash adjustments to net income. To calculate cash flow, it is necessary to adjust net income to expose noncash revenues and expenses, such as depreciation and deferred taxes.
- 2. **Changes in working capital**. Increases in current assets other than cash decrease cash, whereas decreases in these accounts increase cash. Therefore, increases in current liabilities such as accounts payable increase cash, whereas decreases in current liabilities decrease cash.
- 3. **Investments**. If a company invests in fixed assets or short-term financial investments, this will moderate its cash position. On the other hand, if it sells some fixed assets or short-term investments, this will increase cash. (Brigham, 2009)

3.5 Qualitative Characteristics of Financial Statements

According to Robinson qualitative characteristics flowing from the central objective of providing a fair presentation of information that is useful to decision makers, the Framework elaborates on what constitutes usefulness. The Framework identifies four principal qualitative characteristics that make financial information useful: understandability, relevance, reliability, and comparability.

Understandability

Understandability of information is defined in terms of who should be able to understand it. The Framework specifies that the information should be readily understandable by users who have at least basic knowledge of business, economic activities, and accounting.

Relevance

Relevance of information can be understand by whether the information influences economic decisions of users, helping them to evaluate past, present, and future events, or to confirm or correct their past evaluations. Relevant information is detailed sufficiently to help users evaluate the risks and opportunities of a company. In choosing the level of detail to present, a criterion of materiality is used. Materiality means that omission or misstatement of the information could make a difference to users' decisions.

Reliability

Reliable information is free from information error and bias. It is information that a user can depend upon to represent a company's financial situation faithfully and completely. Reliable information also reflects economic reality, not just the legal form of a transaction or event. The following factors contribute to reliability:

- Faithful representation
- Substance over form
- Neutrality
- Prudence
- Completeness.

Comparability

Information should be presented in a consistent method over time and in a consistent method between entities to enable users to make significant comparisons. (Robinson, 2009)

3.6 Methods of Financial Analysis

For the financial statement analysis are used two basic technics of examination, the absolute and percentage analysis. The basis of both technics are absolute indicators, i.e. balance and flow values, which create the content of the accounting statements. (Vochozka, 2011)

3.6.1 Horizontal Analysis

Financial statements analysis involves comparisons of chosen related items in different time periods. Such comparison or establishing of relationship may be based on financial statements of a company. In several countries are horizontal analysis done for every 5 even 10 years and there are called annual report. Calculating absolute changes requires to subtract the base figure from the current figure. Expressing changes with percentages requires to divide the base figure by the current figure, and multiply by 100. It may take the following two forms:

- a) comparative financial statement analysis
- b) trend analysis.

Absolute change = Current year balance - Prewious year balance

 $Percentage \ change = \frac{Current \ year \ balance - Previous \ year \ balance}{Previous \ year \ balance} \times 100$

3.6.2 Vertical Analysis.

Analysis of financial data based on relationship among items in a single period of financial statement is called vertical analysis. This analysis allow recognize and evaluate adequacy of assets and equity. Various assets can be expressed as percentage of total assets. From the portion of the current and fixed assets is possible to estimate the usability of the assets in the company. If there is "low" in one part it means that the second one is not used sufficiently. (Vlachynský, 2006)

3.6.3 Financial Ratio Analysis

Financial ratios are mathematical comparisons of financial statement accounts or categories several companies, respectively with the indicator of relevant branch. These relationships between the financial statement accounts help investors, creditors, and internal company management understand how well a company is performing and areas which need improvement. Financial ratios are the most common tools used to analyze a company' financial situation. Since a ratio is simply a mathematically comparison based on proportions, it means that big and small companies can be use ratios to compare their financial situation. In a sense, financial ratios don't take into consideration the size of a company or the industry. Ratios allow us to compare companies across industries, to identify their strengths and weaknesses. (Zalai, 2006)

Financial ratios are often divided into five main categories:

- Liquidity
- Solvency
- Efficiency
- Profitability
- coverage

3.6.3.1 Liquidity Ratios

Liquidity is used in two meanings which are very closely linked. The first, liquidity ratios determine the ability of a company to pay off its current liabilities as they become due as well as their long-term liabilities as they become current. In other words, these ratios are expression of the cash levels of a company and the ability to turn other assets into cash to pay off liabilities and other current obligations. (Šlosár, 1992)

Liquidity is not only a measure of how much cash a company has. It is also an indicator of how easily it will be for the company to raise enough cash or convert assets into cash. Assets like accounts receivable, trading securities, and inventory are relatively easy to convert into the cash in the very short time period for most of the companies. Then, all of these current assets is insert into the liquidity calculation of a company. (Vlachynský, 2006)

Current Ratio

The current ratio is a liquidity and efficiency ratio that measures a firm's ability to pay off its short-term liabilities with its current assets. The current ratio is an important measure of liquidity because short-term liabilities are due within the next year.

$Current Ratio = \frac{Current Assets}{Current Liabilities}$

This ratio expresses a firm's current obligations in terms of current assets. So a current ratio measure how many times the current assets cover the current liabilities of the company. In practice it means, how many times was the company able to satisfy a creditor, in case of conversion all of the current assets into the cash. It is very difficult to determine the optimal value of current ratio. In according to average strategy of working capital management the current ratio should be between 1,6 and 2,5. A higher current ratio is always more favorable than a lower current ratio because it shows the company can more easily make current debt payments. The current ratio would not decrease under value 1. (Vochozka, 2011)

Quick Ratio

The quick ratio is a liquidity ratio that measures the ability of a company to pay its current liabilities when they come due with only quick assets. Quick assets are current assets that can be converted to cash within 90 days or in the short-term. Cash, cash equivalents, short-term investments or marketable securities, and current accounts receivable are considered quick assets. A company with a quick ratio of 1 means that quick assets equal current assets. This also shows that the company is able to pay off its current liabilities without selling any long-term assets. (Zalai, 2006)

Quick Ratio

```
= \frac{Cash + Cash Equivalents + Short Term Investments + Current Receivables}{Current Liabilities}
```

$$Quick Ratio = \frac{Total Current Assets - Inventory - Prepaid Expenses}{Current Liabilities}$$

Cash Ratio

The cash ratio is a liquidity ratio that measures a firm's ability to pay off its current liabilities with only cash and cash equivalents. The cash ratio the most rigorous from the liquidity ratio because assesses to pay off current liabilities in given time. In the numerator are only cash and cash equivalents, what are bank account, short-term bonds, checks and etc. The recommended value of cash ratio is about 0,2. (Vochozka, 2011)

 $Cash Ratio = rac{Cash + Cash Equivalents}{Total Current Liabilities}$

3.6.3.2 Solvency Ratios

Solvency ratios, also called leverage ratios, measure a company's ability to sustain operations indefinitely by comparing debt levels with equity, assets, and earnings. They express and quantify the range of the utilization foreign capital on financing company's needs. This range can highly influence profitability of the company and their own capital. Solvency rations are also connected with liquidity, the amount of the debts is related to obligation to pay them off in the future. (Vlachynský, 2006)

