

# **Analysing Accounting Statements and Information for the Financial Management of a Company XY**

Juraj Lagin

---

Bachelor's thesis  
2015

 **Tomas Bata University in Zlín**  
Faculty of Management and Economics

---

Univerzita Tomáše Bati ve Zlíně  
Fakulta managementu a ekonomiky  
Ústav financí a účetnictví  
akademický rok: 2014/2015

## ZADÁNÍ BAKALÁŘSKÉ PRÁCE

(PROJEKTU, UMĚLECKÉHO DÍLA, UMĚLECKÉHO VÝKONU)

Jméno a příjmení: **Juraj Lagin**  
Osobní číslo: **M12003**  
Studijní program: **B6202 Hospodářská politika a správa**  
Studijní obor: **Účetnictví a daně**  
Forma studia: **prezenční**

Téma práce: **Analýza využití účetních výkazů a informací pro finanční řízení podniku XY**

Zásady pro vypracování:

### Úvod

Definujte cíle práce a použité metody zpracování práce.

#### I. Teoretická část

- Proveďte průzkum literárních pramenů se zaměřením na vypovídací schopnosti účetních výkazů a jejich důležitost pro finanční řízení podniku.

#### II. Praktická část

- Analyzujte proces zpracování účetních výkazů a informací a jejich využití pro finanční řízení podniku XY.
- Navrhněte doporučení a možnosti pro zlepšení finanční situace podniku XY.

### Závěr

Rozsah bakalářské práce: cca 40 stran  
Rozsah příloh:  
Forma zpracování bakalářské práce: tištěná/elektronická

Seznam odborné literatury:

BREALEY, Richard A., Stewart C. MYERS a Franklin ALLEN. Principles of corporate finance. 11th ed. New York: McGraw-Hill Irwin, c2014, 889 s. ISBN 00-780-3476-0.  
GITMAN, Lawrence J. a Chad J. ZUTTER. Principles of managerial finance. 13th ed. Boston: Prentice Hall, 2010, 947 s. ISBN 978-013-6119-463.  
KNÁPKOVÁ, Adriana, Drahomíra PAVELKOVÁ a Karel ŠTEKER. Finanční analýza: komplexní průvodce s příklady. 2. rozš. vyd. Praha: Grada, 2013, 236 s. ISBN 978-80-247-4456-8.  
ROSS, Stephen A. Fundamentals of corporate finance. 8th ed. Boston: McGraw-Hill/Irwin, c2008, 718 s. ISBN 978-0-07-353062-8.  
YOUNG, S. a Stephen F. O'BYRNE. EVA and value-based management: a practical guide to implementation. 1st ed. New York: McGraw-Hill, 2001, 493 s. ISBN 0071364390.

Vedoucí bakalářské práce: Ing. Michaela Blahová, Ph.D.  
Centrum aplikovaného ekonomického výzkumu  
Datum zadání bakalářské práce: 16. února 2015  
Termín odevzdání bakalářské práce: 15. května 2015

Ve Zlíně dne 16. února 2015



prof. Dr. Ing. Drahomíra Pavelková  
děkanka



Ing. Eliška Pastuszková, Ph.D.  
ředitel ústavu

**I hereby acknowledge that:**

- Upon final submission of my Bachelor's/Master's Thesis, I agree with its publishing in accordance with Act No. 111/1998 Coll., on Higher Education Institutions and on Amendment and Supplements to Some Other Acts, (The Higher Education Act), without regard to the defence result;
- My Bachelor's/Master's Thesis will be released in electronic form in the university information system, accessible for reading only; and one printed copy of the Bachelor's/Master's Thesis will be stored on electronic media in the Reference Library of the Faculty of Management and Economics of Tomas Bata University in Zlín;
- To my Bachelor's/Master's Thesis fully applies Act No. 121/2000 Coll., on Copyright, Rights Related to Copyright and on the Amendment of Certain Laws (Copyright Act) as subsequently amended, esp. Section 35 Para 3;
- In accordance with Section 60 Para 1 of the Copyright Act, TBU in Zlín is entitled to enter into a licence agreement about the use of the Thesis to the extent defined in Section 12 Para 4 of the Copyright Act;
- In accordance with Section 60 Para 2 and 3, I can use my Bachelor/Master's Thesis, or render the licence to its use, only with the prior expressed written agreement of TBU in Zlín, which is in such case entitled to require from me appropriate financial compensation to cover the cost of creating the Bachelor/Master's Thesis (up to the total sum);
- If the software provided by TBU or other entities was used only for study and research purposes (i.e. for non-commercial use) in the development of the Bachelor/Master's Thesis, it is not possible to use the Bachelor/Master's Thesis commercially;
- In the event that the Bachelor/Master's Thesis output encompasses any software product, source codes and/or files of which the project consists of are considered part of the Thesis. Failure to submit this part of the Thesis may result in an unsuccessful defence of the Thesis.

**I herewith declare that:**

- I have created this Bachelor/Master's Thesis on my own and cited all used sources. In case the results are published, I shall be cited as author.
- The contents of the Bachelor/Master's Thesis handed over are identical with the electronic version entered in the IS/STAG.

Zlín 05/05/2015

date



signature

## **ABSTRAKT**

Cílem této práce je komplexně pojednávat o problematice finanční analýzy podniku, a to ve dvou částech, do kterých je tato práce rozdělená.

V první teoretické části tato práce pojednává o samotné podstatě a smyslu zkoumání finanční stability podniku, zdrojích dat pro provedení finanční analýzy, hlavních metodách a nástrojích finanční analýzy. Dále se zabývá konceptem a nástroji celkového hodnocení finančního zdraví a mezipodnikového srovnávání.

V druhé části práce jsou teoretické poznatky z první části aplikovány na vybraný podnik a shrnuty v poslední části práce, kterou tvoří závěrečné zhodnocení a vybraná doporučení.

Klíčová slova: účetní výkazy, účetnictví, finanční analýza, měření finanční výkonnosti, rentabilita, zadluženost, likvidita, čistý pracovní kapitál

## **ABSTRACT**

The aim of this thesis is to provide comprehensive information about corporate financial analysis divided into two parts.

The first part of this thesis deals with the fundamentals and idea of analysing financial stability of a company, sources for the financial analysis, general methods and tools for financial analysis. Moreover it occupies with concept and tools of the overall assessment of financial well-being and intercompany comparison.

"The second part of the thesis takes from the theoretical knowledge from the first part, and is applied to the chosen company and summarized in the last part of the thesis, which comprises the ultimate assessment and recommendations.

Keywords: Financial Statements, Accounting, Financial Analysis, Financial Performance Measurements, Profitability, Leverage, Liquidity, Net Working Capital

*"It takes many good deeds to build a good reputation, and only one bad to lose it."*

*Benjamin Franklin*

At the beginning I would like to express my deep gratitude to my Bachelor's thesis supervisor *Ing. Michaela Blahová, Ph.D.* for all the useful advices and comments, the senior accountant *Martina Laginová*, for the cooperation and administration of financial statements and my friend *Olivier Leclerc-Lagacé* for the language corrections.

# CONTENTS

<b>I</b>	<b>THEORY .....</b>	<b>10</b>
<b>1</b>	<b>SIGNIFICANCE OF ACCOUNTING, ACCOUNTING RULES AND PRINCIPLES.....</b>	<b>11</b>
1.1	SIGNIFICANCE OF ACCOUNTING .....	11
1.2	ACCOUNTING RULES AND PRINCIPLES .....	12
<b>2</b>	<b>LEGISLATIVE REGULATION OF ACCOUNTING IN SLOVAK REPUBLIC .....</b>	<b>14</b>
2.1	ACT NO. 431/2002 COLL., ON ACCOUNTING .....	15
2.2	DECREES IMPLEMENTING THE ACT NO. 431/2002 COLL., ON ACCOUNTING .....	16
2.3	INTERNAL COMPANY GUIDELINES .....	16
<b>3</b>	<b>SOURCES OF INFORMATION FOR FINANCIAL ANALYSIS .....</b>	<b>17</b>
3.1	BALANCE SHEET .....	17
3.1.1	Structure of Balance Sheet .....	17
3.2	INCOME STATEMENT .....	18
3.2.1	Structure of Income Statement .....	18
3.3	STATEMENT OF CASH FLOWS .....	18
3.3.1	Structure of Statement of Cash Flows .....	19
3.4	NOTES TO THE FINANCIAL STATEMENTS .....	19
3.4.1	Structure of Notes to the Financial Statements .....	19
3.5	STATEMENT OF STOCKHOLDERS' EQUITY .....	20
3.6	ANNUAL REPORT .....	20
3.7	OTHER RESOURCES .....	20
<b>4</b>	<b>APPLICATION OF FINANCIAL ANALYSIS.....</b>	<b>21</b>
4.1	METHODS AND TOOLS FOR FINANCIAL ANALYSIS .....	21
4.2	CROSS-SECTIONAL AND TIME-SERIES ANALYSIS .....	22
4.3	FINANCIAL RATIOS ANALYSIS.....	23
4.3.1	Liquidity Ratios .....	23
4.3.1.1	Current Ratio.....	24
4.3.1.2	Quick (Acid-Test) Ratio .....	25
4.3.1.3	Net-Working-Capital-to-Total-Assets Ratio.....	25
4.3.1.4	Cash Ratio .....	26
4.3.1.5	Interval Measure .....	26
4.3.2	Activity Ratios .....	26
4.3.2.1	Inventory Turnover .....	27
4.3.2.2	Average Age of Inventory .....	27
4.3.2.3	Average Collection Period.....	27
4.3.2.4	Average Payment Period .....	28
4.3.2.5	Total Asset Turnover .....	28
4.3.3	Debt Ratios.....	29
4.3.3.1	Debt Related Ratios .....	30
4.3.3.2	Times Interest Earned Ratio .....	31
4.3.3.3	Coverage of Fixed Assets by Long-term Sources .....	32
4.3.3.4	Cash Coverage Ratio .....	32

4.3.4	Profitability Ratios .....	32
4.3.4.1	Gross Profit Margin .....	33
4.3.4.2	Operating Profit Margin.....	33
4.3.4.3	Net Profit Margin.....	33
4.3.4.4	Return on Total Assets (ROA).....	34
4.3.4.5	Return on Common Equity (ROE) .....	34
<b>5</b>	<b>INDUSTRY AND COMPETITION COMPARISON .....</b>	<b>35</b>
5.1	SPIDER ANALYSIS.....	35
<b>6</b>	<b>ECONOMIC VALUE ADDED .....</b>	<b>36</b>
<b>7</b>	<b>OVERALL ANALYSIS OF FINANCIAL HEALTH OF COMPANY .....</b>	<b>37</b>
7.1	ALTMAN'S Z-SCORE.....	37
7.2	INDEX IN .....	38
7.3	DUPONT SYSTEM OF ANALYSIS.....	39
7.3.1	DuPont Formula .....	39
7.3.2	Modified DuPont Formula .....	39
7.4	SUMMARIZING ALL RATIOS .....	40
<b>8</b>	<b>PROS AND CONS OF FINANCIAL ANALYSIS AND SUMMARY .....</b>	<b>41</b>
<b>II</b>	<b>ANALYSIS .....</b>	<b>43</b>
<b>9</b>	<b>BASIC INFORMATION ABOUT COMPANY .....</b>	<b>44</b>
9.1	SWOT ANALYSIS .....	47
<b>10</b>	<b>METHODS OF FINANCIAL ANALYSIS .....</b>	<b>48</b>
10.1	ANALYSIS OF COMPANY ASSETS .....	48
10.2	ANALYSIS OF COMPANY EQUITY AND LIABILITIES.....	51
10.3	ANALYSIS OF COMPANY REVENUES.....	54
10.4	ANALYSIS OF COMPANY EXPENSES.....	57
<b>11</b>	<b>ANALYSIS OF FINANCIAL RATIOS .....</b>	<b>62</b>
11.1	LIQUIDITY RATIOS .....	62
11.2	ACTIVITY RATIOS.....	63
11.3	DEBT RATIOS .....	65
11.4	PROFITABILITY RATIOS.....	68
<b>12</b>	<b>INDUSTRY AND COMPETITION ANALYSIS.....</b>	<b>70</b>
<b>13</b>	<b>ECONOMIC VALUE ADDED .....</b>	<b>73</b>
<b>14</b>	<b>OVERALL ANALYSIS OF FINANCIAL HEALTH OF COMPANY .....</b>	<b>74</b>
14.1	ALTMAN'S Z-SCORE.....	74
14.2	INDEX IN .....	75
14.3	DUPONT SYSTEM OF ANALYSIS.....	76
	<b>SUMMARY OF ANALYSIS AND RECOMMENDATIONS.....</b>	<b>77</b>
	<b>LIST OF ABBREVIATIONS .....</b>	<b>82</b>
	<b>LIST OF FIGURES .....</b>	<b>84</b>
	<b>LIST OF TABLES.....</b>	<b>85</b>
	<b>APPENDICES .....</b>	<b>86</b>



## **INTRODUCTION - SIGNIFICANCE OF FINANCIAL ANALYSIS**

Financial analysis is a tool used in a process of testing the financial health of a particular company. Results and information provided by this analysis might serve as supporting data for financial and investment planning activities. Financial managers often conduct financial analysis or some of its specific parts to reveal facts that can be hidden in the maze of data which come from financial accounting. Numbers which can be found in these statements are the base for conducting financial analysis. However, numbers themselves are not much of a useful information. By using tools of analysis we can easily create ratios, by using data from past years we can create a series of data over time, compare through time, using scales, percentages, graphs, tables, standardized ratios and apply decision rules. Financial managers are then interpreting results to stockholders based on the information provided by the analysis.

For the analysis itself, various data from different sources can be used. Based on sources used, we can distinguish from internal and external analysis. On one hand for the internal analysis conducted by a company's managers and employees all information available may come in use. The scope of the internal analysis is more extensive and includes specific information about the scale of operations, sales, about specific item cost and other decomposed data even other than in means of money. On the other hand, external financial analysis is often conducted by banks, investors or other stakeholders who are searching for information such as indebtedness, in order to analyse the company as a potential investment opportunity. External analyst has usually limited access to financial data, so the external financial analysis cannot originate from detailed information, and thus might not reveal all the important facts and figures about the company as the internal analysis does.

For the purposes of this paper, data from financial statements and annual reports from 2009 to 2013 will be analysed as reporting periods. Financial analysis is a non-conventional tool. It can include various tools and procedures and its complexity depends on the purpose for which it is made. For this paper various methods of analysis are used, ranging from fundamental and technical analysis, analysis of company assets, equity and liabilities, revenues and expenses to indicators such as financial ratios, flow ratios and absolute ratios.

## **OBJECTIVES AND METHODS OF THESIS PROCESSING**

The aim of this thesis is the analysis (examining, monitoring) of the use of accounting information, on the basis of which it further proceeds to the company XY financial management. This thesis will thoroughly examine the financial statements and consultations with senior executives of companies, for they put great value and work with those statements. The theoretical part contains a description of the individual authors and statements related to the topic. The practical part also deals with closer analysis of accounting information in company and financial analysis to comprehensively assess the financial situation of the company through the most important indicators such as profitability, liquidity, activity or indebtedness. Finally, work assesses the current situation within the entity and to propose recommendations to improve financial management, through better use of accounting information.

## **I. THEORY**

# 1 SIGNIFICANCE OF ACCOUNTING, ACCOUNTING RULES AND PRINCIPLES

At the beginning of this work it seems important to start with a description of relationship and connections between accounting and financial analysis. As a subject, financial analysis, is based on understanding at least a basic framework and scheme of accounting, its rules and principles. Provided with the financial analyst, a person creating such analysis, should be aware of these connections and build on its knowledge, so as to provide a reliable and good quality financial results either for personal or company needs. The basic knowledge of accounting and its regulation are described in the first two chapters of the thesis.

## 1.1 Significance of Accounting

There are many types of general answers to the following question: “*What does accounting mean?*”. According to Máče (2013, p. 13), accounting is the application of general theories of economic systems, which aims to research the area of accounting system. He states that: “The main task of accounting is to faithfully show the economic reality of the entity (assets, receivables, liabilities, equity, income and expenses) for owners, banks, statistical offices, tax offices, customers, etc.”

Accounting is a methodically coherent system of information about a company’s activity which provides multiple information including a company’s well-being, profitability and other figures which belong to the important resources for financial management and performance measurements. (Šteker and Otrusinová, 2013, p. 15)

According to Březinová (2014, p. 19) information which serves as outputs from the accounting system are useful facts and figures used for various needs, ranging from administration of assets and liabilities, decision making within investment issues and cooperation with other entities, management of the entity or consolidated group of entities, control system over financial tools and instruments, legal or other needs.

Šteker and Otrusinová (2013, p. 15) describe that the object of accounting is to show the structure of a company's assets and liabilities, to follow the company's revenues and expenses and the profit generation. Moreover they say that its goal is to “faithfully and honestly show the company’s economic reality for the needs of financial management and to ensure the comparability of produced accounting information in national and international merit”.

There are different kinds of users of accounting information. Usually they are divided into two groups. The first one is *internal users*, such as the company owners or employees who use the information for the internal purposes such as long-term plan approvals, investments. The other one is *external users*, such as banks, statistical office, competition, creditors, and prospective investors. They use the information for their own benefit and usually aim to use the information for mutual cooperation. (Rubáková and Hrouda, 2014, p. 13)

According to the function of the accounting statements we can divide accounting into two groups:

- *Financial accounting*, which provides information about the financial situation and performance of the company. It is mainly used for external purposes in the form of accounting statements for external users and legislatively regulated, so that the company must obey given practices and processes. (Šteker and Otrusínová, 2013, p. 16)
- *Cost Accounting* provides the detailed cost information for determining product costs and selling prices, and to help management plan and control operations. The cost accounting, or *managerial accounting* as is its pseudonym, is not regulated by legislation and serves only for internal purposes. (Vanderbeck, 2013, p. 2-5)

## 1.2 Accounting rules and principles

According to Máče (2013, p. 18) there are few axioms, which are used in the area of accounting theory. If these do not apply, then it is not possible to speak about accounting:

- *Concept of Entity* – to follow the condition and movements of assets and liabilities and to create accounting statements for the whole entity given
- *Concept of Assessment with Financial Units* – provided that the external statements created by the companies must be comparable, they should be all “measured” in terms of units of measurement, usually financial units.
- *Concept of Unlimited Life of Entity* – book-keeping period is usually twelve following months in a row. The information compiled during this period is based on the premise of the unlimited life of entity.
- *Accrual Basis* – all of the entries should be recorded at the time when they occur, not at the time when they are accompanied with in- or outflow.

- *Periodical Assessing of Financial Situation of Entity* – information about the financial situation of company and its profits or losses is vital and important to all users, either internal or external, provided companies yield them regularly.

In order to have a comprehensive vision of all the accounting rules and principles, below is the rest as Šteker and Otrusínová (2013, p. 17) list them:

- *Concept of Faithful and Honest Depiction*
- *Concept of Consistence*
- *Concept of Materiality*
- *Concept of Restriction of Mutual Compensation*
- *Concept of Carefulness*
- *Principle of Double-Keeping*
- *Principle of Correlation*
- *Principle of Documentation*
- *Principle of Balance and Continuity*

## 2 LEGISLATIVE REGULATION OF ACCOUNTING IN SLOVAK REPUBLIC

It is important to remark at the beginning of this chapter that this financial analysis is conducted within a framework of Slovak legislative regulation system of accounting and applied on a company from Slovak republic. As the structure and process of analysing the financial health of enterprise is independent in terms of legal regulations, and formulas and equations constructions remain unchanged it can be applied on each company in need of analysis. Legislative regulations form and prescribe rules for financial statements from which the analysis derives its information.

According to Farkaš (2012, p. 8-9) among the basic legislative regulations of accounting in Slovak Republic belongs:

- *Act no. 431/2002 Coll., on Accounting, as amended (inset publications)*
- *Commercial Code no. 513/1991 Coll., (Articles 35 to 40)*
- *Secondary legislation issued by the Ministry of Finance: Decree on Accounting Procedures (including chart of accounts), Decree 4455/2003 on Content of Financial Statements*

Legal acts stated above are designed for entrepreneurs. Decrees on Accounting Procedures are designed for different types of companies, one of them is designed for use by not-for-profit entities. The financial statements must be in compliance with all relevant legal regulations in Slovakia. Legal regulations have a hierarchic structure. Primary legislation are Act on Accounting and Commercial Code which have higher authority than the secondary legislation. Secondary legislation issued by the Ministry of Finance must be in accordance with the primary legislation.

Šlosár and Novák (2012, p. 42) specify and adds secondary legislation:

- *Act. no. 455/1991 Coll., on Trades, as amended (inset publications)*
- *Civil Code no. 47/1992 Coll.*
- *Act. no. 595/2003 Coll., on Income Tax, as amended (inset publications)*
- *Accounting principles and methods of individual entities*
- *Company guidelines*

The structure and system of accounting within Slovakia is covered by international regulations and standards for international system of accounting.

According to Šlosár and Novák (2012, p. 42-43) these regulations are:

- *Fourth Council Directive of the European Union on the financial statements of certain legal forms*
- *Seventh Council Directive of the European Union on the consolidated financial statements of certain legal forms*
- *Directive of Council of the European Union no. 2006/43 on the audit of individual and consolidated financial statements*
  - Based on this directive *Act. no. 540/2007 Coll., on audit* was released in 2007
- *International Financial Reporting Standards – IFRS*
- *United States Generally Accepted Accounting Principles – US GAAP*

According to the *Commercial Code no. 513/1991 Coll.*, all entrepreneurs must keep accounts. The methods and coverage are regulated by a special law, which is *law no. 413/2002 Coll., on Accounting*. This law is the most important legislative regulation for accounting and each entity, for which it applies, must fall into its scope of rules, regardless if it is an entrepreneurial entity or not. It follows that all the specification of various types of entities have to be taken into account in implemented provisions – Decrees of Ministry of Finance, which specialize to each individual kind of entity. These specifications states above all the methods and coverage of financial statements, chart of accounts, allowed accounting methods and their usage and consolidated financial statements. (Farkaš, 2012, p. 9)

However the methods and rules of accounting may vary among entities, these acts and decrees are complemented with the internal company guidelines.