Debt Ratio

The debt ratio measures the proportion of total assets financed by the firm's creditors. The higher this ratio, the greater the amount of other people's money being used to generate profits. The ratio is calculated as follows. (Gitman, 2002)

$$Debt \ Ratio = \frac{Total \ Liabilities}{Total \ Assets}$$

Equity Ratio

The equity ratio measures the amount of assets that are financed by owners' investments by comparing the total equity in the company to the total assets. The equity ratio express structure of the financial sources. The creditors have an interest on the lowest equity ratio of the debtor company, what is related to risk of return of capital borrowed. Companies like use the foreign capital because of lower cost of foreign capital in compares of equity. (Vlachynský, 2006)

$$Equity Ratio = \frac{Total Equity}{Total assets}$$

Debt to Equity Ratio

The debt to equity ratio is a financial, liquidity ratio that compares a company's total debt to total equity. The generally is recommended portion of debt

to equity v 1:1. Taking into account the financial risk the basic safety ratio of indebtedness is 40% of foreign capital to equity. (Vochozka, 2011)

 $Debt \ to \ Equity \ Ratio = \frac{Total \ Liabilities}{Total \ Equity}$

A lower debt to equity ratio usually indicates a more financially stable company. Companies with a higher debt to equity ratio are considered more risky to creditors and investors than companies with a lower ratio.

3.6.3.3 Activity Ratios

Efficiency ratios also called activity ratios measure how well companies utilize their assets. Appropriate utilization of assets is main condition of consolidated financial situation of the company. Under-utilization of assets is considered as the same situation as the company have too many assets. Efficiency ratios look at the time it takes companies to collect cash from customer or the time it takes companies to convert inventory into cash. (Zalai, 2006)

Accounts Receivable Turnover Ratio

The accounts receivable is an efficiency ratio or activity ratio that measures how many times a business can turn its accounts receivable into cash during a period. A relatively high receivables turnover ratio might indicate highly efficient credit and collection. Alternatively, a high receivables turnover ratio could indicate that the company's credit or collection policies are too stringent, suggesting the possibility of sales being lost to competitors offering more lenient terms. A relatively low receivables turnover ratio would typically raise questions about the efficiency of the company's credit and collections procedures. In addition, comparing the company's estimates of uncollectible accounts receivable and actual credit losses with past experience. (Robinson, 2009)

 $Accounts \ Receivable \ Turnover \ Ratio = \frac{Net \ Credit \ Sales}{Average \ Account \ Receivables}$

Asset Turnover Ratio

The asset turnover ratio is an efficiency ratio that measures a company's ability to generate sales from its assets by comparing net sales with average total assets. A higher ratio indicates greater efficiency. Because this ratio includes both fixed and current assets, inefficient working capital management can distort overall interpretations. It is, therefore, helpful to analyze working capital and fixed - asset turnover ratios separately. A low asset turnover ratio can be an indicator of inefficiency or of relative capital intensity of the company. The ratio also reflects strategic decisions by management. (Robinson, 2009)

 $Asset \ Turnover \ Ratio = \frac{Net \ Sales}{Sverage \ Total \ Assets}$

Inventory Turnover Ratio

A fine line exists between having too much and too little inventory in stock. Too little inventory can result in lost sales and costly production delays. Too much inventory can use needed space, increase financing and insurance costs, and become obsolete. Inventory turnover indicates the number of times, on average, that inventory is totally replaced during the year. Generally, a higher turnover indicates that merchandise is being handled more efficiently. The relationship is computed as follows. (Wild, 2009)

$$Inventory \ Turnover \ Ratio = \frac{Cost \ of \ Goods \ Sold}{Average \ Inventory}$$

Days Sales in Inventory

The days sales in inventory calculation measures the number of days it will take a company one turnover. Shorter day's inventory outstanding means the company can convert its inventory into cash quicker. In other words, the inventory is extremely liquid. (Vlachynský, 2006)

Days Sales in Inventory =
$$\frac{Inventory}{Sales} \times 360$$

Management wants to make sure its inventory flow as fast as possible to minimize these costs and to increase cash flows. Management strives to only buy enough inventories to sell within the next 90 days. If inventory sits longer than that, it can start costing the company extra money.

Average collection period

Days sales outstanding , also called the average collection period, is used to appraise accounts receivable, and it is calculated by dividing accounts receivable by

average daily sales to find the number of days' sales that are tied up in receivables. Thus, the average collection period represents the average length of time that the firm must wait after making a sale before receiving cash, which is the average collection period. (Brigham, 2009)

$$Average \ collection \ period = \frac{Receivables}{Annual \ sales/365}$$

3.6.3.4 Profitability Ratios

Profitability ratios compare income statement accounts and categories to show a company's ability to generate profits from its operations. Profitability ratios focus on a company's return on investment in inventory and other assets. These ratios basically show how well companies can achieve profits from their operations.

Gross Margin Ratio

Gross profit margin indicates the percentage of revenue available to cover operating and other expenditures. Higher gross profit margin indicates some combination of higher product pricing and lower product costs. The ability to charge a higher price is constrained by competition, so gross profits are affected by competition. If a product has a competitive advantage, the company is better able to charge more for it. On the cost side, higher gross profit margin can also indicate that a company has a competitive advantage in product costs. (Robinson, 2009)

$$Gross Margin Ratio = \frac{Gross Margin}{Net Sales}$$

Profit Margin Ratio

The profit margin ratio measures the amount of net income earned with each euro of sales generated by comparing the net income and net sales of a company. In other words, the profit margin ratio shows what percentage of sales are left available after all expenses are paid.

The return on sales ratio is often used by internal management to set performance goals for the future. This ratio also indirectly show how well a company manages its expenses relative to its net sales. (myaccountingcourse.com)

$$Profit Margin Ratio = \frac{Net Income}{Net Sales}$$

Return on Assets Ratio

The return on assets ratio, is a profitability ratio that measures the net income produced by total assets during an accounting period by comparing net income to the average total assets. This ratio helps management and investors realize how well the company can convert its investments in assets into profits. Higher return on assets ratio is more favorable, it shows that the company is more effectively managing its assets to produce larger amounts of net income. (Wisner, 2008)

 $Return on Assets Ratio = \frac{Net \ Income}{Average \ Total \ Assets}$

Return on Equity Ratio

The return on equity ratio or ROE is a profitability ratio that measures the ability of a company to generate profits. So a return on 1 means that every euro of equity generates 1 euro of net income. ROE is also an indicator of management effectiveness at using equity financing to fund operations and grow the company. (Scholleová, 2012)

 $Return \ on \ Equity \ Ratio = \frac{Net \ Income}{Shareholder's \ Equity}$

Return on Capital Employed

Return on capital employed or ROCE is a profitability ratio that measures how efficiently a company can generate profits from its capital employed by comparing net operating profit to capital employed. Return on capital employed shows how many euro in profits before taxation each euro of capital employed generates. (Vochozka, 2011)

ROCE is a long-term profitability ratio, it shows how effectively assets are performing by taking into calculation long-term financing. This is why ROCE is a more useful ratio than ROE to evaluate the longevity of a company.

 $Return \ on \ Capital \ Employed = \frac{Net \ Operating \ Profit}{Total \ Asstes - Total \ Liability}$

3.6.4 Bankruptcy Models

The bankruptcy models are used to predictions of the financial problems of the company or prediction of the danger for future bankrupt. Bankruptcy company is the company threatened by future bankrupt.

Altman analysis

The Altman analysis was developed in 1968 by Edward I. Altman, as quantitative balance-sheet method of determining a company's financial health. It can be calculated for all non-financial companies and the lower the score, the greater the risk of the company falling into financial distress. (Vochozka, 2011)

This model is mostly used in industrially developed countries and is based on the following function:

$$Z = 3,3 \times R_1 + 1,0 \times R_2 + 0,6 \times R_3 + 1,4 \times R_4 + 1,2 \times R_5$$

Tab. 2 - Altman model calculation

From the information content of indicators, there results that their levels are even better if they register a greater absolute value. Therefore, Z score is interpreted as follows:

Score value	Company's situation
Z ∈ (2,99;∞)	Good situation
Z ∈ (1,81;2,99)	Grey zone
$Z \in (-\infty; 1, 81)$	bankruptcy situation

Tab. 3 - Interpretation of the bankruptcy risk in Altman analysis

The Taffler index

The Taffler index was created in 1977 as a reaction of the Altman analysis. British economists Taffler and Tisshaw was analyzing a set of indicators on a sample of British companies. They select a four key ratio indicators, set a weight to every indicator and then allowed for the calculation of so-called Taffler index. This index has two versions. The original and modify version. In the original version the largest weight has the ratio of economic result before interests and taxations to short-term liabilities. The other indicators have almost the same weight. According to weight the sequence of other indicators will be as follows ratio of short-term liabilities to assets, ratio of financial assets reduce of short-term liabilities to operational expenses and ratio of current asset to liability.

$$T1 = 0,53 \times \frac{Profit}{S - T \ liability} + 0,13 \times \frac{current \ asset}{liability} + 0,18 \times \frac{S - T \ liability}{asset} + 0,16 \times \frac{Financial \ asset - S - T \ liability}{operational \ expenses}$$

The modify version of the Taffler index is differ from the original one by last ratio indicator which has the same amount than last indicator in original version. This change in ratio analysis has an effect on different margins of intervals for evaluation of the company. If the index is above 0,3 we talk about creditworthy company and if the index is below 0,2 we talk about bankruptcy company. Between 0,2 - 0,3 there is so-called grey zone which occurred after modification. (Vochozka, 2011)

$$T2 = 0,53 \times \frac{Profit}{S - T \ liability} + 0,13 \times \frac{Current \ asset}{Liability} + 0,18 \times \frac{S - T \ liability}{Asset} + 0,16 \times \frac{Sales}{Asset}$$

Score value	Company situation
T1 ∈ (0;∞)	Good situation
$T1 \in (-\infty; 0)$	Bankruptcy situation
T2 ∈ (0,3;∞)	Good situation
T2 ∈ <0,2;0,3>	Grey zone
Τ2 ∈ (-∞;0,2)	Bankruptcy situation

Tab. 4 Interpretation of the bankruptcy risk in Taffler index

4 PRACTICAL PART

The practical part of my thesis utilize the collected information from the literature review and take them into the practice. According to data received from financial statements of the company HRT, s. r. o. the financial ratios are calculated and evaluated. Before the financial analysis, the company HRT, s. r. o. need to be introduced.

4.1 About the Company

The company HRT, s. r. o. was set up 5 April 1993. The financial contribution of each member was 1,129€. Initial capital thus represents 3,387€. The company was established by the form of a notarial deed at District Court in Trnava.

Commercial name:	HRT, s.r.o.
Seat of the company:	Skladová 1, Trnava 917 01
Registration number:	31 432 735
Registration:	5 April 1993
Legal form:	Limited Liability Company (s.r.o.)
Number of partners:	3. (orsr.sk)

History of the company

The company was originally established by thee members Ing. Peter Tepala, Ing. Ľubomír Rubint and Ing. Daniel Hucovič on 5 April 1993. Under the commercial name HRT, s. r. o.. The purpose of the business is engineering construction, consultancy in construction, implementation of engineering constructions, implementation of residential and public buildings, implementation of industrial buildings and installation, repair and maintenance of electrical equipment and lightning contractors up to 1000 V v in the premises without the danger.

After five years of functioning the company on 20 October 1998 leaved one member Ing. L'ubomír Rubint after some disagreements about the future direction of the company. This small change in the structure have almost no impact on the performance of the company a relative to Rubin do not have engineering education.

In 16 April 2012 leave another member of the company, Ing. Peter Tepala and the company HRT remain with one founding member.

Number of employees

2009	2010	2011	2012	2013
56	51	41	26	7

Tab. 5 Number of employees

The company have half of the employees working directly for the company and other half are external self-employers. After the stagnation in construction industry the company was forced to reduce personal staff to minimum.

4.2 Financial Analysis of the Company

The financial analysis of the company is aimed on evaluation the data collected from financial statements to obtain the current financial situation and operating performance of the selected company. The evaluation of the company is based on the horizontal, vertical and financial ratio analyses. For analyzing the company are taken into the considerations the financial statements of accounting years 2009–2013.

4.2.1 Analysis of the Balance Sheet Statement

The Balance Sheet Statement analysis is divided into two parts, horizontal analysis and vertical analysis of the Balance Sheet Statement.

Horizontal Analysis of the Balance Sheet Statement

The results of the horizontal analysis of the Balance Sheet in years 2009–2013 are shown in Tab. 6. Absolute as well as relative changes are calculated. The data of absolute changes are expressed in euros and the data of relative change are expressed in per cents.

	Cha 2009/		Chan; 2010/2		Cha 2011/		Cha 2012/	
	Absolute in €	Relative in %						
Total assets	-423 840	-12,40	-2 170 585	-72,51	-281 434	-34,21	-342 983	-63,36
Fixed assets	-816 033	-31,65	-1 424 424	-80,82	-159 810	-47,29	-161 312	-90,56
TFA	-816 033	-31,65	-1 426 560	-80,95	-159 810	-47,59	-161 312	-91,66
IFA	0	0,00	2 136	0,00	0	0,00	0	0,00
Current assets	386 054	46,90	-730 842	-60,44	-116 997	-24,46	-179 794	-49,76
Inventory	17 568	20,25	-7 008	-6,72	-28 591	-29,38	-1 241	-1,81
L-T receivables	27 021	52,63	44 324	56,56	-49 133	-40,05	0	0,00
S-T receivables	743 276	281,05	-785 895	-77,99	-9 315	-4,20	-172 207	-81,03
S-T fin. assets	-401 811	-95,54	17 737	94,66	-29 958	-82,14	-6 346	-97,39
Total liabilities	-423 840	-12,40	-2 170 585	-72,51	-281 434	-34,21	-342 983	-63,36
Owner's equity	401 202	43,31	-940 675	-70,86	-99 927	-25,83	-161 639	-56,34
P/L of prev. year	68 702	8,10	-358 858	-39,15	-218 521	-39,18	-83 431	-24,59
P/L of cur. Year	332 500	483,97	-581 817	-145,02	107 637	-59,59	-78 208	107,17
Liabilities	-882 797	-35,56	-1 163 696	-72,75	-181 507	-41,63	-181 344	-71,26
S-T liabilities	-519 505	-36,25	-524 517	-57,40	-144 014	-37,00	-213 120	-86,91
L-T liabilities	9 850	97,97	-7 757	-38,97	-9 368	-77,12	-192	-6,91
Provisions	9 420	91,06	-5 173	-26,17	-8 125	-55,68	-6 467	-100,00
Bank loans	-382 561	-37,18	-646 250	-100,00	0,00	0,00	38 435	0,00
L-T bank loans	0	0,00	0	0,00	0	0,00	0	0,00