## **2.1 Act no. 431/2002 Coll., on Accounting**

This act came into force in 2002, and is divided into nine parts and regularly updated. In the first part we can find, for instance, who is this Act for, what is the accounting period and under which circumstances can we amend the length of accounting period. The second part regulates basic definitions such as the coverage of accounting, structure of accounting statements and its parts and also defines which entities can keep accounts in simplified range. In the third part it specifies, which accounting statements belong to the statement of finances and what it has to include, as well as usage of international accounting standards for compilation of the statement of finances. The fourth and fifth part records registration and detailed explanation of pricing of assets and liabilities of an entity, in the sixth part of the Act we can



find the regulation of inventory control over assets and liabilities. The statutory period for archiving accounting documents and administrative trespasses may be found in last three parts this act. (Cenigová, 2014, p. 652)

## **2.2 Decrees implementing the Act no. 431/2002 Coll., on Accounting**

These decrees are implementing some of the provisions of the Act. no. 431/2002 Coll., on Accounting. To those entities, which are entrepreneurs, the Decree no. 4455/2003 Coll., as amended, is dedicated. This Decree regulates:

1. Scope of the Act
2. Classification and identification of individual items of financial statements
3. Contents of selected items of the balance sheet and income statement
4. Attachments definition
5. The statement of cash flows and the statement of retained earnings
6. Chart of accounts
7. Allowed methods and their usage
8. Classification and identification of consolidated items of financial statements, the process of incorporating entities into a consolidated group (Cenigová, 2014, p. 23)

We can find the outlines for balance sheet, income statement in two versions and chart of account at the end of the Decree. This Decree deals with both short- and long-extent version of the statement of finances.

## **2.3 Internal Company Guidelines**

Act no. 431/2002 Coll., on Accounting, directly or indirectly imposes obligation to the entities to release Internal Company Guidelines (ICG). Apart from these guidelines, which are regulated by the Act on Accounting, optionally by one of the CAS, there are other cases, where it would be highly convenient for either accounting employees or employees from related departments, if the solution of any given situations and processes would be regulated by the ICG. When company is deciding which ICG to use, it should consider these on the basis of two main terms – company size and its structure. Generally said, the ICG should be created and released due to internal needs of company and its urge to regulate them. (Louša, 2014, p. 9-10)

### 3 SOURCES OF INFORMATION FOR FINANCIAL ANALYSIS

In order to be able to conduct a powerful and reliable analysis, we have to gather more than a spoonful of information and only then we will be able to run it.

The sources of information for financial analysis can be acquired for the most part from accounting, the statement of finances of a company given. We can differentiate statements of financial significance and inter-company statements. The financial statements are available to public, meaning they can provide facts and figures mainly to external users and analysts about the state and structure of a company's property, sources of its funding, profit generation and cash flow overview. These kinds of statements are standardised. On a contrary, the inter-company statements are not law-adjusted and serve only for the needs of a company. Using these kinds of statements we can come to greater details and thanks to them positively amend the financial analysis expressing information which is not clear from the financial statements at first hand. (Růčková, 2011, p. 21)

#### 3.1 BALANCE SHEET

Balance sheet is a kind of a financial statement by which we can distinguish the company's financial position at a given point in time. It balances the firm's assets (what it owns) and its financing, which can be either *debt* (what it owes) or *equity* (what was provided by owners). There is an important differentiation between short-term and long-term assets and liabilities. The *current assets* and *current liabilities* are short-term assets and liabilities, meaning they can be converted into cash or paid within one year or less. On the other side, all the other assets and liabilities which are supposed to have an infinite life are seen as *long-term*, or *fixed*, because it is implied that they will last for more than one year. (Gitman and Zutter, 2010, p. 62)

##### 3.1.1 Structure of Balance Sheet

For better understanding and faster work with figures we should know the structure of the balance sheet. The assets are listed according to their liquidity, thus from the least liquid – *fixed assets* – to the most liquid – *cash*. The balance sheet includes two main elements: *assets* and *stockholders' equity and liabilities*. The company assets are classified into four groups: A – Receivables for subscribed capital, B – Fixed assets, C – Current assets and D – Accruals. The stockholders' equity and liabilities are divided into group A – Stockholders' equity, B – Liabilities, C – Accruals. (Paseková, 2008, p. 50-52)

TOTAL ASSETS	TOTAL SE AND LIABILITIES
<b>A: Receivables for subscribed capital</b>	<b>A: Stockholder's Equity</b>
<b>B: Fixed assets</b>	Registered capital
Intangible fixed assets	Capital funds
Tangible fixed assets	Funds from earnings
Long-term financial assets	Profit/loss - previous years
<b>C: Current assets</b>	Profit/loss - current year
Inventory	<b>B: Liabilities</b>
Long-term receivables	Reserves
Short-term receivables	Long-term payables
Short-term financial assets	Short-term payables
	Bank loans
<b>D: Accruals</b>	<b>C: Accruals</b>

Table 1: Structure of balance sheet (Šteker and Otrusinová, 2013, p. 21)

## 3.2 INCOME STATEMENT

The main information we can find in the income statement is the financial summary of the company's operating results during a specific period of time. Usually companies create income statements covering a one-year period ending at a specific point in time, ordinarily at the end of the calendar year. Many large companies, however, use so called *fiscal year*, which means a 12-month financial cycle. This kind of time-period ends at a time other than December 31. (Gitman and Zutter, 2010, p. 61)

### 3.2.1 Structure of Income Statement

This financial statement segments expenses into generic and targeted breakdown and revenues according to their individual sources. It is upon the entity whether it decides to use generic or targeted dissection of expenses, but if a targeted system is used, it is possible to use the generic type of dissection of expenses which is attached to notes to the financial statement. Income statement differentiates between the operating profit/loss, financial profit/loss, based on these two indicators it generates profit/loss from ordinary activity and its particle which pursues extraordinary activity of enterprise and accruals of the extraordinary profit or loss. (Paseková, 2008, p. 172-173)

## 3.3 STATEMENT OF CASH FLOWS

Balance sheet sums up the conditions and structure of assets and liabilities at the given point in time. Income statement lists company's revenues and expenses when they are created,

however they are accompanied with inflows and outflows of money. In this case disagreement arises among revenues, expenses, inflows, outflows, profit and cash balance. In order to ensure that such discrepancy does not occur, companies create the statement of cash flows, which plays an important role in financial controls and financial analysis. The main idea of this statement is to follow the company's cash flows and to explain why inflows and outflows occur throughout a year. (Knápková, Pavelková and Šteker, 2013, p. 47)

### 3.3.1 Structure of Statement of Cash Flows

The structure of this statement falls into three categories: *operating flows*, *investment flows* and *financing flows*. The sale and productions of the firm's products and services is directly bounded with the operating flows. The purchase and sale of both fixed assets and equity investments in other firms is associated with the investments flows, and financing transactions result in the financing flows. (Gitman and Zutter, 2010, p. 118)

According to Ručková (2011, p. 34) the most important part of the statement of cash flows are the *operating flows*, which explains to what extent the *net profit after taxes* from the statement of cash flow follow the real cash flows in the company.

There are two methods of building up this statement – *direct* and *indirect* method. In direct method the real cash inflows and outflows are tracked. On a contrary, the indirect method transforms the *net profit after taxes* from the income statement. (Knápková, Pavelková and Šteker, 2013, p. 49)

## 3.4 NOTES TO THE FINANCIAL STATEMENTS

Notes to the financial statements create an obligatory part of the statement of finances, which is very important for financial analysts mainly because of its explanatory part about the information contained in balance sheet and income statement. Moreover it comes up with important information which complements the statements' figures, so that the analysts get a clear vision of company's well-being and processes within. (Šteker and Otrusínová, 2013, p. 241)

### 3.4.1 Structure of Notes to the Financial Statements

The statements include above all general information about the company and units it controls or has an essential interest in, related parties transactions overview, accounting principles and methods additional information about events, which occurred from the moment when

the balance sheet is released and time when statement of finances is conducted. (Šteker and Otrusínová, 2013, p. 242)

### **3.5 STATEMENT OF STOCKHOLDERS' EQUITY**

The statement of stockholders' equity, or the *statement of retained earnings*, as is its abbreviated form, shows all equity account transactions that occurred during a given year. Its shorter version, the statement of retained earnings reconciles the net income earned during a given year, and any cash dividends paid, with the change in retained earnings between the start and the end of that year. (Gitman and Zutter, 2010, p. 65)

This statement shows an overview of increasing or decreasing parts of equity, provides outline of dividends paid and sources, from which they were financed. (Paseková, 2008, p. 189)

### **3.6 ANNUAL REPORT**

The aim of this report is to inform about the economic position of the company and to provide the insight into the present and future of company's performance. (Šteker and Otrusínová, 2013, p. 247)

### **3.7 OTHER RESOURCES**

In order to conduct a more precise financial analysis sometimes we may use other additional sources, as for example the equity overview, the auditor's announcement to the statement of finances. Moreover we can use reports of manager and leading bodies, information from the internal company statistics, bulletins, summaries and statements. We may consider using facts and figures from managerial accounting, as well.

In order to get more information which the company may use when comparing its situation of financial health to either other businesses within the given specified industry area or looking for facts and figures about other companies within all the branches of Czech industry, we may find this information on the website of *Ministry of Industry and Trade of the Czech Republic*, which regularly conducts financial analysis and aggregately evaluates its results according to the classification of economic activities. (Knápková and Pavelková, 2010, p. 18)

In terms of such analysis these information are available on the website of *Ministry of Economy of Slovak Republic*, as well.

## 4 APPLICATION OF FINANCIAL ANALYSIS

The financial analysis helps us to read and interpret financial statements. The financial analysis is a complex scientific area based especially on mathematics and statistics, with various approaches. The aim of this thesis is to choose methods of financial analysis in order to capture a comprehensive image of the basic financial characteristics about the company. (Březinová, 2014, p. 182)

The financial analysis is used not only by the company management for short-term and long-term financial planning and management, controlling, investment decisions, acquiring of fixed assets, optimal structure of assets and liabilities, but also by managers of other companies, creditors, investors, business partners, state institutions, international institutions and companies, employees, auditors, competition, and other specialist. (Knápková, Pavelková and Šteker, 2013, p. 17)

### 4.1 METHODS AND TOOLS FOR FINANCIAL ANALYSIS

Today we can find many methods of financial analysis which helps us analyse the financial health of a company. All of the analysis should be, on a contrary, applied in a way which allows them to be efficient and to provide a reliable result for their users. At the same time the financial analysts should wisely choose the right method for their purpose intended, as not always all the methods are applicable for the given research area. We can generally conclude that the better the methods, the better the results and the lower the danger of wrong decision. (Růčková, 2011, p. 40)

Generally there are two kinds of approaches to the assessment of economic processes. The first one is *fundamental analysis*, which is based on knowledge of interdependencies between economic and non-economic processes. The second type of assessment is *technical analysis*, which uses mathematical, mathematical-statistical and other algorithmic methods. Although it is obvious that these two types of analysis cannot work without each other simultaneously, as long as assessment of technical analysis results cannot be made without at least basic knowledge of economic processes. (Březinová, 2014, p. 182)

While conducting a financial analysis either internal or external analysts usually work with many kinds of indicators. They analyse either *absolute* indicators or *flow* indicators. For absolute indicators, mostly the structure of assets and liabilities, usually by creating cross-

sectional and time-series analysis and a percentage dissection of individual items of the balance sheet. As for the *flow* indicators, mostly revenues, expenses, profit/loss and cash flow, *differences* indicators, often *net working capital* and finally *financial ratios*, which usually shape the core of a conducted financial analysis. (Knápková, Pavelková and Šteker, 2013, p. 61)

According to Růčková (2011, p. 43) all of these indicators, as divided into a couple of groups, create a financial consciousness of company. The significance of these groups does not stand alone as together they stand for a complex financial analysis of company's economy.

## 4.2 CROSS-SECTIONAL AND TIME-SERIES ANALYSIS

In the cross-sectional analysis we compare financial ratios of different companies at the same point of time. Both the external or internal analysts are interested in how well a company has performed in comparison to other companies in its industry. Usually the third parties, as investors, analysts, as well as the company itself compare their financial ratios with ratio values to those of a key competitor or group of competitors that they wish to emulate. This type of cross-sectional analysis is called *benchmarking* and has become very popular. (Gitman and Zutter, 2010, p. 67)

Analysts have to be very careful when considering the financial ratios and comparing them within the industry ratios. It is tempting to assume that if one ratio for a particular firm is above the industry norm, this is a sign that the firm is performing well, at least along the dimension measured by the ratio. However these ratios values may well be below or above the average because of positive and negative reasons as well and it is necessary to determine why a firm's performance differs from its industry peers. (Gitman and Zutter, 2010, p. 68)

Time-series analysis evaluates the company's indicators over a given period of time. Thanks to this analysis company is able to assess its performance over time so that it enables analysts to assess company's progress. It usually happens that we find significant changes in year-to-year comparison, which may indicate a problem, especially if the same trend is not an industry-wide phenomenon. (Gitman and Zutter, 2010, p. 68)

The indicators undergo time-series and cross-sectional analysis. By the time-series analysis we compare changes in individual indicators by each line (that is why this analysis is also called *horizontal analysis*) and allocate the change in *percentage* or *absolute numbers*.

$$\text{changes in \%} = \frac{\text{actual period} - \text{last period}}{\text{last period}} \times 100$$

$$\text{changes in absolute numbers} = \text{actual period} - \text{last period}$$

By the cross-sectional analysis we describe individual entries as a percentage amount to other entries, or base of distribution, which is set for 100 %. (Knápková, Pavelková and Šteker, 2013, p. 68)

### 4.3 FINANCIAL RATIOS ANALYSIS

The financial ratios analysis belongs to the most frequent used practices not just because of its importance, but also because of the simple access to data, which are almost completely available from the basic accounting statements. For these indicators by far the most used and important are liquidity, activity, debt, profitability, and market ratios. (Růčková, 2011, p. 47)

#### 4.3.1 Liquidity Ratios

According to Ross (2008, p. 57) this group of liquidity financial ratios, also called *short-term solvency ratios* or *liquidity measures*, provide information about a firm's liquidity. The primary goal of company's liquidity is to pay all of its bills within the given period without undue stress. These kinds of ratios are particularly important for short-term creditors, and understanding of these ratios is essential for a company as it cooperates with many external providers on short-term basis.

“If you are extending credit to a customer or making a short-term bank loan, you are interested in more than the company's leverage. You want to know whether the company can lay its hands on the cash to repay you. Liquid assets can be converted into cash quickly and cheaply.” (Brealey, Myers and Allen, 2014, p. 735)

There are many assets within the company, which might be either of high or low liquidity. These degrees of liquidity may vary widely. For example, accounts receivable and inventories of finished goods are generally quite liquid. At the other extreme, real estate may be very *illiquid*, it may be very difficult for a company to find a buyer, negotiate a fair price, and close a deal on short notice. It is also very important for a company to keep track of its short-term assets as they can easily become outdated. Cash in the bank disappears in seconds. On the other side there are some drawbacks of liquidity for companies. Assets that seem liquid have a nasty habit of becoming illiquid, as happened during the subprime mortgage crisis in 2007, when some financial institutions had set up funds that issued short-term debt



backed by residential mortgages, which rates began to climb so that dealers were reluctant to quote a price and investors who were forced to sell found that the prices that they received were less than half the debt's estimated value. Another drawback of liquidity might be its inefficient slope. To have a high rate of liquid assets within company is not always a good thing. A few efficient and quality companies leave excess cash in their bank accounts. In other words, high levels of liquidity may indicate sloppy use of capital. Here, EVA (*presented in chapter no. 5*) can help. (Brealey, Myers and Allen, 2014 p. 735)

Another reason why efficient companies do not leave excess cash in the bank accounts is that these do not earn a particularly high rate of return, so shareholders will not want a company to *overinvest* in liquidity. "Clearly it is desirable that a firm is able to pay its bills, so having enough liquidity for day-to-day operations is important". (Gitman and Zutter, 2006, p. 71)

Gitman and Zutter (2006, p. 71) indicate two basic measures of liquidity, which are the *current ratio* and the *quick (acid-test) ratio*, but according to Brealey, Myers and Allen (2014, p. 735) there is also *net-working-capital-to-total-assets ratio*, *cash ratio* and according to Ross (2008, p. 59) *interval measures* is included. Below all these indicators are discussed.

#### 4.3.1.1 *Current Ratio*

The current ratio, one of the most commonly cited financial ratios, measures the company's ability to meet its short-term goals. It is simply just the ratio of current assets to current liabilities, a measure of liquidity calculated by dividing the assets by its current liabilities.

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

Generally a higher current ratio indicates a greater degree of liquidity. The volatility of the company's business, bank credit lines, company's size are factors influencing the overall liquidity. For example, a grocery store, which is easily predictable and is sure of its revenues, may not need as much liquidity as a manufacturing company which may face sudden changes in its demand for products from day to day. "The more predictable a firm's cash flows, the lower the acceptable current ratio." (Gitman and Zutter, 2010, p. 71) This author also points out that smaller companies may not have the same access to credit, and therefore they tend to operate with more liquidity.

#### 4.3.1.2 Quick (Acid-Test) Ratio

Sometimes some of the inventory may later turn out to be damaged, obsolete or lost. And as long as the inventory is often the least liquid current asset, managers usually exclude inventories and other less liquid components of current assets, so that they avoid assets with lower liquidity than cash. (Brealey, Myers and Allen, 2014, p. 736)

Relatively large inventories are often a sign of short-term trouble. Because the company may have overestimated sales, as a result, a substantial portion of its liquidity is tied up in slow-moving inventory. This is the reason why, as indicated above, the managers exclude inventories from *current ratio*. (Ross, 2008, p. 58)

According to Gitman and Zutter (2010, p. 71) there are two primary factors why inventory has a low liquidity - *many types of inventory*, which as a result is hard to be sold and *selling inventory on credit*, which means that the inventory turns into accounts receivable before it is converted into cash.

$$\text{Quick (Acid - Test) Ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

“If inventory is liquid, the current ratio is a preferred measure of overall liquidity”. (Gitman and Zutter 2010, p. 71) He points out that the results we get from the quick ratio depends on the kind of a business which company runs, either a company with a high-level of inventory or companies which hold very little inventory.

#### 4.3.1.3 Net-Working-Capital-to-Total-Assets Ratio

Net-working-capital-to-total-assets ratio is simply the difference between current assets and current liabilities, which is known as *net working capital*. We may generally conclude that current assets usually exceed current liabilities, so that this ratio is mostly positive. (Brealey, Myers and Allen, 2014, p. 735)

$$\text{Net Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$

Because net working capital is frequently viewed as the amount of short-term liquidity a company has, we compare the amount of net working capital to total assets, expressed in percentages. (Ross, 2008, p. 59)

$$\frac{\text{Net Working Capital}}{\text{Total Assets}} \times 100$$

“A relatively low value might indicate relatively low levels of liquidity.” (Ross, 2008, p. 59)

#### 4.3.1.4 Cash Ratio

All of the above mentioned ratios (current ration, quick ratio, net-working-capital ratio) are measures of liquidity. There are, however, creditors who work on a very short-term basis with the company. This kind of creditors may be interested in a financial ratio called *cash ratio*. (Ross, 2008, p. 59)

$$\text{Cash Ratio} = \frac{\text{Cash}}{\text{Current Liabilities}}$$

We may not view this financial ratio so strictly, as in this case it depends whether the company has a good and quality line of credit so it can borrow whenever it chooses, or has enough cash on hand. None of the standard measures of liquidity takes the company's *reserve borrowing power* into account. (Brealey, Myers and Allen, 2014, p. 736)

#### 4.3.1.5 Interval Measure

This is an interesting kind of a financial ratio, which is more of an emergency help than of a review of financial ratios. What if the company is facing a strike and cash inflows began to dry up? How long is the company expected to keep running its business? This financial ratio answers this question. We need only a total costs for the year, excluding depreciation and interest. After getting this information from the financial statements we divide this figure with the number of days in a year and get *average daily operating costs*. (Ross, 2008, p. 59)

$$\text{Interval Measure} = \frac{\text{Current Assets}}{\text{Average Daily Operating Costs}}$$

#### 4.3.2 Activity Ratios

Activity ratios or as Brealey, Myers and Allen (2014, p 729) call it *efficiency measuring ratios* answers the question: *What factors contribute to company's overall profitability?*

This ratio analysis measures the speed with which various account are converted into sales or cash – inflows or outflows, meaning how efficiently a company operates along a variety of dimensions such as inventory management, disbursements, and collections. In this analysis we test various current accounts, which include inventory, accounts receivable, and account payable. We can measure the efficiency of total assets used in a company, too. (Gitman and Zutter, 2010, p. 73)

Gitman and Zutter (2010, p. 73-75) introduce *inventory turnover*, *average age of inventory*, *average collection period*, *average payment period* and *total asset turnover*. Ross (2008, p. 63) develop asset turnover ratio into *fixed asset turnover*.