Tab. 6 Horizontal analysis of the Balance Sheet Statement in 2009–2013

According to Tab. 6 we can see the company HRT held a negative development of assets during the whole examined period. The total assets decrease from the amount of 3 417 205 € in 2009 to 198 363 € in the year 2013 what represent the relative change of -94,2%. The evolution of the assets during the examined period is shown in the Fig.2. The changes fluctuated all the time from the less significant one in period 2009-2010 of 12,4% to the highest decrease of assets in 2010-2011 of 72,51%. In year 2011 the company sold the multifunctional building which was built by the company what was main caused of decreasing in fixed asset. The only positive change is in 2009-2010 of current assets in 46,9% and then have continuous decrease trend.

In the Fig. 3 we can see that from the year 2011 the company have higher amount of current assets than fixed assets, in the year 2013 it was above 90%. The decrease of current asset is less significant than changes in fixed asset. The highest positive change in asset appear in the 2009-2010 in short-term receivables, there was increase in amount 743 276 \in what represent 281,05% change.

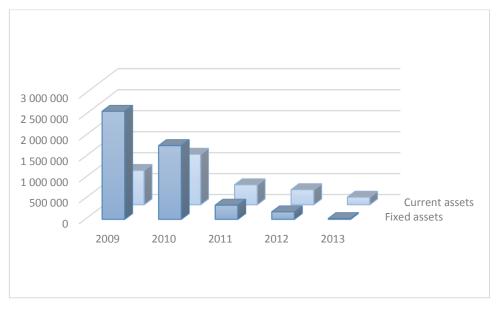


Fig. 3 Development of assets in 2009-2013

By shifting to the other side of the balance sheet we move to the equity. As we can see there is the same negative trend of the equity as the asset. Absolute change of equity from 2009 to 2013 is -3 218 842 \in . When we look at the owner's equity there is increase in 43,31% from 2009 to 2010 and then continuous decreasing slope. Equity started to decrease due to the lower profits caused by the financial crisis, mainly stagnation in construction industry.

The most significant changes are in the short-time liabilities from -36,25% to -86,91% this could be also caused by stagnation in construction industry, the less orders from customers, less material needed.

When we take a look at the bank loans, in 2011 the company pay off all of their loans and after two years take another one. Then the bank loans again increase from 0 to 38 435 \in .

In the Fig. 4 is shown the structure of the equity. In the first three years there are higher amount of liabilities than owner's equity. Since the liability was decreasing more rapidly than the owner's equity, than in years 2012 and 2013 is the amount of liability lower than owner's equity.

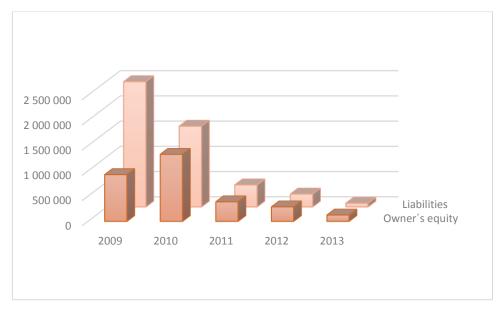


Fig. 4 Development of Owner's equity and liability in 2009-2013

Vertical Analysis of the Balance Sheet Statement

Vertical analysis deals with structure of assets and liabilities so the composition of economic resources could be seen. The results of vertical analysis are shown in Tab. 7. The data in the vertical analysis are expressed in per cents.

ASSETS	2009	2010	2011	2012	2013
Total assets	100,00%	100,00%	100,00%	100,00%	100,00%
Fixed assets	75,45%	58,88%	41,07%	32,90%	8,48%
TFA	75,45%	58,88%	40,81%	32,51%	7,40%
IFA	0,00%	0,00%	0,26%	0,39%	1,08%
Current assets	24,09%	40,39%	58,14%	66,75%	91,52%
Inventory	2,54%	3,49%	11,83%	12,70%	34,02%
Long-term receivables	1,50%	2,62%	14,91%	13,59%	37,08%
Short-term receivables	7,74%	33,67%	26,96%	39,26%	20,33%
Short-term fin. assets	12,31%	0,63%	4,43%	1,20%	0,09%
EQUITY	2009	2010	2011	2012	2013
Total liabilities	100,00%	100,00%	100,00%	100,00%	100,00%
Owner's equity	27,11%	44,35%	47,01%	52,99%	63,14%
Profit/loss of prev. year	24,81%	30,62%	67,79%	62,67%	128,97%
Profit/loss of cur. Year	2,01%	13,40%	-21,95%	-13,48%	-76,22%
Liabilities	72,65%	53,44%	52,99%	47,01%	36,86%
Short-term liabilities	41,94%	30,53%	47,31%	45,30%	16,18%
Long-term liabilities	0,29%	0,66%	1,48%	0,51%	1,30%
Provisions	0,30%	0,66%	1,77%	1,19%	0,00%
Bank loans	30,11%	21,59%	0,00%	0,00%	19,38%
Long-term bank loans	0,00%	0,00%	0,00%	0,00%	0,00%

Tab. 7 Vertical analysis of the Balance Sheet Statement in 2009–2013

As we can see the structure of assets and equity are changing all the time and changes are significant. At first take a look at the assets. The portion of the fixed assets to total asset have a decreasing character from 75,45% in 2009 decrease to 8,48 in the year 2013. Conversely the portion of the current asset to total asset growth from 24,09% to 91,52% during the observe period.

Long-term receivables was changed lightly from 1,50% to 2.62% in years 2009-2010 and then jump in 14,91% in following year. Another rapid growth in structure occurred from years 2012 to 2013 from amount 13,59% to 37,8%. Various changes do not skip short-term receivables as well. In 2009 the portion of short-term receivables was 7,74% then changed in 33,67% in next year. Changes in following years was slight.

Short-term financial assets was at the end of the observe period less than 0,1%, with the compares of the beginning of the period it was 12,31%.

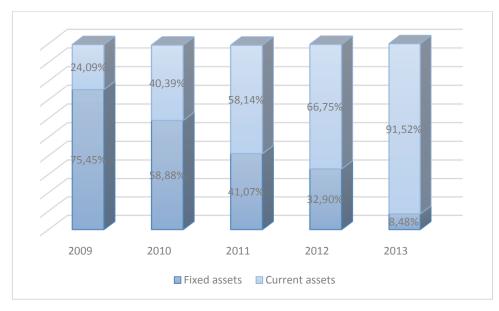


Fig. 5 Structure of assets in 2009-2013

In the first year 2009 the liability prevailed over the owner's equity by the 45%. This different getting smaller, in following three years are liability and owner's equity almost equals. In the last year of examined period the portion of equity increase to 63,14% and portion of liability decrease to 36,86% as we can see in Fig. 5, what positively changed the structure of total liability.

On the side of owners' equity main changes were in economic results which can be very different each year. From the year 2011 the economic result started to decline very rapidly, this can be caused by stagnation in construction industry. In 2009 was economic result 2,01% of total equity and at the end of the examined period it was -76,22%.

On the other side of liabilities, the most significant changes occurred in fluctuating shortterm liabilities and bank loans which decreased from 0,00% in 2011 to 19,38% in 2013. Changes in short-term liabilities in 2009-2012 was very slight and then decrease by 29,12%.



Fig. 6 Structure of Total liability in 2009-2013

In the analysis of the balance sheet we should also mention a balance rules. The firs one is golden balance rules, which says that fixed assets should be financing mainly by the owner's equity. In years 2009 and 2010 this rule was break but in the following years company manage its assets and equity according the golden balance rule. Next one is golden rule of balancing the risk, this rule comparing the owner's equity to liability which should be in the ratio 1:1, or higher amount of equity. In 2010, 2011 and 2012 was ratio almost 1:1, in first year was ratio 0,27:0,73 and company was in the risk. Last year was the best according this rule, the equity exceed the liability in ratio 0,63:0,37. The last mention rule of golden pari. The fixed asset should be financing only by the equity. In the whole examined period was this rule perfectly obey.

4.2.2 Analysis of Profit and Loss Statement

This part of the thesis describes the horizontal analysis of Profit and Loss Statement. The examined period is same as for the Balance sheet statement 2009-2013, the relevant data from statement are collected in the Tab. 8.

	Change 2009/2010		Change 2010/2011		Change 2011/2012		Change 2012/2013	
	Absolute in €	Relative in %						
P/L from accounting period	332499	483,97	-581816	-145,02	107637	-59,59	-78208	107,17
P/L from ordinary activity	332499	483,97	-581816	-145,02	107637	-59,59	-78208	107,17
Operating P/L	415706	290,22	-762214	-136,37	100931	-49,65	-46470	45,41
Sales from goods	-906638	-40,31	-149065	-11,10	-248041	-20,78	-599604	-63,42
Added value	-318775	-51,61	-150734	-50,43	30856	20,82	-152452	-85,15
Personnel costs	-15613	-3,19	-71491	-15,07	-93768	-23,28	-163359	-52,86
Financial P/L	-5483	9,53	43882	-69,62	16756	-87,52	12	-0,50
Interest costs	24921	81,73	-37493	-67,66	-16661	-92,98	195	15,50
Exchange profit	7383	362,98	-8213	-87,21	-	-	-	-
Exchange losses	-6950	-95,82	400	132,01	-654	-93,03	-	-
Other costs	-4426	-20,17	-15760	-89,96	-675	-38,37	-159	-14,67
P/L before	410223	478,71	-718332	-144,85	117687	-52,91	-46458	44,36

Tab. 8 Horizontal analysis of Profit and Loss Statement

As it is seen from the Tab. 8, the company HRT, s.r.o. has no profit and loss from extraordinary activity. The economic result then consists only of profit and loss from ordinary activity and the major part of the economic result is the operating profit. The economic result from financial activity is always negative as a result of the interests from bank loans, other financial costs include the international trade operations where is a risk connected with frequent fluctuation of exchange rate. The company was making the profit in the first two years of examined accounting periods and then in 2011sudenly made a loss in amount of -222 415 €, since 2011 is the company making loss. The major problems were recorded in the stagnation in construction industry and decrease in trade margin. The highest profit of the company was reached in the year 2010 of 495 917 € and the highest loss in the following year 2011. The different between this two years is huge, almost -145%.

Sales from goods has decreasing character as well, what is also connected with bad situation in the construction industry and smaller amount of customers.

Sales changed by -906 638 € between 2009 and 2010. The changes between other years was not so substantial, from -11,10% to -63,42%.

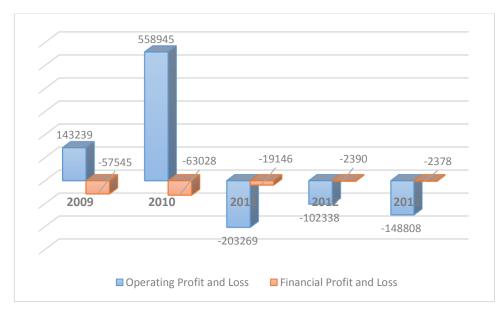


Fig. 7 Development of operating and financial P/L in 2009-2013

4.2.3 Financial Ratio Analysis

This chapter describes financial ratio analysis which helps to determine the financial situation of the company HRT, s.r.o. over the years 2009–2013 and predict possible future of the firm.

Liquidity Ratios

The Tab. 9 shows the values of chosen liquidity ratios which tell us more about how quickly the company turned its assets into cash with the purpose to cover its short-term obligations. The most used and mentioned ratios are current ratio, quick ratio and cash ratio.

	2009	2010	2011	2012	2013
Current ratio	0,57	1,32	1,23	1,47	5,65
Quick ratio	0,51	1,21	0,98	1,19	3,55
Cash ratio	0,29	0,02	0,09	0,03	0,01

Tab. 9 Development of liquidity ratios in 2009–2013

Current ratio show coverage of short-time liabilities by asset. According to calculation based on the data from balance sheet we can see that the company is in better situation at the end of the observed period. In the first year is current ratio 0,57, what is lower than generally recommended minimal value and company is not liquid. This could be caused by high portion of poorly liquid inventories or

uncollectible receivables. Next three years, the current ratio was in the range 1,23-1,47, this is close to minimal value 1,5. In this situation the company could have the problem with solvency. In the best situation was company in 2013 when the current ratio was 5,65, it means the company is extremely liquid.

The recommended value of quick ratio is between 0,8-1. The company ratios fitted into this interval during the study period just once, in 2011. In the years 2010, 2012 and 2013 the ratio was above 1, it means the company have excessive amount of current asset which lead to unproductive usage of input resources. In this situation have negative impact on rentability of the company.

The best cash position the company had in 2009 when the cash ratio was 0,29. In following years the ratio decrease rapidly, in 2013 was cash ratio just 0,01. In this situation when the ratio falls under 0,2 the company do not have enough quick asset to pay all of the short-term liabilities immediately.

In the Fig. 8 is shown the development of the current, quick and cash ratio during the examined period 2009-2013.