#### 4.3.2.1 Inventory Turnover

Inventory turnover commonly measures the activity, or liquidity, of a company's inventory. Efficient companies do not tie up more capital than they need in raw materials and finished goods. They hold only as much of the inventory as they need and turn it over rapidly. (Brealey, Myers and Allen, 2014, p. 730)

$$\text{Inventory Turnover} = \frac{\text{Sales}}{\text{Inventory}}$$

We may find this ratio meaningful just in case when we compare it with that of other companies in the same industry or to the company's past inventory turnover. We may compare a grocery or an aircraft manufacturer. Each of them may have an extreme value of inventory turnover ratio, for a grocery's products are highly perishable, it will be high, but the manufacturer might turn its inventory just four times per year. (Gitman and Zutter, 2010, p. 73)

#### 4.3.2.2 Average Age of Inventory

Another way to express how long inventory sits on average before it is sold, is to use the *average age of inventory* financial ratio. Assuming we use just the most recent inventory and cost figures, it will tell us how many days it will last to work of our current inventory. This is equal to the level of inventories divided by the *daily* cost of goods sold. (Ross, 2008, p. 62)

$$\text{Average Age of Inventory} = \frac{\text{Inventory}}{\text{Daily Sales}}$$

$$\text{Daily Sales} = \frac{\text{Sales}}{365}$$

#### 4.3.2.3 Average Collection Period

When the company wants to evaluate its credit and collection policies it is highly recommended to use the *average collection period* ratio. (Gitman and Zutter, 2010, p. 74)

$$\text{Average Collection Period} = \frac{\text{Accounts Receivable}}{\frac{\text{Sales}}{365}}$$

Knápková, Pavelková and Šteker (2013, p. 105) state that this financial ratios shows the users of financial analysis time that the company has to wait before it collects its accounts receivables. The value of this indicator should be compared with the maturity of invoices and with the industrial average. If the value is bigger than either the maturity of invoices or the industrial average it means that a bigger amount of trade credits is needed and so the expense will increase.

#### 4.3.2.4 *Average Payment Period*

The average payment period is calculated in the same manner as the average collection period.

$$\text{Average Payment Period} = \frac{\text{Accounts Payable}}{\frac{\text{Annual Purchases}}{365}}$$

There is however one problematic part of calculation financial ratio like this. In order to get the average payment period we need to know the annual purchases, a value not available in published financial statements. So as to find out this figure we ordinarily estimate it as a given percentage of cost of goods sold. (Gitman and Zutter, 2010, p. 75)

This financial ratio shows us how quickly the company's accounts payable are sorted out and paid. Generally we may assume that the average payment period should be longer than average collection period, not to violate the financial balance of the company. (Růčková, 2011, p. 61)

#### 4.3.2.5 *Total Asset Turnover*

The total asset turnover indicates the efficiency with which the company uses its assets to generate sales. In other words, how many times a company turns over its assets throughout a year. (Gitman and Zutter, 2010, p. 75)

$$\text{Total Asset Turnover} = \frac{\text{Sales}}{\text{Total Assets}}$$

Like for a number of other financial ratios, there is *no* obvious *best* point of time to measure. The total asset turnover or *sales-to-sales* ratio as it is called compares a flow measure (sales over the entire year) with a snapshot measure (assets at a point of time). In this case there are no special advices on what time should the figures be taken from. Analysts frequently use the *average* of the company's assets at the start and end of the year. The total assets

turnover ratio measures how efficiently the company is using its entire asset base, but users of financial analysis may also be interested in how hard *particular types* of assets are being put to use, these were mentioned above. (Brealey, Myers and Allen, 2014, p. 729)

According to Knápková, Pavelková and Šteker (2013, p. 104) if the company deals with a great amount of assets finance by leasing, these are not influenced in the balance sheet so it may happen that the value of the total asset turnover is over-estimated.

Total assets turnover ratio is an important indicator, which has a direct influence on company's profitability. If the value of this ratio calculated within the company is lower than those of the industrial average, the part of assets should be sold or sales should be increased. (Sedláček, 2011, p. 61)

If the analysts of the financial ratios are interested in this ratio the analysis may offer another type of total asset turnover – *fixed asset turnover*. Thus we are able to state how much sales the company generates for every euro in fixed assets.

$$\text{Fixed Asset Turnover} = \frac{\text{Sales}}{\text{Net Fixed Sales}}$$

### 4.3.3 Debt Ratios

Debt ratios measure financial stability as one of the important aspects of the financial health of the company. These ratios generally indicate the amount of other people's money being used to generate profits. To allocate the optimal amount of resources needed for financing is one of the primary goals of the financial management. Generally financial and capital structures are recognized. *Financial structure* is the overall structure of the company which is further divided into *own* and *other resources* to ensure the entire activity of the entities. *Capital structure* is the part of the capital, which serves to finance fixed assets and part of the current assets. The debt ratios generally show the proportion among resources owned by the company and other resources. Usually those companies with a high slope of other resources have multiple problems, from *problems with accounts payable, interests from accounts payable?* The price for being so debt-based forces them to often have to withdraw expensive loans to keep their business running. (Březinová, 2014, p. 193)

Because debt increases the returns to shareholders in good times and reduces them in bad times, it is said to create *financial leverage*. The debt ratios, or *leverage ratios* as this term is widely used, shows how much financial leverage the company has taken on. The main

task of the Chief Office Executive is to keep these ratios under control and let companies bear just reasonable amount of financial leverage. (Brealey, Myers and Allen, 2014, p. 732)

Financial leverage is the magnification of risk and return through the use of fixed-cost financing, such as debt and preferred stock. The more fixed-cost debt a firm uses, the greater will be its expected risk and return. From general terms of the world of investments we may conclude that *the greater the debt the greater the risk and the greater the potential return*. (Gitman and Zutter, 2010, p. 76)

When the company needs new resources for financing it takes into account the opinion of creditors and stockholders, as far as under a great indebtedness it may happen that the company would be incapable to find another creditor who is willing to provide his finances. Even in case when the creditor decides to flow his financial help to the company he sets expensive price of this help and thus great expenses may occur. The proportion of other sources of financing is very important to stockholders, too. The bigger this rate the riskier are the company shares. From these cases it is acknowledged that the reasonable proportion between own and other resources of financing is desired in order to achieve the company to be as profitable as it is possible with adequate financial indebtedness ratio. (Růčková, 2011, p. 58)

Apart from the pros and cons of using the debt financing, there are other effects coming along with this kind of financing. Using *other capital* as a financing tool allows the stockholders keep their shares and so to control the company. Besides from the tax effect we may find some financial leverage agency effect, where in case that the company is able to earn more money with other sources of financing than is the interest price for such funding, the profitability of own capital increases. (Knápková and Pavelková, 2008, p. 64)

#### **4.3.3.1 Debt Related Ratios**

The debt ratio measures the rate of total assets which are financed by the company's creditors meaning the higher the ratio the bigger the proportion of other capital used to generate profits. (Gitman and Zutter, 2010, p. 77)

The *total debt ratio* takes into account all debts of all maturities to all creditors. This indicator can be defined in many ways, starting with the easiest one:

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

From the result of such a ratio we may learn how much debt the company use for financing. As long as we know the total debt ratio we may assume how big is the part financed by company's own capital easily subtracting the number of debt ratio (1 – debt ratio). With this in mind, we can define two more useful variations of debt ratio:

1. *Debt – Equity Ratio* = 
$$\frac{\text{Liabilities}}{\text{Total Stockholders' Equity}}$$
2. *Equity Multiplier* = 
$$\frac{\text{Total Assets}}{\text{Total Stockholders' Equity}}$$

There is an interesting thing to be notice, which is that coming to one of these ratios means you are on a direct road to the other two indicators. (Ross, 2008, p. 59-60)

Providing the debt-equity ratio is important to depict the structure of the stockholders' equity and liabilities within the financial structure of the company, it is also crucial to highlight these sources form the maturity point of view. For this purposes we use following ratios: (Knápková, Pavelková and Šteker, 2013, p. 86)

$$\frac{\text{Long – term Liabilities}}{\text{Stockholders' Equity} + \text{Long – term Liabilities}}$$

$$\frac{\text{Long – term Liabilities}}{\text{Liabilities}}$$

#### 4.3.3.2 *Times Interest Earned Ratio*

The users of financial ratios use this ratio to learn how many times the company would be able to pay loan interest from the profit it earns. If this indicated less than 1, it would mean that the *other capital costs* are higher than the profit, which was been generated using both own and other capital for the given period. It is generally desired that the amount of profit generated from the other capital covers costs for using such a way of financing. It is widely stated that the company should cover its interest expenses from the profit at least three to six times; however this information should be evaluated carefully, taking into account all the circumstances. (Sedláček, 2011, p. 64)

This ratio, measuring the company's ability to make contractual interest payments, is formed by *Earnings before interest and taxes (EBIT)*, which is exactly the same number as that for *operating profits* shown in the income statement. (Gitman and Zutter, 2010, p. 78)

$$\text{Times Interest Earned Ratio} = \frac{\text{Earnings Before Interest and Taxes}}{\text{Interest Expense}}$$



#### 4.3.3.3 Coverage of Fixed Assets by Long-term Sources

This indicator is a ratio between company long-term sources and fixed assets. It is connected with so-called *golden rule of financing*, which states that the company should cover its fixed assets by long-term sources and on the contrary the current assets should be financed by short-term sources. (Knápková, Pavelková and Šteker, 2013, p. 88)

*Coverage of FA by Long – term Sources*

$$= \frac{\text{Stockholders' Equity} + \text{Long – term Liabilities}}{\text{Fixed Assets}}$$

#### 4.3.3.4 Cash Coverage Ratio

According to Ross (2008, p. 61) given that EBIT is not really a measure of cash available to pay interest, and in the previous ratio it is used, here comes a little problem. As long as in *times interest earned ratio* a non-cash expense – depreciation has been deducted out, and because we definitely find interest a cash flow (to creditors) one way to define this ratio is:

$$\text{Cash Coverage Ratio} = \frac{\text{EBIT} + \text{Depreciation}}{\text{Interest Expense}}$$

Here we find a numerator created out of a sum of *EBIT* and *Depreciation*, which is commonly referred to as *EBITD (earnings before interest, taxes, and depreciation)*. It is frequently used either to measure company's ability to generate cash from operations, or to measure a cash flow available to satisfy financial obligations. (Ross, 2008, p. 61)

Another common variation of EBIT is *EBITDA (Earnings before interest, taxes, depreciation, and amortization)*, where amortization refers to a noncash deduction similar to depreciation, but it applies to intangible assets rather than tangible. (Ross, 2008, p. 61)

#### 4.3.4 Profitability Ratios

Without profits, a company could not attract outside capital, and thus shareholders, creditors and management pay close attention to these ratios as boosting the capital is of a great importance. With respect to a given level of sales, a certain level of assets, or the shareholders' investments the analysts are able to analyse the company's profits. (Gitman and Zutter, 2010, p. 79)

According to Ross (2008, p. 63-64) there are three measures which are best known and most widely used of all financial ratios. These are *Profit Margin*, *Return on Assets* and *Return on*

*Equity*. They are intended to measure how efficiently a company uses its assets and manages its operations. Altogether they concentrate on a bottom line of an income statement – *net income*.

Although Ross (2008, p. 64) introduces these ratios as the most important and used among all the ratios, Gitman and Zutter (2010, p. 79-82) go deeper in a company's profitability and they present profitability ratios stated below.

#### 4.3.4.1 *Gross Profit Margin*

“The *gross profit margin* measures the percentage of cash sales dollar (euro) remaining after the company has paid for its goods. The higher the gross profit margin, the better.” (Gitman and Zutter, 2010, p. 79)

$$\text{Gross Profit Margin} = \frac{\text{Sales} - \text{Cost of Goods Sold}}{\text{Sales}} = \frac{\text{Gross Profits}}{\text{Sales}}$$

#### 4.3.4.2 *Operating Profit Margin*

The keystone of this financial ratio, *operating profit margin* is the same as the previous one, but in this case it is not just the percentage of cash sales euro remaining after the company has paid for its goods, but after all costs and expenses *other than* interest, taxes and preferred stock dividends are deducted. We may conclude that the number we get from this ratio are *pure* operating profits, as they measure only the profits from operations, and thus a high operating profit margin is preferred. (Gitman and Zutter, 2010, p .80)

$$\text{Operating Profit Margin} = \frac{\text{Profit or Loss from Operating Activities}}{\text{Sales}}$$

#### 4.3.4.3 *Net Profit Margin*

The *net profit margin* is the last one from the series of profit margins. The result of this financial ratios is, logically, summarizing all the previous margins together, as it measures the percentage of each euro remaining after all costs and expenses, *including* interest, taxes, and preferred stock dividends (*not* likewise operating profit margin), have been deducted.

$$\text{Net Profit Margin} = \frac{\text{Profit or Loss from Current Year}}{\text{Sales}}$$

Again, the higher the number for net profit margin, the better. (Gitman and Zutter, 2010, p. 81)

#### 4.3.4.4 *Return on Total Assets (ROA)*

The overall effectiveness of the company's management in generating profits with all the assets is measured by *return on total assets*, also called the *return on investment (ROI)*. (Gitman and Zutter, 2010, p. 81)

Together with ROE these financial ratios are commonly cited indicators, but it is very important to remember that they are accounting rates of return, meaning we should not compare them to interest rates observed in the financial markets. They are sometimes referred to as *return on book assets* and *return on book equity*. (Ross, 2008, p. 64)

$$\text{Return on Total Assets (ROA)} = \frac{\text{Profit or Loss from Current Year}}{\text{Total assets}}$$

#### 4.3.4.5 *Return on Common Equity (ROE)*

Likewise ROA, *return on common equity (ROE)* measures how much euro the company earned on each euro of common stock equity. (Gitman and Zutter, 2010, p. 82)

$$\text{Return on Equity} = \frac{\text{Profit or Loss from Current Year}}{\text{Stockholders' Equity}}$$

There is one problem about this financial ratio. The common reality is that usually information and figures used for this indicator are dated to the same point of time, and thus we may underestimate the real profitability of the company. The problem arises because the profit is being created throughout a whole year and thus is not completely available to the date given and that is why we get a lower result. (Knápková, Pavelková and Šteker, 2013, p. 100)

## 5 INDUSTRY AND COMPETITION COMPARISON

The results of the financial analysis, *financial ratios* and *other indicators* are frequently used in a comparison to other companies, usually with either competition or an industry, which shows the same signs, similar to the structure of assets and liabilities due to similar or same business specification. Apart from the basic functions of financial analysis which are financial ratios calculations, current financial health condition dissection and its reasons, determination of weaknesses and proposal measures, the results are often used for comparisons. These are regularly brought up in many ways, such as table charts, pie charts, trend depictions, histograms, etc. Because of its advantage of transparency, so called *spider graph* is widely used.

### 5.1 SPIDER ANALYSIS

There are many ways of *spatial comparisons* of the indicators within a given period of time, such as *pie chart*, *ring chart* or *radar chart* (spider graph), where the spider graph is a result of *spider analysis*. In this kind of analysis we choose one representative of each of the financial ratios groups which together create a financial balance. This representative is meant to be the most important among all others. For a comparison this graph uses the financial indicators of the same groups but from the industrial comparison – a company with similar or same business. (Usually *benchmarking* is applied, meaning that for such comparisons a company which is desired to be emulated is used – author's comment). Generally the greater the area covered the better the financial health of the company. (Sedláček, 2011, p. 78)

Based on the financial ratios in the spider graph the company is able to track its development in each year, or the comparison to its competition. It is also possible to draw a comparison of multiple companies at the same time, but the graph becomes to be less transparent, then.

If the company is compared to its competition or to the industrial average, in case that the values of the company are shown above the level of the circle generating 100 %, it is assumed that the company's results are better than indexes used for comparison. However it is important to pay attention and remember that not always the rule *the bigger the better* applies. In this case we overturn the original values – in denominator is a company being compared and in numerator the best company. (Synek, Kopkáně and Kubálková, 2009, p. 193)

## 6 ECONOMIC VALUE ADDED

There are many important and worth-taking conventional accounting measures of profit, but one of them stays apart with one important difference. It is *Economic Value Added* or *EVA* which considers the cost of *all* capital. The problem of the other ways of measuring the profit is that they absorb just the visible information from the company's income statements while ignoring the *cost of equity*. In order to measure the company's performance we cannot ignore and avoid such costs, because otherwise we would not be able to reveal how successful a company has been in creating value for its owners. (Young and O'Byrne, 2011, p. 5)

The main idea of EVA is not new, really. EVA is basically a concept of putting financial management and corporate finance principles, which have been around for already quite a long time, together. (Young and O'Byrne, 2011, p. 5)

The *cost of capital* equals the expected rate of return on investment opportunities open to investors in financial markets, and thus is called an *opportunity* cost of capital, meaning it is the minimum acceptable rate of return on capital invested into company. In this sense we may conclude that an efficient company with a high rate of performance creates the value for investors only if it earns more than the cost of capital, that is, more than if the investors invested on their own. (Brealey, Myers and Allen, 2014, p. 725)

Knápková, Pavelková and Šteker (2013, p. 152-153) say that economic value added is therefore a difference between so called *operating profits* after taxes and cost of capital. They express this relationship as follows:

$$EVA = \text{Net income} - \text{cost of own capital} \times \text{own capital}$$

According to Brealey, Myers and Allen (2014, p. 306, 726) when we deduct the euro return required by investors from the net income we get what is called *residual income* or *economic value added*. They define this ratio as shown below:

$$EVA = (\text{after-tax interest} + \text{net income}) - (\text{cost of capital} \times \text{capital})$$

Sometimes it is helpful to re-express EVA like this:

$$\begin{aligned} EVA &= \left( \frac{\text{after-tax interest} + \text{net income}}{\text{total capital}} - \text{cost of capital} \right) \times \text{total capital} \\ &= (\text{return on capital} - \text{cost of capital}) \times \text{total capital} \end{aligned}$$

## 7 OVERALL ANALYSIS OF FINANCIAL HEALTH OF COMPANY

The analysis of financial health of company uses indicators, models and other methods to evaluate the financial health and overall financial situation of the company in given connections. As each individual indicators in previous chapters, also here, each method or index has a given recommended limits, the area where the values of all indicators should appear. This limits are greatly influenced by a degree of objectivity of all elements, from which it is composed, and according to the reliability of results which financial analysts produce, a denouncing value of the overall evaluation is developed.

The main idea of these indicators is to choose right indicators and thanks to indicated ratios, assign them a level of significance and summarize them into one overall indicator. The bankruptcy models aim to assess and evaluate the company situation and predict if the entity is endangered by a prospective future bankruptcy or not (Altman Z-Score). A creditworthy models shows a financial health of company, which is evaluated for individual areas. (Index IN). (Březinová, 2014, p. 199)

As soon as the financial analysis is conducted, summarizing all ratios is needed. There are multiple ways how to do that, but altogether they have one goal – to evaluate the results and financial ratios from the financial analysis in order to provide a comprehensive view of company's financial health. *Summarizing all ratios* is a kind of an evaluation which is based more on describing and explaining individual ratios. On the contrary using *Du Pont system of analysis* may be a little advanced and expects at least intermediate knowledge of financial indicators and connections among them.

### 7.1 ALTMAN'S Z-SCORE

This model is a bankruptcy model that reflects the financial situation of the company. In the event that the value of the final score is higher than 2,99, the company is financially healthy, with a value from 1,81 to 2,99, the company is in a vague financial situation and value of less than 1,81 may already have big financial problems. (Knápková, Pavelková and Šteker, 2013, p. 132)

Under the conditions of Czech economy the Altman's Z-Score is indicated below: (Jáčová and Ortová, 2011, p. 200)

$$Z = 1.2 \times X_1 + 1.4 \times X_2 + 3.7 \times X_3 + 0.6 \times X_4 + 1.0 \times X_5$$

$$X_1 = \frac{\text{Current assets} - \text{short-term payables}}{\text{Total assets}} \quad X_2 = \frac{\text{Profit-loss from previous years}}{\text{Total assets}}$$

$$X_3 = \frac{\text{EBIT}}{\text{Total assets}} \quad X_4 = \frac{\text{Market value of Stockholders' Equity}}{\text{Liabilities}} \quad X_5 = \frac{\text{Sales}}{\text{Total assets}}$$

## 7.2 INDEX IN

IN Indices are indices derived from mathematical and statistical procedures. Some of these models are bankruptcy models, other creditworthy models and show us development of business value.

$$IN_{95} = V_1 \times A + V_2 \times B + V_3 \times C + V_4 \times D + V_5 \times E - V_6 \times F$$

Index IN95 is a bankruptcy model, where  $V_1$  to  $V_6$  weights individual indicators according to its economic area and A to F are individual ratios. If  $IN_{95} > 2$  the company is financially sound, if  $1 < IN_{95} < 2$  so called *grey area*, we cannot say neither the company is sound nor it is literally unsound, but definitely has financial problems. If  $IN_{95} < 1$ , the company has great financial problems. (Jáčová and Ortová, 2011, p. 97-98)

$$IN_{99} = -0.017 \times A + 4.573 \times C + 0.481 \times D + 0.015 \times E$$

Index IN99 represents a creditworthy model. If its value is greater than 2,07 a firm produces a new value, or reaches an economical profit, if  $0,687 < IN_{99} < 2,07$  it is the area which signals problems. If  $IN_{99} < 0,684$  this means, that the company does not create any value at all or even decreases it by its own operation. (Knápková, Pavelková and Šteker, 2013, p. 133)

$$IN_{05} = 0.13 \times A + 0.04 \times B + 3.97 \times C + 0.21 \times D + 0.09 \times E$$

Index IN05 combines creditworthy and bankruptcy models. If the value of the index IN05 is more than 1,6 it is possible to say that the entity produces new value and is financially healthy, if  $0,9 < IN_{05} < 1,6$ , again, this is called *grey area* and if  $IN_{05} < 0,9$  the enterprise does not create any value or even decrease it. (Jáčová and Ortová, 2011, p. 199-200)

Individual ratios for indices calculations below: (Jáčová and Ortová, 2011, p. 200)

$$A = \frac{\text{Total assets}}{\text{Liabilities}} \quad B = \frac{\text{EBIT}}{\text{Interest expenses}} \quad C = \frac{\text{EBIT}}{\text{Total assets}} \quad D = \frac{\text{Sales}}{\text{Total assets}}$$

$$E = \frac{\text{Current assets}}{\text{Short-term payables, bank loans and reserves}} \quad F = \frac{\text{Payables overdue}}{\text{Sales}}$$

### 7.3 DUPONT SYSTEM OF ANALYSIS

Another way of building up an analysis, which provides a general outline of the company's financial position, is a *DuPont system of analysis*.

According to Gitman and Zutter (2010, p. 85) this analysis is used to decompose the basic and additional financial statements in order to assess the company's financial condition. It merges these statements into two summary measures of profitability – *return on total assets (ROA)* and *return on common equity (ROE)*. The upper part of the outline of the analysis depicts the income statement activities; the lower portion summarizes the balance sheet activities. (Gitman and Zutter, 2010, p. 85)

#### 7.3.1 DuPont Formula

This formula first brings the *net profit margin* and *total asset turnover*, which together indicates how efficiently the company has used its assets to generate sales. The result of these two ratios is the *return on total assets (ROA)*:

$$ROA = \text{Net profit margin} \times \text{Total asset turnover}$$

In this case we substitute those two parts of the formula with the general equations of the financial ratios provided earlier in the previous chapter we can finally simplify this relation:

$$ROA = \frac{EAFCS}{Sales} \times \frac{Sales}{Total\ assets} = \frac{EAFCS}{Total\ assets}$$

The DuPont formula is used so as to enable the company to break down its return into *profit-on-sales* and *efficiency-of-asset-use* components. (Gitman and Zutter, 2010, p. 89)

#### 7.3.2 Modified DuPont Formula

“This formula relates the company's *return on total assets (ROA)* to its *return on common equity (ROE)*.” (Gitman and Zutter, 2010, p. 89)

Again we can substitute this formula:

$$ROE = ROA \times \text{Financial leverage multiplier (FLM)}$$

Into a more comprehensible form thanks to previous financial ratios:

$$ROE = \frac{EAFCS}{Total\ Assets} \times \frac{Total\ assets}{Common\ stock\ equity} = \frac{EAFCS}{Common\ stock\ equity}$$



Based on these formulas and equations we can use the financial leverage multiplier to convert the ROA into the ROE, which offers to reflect the impact of financial leverage on owners' return. (Gitman and Zutter, 2010, p. 89)

The DuPont system enables the company to break its return on equity (ROE) into *net profit margin* and *total asset turnover*, and *financial leverage multiplier*, so the *total return to owners* can be analysed through these important dimensions.

## 7.4 SUMMARIZING ALL RATIOS

In order to create an overall summary of all financial ratios offered by the financial analysis we may use this method, which tends to view *all aspects* of the company's financial activities to isolate key areas of responsibility. (Gitman and Zutter, 2010, p. 84)

*Keep it simple and straight* is the main idea of such a summary, at which all the ratios are thrown into separated groups according to their character and evaluated. Based on their values the authors of the analysis come to the final assessment.

## 8 PROS AND CONS OF FINANCIAL ANALYSIS AND SUMMARY

The financial analysis provides important and useful information, but as long as it is an analytical method, there are some limitations which should be observed by those who conduct it, and thus the users of financial analysis might judge its results carefully and reasonably. (Knápková, Pavelková and Šteker, 2013, p. 139)

Usually there are many judgments about value and risk in the analysis, which are provided by guidance of financial theory and economic logic, only a little help exists with financial statements and that is why we cannot say which financial ratios are the most important and what a high or low value might be. (Ross, 2008, p. 77)

Knápková, Pavelková and Šteker (2013, p. 139) list the most common problematic parts of analysis:

- Presentation of financial statements and figures used as resources for financial analysis and different accounting procedures
- Fluctuation in accounts due to seasonal changes and extraordinary occurrences
- Dependency of methods and procedures of analysis on financial statements
- Need to compare financial results with other entities

The problem which has become increasingly common within the industry and major competitors is that the members of each group may be scattered around the globe meaning they can stick to different accounting methods and procedures. The existence of different standards and procedures around the globe makes it much more difficult to compare financial statements. (Ross, 2008, p. 78)

There are a few other problems with financial analysis counting from already mentioned different accounting procedures, through different companies' ends of fiscal years and one-time profits from an asset sale, to companies in seasonal businesses, which can lead to difficulties in comparing balance sheets because of fluctuations in accounts during the year. (Ross, 2008, p. 78)

One of the biggest problems comes with the assessment of assets, which are priced with the *purchase price* and then depreciated each year, however they may not depict their real present value. (Blaha and Jindřichovská, 2009, p. 26)

We need to find the best facts and figures in order to conduct a reliable and high-quality analysis. Only after having done so, the results are sound and safe and provide valuable and solid ground for the financial health assessment. (Blaha and Jindřichovská, 2009, p. 26-27)

The most important is the value of the company's profit when working with the profitability financial ratios. However this number can be distorted by the method of depreciation or creating provisions in a given period. The company's profit can be sometimes influenced by extraordinary occurrences, and therefore often operating profits, containing only the main operation activities of the company, is used instead of net income. (Knápková, Pavelková and Šteker, 2013, p. 144-145)

When evaluating the company's financial position we have to pay close attention to other factors influencing the company, too. These factors are changes of economic conditions, changes and fluctuation of capital market, various international agency problems, crisis, changes in legislative or tax regulation, etc. Excluding such information in the financial analysis may deteriorate its results and worsen the suitable and reasonable proposal measures. Generally we may say the more information we have the more able we are to conduct the analysis and thus it is more probable that we find possible financial problems and try to fix them. Based on this chapter we could see that it is important not just to look at the advantages of the financial analysis but also to be always aware and keep an eye on its drawback. The results which the users of financial analysis may obtain from all kinds of indicators and analysis provide them with a comprehensive depiction of the financial health of the company. However it is important not just to know the present values of the results of the analysis, but also to devote time and attention to their future development, to compare them either with industry or competition. Undisputedly the most important and crucial point of bringing up a financial analysis is to detect problems and reasons of its results, often in order to define limits of discrepancy which has been uncovered according to generally applicable rules of financial behaviour of companies. The significance of financial analysis may be born as soon as a financial analyst consider all results based on his knowledge from the financial and economic area, present these to a company management, interpret individual indicators and if needed propose an action plan to fix possible financial instability. Therefore the financial analysis is a powerful tool used by both the internal management of company, where it becomes a part of the financial planning, or by other users which might be somehow connected to the enterprise, and this work introduces its essential concept and turns theory into analysis.

## **II. ANALYSIS**

## 9 BASIC INFORMATION ABOUT COMPANY

Company name:	<i>XY, s. r. o.</i>
Founded:	25. 11. 2004
Legal form:	<i>Limited Liability Company</i>
SK NACE:	<i>46690 Wholesale of other machinery and equipment</i>

For the purpose of this financial analysis, a limited liability company with a tradition as long as more than ten years has been chosen. The company was founded in 1991, when *sale and service for forest and garden* started its operation, as an entrepreneur. Later in 1994 another section for *forest* was formed and in 2004 the legal form was changed to *Limited Liability Company*. Finally in 2009 the department for *hunters* opened its doors. Each of these three parts of the company serves for different purpose, as shown below.

*Sale and service for forest and garden* deals with selling products and its components for forest and garden, such as chainsaws, chains, files and replacement parts. Along with its development the company has broaden its range of products with other garden and forest components. At the same time it provides service to amend and fix chainsaws.

*The Forest* section has been in operation since 1994, based on long tradition, experience and expertise. The forestry experts dedicate entirely to forest and its preservation and continuously try to push private forestry industry to a higher level. This department works with services such as cleaning of forest lands and roads and repurchase all kinds of wood and trees.

The youngest part of the company, *hunter*, complements the company's portfolio with services connected with works in forest and hunters and for relaxation in nature and free time. From a narrow range of products, such as hunter and fishing badges and key rings, this assortment has expanded up to present, when many other useful tools for friends of nature, hunters and photographers can be found.

Thanks to *good relations, very similar trades, strong connections* between countries (Slovak and Czech Republic) and *many mutual partners*, in 2009 a subsidiary in Czech Republic was founded, starting up its business with *sale and service for forest and garden*.

Lately, in 2011, another subsidiary in *Poland* has been founded, gradually increasing its assortment likewise the parent company in Slovakia and in 2013 an *Austrian* branch opened.

Company values:

- *Creativity* – we have plenty of new, original and exceptional ideas
- *Perfection* – we try to develop everything we do and are aware of the never ending process of getting better
- *Cooperation* – we know how to communicate boundlessly, to respect each other, to help each other mutually and to jointly create values
- *Sale-oriented* – we work because we want to sell valuable and quality goods and products. Every person creating a part of the company's human resources is awarded based on the work load, its quality and customers' satisfaction
- *Game-like environment* – creating pleasant and quality selling environment is like a game for us, which we are fully responsible for and fully competent of its rules at the same time.
- *Customer satisfaction* – we understand our customers and go to any lengths in order to satisfy them with our services and make them happily come back.

The company did not raise its *registered capital* for none of the reporting periods (2009-2013), so it remained unchanged in the amount of 33,194 €.

From the graph below we can see that the average number of employees was increasing very slowly from 2008 to 2012 because of the global financial crisis which took place during these years. As the deteriorating effect of the financial crisis began to fade out in 2012, the company revived significantly, and thus needed more employees. According to last information, in the last quarter of the year 2014, the average number of employees within the company counted 35, implying essential improvement and development.

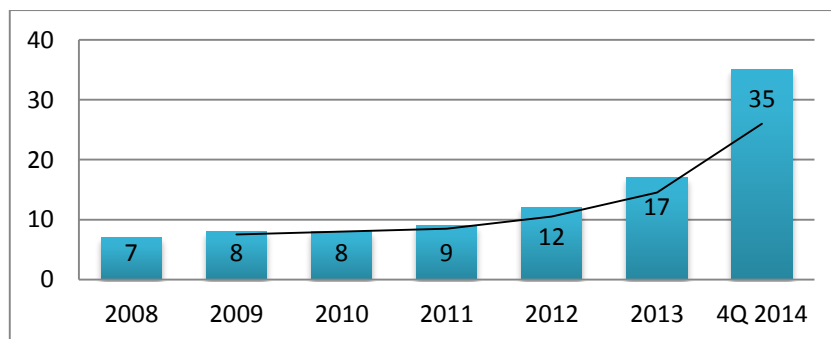


Figure 1: Average number of employees (self-conducted, data: annual report XY)

The company belongs into the economic sector SK NACE 46690 *Wholesale of other machinery and equipment*, which lies within the major Slovak economic sectors, occupying the

second place (*wholesale and retail sale*), closely following *industry*, and creating more than 15 % share of the *gross domestic product* of Slovakia. Likewise all other economic sectors and fields also wholesale and retail sale has been influenced by the global financial crisis, resulting in deteriorating financial ratios, mostly in years 2009 and 2010. Apart from its main economic sector specification the company creates a small production of wood products and services connected with them. However, it is not the company’s major activity, it is important to point it out as some components may be significant when analysing the company.

In the following figure we may see the number of entities working within the given economic sector SK NACE 46690, which increased rapidly from 2009 to 2010 as during the crisis companies were no longer able to find large profits so their production started to reduce its price and thus wholesale and retail sale oriented enterprises flourished significantly. During years 2010 – 2013 this number stabilizes at around 200 000 entities.

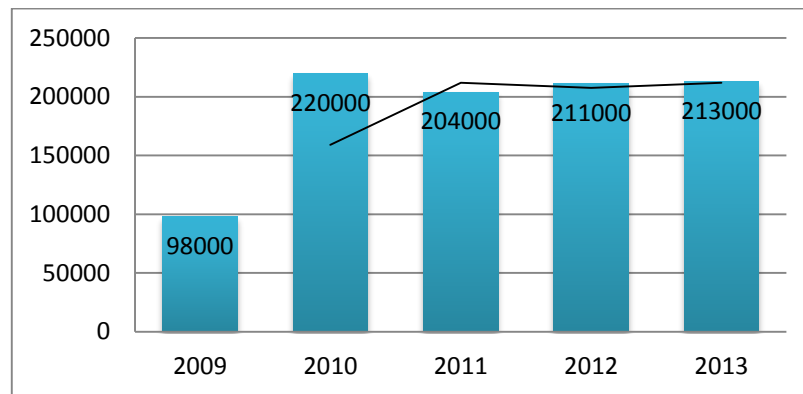


Figure 2: No. of entities SK NACE 46 (self-conducted, data: annual report XY)

With the number of employees counting 35 in the last quarter of 2014, total assets of more than 2.3 mil. €, and turnover in the amount of more than 3.2 mil. €, this company ranks as a middle-sized enterprise. From the table below it is obvious that the entity has raised its total assets for all stated periods, given the *biggest portion* is *current assets*. In order to compare fixed and current assets we may put the number in a ratio – 1:5, so that we may see the high liquidity within the company, which is reasonable according to the sector.

(in whole numbers of €)	2009	2010	2011	2012	2013
<b>TOTAL ASSETS</b>	<b>1,288,351</b>	<b>1,307,775</b>	<b>1,536,638</b>	<b>1,726,383</b>	<b>2,374,351</b>
Revenues from sold goods	768,889	1,073,713	1,599,387	2,068,264	2,261,153
Production	721,501	635,528	544,881	516,768	1,019,572
<b>REVENUES</b>	<b>1,574,796</b>	<b>1,740,285</b>	<b>2,171,587</b>	<b>2,596,636</b>	<b>3,404,767</b>

Table 2: Turnover and revenues for sold goods and production of company (self-conducted, annual report XY)

In the following table 2 we may see development of accounting value added of the company, which suffered during the financial crisis and plunged down during 2010 but began to rise again in 2011 reaching value more than twice as big as the beginning of reported periods.

(in whole numbers of €)	2009	2010	2011	2012	2013
<b>Accounting value added</b>	178,951	137,670	146,313	290,604	397,788

Table 3: Accounting value added in € (self-conducted, fin. stat. XY)

As shown in the following table we may see that the company underwent a substantial loss in the year 2010, when it began to slow down and restore upward to positive values rising to more than 150,000 € today. The company may have suffered from fundamental problems related to the global financial crisis. Further analysis of this index will be conducted later.

(in whole numbers of €)	2009	2010	2011	2012	2013
<b>Profit/loss - current year</b>	(33,442)	(198,122)	(122,016)	6,842	150,196

Table 4: Profit/loss – current year in € (self-conducted, fin. stat. XY)

### 9.1 SWOT Analysis

	<b>HELPFUL</b> to achieving the objective	<b>HARMFUL</b> to achieving the objective
<b>INTERNAL Origin</b> attributes of the organisation	<ul style="list-style-type: none"> <li>°convenient position of company branches</li> <li>°high quality of company production</li> <li>°exclusive representation of STIHL in Slovakia</li> <li>°good reputation among customers</li> </ul>	<ul style="list-style-type: none"> <li>°quite specialized production and assortment</li> <li>°seasonal changes' influence on production</li> <li>°decreasing trend in investment activities</li> <li>°higher prices of specialized production and assortment</li> </ul>
<b>EXTERNAL Origin</b> attributes of the environment	<ul style="list-style-type: none"> <li>°break into other international markets (Hungary)</li> <li>°exclusive representation of STIHL in AU/PL/CZ</li> <li>°cooperation activities with other EU countries (AU/PL/CZ)</li> <li>°extra external and internal company activities</li> </ul>	<ul style="list-style-type: none"> <li>°strategy of already existing competition</li> <li>°development and expansion of competition</li> <li>°attention of legislation changes in EU countries</li> <li>°fluctuation of employees due to ambivalent environment</li> </ul>

Table 5: SWOT Analysis of XY (self-conducted, data: XY Company Information)



## 10 METHODS OF FINANCIAL ANALYSIS

This chapter states a few types of analyses used to analyse and assess the company XY, s. r. o. Mostly time-series and cross-sectional analyses are applied on the information from the accounting statements and annual reports in order to create a comprehensive projection of company's indicators so as to be able to provide summary and recommendations for improvement of a financial situation of the company at the end of the analysing part of this work.

### 10.1 ANALYSIS OF COMPANY ASSETS

According to the information provided from the financial statements of the company which are generated for the last day of the accounting period, it is possible to have a comprehensive overview of company's assets and liabilities based on the time-series and cross-sectional analysis, which may be seen at the back of this work in Appendices (Appendix P I).

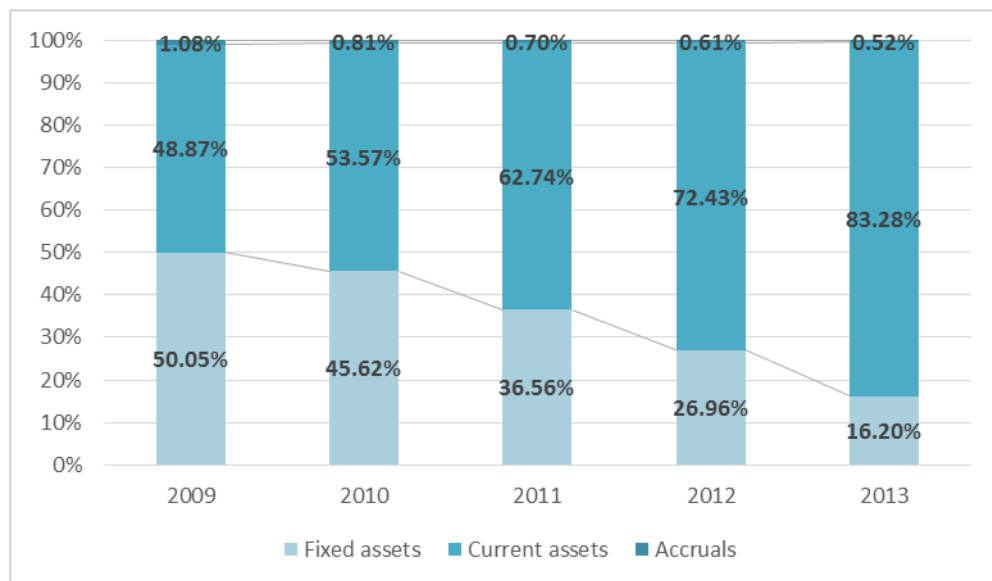


Figure 3: Structure of assets in XY (self-conducted, data: fin. stat. XY)

From the structure of the company's assets above it can be concluded that it is a wholesale type of enterprise within economic activities, and thus it is reasonable and justified that the company possesses in all years at least 50 % of *current assets*, as they create a core of the company's business. From the more detailed perspective obtained from the financial statements it has been identified that the biggest portion of current assets is formed by the *inventory*, since company keeps it in high quantities provided it is a wholesale. The highest rate of inventory is kept by goods and production as these are the main economic activities of the

company, in a ratio of 1:3 during year 2009-2013. Other components of current assets with high percentage in terms of a group are short-term receivables and financial assets, which have a reverse trend of development over years, with short-term receivables increasing to the contrary of decreasing short-term financial assets with fluctuating numbers between 2010 and 2012. This might be caused by a declining ability of customers to pay their debts and provided this information, it is tenable that company's short-term financial assets have a decreasing trend over years as a situation of after-maturity receivables does not shape up during reporting periods.

In the following table the maturity of short-term and long-term receivables is depicted. From figures shown it is obvious that the company has not been able to collect its accounts receivable due to its relaxed and unfastened policy towards its customers. In this point it would be convenient if the company improved this policy, and thus it would be able to refinance its need for another financial help in the future. It is important to remark that the company keeps a negligible amount of long-term receivables from 2012, which has not changed since its creation.

(in eur)	2009	2010	2011	2012	2013
<b>Total receivables</b>	71,200	101,094	164,098	343,515	463,980
<b>Receivables DUE</b>	33,705	95,573	148,981	80,464	64,862
<b>Receivables OVERDUE</b>	37,495	5,521	15,117	263,051	399,118
<b>Rec. OVERDUE in %</b>	52.66%	5.46%	9.21%	76.58%	86.02%

Table 6: Structure of maturity of receivables (self-conducted, data: fin. stats. XY)

The company keeps more than 95 % of its short-term money in cash in order to preserve high liquidity and at the same time because of the fact that the company has a central-branch store which needs cash money to operate. Another 5 % remain in the ordinary enterprise account in a bank.

From the graph below we may see a gradual decrease in fixed assets for all reporting periods. This nearly linear and gradual decrease in fixed assets is caused by its accounting rule for depreciation of intangible assets which allow to depreciate the assets only for 5 years. The main reason for a decreasing trend of fixed assets is depreciation of both tangible and intangible fixed assets while management of the company did not acquire nearly any type of fixed assets during years 2009 – 2012 only in 2012 when a new accounting software was bought with an obligatory repurchase of licence in 2013. The company's management, however, decided to make a financial investment, and in 2010 the Slovak parent company made an

investment into a subsidiary in Czech Republic, which was founded during this year, while this investment is inextricably connected with a decrease in the short-term financial assets.

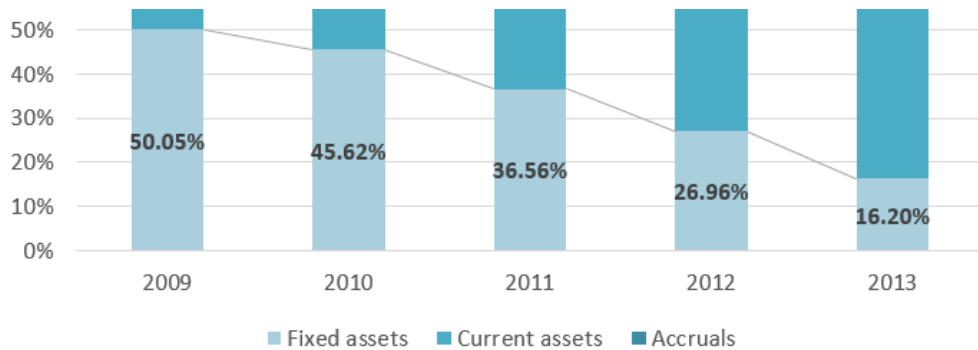


Figure 4: Development of fixed assets over years 2009 – 2013 (self-conducted, fin. stats. XY)

The figure 4 above shows a steady and stable decrease of a portion of fixed assets in comparison to total assets in the company. During the last year of 2013 this was caused not just because of a high rate of inventory, short-term receivables and short-term financial assets but also due to a *deferred tax* which was generated in this period based on a difference between tax and accounting depreciation method.