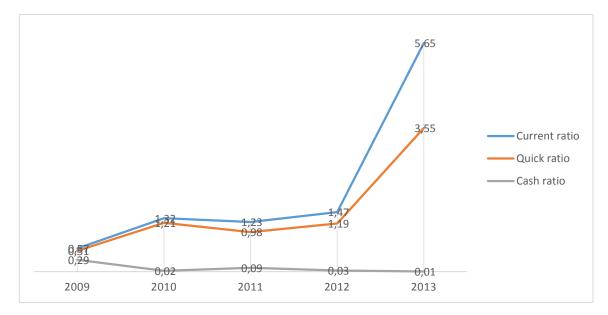


Fig. 8 Development of liquidity ratios in 2009-2013

Solvency Ratios

The next financial ratios calculated in this analysis are debt ratio, equity ratio and interest coverage ratio which can be commonly referred to as solvency ratios. Their development over the observed period is demonstrate in the Table 10.

	2009	2010	2011	2012	2013
Debt ratio	0,73	0,53	0,53	0,47	0,37
Equity ratio					0.62
	0,27	0,44	0,47	0,53	0,63
Debt to Equity ratio	2,68	1,21	1,13	0,89	0,58

Tab. 10 Development of solvency ratios in 2009–2013

If the values of debt ratio is very high it could push company into the financial risk but also the value should not be too low as well because of the foregone gearing return. This ratio supposed to be below 0,5 because it is better to finance more of the firm's assets with equity than with a debt. The table shows only one year, 20099, in which the debt ratio is vastly higher than 0,5. The years 2010 and 2011 has ratios in amount 0,53 was can be considered as a margin value. Last two years ratios are represented by lower numbers but not the too low ones. It means that since 2012 to 2013 the company financed its assets by equity with higher amount than by the debt.

Equity ratio show how much assets was financing by the owner's equity. As we can see in the calculations the portion of assets financing by the equity and debts is almost equal in years 2010, 2011 and 2012. In the first year, 2009, was asset cover mostly by debts and in 2013 was 63% of assets financing by equity. The relations between debt and equity ratios is shown in Fig. 9.

A lower debt to equity ratio usually implies a more financially stable business. Companies with a higher debt to equity ratio are considered more risky to creditors and investors than companies with a lower ratio. As we can see the debt to equity ratio has decreasing slope what indicated the deteriorating financial situation of the company. At the beginning of the observe period the ratio was 2,68 but at the end of the period decrease to amount of 0,58.

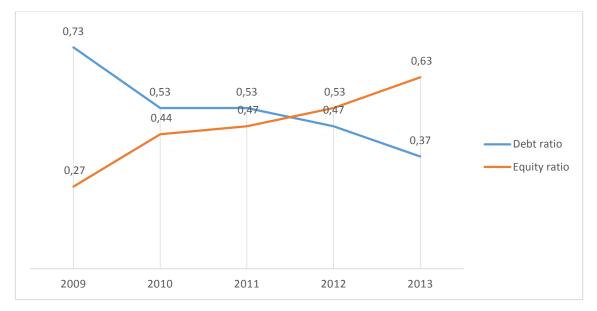


Fig. 9 Development of Debt and Equity ratios in 2009-2013

Profitability Ratios

Tab. 11 shows the calculations' results of profitability ratios in followed years 2009-2013. Namely, gross margin ratio, profit margin ratio, return on assets, return on equity and return on capital employed. The results will tell us more about the efficiency of the business efforts.

	2009	2010	2011	2012	2013
Gross Margin Ratio	-55,46	-140,84	4,62	10,88	7,69
Profit Margin Ratio	3,81	36,94	-18,63	-11,08	-43,71
Return on Assets	2,01	13,40	-21,95	-13,48	-76,22
Return on Equity	7,42	30,22	-46,69	-25,44	-120,72
Return on Capital Employed	4,32	23,85	-51,30	-35,37	-90,93

Tab. 11 Development of profitability ratios in 2009–2013 in %

Gross margin ratio measures profitability that higher values indicate that more cents are earned per euro of revenue. In 2009 and 2012 is the ration negative it means that company can have a problem and gross profit that will be sufficient to cover its selling and administrative expenses. From 2011 to 2013 is gross margin ratio positive, what indicates the better profitability situation of the company.

Profit margin ratio shows how company convert its sales into the profit. The best situation occurred in 2010 when the company convert 36,94% of sales into the

profit. Profit margin ratio of following years was negative than we can see that the company was not making the profit at all.

Return on Assets ratio gives an idea of how efficient management is at using its assets to generate profit. The higher ratio is always the better, because the company is earning more money on its assets. According to data from Tab. 10 is seen the company in 2009 earned 2% on its assets, better situation was in 2010 where the company earned 13,4% money on its assets. As showed the ratios before from 2011 company get to negative numbers and start losing the money on its assets.

The ROE tells how effectively the money is being employed. The higher ratio is the better company use equity to produce profit. In first year was return on asset 7,42%, in the next year was company more successful with managing the equity and return growth to 30,22%. From 2011 return decrease and turn to negative numbers.

The return on capital employed ratio shows how much profit each euro of employed capital generates. Generally, a higher ratio is more favorable because it means that more euros of profits are generated by each euro of capital employed. In first two years has this ratio increasing character and then rapidly started to decrease. There is huge different between years 2010 and 2013where the ratios was 23,85 and -90,93.

Activity ratios

In this part of the thesis, activity ratios measure the effectiveness of managing the company's assets. The ratios are: account receivable turnover ratio, inventory turnover, total assets turnover and collection period the results of which are shown in the Tab. 12.

	2009	2010	2011	2012	2013
Accounts Receivable Turnover Ratio	8,51	1,33	5,38	4,45	8,58
Asset Turnover Ratio	0,66	0,45	1,45	1,75	1,74
Inventory Turnover Ratio	40	31	12	12	5
Days Sales in Inventory	9	12	31	29	76

Tab. 12 Development of efficiency ratios in 2009–2013

According to theory of asset turnover ratio, the higher number is better. When we take a look at calculation of asset turnover ratio have increasing character exception of 2010 when ratio decrease from 0,66 to 0,45. Changes between 2012 and 2013 was negligible.

Inventory turnover ratio express the time the inventory are commit in the company in days, by optimization of inventories the company is trying to minimize this ratio. In 2009 was ratio very high even 40 days, next year has succeed with optimization and decrease the ratio at 31 days. Following year was even better and company manage its inventories more effectively to ratio 12 days and they keep the ratio at the same level also for next year. The best inventory turnover ratio was in 2013 and it was 5 days. After analysis we can say that company manage its inventory properly.

A financial measure of a company's performance that gives company an idea of how long it takes a company to turn its inventory into sales calls days sells in inventory. Generally, the shorter the days sales inventory ratio the better, but it is important to note that the average ratio varies from one industry to another. Looking at calculation is

Development of the asset turnover ratio and inventory turnover ratio is graphically demonstrated in Fig. 10.