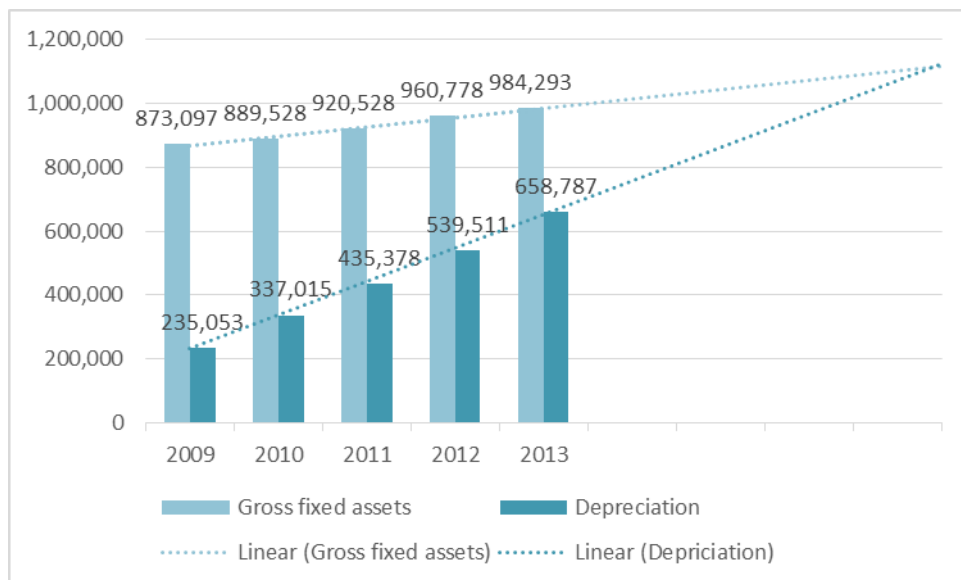


Figure 5: Indicated depreciation of fixed assets with a future prognosis (self-conducted, data: fin. stats. XY)

According to the information from balance sheets from reporting periods 2009-2013 it is possible to evaluate the condition of the company’s assets in regards of its depreciated value. In the figure 5 gross fixed assets have only a little humble tendency to rise, as the company

did not acquire any form of fixed assets, only office tools and equipment with rather insignificant percentage compared to gross value of fixed assets. The linear gross fixed assets and depreciation show us a rising trend of both assets and its depreciation which, under current conditions and investment policy may persist in the nearest accounting periods and under which the company will completely use its tangible and intangible assets with a need of major investments in coming years.

According to the competition the structure of fixed assets is almost in a ratio of 1:2. This ratio is maintained throughout the period analysed. In 2012, however, the rival company sold its production line and there was a tangible fixed assets reduction of more than 250,000 € and the associated decline in the needed current assets due to reduction in manufacturing.

## 10.2 ANALYSIS OF COMPANY EQUITY AND LIABILITIES

Based on the company information from balance sheets generated due on the last day of each given accounting periods, the financial structure of the enterprise is depicted in figure 5. It has been formed according to facts and figures of the cross-sectional and time-series analysis which is available in Appendix II.

Due to disclosed information, it is followed that the financial structure of company is itemized mostly from *equity*, which mostly comprises more than 55 % on average, and from *other resources* with fluctuations prevailing between 30 – 50 % during given periods.

At the beginning of the global financial crisis, the company kept its healthy financial conditions until first problems arose and the entity was made to take out a long-term loan at the beginning of 2010, which can be seen from the figure as the proportion of liabilities increases. During the following years 2011 and 2012 the value of liabilities oscillated within a difference of 4 – 6 % because the company continued in a balanced strategy of investments using stockholders' equity and liabilities in the same proportion. A substantial information came in 2011 when the company made a leasing contract at the end of a year but did not include it into company's assets, and thus this item can be seen in a sharp rise of long-term receivables. During the years 2012 and 2013 the company continues to use a conservative financial strategy as it goes on disposing fixed assets and materials and lower the amount of liabilities with the exception from 2013 when the company withdrew a loan in order to build a new property for the company's operation.

Based on the information from the financial statements and from figure 5 below a slight increase of accruals from 2009 and 2010 may be seen. This upwards movement is connected with a substantial increase in *accrued expenses*, since the company received a non-repayable grant from the Ministry of Agriculture of Slovak Republic, which is progressively dissolved over eight periods in an amount corresponding to one eighth of the grant beginning already in the year 2010.

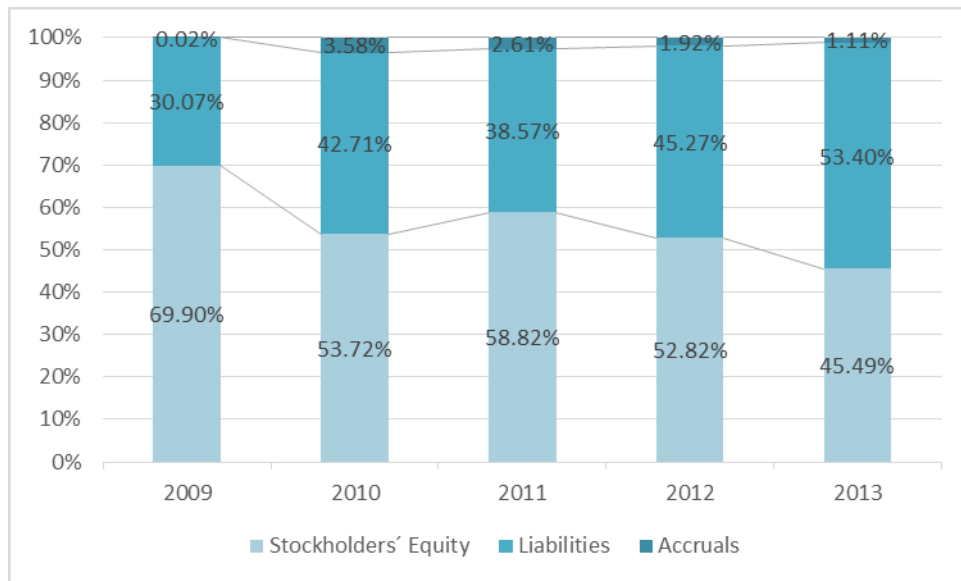


Figure 6: Structure of liabilities of XY (self-conducted, data: fin. stats. XY)

The main item from which equity is composed of is *other capital funds*, which are higher than total amount of equity for the whole time of given reporting period, which happens due to presence of always negative value of profit/loss from previous years. Other capital funds are used in order to increase equity and mostly are formed by donations of tangible or intangible assets or financial donations. The registered capital stays unchanged for the whole time as well as funds from earnings which company has not increased during given years and do not intend to in the following period. From the table 6 it is obvious that company was not profitable during first three years of given periods which has been amended during last two periods 2012 and 2013 when the entity generated profit. Deeper details and explanations of profit/loss over indicated periods will be further described in the analysis of revenues and expenses in the following chapters.

(in eur)	2009	2010	2011	2012	2013
<b>Operating profit/loss</b>	(8,643)	(56,301)	(83,964)	44,009	159,676
<b>Financial profit/loss</b>	(23,824)	(35,552)	(36,093)	(35,483)	(55,501)
<b>PROFIT/LOSS</b>	<b>(33,442)</b>	<b>(198,122)</b>	<b>(122,016)</b>	<b>6,842</b>	<b>150,196</b>

Table 7: Profit/loss of company XY (self-conducted, data: fin. stats. XY)

(in eur)	2009	2010	2011	2012	2013
<b>Total payables</b>	157,706	248,990	382,041	503,311	857,498
<b>Payables DUE</b>	43,473	62,906	238,904	255,755	738,304
<b>Payables OVERDUE</b>	114,233	186,084	143,137	247,556	119,194
<b>Pay. OVERDUE in %</b>	72.43%	74.74%	37.47%	49.19%	13.90%

Table 8: Structure of maturity of payables (self-conducted, data: fin. stats. XY)

The structure of maturity of payables is similar to structure of receivables where the company started to recover from the financial crisis in 2011 with improvement of its payments which continues in 2012 with a little higher percentage. Based on the increasing number of overdue receivables company wanted to show its customers its strict and punctual policy of their payments which ultimately did not have any impact on invoices remittance.

According to the observed information obtained from the cross-sectional and time-series analysis it is obvious that company continues in such a trend of financial structure which uses stockholders' equity as a source of funding more than liabilities. This rule is broken only twice, for the first time in 2010 when company's financial structure absorbed a loan in order to help company overcome the global financial crisis which influenced company greatly in 2009, and for the second time in year 2013, when the entity took out another loan for development and realisation of its future development plans when it began to build property and infrastructure in the same year.

Since the structure of the property of XY and its competition are similar, this corresponds analogically to the structure of the stockholders' equity and liabilities. The company XY differs from its competition in preferring own equity as a form of financing of its assets (compared to competitor on average more than 10 %).

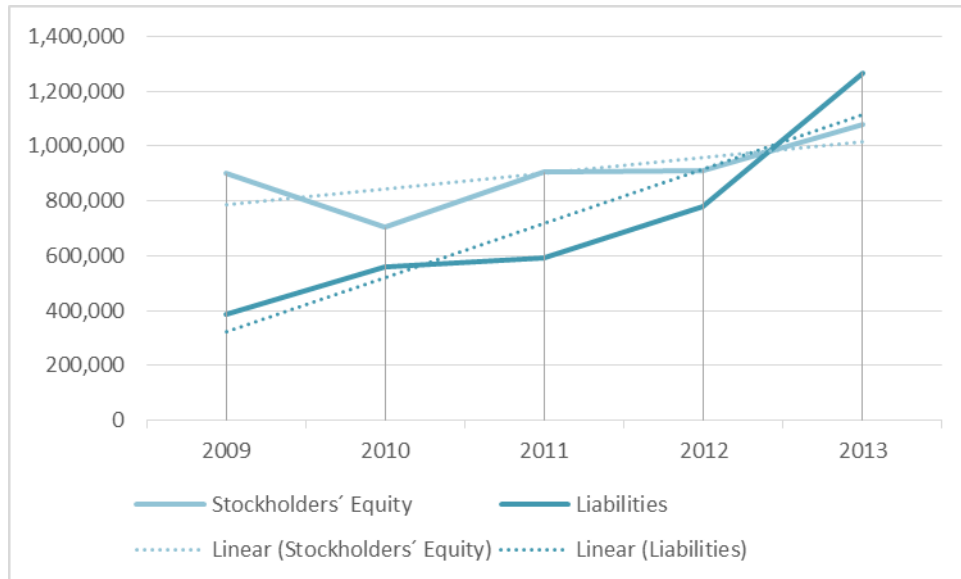


Figure 7: Development trend of stockholders' equity and liabilities (self-conducted, data: fin. stats. XY)

The amount of liabilities increases faster than equity, especially during the last year of reporting periods, when there was a significant rise in usage of liabilities due to already mentioned loan for property and infrastructure development.

### 10.3 ANALYSIS OF COMPANY REVENUES

According to the information provided from the financial statements of the company which are generated due to last day of the accounting period, it is possible to have a comprehensive overview of company's revenues based on the time-series and cross-sectional analysis, which may be seen at the back of this work in Appendices (Appendix P III).

Below are shown figures in which a structure of company revenues is outlined. The first figure depicts revenues from goods sold, production and the last item is other revenues which have been encapsulated into one element as its proportion is omissible and do not stand for such a significant change as other indicators. However other revenues are dissected in the following Figure 9 in order to provide a comprehensive overview of company revenues no matter what their absolute value and percentage in a group is.

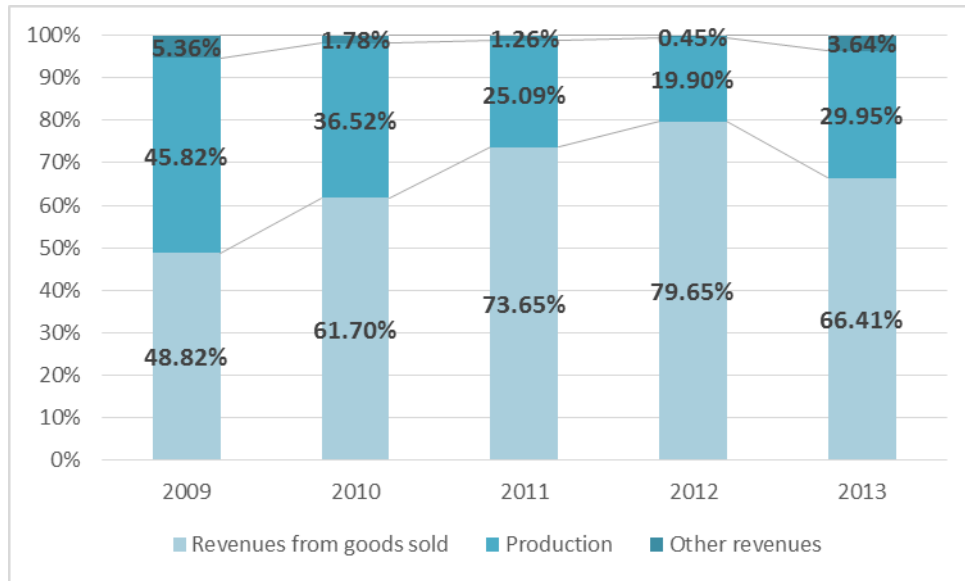


Figure 8: Structure of revenues of XY (self-conducted, data: fin. stats. XY)

At the first glance on the structure of revenues it is obvious, that more than 50 % of all company revenues were generated by revenues from goods sold during given reporting periods. Provided this company is mostly a wholesale but semi-production oriented at the same time, from the given information we may observe a significant portion of production in each year. The entity relies on other revenues at least.

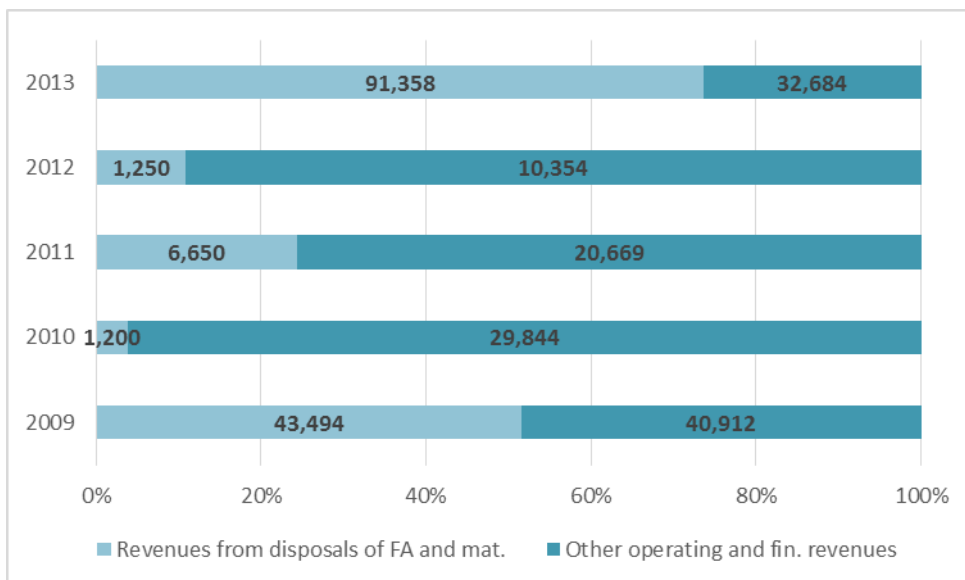


Figure 9: Structure of *Other revenues* of XY (self-conducted, data: fin. stats. XY)

These revenues, *other revenues*, as the Figure 9 above evidences include mostly other operating and financial revenues such as *other financial revenues* and *interest revenues*, and *revenues from disposals of fixed assets and materials*.



Therefore we can confirm a statement from the chapter about the structure of company assets, that this analysis is conducted for a typical wholesale enterprise. There were neither extraordinary occurrences nor extraordinary revenues during all years in a company.

(in eur)	2009	2010	2011	2012	2013
Revenues from sold goods	768,889	1,073,713	1,599,387	2,068,264	2,261,153
Production	721,501	635,528	544,881	516,768	1,019,572
Revenues from disposals of FA and mat.	43,494	1,200	6,650	1,250	91,358
<b>REVENUES</b>	<b>1,574,796</b>	<b>1,740,285</b>	<b>2,171,587</b>	<b>2,596,636</b>	<b>3,404,767</b>

Table 9: Basic structure of revenues of XY (self-conducted, data: fin. stats. XY)

Development trend of revenues from goods sold and production revenues, or generally development trend of total revenues had a stable rising trend, which peaked the top in 2008, when the global financial crises burst out largely, but at that time entity was more than secured with contracted orders and commissions from which it could profit during this year. Although after this huge “blast in finances around the world” came in, the overall revenues may seem to continue increasing for all the reporting periods the company expenses increased sharply resulting in a negative profit/loss until 2011 when the entity hit the bottom and finally generated profit. Detailed analysis of expenses will be described in the following chapter.

(in eur)	2009	2012	2013
Revenues from sold goods	-15.90%	29.32%	9.33%
Production	997.22%	-5.16%	97.30%
Revenues from own products and services	518.05%	-4.69%	67.35%
Change in inventory of own products	-	-7.85%	273.85%
Revenues from disposals of FA and mat.	644.49%	-81.20%	7208.64%
Other operating revenues	602.13%	-52.96%	274.92%
Interest revenues	-78.91%	-65.63%	36.36%
Other financial revenues	1014.53%	-39.66%	62.94%
<b>REVENUES</b>	<b>58.87%</b>	<b>19.57%</b>	<b>31.12%</b>

Table 10: Changes in chosen revenues of XY (self-conducted, data: fin. stats. XY)

The highlighted values from the table 9 indicate great changes analysed by the cross-sectional and time-series analysis. There have been various significant changes within the company revenues during years 2009 and 2013. In the year 2009 the company began to log and administer services generally connected with logging, and therefore incorporated a few accounting rules. If the company sells a logged wood directly it registers this activity as *sold material*, if it modifies the wood partially– *work-in-progress* and if it modifies the wood

completely – *revenues from own products*. As the company works with wood they have to include other expenses – *personnel expenses, depreciation of machinery, taxes from wood administration*, etc. Together these facts explain large-scale changes in the company production and revenues from own products and services. Another element of the income statement signalling high rate changes are revenues which company acquired thanks to disposals of some fixed assets throughout a year. The changes within *other operating revenues* consists of three main occurrences – *claims of insurance against theft, return of aliquot amount of money from insurance* of fixed assets which have been disposed and a *received invoice for business credit*, which means a *turnover bonus* for purchased goods. It is important to state that the accounting principles allowed to receive such invoice, but under present regulation this activity has to be recorded as a negative increase of expenses from disposed fixed assets. The *other financial revenues* are formed by *foreign exchange gains*. A comprehensive and aggregate change is seen for the whole year 2013 as the company assigned another segment of *fishing* to its assortment. The entity broadened its operation in two newly opened company stores in the shopping centres and send out one mobile store on the roads. According to the information the year 2013 was very prolific and successful for the company, also because of the fact that the entity opened its subsidiary in *Austria* and finally obtained a proprietor right for representation of a Serbian company.

The competing companies follow the same composition of revenues, where the biggest share is revenues from own production and services. In contrast to the company XY, however, its competition has more of a decreasing trend of revenues.

#### **10.4 ANALYSIS OF COMPANY EXPENSES**

According to the information provided from the financial statements of the company which are generated due to last day of the accounting period, it is possible to have a comprehensive overview of company's expenses based on the time-series and cross-sectional analysis, which may be seen at the back of this work in Appendices (Appendix P IV).

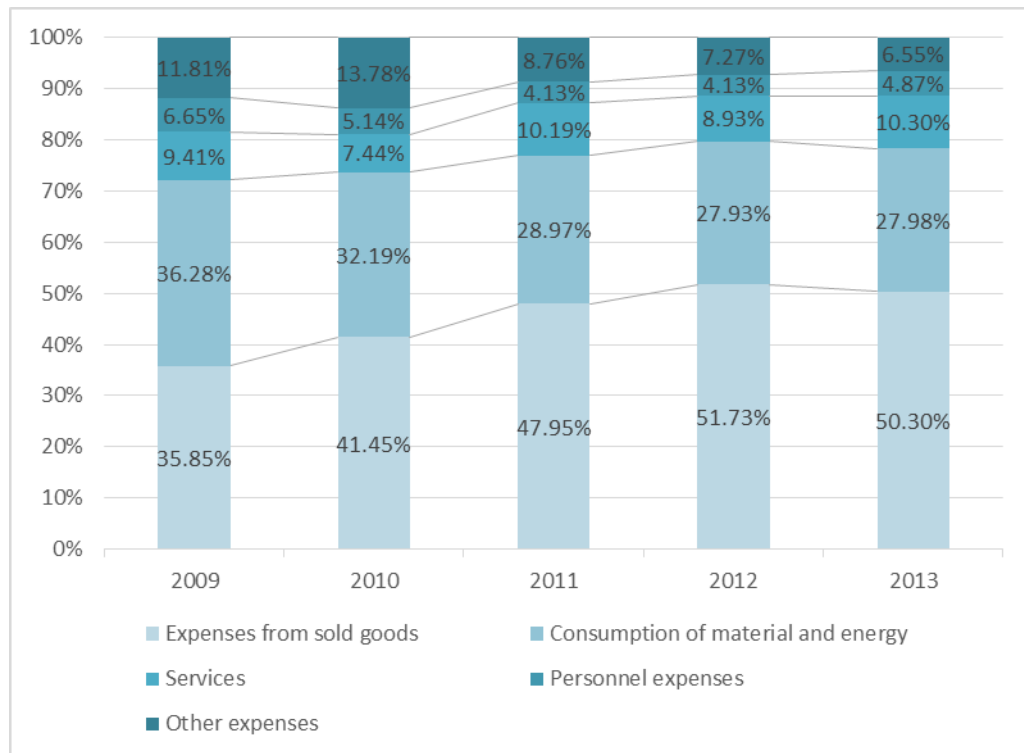


Figure 10: Structure of expenses of XY (self-conducted, data: fin. stats. XY)

From the Figure 10 above it is obvious that after analysing company revenues in the previous chapter the expenses and revenues are analogically connected. The largest proportion is generated by *expenses from sold goods* fluctuating within a range of 35 – 50% as the company is a wholesale. The second place is occupied by *consumption of material and energy*, as the company, however it is a wholesale, began own production in 2009 when it started to deal with wood logging. There are more expenses following with similar rate, from *personnel expenses* generated based on wages of workers and administrative employees, *services* acquired from third parties to ensure a smooth functioning of production process to *other expenses* as taxes and fees, depreciation and interest expenses, etc.

From an overall perspective total expenses copy the development trend of revenues. As it was already mentioned in the chapter dealing with the company stockholders' equity and liabilities, in the years 2010 and 2011 because of the negative effects of the global financial crisis, a difference between total revenues and total expenses is visible most. After these effects settled down in 2012, expenses and revenues were balanced nearly on the exact same line with a positive difference in 2013 when company revenues overcame its expenses, as the company paced up with its promotion, structure and overall development achieving large positive changes in this year.

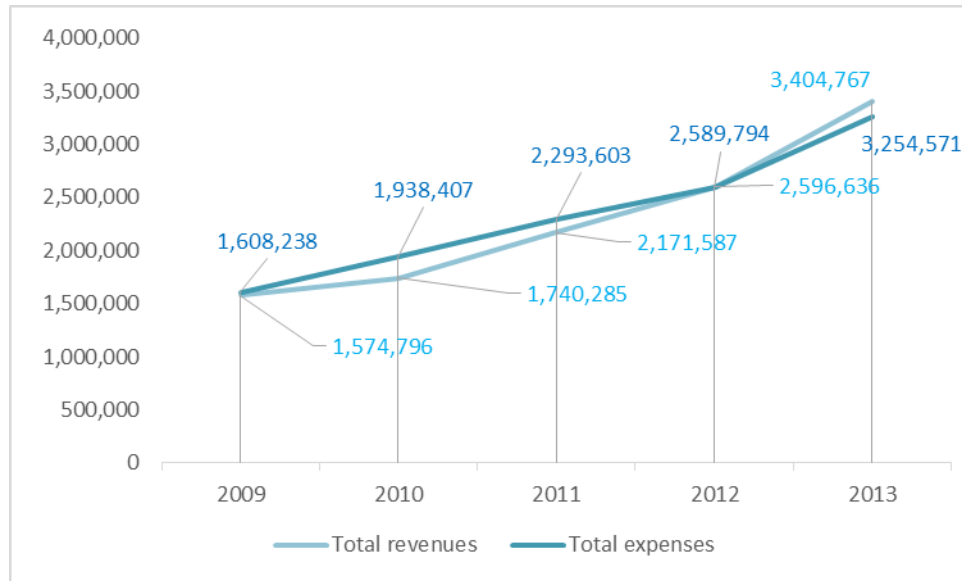


Figure 11: Development trend of total revenues and expenses of XY (self-conducted, data: fin. stats.)

As for other types of expenses from cross-sectional and time-series analysis the large proportion is generated by *personnel expenses*, which have kept its values within a variance of 2 % for all reporting periods. According to a partially processed information from the accounting period 2014 which is available in the first chapter of analysis, the average number of employees in this year increases for more than 100 %, and thus a sharp rise in personnel expenses is expected in 2014.

The table 11 below shows the revenues and expenses from sold goods during given periods which indicate a stable and balanced condition of *profit margin* during all years with the average value of 71 %. This means that the company generated 71 % of expenses by *expenses from sold goods*. Other 29 % are formed by *production consumption*, which are consumption of material and energy and consequently external services for the company production and its administration, and ultimately this proportion is substituted by *personnel* and other *operating expenses* and profit generation.

(in eur)	2009	2010	2011	2012	2013
Revenues from sold goods	768,889	1,073,713	1,599,387	2,068,264	2,261,153
Expenses from sold goods	576,619	803,410	1,099,680	1,339,827	1,637,063
Expenses/Revenues from sold goods	74.99%	74.83%	68.76%	64.78%	72.40%

Table 11: Revenues and expenses from sold goods of XY (self-conducted, data: fin. stats. XY)

(in eur)	2009	2011	2013
Expenses from sold goods	-18.62%	36.88%	22.18%
Production consumption	407.04%	16.94%	30.51%
Consumption of material and energy	1719.54%	6.50%	25.91%
Services	134029.81%	62.15%	44.89%
Personnel expenses	26.39%	-5.05%	48.13%
Taxes and fees	537.63%	1.75%	11.36%
Depreciation of intan. and tan. assets	1.69%	7.37%	16.33%
Net book value of disposed FA and mat.	140.00%	-	528.50%
Other operating expenses	275.69%	392.72%	49.83%
Interest expense	261.05%	22.52%	-2.30%
Other financial expenses	-5.87%	-17.03%	150.41%
Income tax	-2.09%	54.37%	-2832.84%
Extraordinary expenses	-	-100.00%	-
<b>EXPENSES</b>	<b>48.51%</b>	<b>18.32%</b>	<b>25.67%</b>

Table 12: Changes in chosen expenses of XY (self-conducted, data: fin. stats. XY) The highlighted values from the table 11 indicate great changes analysed by the cross-sectional and time-series analysis. There have been various significant changes within the company revenues during years 2009, 2011 and 2013. The first changes include *production consumption*, *consumption of material and energy* and *services*, all of these connected with already mentioned initiation of logging of wood. In 2009 we may see a significant value jump in taxes and fees which is caused by a change in the legislative regulation, under which company had to bring some of its fixed assets – *vehicles of cat. M, N, O* into a taxation area. An essential rise in the amount of disposed fixed assets may be seen during 2009, as well as a rise in other operating expenses caused by a theft, mentioned in the previous analysis and other financial expenses generated by a large amount of interest from a long-term bank loan. In 2011 other operating expenses moved to a higher value provided the company had to pay a forest liability insurance. In this year the entity paid a deposit for a purchase of a new vehicle, when, due to the violation of contract terms, the company did not get the deposit back and had to generate this as a loss in the form of other operating expenses. In 2011 the company had to return a VAT from theft from the same year and within this year, a few of its company stores generated deficit in its end-of-the-year stocktaking. The year 2011 is exceptional as it is the only period within which the extraordinary expenses occurred, connected with a *transfer of entrepreneurial natural person liability*, with no more information. The year 2013, as described in the last chapter, is typical for great positive changes, while this also analogically applies within company expenses. With a sharp rise of revenues come

rise of expenses. The most visible increase is generated by *disposals of fixed assets* and the *income tax*. The second uplift originated because the company did not create any accounting depreciation expenses of none of its either fixed tangible or intangible assets in order to be more able to acquire a bank credit line, but this was possible only during the depreciation time of these assets which ultimately finished in 2013 when company had to generate a single value depreciation expense.

Based on the analysis of the competition company's expenses, it has been found that while the ratio of *consumption of material and energy expense* to total expenses is on average 30% in XY, the competitor's ratio is more than 17 % lower. But the share of external services expenses is 3 % higher and the proportion of wage expenses in total expenses is even more than 5 percentage points higher.

## 11 ANALYSIS OF FINANCIAL RATIOS

According to the information provided from the financial statements of the company which are generated due to last day of the accounting period, it is possible to conduct the following performance and stability analysis based on the financial ratios. The following groups of ratios are used within this analysis: *liquidity, activity, debt and profitability ratios*.

### 11.1 LIQUIDITY RATIOS

The average current ratio of the company during given reporting periods is *3.16*, meaning that company would be able to meet its short-term goals even if they were three times larger, given the entity would be able to sell its current assets. The recommended values for quick ratio within the industry range from 1.5 to 3, provided that the company is healthy. For the first three years when the company was under the financial crisis, it kept high liquidity but during the last two years as the entity could forecast a positive development of its revenues and had reliable access to credit, it did not grow current assets likewise during previous years.

(in abs. numbers)	2009	2010	2011	2012	2013
Current Ratio	3.99	2.83	4.04	2.60	2.36
Quick (Acid-Test) Ratio	1.39	0.56	0.91	0.72	0.73
Net-Working-Capital-to-TA Ratio	36.63%	34.62%	47.19%	44.52%	47.96%
Cash Ratio	0.92	0.022	0.008	0.005	0.010
Interval Measure	154	141	163	187	233

Table 13: Liquidity ratios of XY (self-conducted, data: fin. stats. XY)

However not all items of the current assets are possible to be sold as they may turn out to be damaged, obsolete or lost, and therefore liquidity ratios analyse *quick (acid-test) ratio*. The result from periods 2009 – 2013 is the average number of *0.86*, meaning that the company would not be able to satisfy its short-term goals after dissecting inventory from current assets. This is caused by a high amount of inventory which the company keeps, with a slow-moving turnover as the inventory is rather specialized and usually selling on credit. The recommended values for this indicator stays above *1*, stating that if this indicator goes below this value the company cannot currently fully pay back its current liabilities.

As a net-working-capital is only a difference between current assets and current liabilities, according to financial statements keeps positive for the whole time, and is often viewed as the amount of a short-term liquidity it is compared to total assets. According to the table this

indicator fluctuates within the range of 35 – 48 %. On average its value is 42.18 % meaning that the company's liquidity is nearly 43 %, and little less than 50 % of the current assets are covered by long-term finances.

Provided all of the above mentioned ratios are measures of liquidity, there are, however, creditors who work on a very short-term basis with the company and these are interested in *cash ratio* with the average ratio 0.19 meaning that company keeps a little cash within its current assets and thus does not dispatch with cash, which is understandable as it operates with credit sales mostly.

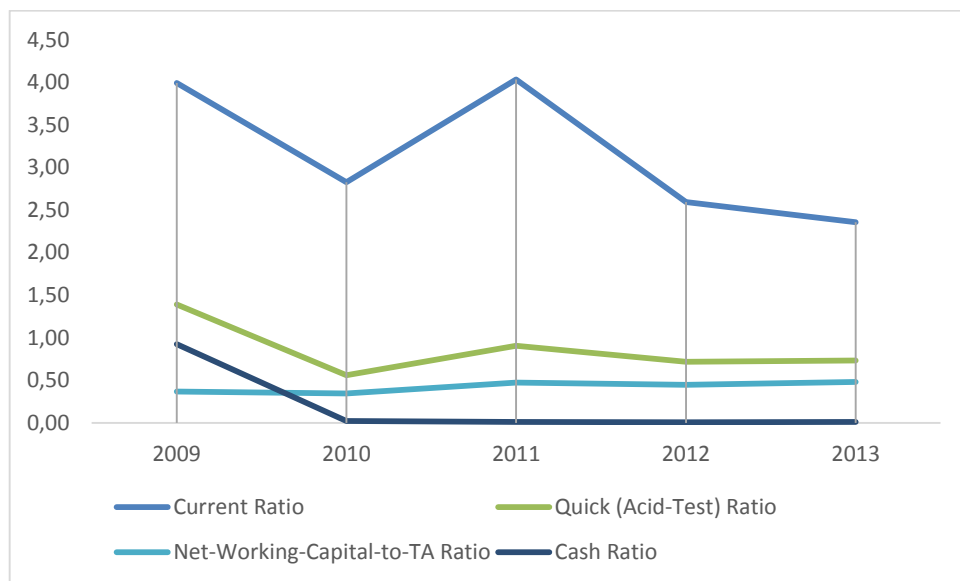


Figure 12: Liquidity ratios of XY (self-conducted, data: fin. stats. XY)

The last figures from the table 12 provide information about an emergency financial ratio with rather stable development over years. Its average number is 176 meaning that if the company was for instance facing a strike and cash flow began to dry up, it could expect to keep running its business for 176 days.

## 11.2 ACTIVITY RATIOS

The inventory in years 2009 – 2013 turned on average 2.96 times per year into other forms of company assets, and this value is appreciated, provided the company owns mostly slowly-moving and specialized assortment. The value for inventory turnover might seem small, but in regards to its specialisation is reasonable. The company undergoes seasonable effects of inventory, when during *autumn* goods from the department of *Hunter* and during *spring* goods from the department of *Garden* are on a peak of its sales. Moreover these goods are



mostly interesting for and demanded by customers with a higher rate of purchasing power since the products are usually imported from such areas as America and Asia.

Total asset turnover of the company is during all reporting periods larger than 1, so that it can be stated that the total assets under each of the reference years turned into sales more than once. In cases where it is deemed ineffective when the pointer value is 1 or less, the company may be considered to be adequately equipped. In the terms of total asset ratio there is another indicator to be analysed. *Fixed asset turnover* states how much sales the company generates from fixed assets. Its development over years is rather gradually increasing from 2.31 in 2009 to 8.53 in 2013, which means that in the year 2013 the company generated 8.53 euro of sales from one euro of fixed assets.

(in abs. numbers)	2009	2010	2011	2012	2013
Inventory Turnover	3.63	3.04	2.87	2.86	2.41
Average Age of Inventory	100	120	127	128	152
Average Collection Period	17	22	28	49	51
Average Payment Period	39	53	41	68	93
Total Asset Turnover	1.16	1.31	1.40	1.50	1.38
Fixed Asset Turnover	2.31	2.86	3.82	5.55	8.53

Table 14: Activity ratios of XY (self-conducted, data: fin. stats. XY)

Regarding average periods of individual indicators, either inventory, receivables or payables, the longest period or turnover reported annually belongs to payables, where the time from its generation to its payment in 2013 lasted longest, up to 93 days. For both payables and receivables the trend of the development was increasing each year. Especially for receivables, company kept its strict policy during 2009 – 2011 and collected its receivables on time as it was important for the entity to keep a high rate of liquidity instead of using other sources of financing. During the last two years company relaxed its policy for both receivables and payables and did not pay enough attention to maturities of none of them, resulting in its deteriorating values. The company takes advantage from collecting receivables sooner than paying payables, provided meantime it uses these sources for financing high-rate-turnover inventory. The number of average age of inventory measures that the company has on average 126 days of inventory on hand, in other words the average number of days' sales in inventory is 126.

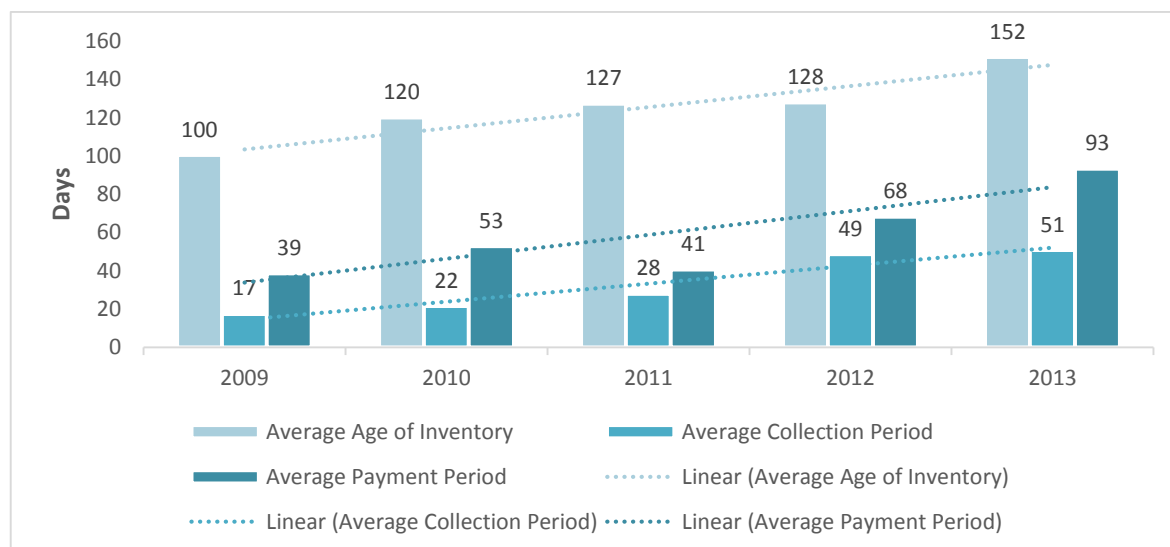


Figure 13: Average age of inventory, payables and receivables of XY (self-conducted, data: fin. stats. XY)

### 11.3 DEBT RATIOS

According to the information from the table 14 below it is obvious from the total debt ratio, that during years 2009 – 2013, the company used on average 42 % of debt for financing, which means that company used other than own sources to finance its assets. This number deteriorates especially at the end of reporting periods as the company took out the loan instruments in order to build new property and infrastructure as indicated in the previous analysis. Based on the value of this ratio it is possible to evaluate how much company assets are financed by own capital. In this case the number says that the entity used on average 58 % of own capital in its assets. This values falls into recommended range, which is stated to be between 30-60 %.

(in abs. numbers)	2009	2010	2011	2012	2013
Total Debt Ratio	30.07%	42.71%	38.57%	45.27%	53.40%
Debt-Equity Ratio	43.02%	79.51%	65.57%	85.71%	117.40%
Long-term Other Sources to Long-term Sour.	20.33%	30.67%	28.13%	24.74%	28.43%
Long-term Other Sources to Other Sources	59.30%	55.63%	59.69%	38.35%	33.84%
Times Interest Earned Ratio	-0.74	-3.20	-3.89	1.87	6.96
Cov. of FA by Long-term Sources	1.75	1.70	2.24	2.60	3.92
Cash Coverage Ratio	7.91	2.59	1.18	6.83	12.86

Table 15: Debt ratios of XY (self-conducted, data: fin. stats. XY)

The debt-equity ratio during these periods ranges from 43 % to 117 %. This means that the share of liabilities on its own achieves precisely this percentage. This indicator has practically the same meaning as the previous explicitness indicator of total debt. It is interesting to follow its evolution in time when we can see that the rate of the company's debt in recent years grew significantly. Since the ratios during the last two years of the reporting period ranges from 85-117 %, and thus the company finances its assets for 17% more from others sources than from own ones within 2013, which means that the company might not have a problem with obtaining new credit from banks.

In regards to the previous debt ratios it is important to interpret them together with its maturity and structure. According to the information from the table 14 the proportion of long-term liabilities to overall long-term sources fluctuates from 20-30 %, meaning that company's long-term sources comprise on average of 26 % from long-term *liabilities*, leaving the rest for stockholders' equity. Generally company uses long-term liabilities for 50 %, while another 50 % are short-term liabilities, which signals a conservative strategy of financing when the entity keeps balances expenses to risk.

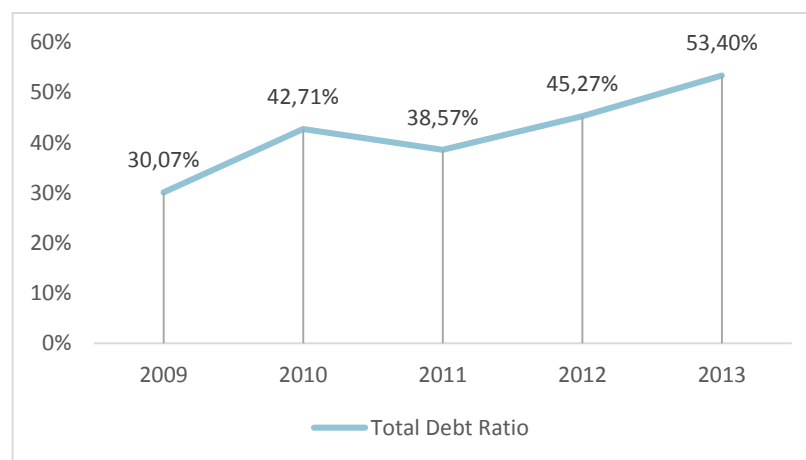


Figure 14: Development of chosen debt ratios of XY (self-conducted, data: fin. stats. XY)

Times interest earned ratio in the individual years varies significantly. It is due to fluctuations in the size of the profit which company produced in given periods and fluctuations in the sizes of interest expense, which in these times paid. The data shows that from years 2009 to 2011 the company's profit before interest and taxes, which created, did not manage to pay interest expenses paid during the period because the enterprise did not generate enough profit from the other capital to cover these costs, while during years 2012 – 2013 when company ultimately started to generate profit with a sharp increase in 2013 and due to lower interest

cost the company's operating profits managed to pay the interest expenses 7 times. This value is considered positively as in the literature it is often indicated that the company should cover its interest expense from profits at least 3-6 times.

However the values of the times interest earned ratio are negative for the first three years, another ratio is used to analyse this results. As long as this ratio includes a depreciation, as a non-cash outflow, the overall number rises significantly, and thus after dividing this amount by interest expense we may see that the company's ability to pay the borrower's interest expense increases up to nearly 13 times during the final year of reporting period.

One of the final indicators examined in this group is the coverage ratio of fixed assets by long-term sources. High values of this ratio only confirms the previous analysis results, when the company practiced conservative financing strategy. For example, especially in 2013, its fixed assets are covered by long-term sources nearly four times. It uses, then, twice as much long-term sources as it would theoretically have, or should in an effort to obey the golden rule of financing.

## 11.4 PROFITABILITY RATIOS

Based on the information provided by table 15 below and previous analysis the company did not generate profit during first three years of the reporting period, and thus was not able to create new sources. As an evidence serve values of the profitability ratios except for a *gross profit margin*. This financial ratio measures the percentage of cash sales euro remaining after the company has paid for its goods, in this case averaging at a number of 10 % which means that the entity earned 0.10 euro from each sale euro.