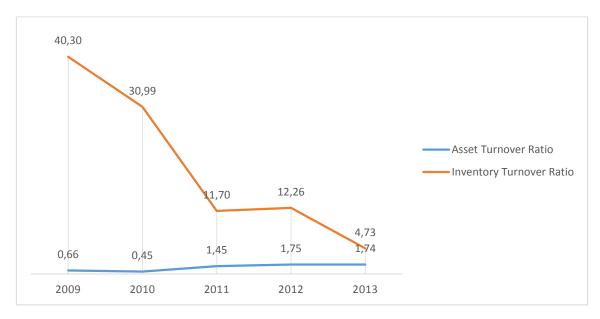


Fig. 10 Development of assets and inventory turnover ratios in 2009-2013

4.2.4 Bankruptcy Models

The bankruptcy and solvency models used in this thesis, ending practical part of financial analysis of the company. Models used for calculation are Altman index, Z-score and Taffler index. The results of the financial health of the company are discussed below. All models are calculated for the each year of examined period of 2009–2013.

Altman index

We used Altman index to detect possible bankruptcy of the company. In following Tab. 13 we calculated all indicators of Altman index and multiply them by assigned weights to get final Altman indexes for each year of study period.

	2009	2010	2011	2012	2013
X1	0,03	0,17	-0,27	-0,19	-0,76
X2	0,66	0,45	1,45	1,75	1,74
X3	0,37	0,83	0,89	1,13	1,71
X4	0,25	0,31	0,68	1,05	2,81
X5	-0,18	0,10	0,11	0,21	0,75
Altman index	1,10	0,67	1,56	4,32	8,23

Tab. 13 Altman index of the company in 2009–2013

The company is considered as bankruptcy company if the value of Altman index is smaller than 1,81. As we can see from the Tab. 13 the indexes of years 2009, 2010 and 2011 are all below to bankruptcy margin and we can say that the company in this years was in the possible of bankrupt. When we continue to next year is obvious that management of the company chosen propriety strategy and pull company out from the bankruptcy zone. In 2013 was Altman index 8,23 which means the creditworthy company without foreseeing of future bankrupt.

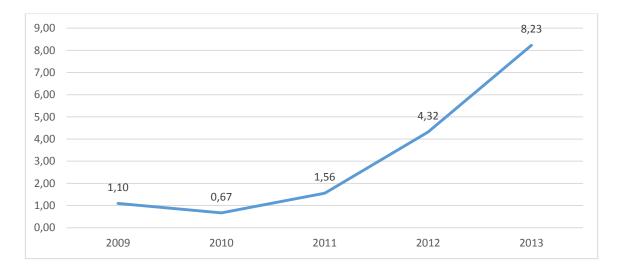


Fig. 11 Development of Altman index in 2009-2013

Taffler index

In the very last section of the practical part we calculated original (T1) and modify (T2) version of the Taffler index to find out whether the company is creditworthy or bankruptcy in every year of the examined period. In the Tab. 14 are calculated the values of indexes for each year from 2009 to 2013.

	2009	2010	2011	2012	2013
T1	0,10	0,34	-0,07	0,06	-2,16
Interpretation	creditworthy	creditworthy	bankruptcy	creditworthy	bankruptcy
T2	0,25	0,46	0,21	0,39	-1,87
Interpretation	grey tone	creditworthy	grey zone	creditworthy	bankruptcy

Tab. 14 *Taffler index of the company in 2009–2013*

After calculation the Taffler indexes we can see that the company was in good situation but after stagnation in the construction industry get into the red numbers and from the creditworthy company get to the danger of bankruptcy. First two years was company in really good position. The first hint of the bankruptcy appear in 2011 what alerted the company to take some action to predict future bankruptcy. Following year the company get to creditworthy zone again. The next 2013 the situation worsen again and company get to the bankruptcy zone.

In the Fig. 12 we can see the development of the Taffler indexes during the years 2009 until 2013.

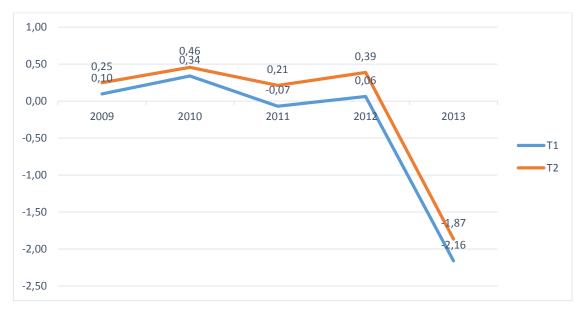


Fig. 12 Development of Taffler indexes in 2009-2013

5 DISCUSSION AND RECOMMENDATION

In this part of the bachelor thesis we summarize all results from financial analysis and objectively evaluate the complex financial situation of the company. Next we identify the problematic areas and recommend some possible future improvement.

5.1 Discussion

For evaluation the financial situation of company HRT, s. r. o. was used horizontal and vertical analysis of the accounting statements, financial ratio analysis and bankruptcy models. The examined period was 5 years from 2009 till 2013.

Horizontal and Vertical Analysis of Balance Sheet

Horizontal analysis of balance sheet show decreasing development of assets and equity as well. When we compare the data from the beginning and from the end of the examined period we can see the significant change in every item of balance sheet. The fixed asset change from 2 578 392 in 2009 to 16 813 in 2013 what represent the change in relative -99,35% and average yearly change -62,6%. This change in fixed assets could be also connected with leaving of one partner and splitting the assets. The change in current asset move in the same direction, the average year change was in amount -22%. This is also good indicator of company's management, the number of inventories in stock, what is part of current asset, is decreasing thus the company do not bound financial resources. The only positive average change in side of assets was in short and long-term receivables. This was caused by high increase in first years and not so rapid decrease in following years. This can indicates bad money collection strategy, the amount of money the receivables owe to company increase, which can lead to uncollectible receivables as well.

At the side of total liability appeared decline in whole observed period as well. The part of owner's equity showed growth in 2009 in 43,31%, this growth was followed by fall in -70,86%, -25,83% and -56,34%. Development of liability was negative from 2009 to 2013 in average yearly value of -55%. This could be result of continuous negative economic result of the company and also the leaving the one partner. Who have to be paid off.

The vertical analysis show changing in the structure of asset and equity. The most important indicator is the different between portion of liability and equity. The portion of liability should not exceed the portion of equity. In 2009 liability exceed equity about 45,54%. The company improve its situation by reduced the different between portion to 9,09% and in 2011 to 5,98%. Situation changed in 2012 when owner's equity exceed liability in 5,99% and in 2013 in more than 26% it means that the company finance its activity mostly by the equity.

Analysis of Profit and Loss

The profit and loss statement was analyzed by horizontal analysis. According this analysis the company recorded the profit in years 2009 and 2010. The change between this two years is 478,71%. Following years started stagnation in the construction industry what was reflected in the economic result of the company. The relative change in 2010 to 2011 was -144,85%. Next year the loss decrease by 52,91% and in 2013 loss increase again to 44,36%. The analysis of profit and loss statement reveal that company get into financial bed situation after crisis in 2009 and get to the bankruptcy risk. The most significant part of the profit and loss statement of this company is operating profit and loss, what is reasonable when taking into account that it is construction company. Another reason can be ineffective usage of labor or assets. Currently unused assets and equipment can be rent and make a profit.