(in abs. numbers)	2009	2010	2011	2012	2013
Gross Profit Margin	12.01%	8.05%	6.82%	11.24%	12.13%
Operating Profit Margin	-0.58%	-3.29%	-3.92%	1.70%	4.87%
Net Profit Margin	-2.24%	-11.59%	-5.69%	0.26%	4.58%
Return on Total Assets (ROA)	-2.60%	-15.15%	-7.94%	0.40%	6.33%
Return on Common Equity (ROE)	-3.71%	-28.20%	-13.50%	0.75%	13.91%

Table 16: Profitability ratios of XY (self-conducted, data: fin. stats)

The other two profitability ratios measuring the margin are both negative as their equation counts with profit which was not created by the entity at the beginning. The average operating profit margin created from the positive values during last two years is nearly 3.3 % which means that after the company has paid for its goods, but after all costs and expenses *other than* interest and taxes were deducted, company earned nearly 3.3 eurocents from each cash sale euro. Ultimately being able to yield how much money the company is left after paying for goods while all costs and expenses, *including* interest and taxes has been covered, the *net profit margin* states that the enterprise earned on average from the last two years 2.42 % of each euro, and thus interest and taxes create nearly 0.88 % of the profit margin. The highest value of the net profit margin is formed in 2013, when the revenues from goods sold peaked the top compared to years 2009-2013 and at the same time expenses from goods sold were low, so that the maximum margin emerged.

The last two profitability financial ratios measure the overall effectiveness of the company's management in generating profits from assets and common equity. The first one, *return on total assets*, depicts a situation when the company generated on average from the last two periods 3.4 % on each euro of asset investment, or in other words the entity earned 3.4 cents on each euro of asset investment.

Likewise ROA, *return on common equity* measure the effectiveness of company's investments to common equity, with the average number from the last two years of the reporting

periods of more than 7.3 %, which means that the company earned during 2011 – 2012 7.3 cents on each euro of common equity.

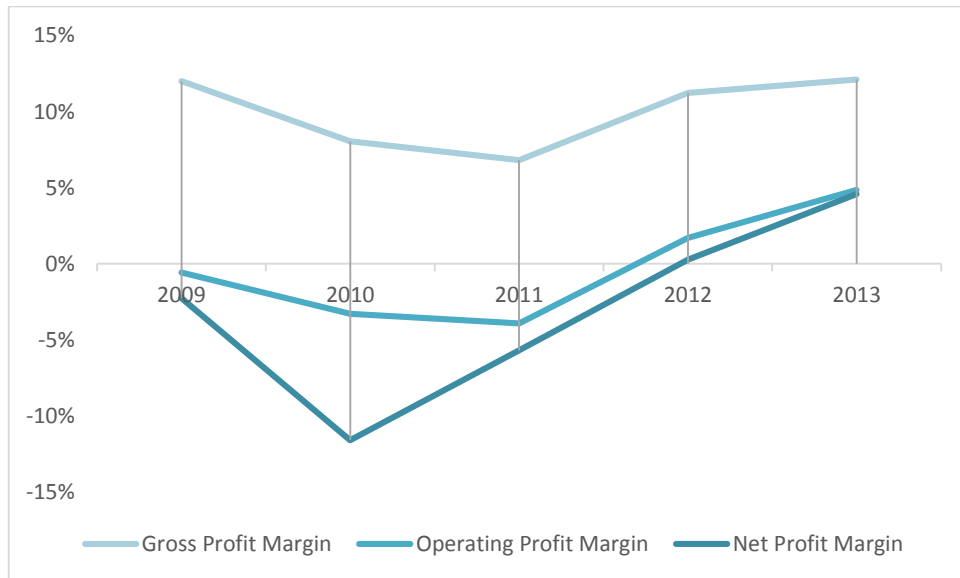


Figure 15: Profit margins of XY (self-conducted, data: fin. stats. XY)

In a situation where we compare the return on equity to risk-free rate, we find that only during the last year 2013 the profitability was above this rate. It means that the money invested in the company by the stockholders brought them less money in other years than 2013, than if they invested their funds, for example, in ten-year-government bonds. The biggest difference between risk-free rate and return on equity occurred in 2010, when the return on equity reached the lowest values through non-efficient use of company assets, thanks to negative profit margins and also due to the negative effect of the financial leverage. At present, the gap between profitability and the interest rate on ten-year government bonds again increases positively which is for the company and stockholders good information.

(in abs. numbers)	2009	2010	2011	2012	2013
Risk-free Rate	4.67%	3.71%	3.79%	2.31%	2.26%

Table 17: Riskless rate (self-conducted, data: Ministry of Industry and Trade)

## 12 INDUSTRY AND COMPETITION ANALYSIS

In the following spider diagram, we can see a comparison of some basic ratios of the reporting enterprise in contrast with the industry. It is important to highlight some facts, which influenced the analysis, though in order to be able to compare *cash ratio*, it was modified according to the information provided by the Ministry of Industry and Trade, so that it uses *short-term financial assets* instead of *cash*, and financial ratio *average collection period* uses both *long and short-term receivables* in a comparison to daily sales. These ratios were consequently modified for XY Company for better depiction.

At first glance at the comparison chart it is obvious that the enterprise has, compared to the industry, better results mainly in the area of *profitability*, meaning that the company produced twice as large value as its industrial median.

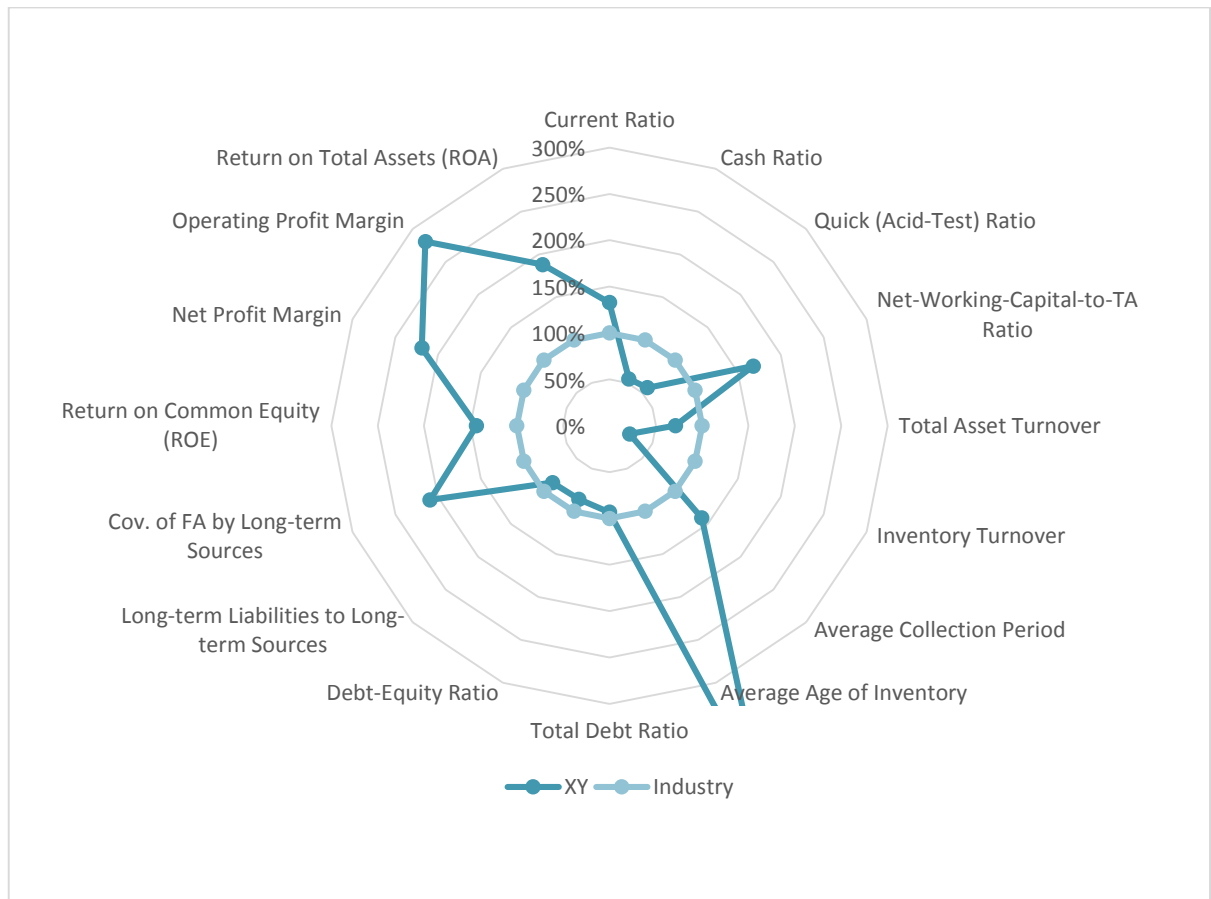


Figure 16: Spider analysis for 2013 – industry and XY (self-conducted, data: fin. stats. XY)

The financial ratios which stretch outside the industrial limits are *operating profit margin*, as the company generates nearly *three times* bigger profit margin and *net profit margin*,

which in a comparison to the *operating profit margin* states that the entity produced more than *twice* larger value during reporting periods than the industry after deducting interest expense and taxes. Other significant indicator is the *coverage of FA*, which states that company used twice as much long-term sources to cover its fixed assets, using a conservative strategy of financing. The information from the graph indicates that company's return on assets is nearly twice as big as the industrial from which the effectiveness of common equity rates as *1.5 times* higher than the industry.

The most deteriorated ratios are *inventory turnover* and *average age of inventory*, which is due to a high specialisation of company goods within the industrial comparison. The cash and quick ratio describes a situation when the entity dispatches half the short-term financial assets of those within industry.

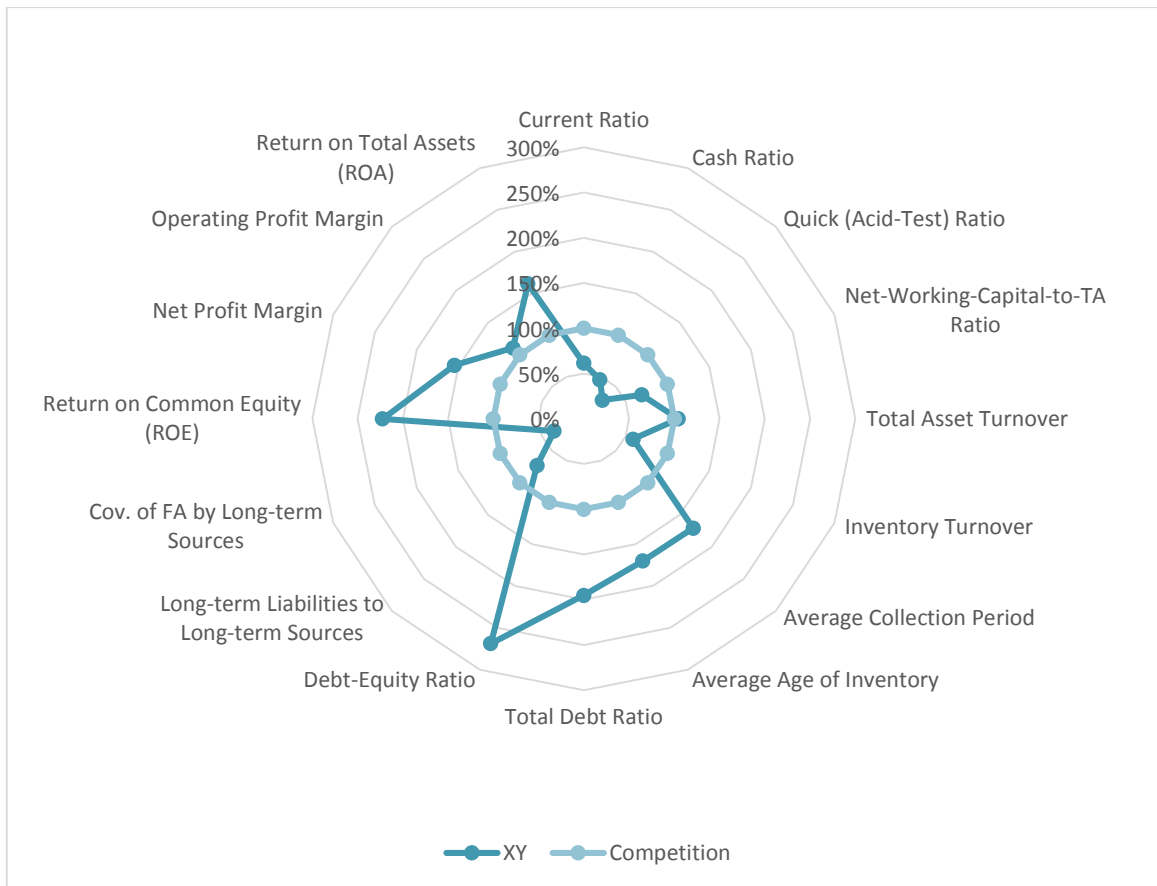


Figure 17: Spider analysis for 2013 – competition and XY (self-conducted, data: fin. stats. XY)

The spider diagram comparing the observed company XY with a diameter customary to its competition proved its higher rates in the area of debt ratios, partly liquidity and profitability. Return on equity is nearly 2.5 times higher than the competition. Therefore it can be stated



that company is highly profitable compared to its major competition within the year 2013. The company's effectiveness over management of its assets proves to be 1.5 times higher and the net profit margin states that a profit margin after deducting taxes and interest expense is also 1.5 higher than the competition, which is caused by twice as high profit which the XY Company generated. According to the values of debt ratios it is obvious that XY Company used liabilities much more than its competition and together with the coverage of fixed assets by long-term sources, one should recognize that the competition uses exclusively its own sources, provided it does not have any bank credits in form of loans, which may be visible also from liquidity ratios, and thus the financial leverage is not balanced.

### 13 ECONOMIC VALUE ADDED

When conducting the indicator of *Economic Value Added* it is possible to use various methods. For purposes of this financial analysis, the *modular* method of *cost of own capital* is used, so that following equation is calculated:

$$r_e = \frac{WACC * \frac{PS}{A} - (1 - t_x) * \frac{R_t}{BA+O} * (\frac{PS}{A} - \frac{EQ}{A})}{\frac{EQ}{A}} \quad R_t = \frac{\text{Interest Expense}}{\text{Obligations} + \text{Bank Loans}}$$

All figures can be found within financial statements, apart from WACC, which together with EVA is calculated as follows:

$$WACC = r_f + r_{LA} + r_{enterprise} + r_{FinStab} \quad EVA = NI - r_e * EQ$$

Values for all of the risk margins are values of the sector, provided in my opinion the company approached the sector in almost all indicators, and so I think that the calculation of WACC will be objective.

ind/year	2009	2010	2011	2012	2013
$r_f$	4.67%	3.71%	3.51%	2.31%	2.26%
$r_{LA}$	1.80%	1.67%	1.57%	1.41%	1.31%
$r_{enterprise}$	3.82%	3.46%	3.52%	5.45%	3.46%
$r_{finstab}$	6.73%	5.69%	5.28%	4.58%	5.15%
<b>WACC</b>	<b>17.02%</b>	<b>14.53%</b>	<b>13.88%</b>	<b>13.75%</b>	<b>12.18%</b>
WACC*PS/A	0.149	0.112	0.110	0.094	0.076
(1- $t_x$ )	0.810	0.810	0.810	0.810	0.810
$R_t/BA+O$	0.051	0.058	0.070	0.086	0.057
(PS/A) - (EQ/A)	0.176	0.234	0.201	0.158	0.168
EQ/A	0.699	0.537	0.588	0.528	0.455
<b><math>r_e</math></b>	<b>20.25%</b>	<b>18.82%</b>	<b>16.69%</b>	<b>15.77%</b>	<b>14.96%</b>
NI	(33,442)	(198,122)	(122,016)	6,842	150,196
EQ	900,600	702,479	903,852	911,798	1,079,991
<b>EVA</b>	<b>(215,824)</b>	<b>(330,330)</b>	<b>(272,884)</b>	<b>(136,975)</b>	<b>(11,423)</b>

Table 18: EVA Calculation for XY (self-conducted, data: fin. stats. XY)

From the table above it is obvious that the company did not create value in any of the reporting periods. Even though the company generated profit during the last year 2013, so that its *net income*, *EBT* and *EBIT* improved significantly in comparison to other periods, the value of EVA is still negative.

## 14 OVERALL ANALYSIS OF FINANCIAL HEALTH OF COMPANY

In order to provide a comprehensive outline of the financial health of company the following methods are used to evaluate the results. The Altman’s Z-Score and Index IN provide an insightful overview of the company’s financial conditions.

### 14.1 ALTMAN’S Z-SCORE

One of the methods how to evaluate the overall financial situation of the enterprise is Altman’s Z-Score, which may provide facts about the company’s financial health. The results of this analysis for XY Company can be seen below.

Ind/Year	2009	2010	2011	2012	2013
X <sub>1</sub>	0.37	0.35	0.47	0.45	0.48
X <sub>2</sub>	-0.07	-0.09	-0.21	-0.26	-0.18
X <sub>3</sub>	-0.01	-0.04	-0.05	0.03	0.07
X <sub>4</sub>	2.32	1.26	1.53	1.17	0.85
X <sub>5</sub>	1.16	1.31	1.40	1.50	1.38
<b>Z-Score</b>	<b>2.87</b>	<b>2.19</b>	<b>2.38</b>	<b>2.47</b>	<b>2.46</b>

Table 19: Altman’s Z-Score (self-conducted, data: fin. stats. XY)

According to the figures which are depicted in the graph below it is obvious that company is located in so called *ambivalent financial situation* meaning that neither financially healthy entity status nor status of financial problems belong to XY Company. It does not evidence any sings of serious financial problems.

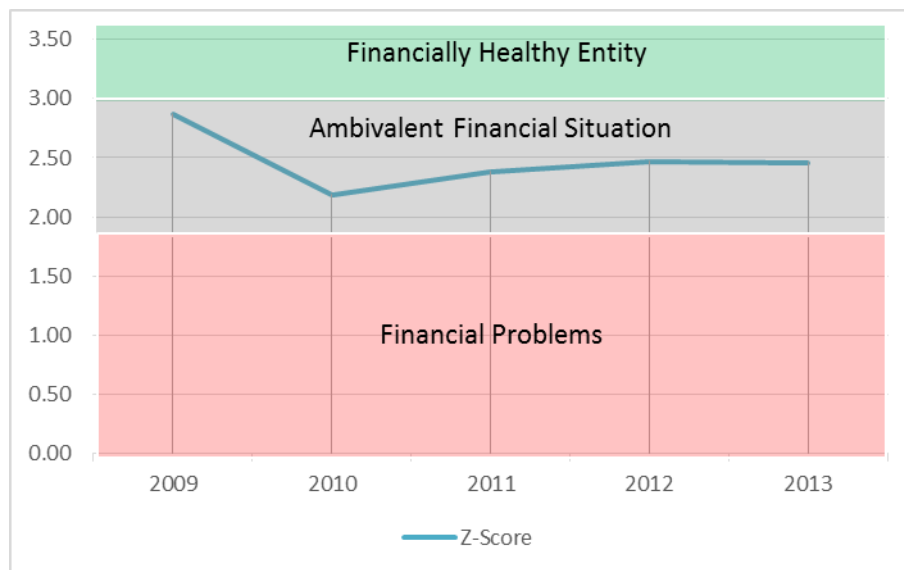


Figure 18: Altman’s Z-Score (self-conducted, data: fin. stats. XY)

### 14.2 INDEX IN

Below are calculated and analysed various indices. Index IN 95 confirms that the company is financially healthy provided it records values beyond the positively evaluated limit.

Ind/Year	2009	2010	2011	2012	2013
IN <sub>95</sub>	2.65	2.44	1.71	3.46	3.22
IN <sub>99</sub>	0.49	0.41	0.40	0.82	0.96
IN <sub>05</sub>	0.77	0.39	0.41	0.93	1.22

Table 20: Index IN (self-conducted, data: fin. stats. XY)

The model IN 99 situation is somewhat different. According to this indicator company creates value if the value of this indicator is higher than 2.07, which the company did not reach in any of the reporting periods. If this index fluctuates under 0.684 it means that it has not generated positive profit, which is according to the financial statements true.

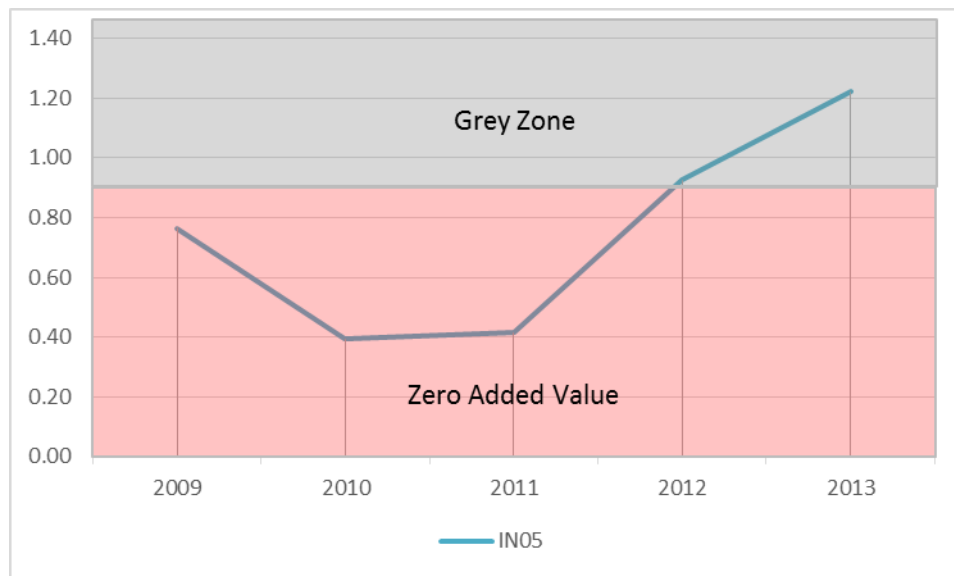


Figure 19: Index IN05 (self-conducted, data: fin. stats. XY)

The last index IN 05 combines creditworthy and bankruptcy model. According to the value of this index the entity did not create any value for the first four years of reporting periods while ultimately in the last year the enterprise generated both profit and thus a value.