Liquidity Ratios

According to calculation of current ratio based on the data from balance sheet we can see that the company is in the best situation at the end of the observed period. In the first year is current ratio 0,57, what is lower than generally recommended minimal value and company is not liquid enough. But at the end of the examined period it was 5,65 what indicate extremely liquid company. Next ratio used in the analysis to analyze liquidity of the company is quick ratio, recommended value of this ratio is 1 or 1,5. In 2010, 2012 and 2013 the ratio was above 1, it means the company have higher amount of current asset than current liability and able to cover all liabilities without selling the inventory from stock. The best cash position the company had in 2009 when the cash ratio was 0,29. From 2010 the cash ratio starting to decrease rapidly to 2013 when the cash ratio was just 0,01. In the years 2010-2013 the ratio falls under 0,2 it means that the company do not have enough financial asset to pay all of the short-term liabilities immediately. This could lead to insolvency and company should keep more financial resources to due obligations.

Solvency Ratios

A lower debt to equity ratio usually implies a more financially stable business. At the beginning of the observe period the ratio was 2,68 but at the end of the period decrease to amount of 0,58. Last two years are debt ratios represented by lower it means that since 2012 to 2013 the company financed its assets by equity with higher amount than by the debt. At the other hand the equity ratio show how much assets was financing by the owner's equity. As we can see in the calculations assets financing by the equity and by the debts is almost half to half in years 2010, 2011 and 2012. In 2009, was asset cover from the most part by debts and in 2013, it was 63% of assets financing by equity. This can be interpreted as improving solvency situation during the study period. According to another study is more favorable situation when company finance its activity by foreign capital rather than owner's equity. The reason is lower cost of foreign capital.

Profitability ratios

The profitability ratios had a parabolic slope, they maintained positive values during the period 2009–2010 and then turn into the negative values from 2011 to 2013. In 2011, return on asset and return on equity declined significantly. It could be caused by the still ongoing financial crisis. Most of the companies, especially constructing ones experienced drop in this time so the company was not in extraordinary situation. The last year 2013 was the weakest for all of the indicators. The only one way how to increase the profitability is to increase the net profit. The main problem of this company is in negative economic result.

Activity ratios

The activity ratios can be sum up as they are satisfactory. The company generated the value of its assets turnover from 0,66 to 1,74 times with increasing character during entire examined period. Inventory turnover ratio change from value 40 days in 2009 to 5 day in 2013. The days sales in inventory moved to opposite direction, the ratio raised from 9 days to 76 day.

Altman index

After the calculation of all indicator and multiplying them by assigned weight we get Altman indexes for each year of examined period. According the results the company was under the treats of bankruptcy in years 2009-2011 and then the indexes jumped above value of 2,99 what indicated that threat of bankruptcy was averted.

Taffler index

Another model used to predict future bankruptcy vas original and modify Taffler index. According this model was the company in good situation during first four years and then suddenly indexes fell under margin value of bankruptcy zone. In the thesis was used two bankruptcy models and the result was absolute opposites. According to Taffler index company get into the bankruptcy risk but according to Altman index was bankruptcy averted.

5.2 **Recommendations**

This part of thesis is focused on recommendations based on the deficiencies found out by financial analysis of company HRT, s. r. o.. The main recommendations are relating to receivables, structure of assets and equity, and increasing to economic result.

From the horizontal analysis of the balance sheet is seen the Long-term receivables increased by 52,63% between first two years of examined period and this situation repeat in following year and receivables increased by 56,56%. In absolute values it represent change in amount 27 021 \in and in 2010 to 2011 44 324 \notin . In next year company decrease their long-term receivables by 40% and keep the receivables under same amount for the subsequent years. The company should try to minimize the level of long-term receivables. This could company achieve by pushing on the customers to pay their liability on the time. One of the strategy could be establishing the late payment fee. Also do not acceptance the new order from the customer who do not pay off current liability of the company.

After reduction in personal structure of the company as we can see in Tab. 5, resulted in ineffective utilization of offices. The company own building in the upper town, nowadays are working just four employees daily in whole building. The building is consist of 5 separated offices, meeting room, toilets and kitchen. I recommend to rent two large offices and meeting room which are already unused to effectively usage of asset and gain more money to company. The average price of rent in this area is about 7 Euro per square meter. The area of offices and meeting room is 120 m². It can bring 840 euro per month and 10 080 euro each year. This can help company to decrease negative economic results.

Another recommendation is based on analysis of profit and loss statement. The significant continues decreasing appear in added value of the company. The relative changes was slightly above -50% and in last year 2013 was change higher than -85%. Added value is based on calculation Trade margin plus production minus operational expenses. When we look at the profit and loss statement we can see there is no values for trade margin then changes in added value must be done by modification of production or operational expenses. This can company achieved by increasing the production by obtaining new customers. The new customers can company entice by better advertising and presenting the company on the right places, as example in the CONECO construction fair in Bratislava etc. The prices of rent for exhibitor is from 239€ to 996€, the average number of visitors are 200 000. With prediction that 1% of the visitors become the client of the company, than it can bring 2 000 customers. The most of the company orders are the family houses constructions. The average price of the house construction is about 90 000€. So the participation on the fair can bring company orders in the total value of 180 000 000€. Other possibility is decrease of operational expenses. Expenses can be decreased by funding the more favorable suppliers or make orders in big volume to gain the quantity discount. The surplus of inventories can be resold with the profit.

6 CONCLUSION

The aim of the bachelor thesis was evaluation the financial situation of the company HRT, s.r.o. and suggestion of several recommendations that would lead to improvement of financial situation of given company. For evaluation the financial situation was used the different methods of financial analysis. The data used in analysis were based on the financial statements - Balance Sheet Statement and Profit and Loss Statement of the company from the year 2009 to 2013. After the collection of data from sources, specific calculations were made and evaluated according the data acquired from the theoretical part.

All of the process and sources needed for achieving the aim of the thesis was described in the theoretical part as well as the methods used in financial analysis of the company. Then followed the practical part which took this theoretical knowledge into the practice, represented by the calculations and evaluations of the results. The most important part of the thesis was the discussion and recommendations, where was summed up the results of analysis and recommendations were suggested to help improve the financial situation of the company.

The result of the analysis is as follows, the amount of total assets and total liability have decreased rapidly. The profit has decreased significantly from the beginning of the examined period to the loss at the end. Most of the indicators in financial ratio analysis as well as the bankruptcy model recorded the decreasing tendency which was caused by the financial crisis started in the year 2009 and influenced the whole economic situation and mainly the construction industry. Taking all the aspects into consideration, the result of the financial analysis is that the financial situation of the company is sufficient as the most of the results were in the norm.

The recommendations suggested to help improve the financial situation of the company was payment discipline of customers, effectively usage of the untapped offices to increase income and increase the added value of the company.

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