### 14.3 DUPONT SYSTEM OF ANALYSIS

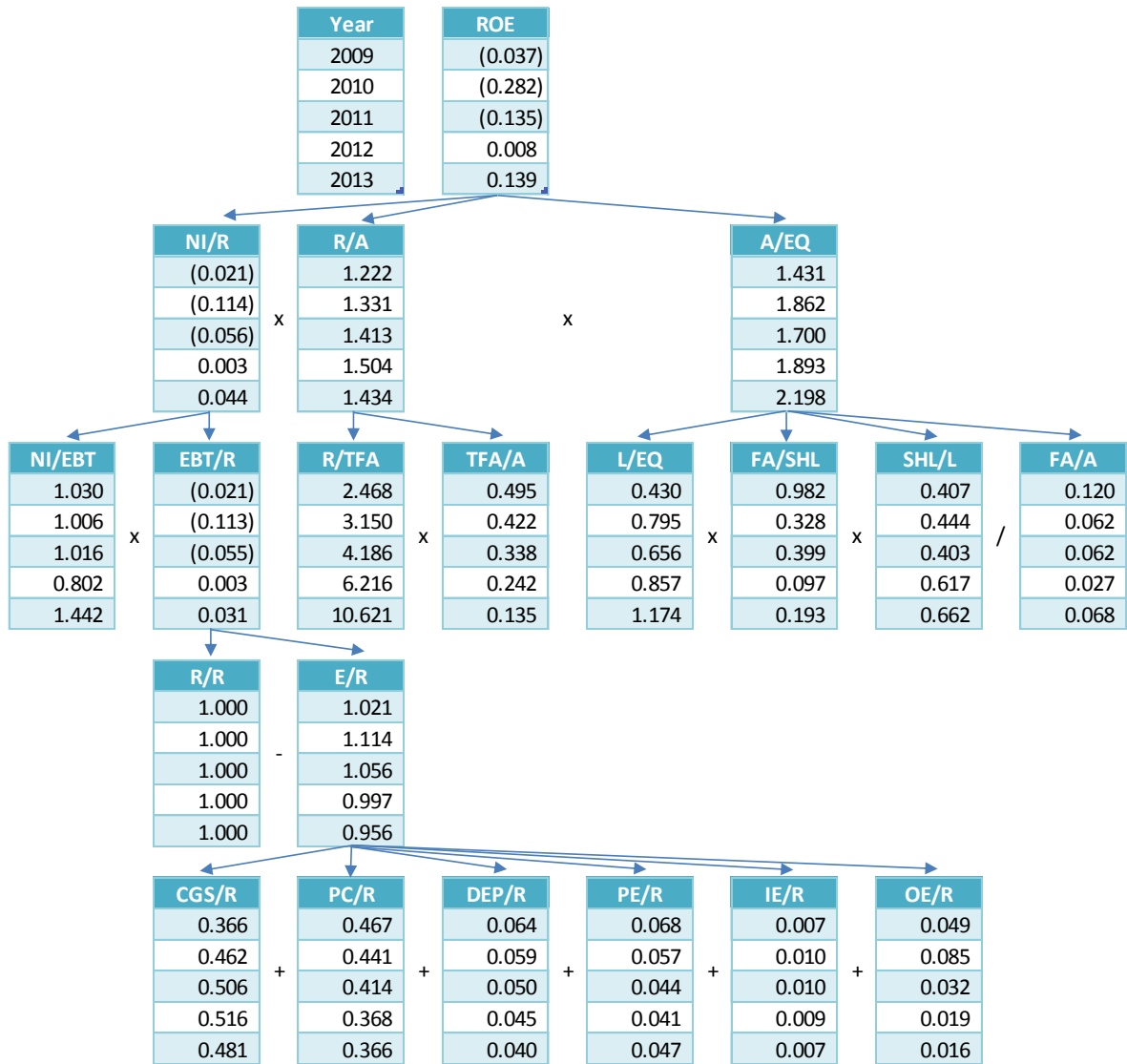


Table 21: DuPont Analysis of ROE of XY (self-conducted, data: fin. stats. XY)

From the DuPont system of analysis which continuously dissects indicator of *return on equity* we may see some important features. The indicator counts negative values for the first three periods when the company did not generate profit. The profit from tangible fixed assets, despite its decreasing amount over years, tends to increase. During the last year 2013 assets were twice as big as equity, while the proportion between equity and liabilities is slightly more than equal. The company may improve its ROE if it allows the effect of financial leverage agency to rise, so that the proportion of liabilities would level up. The low level of ROE might be caused by negative values of net income, provided that expense overcome revenues and ultimately do not let the company profit. This is caused generally due to high rates of costs of goods sold and production consumption, which are the core of business.

## SUMMARY OF ANALYSIS AND RECOMMENDATIONS

The company which is analysed in this bachelor thesis is a small-sized wholesale and semi-production enterprise selling highly specialized tools within either garden or forest area of interest and producing own products or semi-finished products from wood, employing up to 35 employees, according to the most recent information. As a mostly wholesale entity, the share of fixed assets on total company assets is more than 50 % during the first year of the reporting period while this ratio gradually decreases over years to less than 20 % in 2013. The rest is formed mainly by short-term receivables and inventory. The company disposes with a quite old and nearly completely depreciated tangible fixed assets. This amount is caused by the fact that the company did not invest in any forms of fixed assets during any of reported periods. It is highly recommended to put at least reasonable proportion of company's investments into tangible fixed assets and thus not to allow it to become old and obsolete because the company exposes itself to a risk of unexpected and urgent need for investments, and so undesired need for finding a way of financing sources. The company may for example deduct a certain percentage from its annual profit/loss and put this into asset investments or might benefit from creating tax deductible reserves, which have not been utilized, yet.

It can be seen from the previous analysis that the ratio between short-term receivables and short-term financial assets is trending reversely, with short-term receivables increasing but decreasing short-term financial assets as there was a decline in the ability of customers to pay their debts to the company. The figures from the analysis of overdue receivables and payables speaks for themselves, when overdue receivables in 2009 (52.66 %) increased sharply in 2013 (86.02 %). It is desired to point out that the average collection period in 2013 was 51 days and average payment period 93 days. Although it is advisable for the company to manage its system of receivables' collection, the current system is a present evidence of past global financial crisis due to which the company's customers were not able to pay their debts properly and remained their habits up to present day. However company took advantage from such an approach and nowadays always valorises obtained payments from receivables into high-rate-turnover inventory before settling its debt in a form of acquitting the payables.

The company uses on average 55% of liabilities to finance its assets, while generally the development of liabilities is faster than stockholders' equity and liabilities, especially during

the last two periods, when there was a significant rise in the usage of liabilities due to a loan for a property and infrastructure development.

At the first glance on the structure of revenues it is obvious, that more than 50 % of all company revenues were generated by revenues from goods sold during given reporting periods. Provided this company is mostly a wholesale but semi-production oriented at the same time, from the given information we may observe a significant portion of production in each year. The entity relies on other revenues at least. The chapter *analysis of company revenues* described that after analysing the company's revenues and expenses, these are analogically connected. The largest proportion is generated by *expenses from sold goods* fluctuating within a range of 35 – 50% as the company is a wholesale. The second place is occupied by the *consumption of material and energy*.

From the analysis of financial ratios it has been found that the company has some errors within its liquidity, especially in quick and cash ratio. According to the literature the recommended value for the current ratio should overcome 1, while the company failed in this test in 4 out of 5 periods. After dissecting particles which create this indicator it has been proved that company held inefficiently high amount of inventory during all the reporting periods, and on the other side a humble amount of high-rate-turnover current assets, so that the quick liquidity did not reach desired levels. Upon this analysis the company should manage its current assets and adequately spread the load on current assets – *decrease* number of inventory, as its turnover does not reach high values, and thus presence of a bigger amount of inventory is redundant, while the company may keep its finance in other forms of current assets such as cash or bank accounts which would ultimately enhance its quick liquidity. As for the inventory turnover it may seem that the company does not turn its inventory during the accounting period enough, but after analysing its assortment this has been clarified, provided the enterprise deals with a low-rate-turnover goods which is highly specialised and moreover seasonally affected.

From the debt ratios analysis it may be seen that the company does keep its situation over indebtedness in its limits, since the total debt ratio proves the balanced strategy of financing from both own stockholders' equity and liabilities. From the time-perspective view the long-term liabilities create on average just 25 % of the company's long-term sources meaning the rest belongs to equity long-term sources. From the indicator of cash coverage ratio, which subtracts depreciation from the equation of times interest earned ratio the entity proved to have enough sources to pay interest expenses.

The spider analysis and overall comparison of company's financial results to industry and rival competition proved that net profit margin of XY reaches higher values than both industry and competition, and thus the ratio of profit/loss from individual periods to sales has proven to overcome industrial and competitor's results. From the ratio of return on equity it is visible that the company earned on average during last two periods 7.3 eurocents on each euro of common equity moving the enterprise towards higher position in scorecards in comparison to industry (4.5 eurocents) and competition (3.92 eurocents). The DuPont system of dissection the ratio of return on equity describes possible solution how to top up this return, e.g. it offers an increase in financial leverage – *usage of liabilities* as a possible answer.

Although the economic value added did not prove that the company created any value during reporting periods. Even though during last two periods the entity generated profit from the accounting point of view and from the information from the financial statements, it did not create any economic value added for itself, for its owners, meaning that for prospective investors the initial investments might not be interesting as they would encapsulate higher return from the state-government treasury bills.

The bankruptcy and creditworthiness models analysis at the analysis part proved that company did not excel in its financial results as it found itself within the limits of ambivalent financial situation which does not mark its performance neither as a financially healthy entity nor as having financial problems.

Analysed company XY is generally assessed as a powerful and stable company with conservative financing. After the summary and analysis of its attributes, it can be stated that the enterprise is financially sound and fulfils majority of the financial criteria and based on the bankruptcy and creditworthiness models it is not expected to succumb a financial collapse.



**BIBLIOGRAPHY**

BLAHA, Zdenek Sid and Irena JINDŘICHOVSKÁ, 2006. Jak posoudit finanční zdraví firmy. 3rd ext. ed. Praha: Management Press, 194 p. ISBN 80-7261-145-3.

BREALEY, Richard A, Stewart C MYERS and Franklin ALLEN, c2014. Principles of corporate finance. 11th ed. New York: McGraw-Hill Irwin, 889 p. ISBN 00-780-3476-0.

BŘEZINOVÁ, Hana, 2014. Rozumíme účetní závěrce podnikatelů. Ed. 1st. Praha: Wolters Kluwer, 222 p. ISBN 978-80-7478-640-2.

CENIGOVÁ, Alena, 2014. Podvojný účetnictvo podnikatelův 2014: Praktická příručka. Bratislava: Ceniga, 704 p. ISBN 978-80-9699-465-6.

FARKAŠ, Richard, 2012. Comparison of IFRS and Slovak Accounting Regulations. Bratislava, 212 p., *not published*

GITMAN AND ZUTTER, Lawrence J and Chad J ZUTTER, 2010. Principles of managerial finance. 13th ed. Boston: Prentice Hall, 947 p. ISBN 978-013-6119-463.

JÁČOVÁ AND ORTOVÁ, Helena and Martina ORTOVÁ, 2011. Finanční řízení podniku v příkladech. Ed. 1st. Praha: Wolters Kluwer Česká republika, 143 p. ISBN 978-80-7357-724-7.

KNÁPKOVÁ, Adriana, Drahomíra PAVELKOVÁ and Karel ŠTEKER, 2013. Finanční analýza: komplexní průvodce s příklady. 2nd ext. ed. Praha: Grada, 236 p. Prosperita firmy. ISBN 978-80-247-4456-8.

KOVÁLÍKOVÁ, Hana, 2004. Jednoduchý průvodce základními vnitropodnikovými směrniciemi pro podnikatele. 2nd updated edition. Olomouc: ANAG, s. r. o., 135 p. ISBN 80-7263-222-1.

KOVANICOVÁ, Dana, 2012. Abeceda účetních znalostí pro každého. Praha: Trizonia. Updated irregularly, 412 p. ISBN 978-80-7273-169-5.

LOUŠA, František, 2014. Vnitropodnikové směrnice v účetnictví. 6th updated. ed. Praha: Grada, 112 p. ISBN 978-80-247-5172-6.

MÁČE, Miroslav, 2013. Účetnictví a finanční řízení. 1st ed. Praha: Grada, 551 p. ISBN 978-80-247-4574-9.

- PASEKOVÁ, Marie, 2008. Základy účetnictví: studijní pomůcka pro distanční studium. Ed. 5th, amd. Zlín: Univerzita Tomáše Bati ve Zlíně, 191 p. ISBN 978-80-7318-750-7.
- PAVELKOVÁ, Drahomíra a Adriana KNÁPKOVÁ, 2008. Podnikové finance: studijní pomůcka pro distanční studium. Ed. 4th, unchanged. Zlín: Univerzita Tomáše Bati ve Zlíně, 293 p. ISBN 978-80-7318-732-3.
- ROSS, Stephen A, c2008. Fundamentals of corporate finance. 8th ed. Boston: McGraw-Hill/Irwin, 718 p. ISBN 978-0-07-353062-8.
- RUBÁKOVÁ AND HROUDA, Věra and Pavel HROUDA, 2014. Účetnictví pro úplné začátečníky 2014 Praha: Grada. 1x year, 192 p. ISBN 978-80-247-5123-8.
- RŮČKOVÁ, Petra, 2011. Finanční analýza: metody, ukazatele, využití v praxi. 4th, updated. ed. Praha: Grada, 143 p. ISBN 978-80-247-3916-8.
- SEDLÁČEK, Jaroslav, 2011. Finanční analýza podniku. 2nd updated. ed. Brno: Computer Press, 152 p. ISBN 978-80-251-3386-6.
- SYNEK, KOPKÁNĚ AND KUBÁLKOVÁ, Miloslav, Heřman KOPKÁNĚ and Markéta KUBÁLKOVÁ, 2009. Manažerské výpočty a ekonomická analýza. Ed. 1st Praha: C.H. Beck, 301 p. ISBN 978-80-7400-154-3.
- ŠLOSÁR AND NOVÁK, Rudolf and Jaromír NOVÁK, 2012. Didaktika účetnictva A. Bratislava: Ekonomická univerzita v Bratislave, 352 p. ISBN 978-80-225-3412-3.
- ŠTEKER, Karel and Milana OTRUSINOVÁ, 2013. Jak číst účetní výkazy: základy českého účetnictví a výkaznictví. 1st ed. Praha: Grada, 264 p. ISBN 978-80-247-4702-6.
- VANDERBECK, Edward J, c2013. Principles of cost accounting. 16th ed. Masdon, Ohio: South Western/Cengage Learning, 574 p. ISBN 978-1-133-18788-2.
- YOUNG, S and Stephen F O'BYRNE, 2001. EVA and value-based management: a practical guide to implementation. 1st ed. New York: McGraw-Hill, 493 p. ISBN 0071364390.

**LIST OF ABBREVIATIONS**

A	Assets
BA	Bank Accounts
CAS	Czech Accounting Standards
CGS	Cost of Goods Sold
DEP	Depreciation
E	Expenses
EAFCFS	Earnings Available for Common Stockholders
EBIT	Earnings Before Interest and Taxes
EBITD	Earnings before interest, taxes and depreciation
EBITDA	Earnings before interest, taxes, depreciation and amortization
EBT	Earnings Before Taxes
EQ	Equity
EVA	Economic Value Added
FA	Financial Assets
ICG	Internal Company Guidelines
IE	Interest Expense
IFRS	International Financing Reporting Standards
L	Liability
NI	Net Income
O	Obligations
OE	Other Expenses
PC	Production Consumption
PE	Personnel Expenses
PS	Payable Sources

---

R	Revenues
$r_e$	Cost of Own Capital
$r_{enterprise}$	Enterprise Margin
$r_f$	Risk-free Rate
$r_{FinStab}$	Financial Stability Margin
$r_{LA}$	Size-of-Company Margin
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
$R_t$	Rate
SE	Stockholders' Equity
SHL	Short-term Liabilities
SK NACE	Statistical Classification of Economic Activities in Slovakia
TFA	Tangible Fixed Assets
$t_x$	Tax Rate
US GAAP	United States Generally Accepted Accounting Principles
WACC	Weighted Average Cost of Capital

**LIST OF FIGURES**

Figure 1: Average number of employees.....	45
Figure 2: No. of entities SK NACE 46 .....	46
Figure 3: Structure of assets in XY.....	48
Figure 4: Development of fixed assets over years 2009 – 2013.....	50
Figure 5: Indicated depreciation of fixed assets with a future prognosis .....	50
Figure 6: Structure of liabilities of XY .....	52
Figure 7: Development trend of stockholders' equity and liabilities.....	54
Figure 8: Structure of revenues of XY.....	55
Figure 9: Structure of <i>Other revenues</i> of XY .....	55
Figure 10: Structure of expenses of XY .....	58
Figure 11: Development trend of total revenues and expenses of XY .....	59
Figure 12: Liquidity ratios of XY .....	63
Figure 13: Average age of inventory, payables and receivables of XY .....	65
Figure 14: Development of chosen debt ratios of XY .....	66
Figure 15: Profit margins of XY .....	69
Figure 16: Spider analysis for 2013 – industry and XY .....	70
Figure 17: Spider analysis for 2013 – competition and XY .....	71
Figure 18: Altman's Z-Score .....	74
Figure 19: Index IN05.....	75
Figure 20: Balance Sheet XY for 2009-2013 – <i>Assets</i> .....	91
Figure 21: Income Statement XY for 2009-2013 – <i>Liabilities</i> .....	91
Figure 22: Income Statement XY for 2009-2013 – <i>Revenues</i> .....	92
Figure 23: Income Statement XY for 2009-2013 – <i>Expenses</i> .....	92

**LIST OF TABLES**

Table 1: Structure of balance sheet (Šteker and Otrusínová, 2013, p. 21) .....	18
Table 2: Turnover and revenues for sold goods and production of company .....	46
Table 3: Accounting value added in € .....	47
Table 4: Profit/loss – current year in € .....	47
Table 5: SWOT Analysis of XY .....	47
Table 6: Structure of maturity of receivables .....	49
Table 7: Profit/loss of company XY .....	53
Table 8: Structure of maturity of payables .....	53
Table 9: Basic structure of revenues of XY .....	56
Table 10: Changes in chosen revenues of XY .....	56
Table 11: Revenues and expenses from sold goods of XY .....	59
Table 12: Changes in chosen expenses of XY .....	60
Table 13: Liquidity ratios of XY .....	62
Table 14: Activity ratios of XY .....	64
Table 15: Debt ratios of XY .....	65
Table 16: Profitability ratios of XY .....	68
Table 17: Riskless rate .....	69
Table 18: EVA Calculation for XY .....	73
Table 19: Altman’s Z-Score .....	74
Table 20: Index IN .....	75
Table 21: DuPont Analysis of ROE of XY .....	76
Table 22: Cross-sectional analysis of assets of XY .....	87
Table 23: Time-series analysis of assets of XY .....	87
Table 24: Cross-sectional analysis of SE and liabilities of XY .....	88
Table 25: Time-series analysis of SE and liabilities of XY .....	88
Table 26: Cross-sectional analysis of revenues of XY .....	89
Table 27: Time-series analysis of revenues of XY .....	89
Table 28: Cross-sectional analysis of expenses of XY ( .....	90
Table 29: Time-series analysis of expenses of XY .....	90

## **APPENDICES**

APPENDIX P I: Cross-sectional and time-series analysis of assets

APPENDIX P II: Cross-sectional and time-series analysis of SE and liabilities

APPENDIX P III: Cross-sectional and time-series analysis of revenues

APPENDIX P IV: Cross-sectional and time-series analysis of expenses

APPENDIX P V: Balance Sheet of XY 2009-2013

APPENDIX P VI: Income Statement of XY 2009-2013

## APPENDIX P I: CROSS-SECTIONAL AND TIME-SERIES ANALYSIS OF ASSETS

(in eur)	2009	2010	2011	2012	2013
<b>TOTAL ASSETS</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
<b>Fixed assets</b>	<b>50.05%</b>	<b>45.62%</b>	<b>36.56%</b>	<b>26.96%</b>	<b>16.20%</b>
Intangible fixed assets	0.00%	0.00%	0.00%	0.21%	0.21%
Tangible fixed assets	49.52%	42.25%	33.76%	24.20%	13.50%
Long-term financial assets	0.53%	3.37%	2.80%	2.56%	2.49%
<b>Current assets</b>	<b>48.87%</b>	<b>53.57%</b>	<b>62.74%</b>	<b>72.43%</b>	<b>83.28%</b>
Inventory	31.85%	43.00%	48.66%	52.37%	57.45%
Long-term receivables	0.00%	0.00%	0.00%	0.01%	2.24%
Short-term receivables	5.53%	7.73%	10.68%	19.90%	19.25%
Short-term financial assets	11.49%	2.84%	3.39%	0.15%	4.34%
<b>Accruals</b>	<b>1.08%</b>	<b>0.81%</b>	<b>0.70%</b>	<b>0.61%</b>	<b>0.52%</b>

Table 22: Cross-sectional analysis of assets of XY

(in eur)	2009	2010	2011	2012	2013
<b>TOTAL ASSETS</b>	<b>9.76%</b>	<b>1.51%</b>	<b>17.50%</b>	<b>12.35%</b>	<b>37.53%</b>
<b>Fixed assets</b>	<b>-13.34%</b>	<b>-7.48%</b>	<b>-5.83%</b>	<b>-17.15%</b>	<b>-17.36%</b>
Intangible fixed assets	0.00%	0.00%	0.00%	0.00%	38.36%
Tangible fixed assets	-13.42%	-13.41%	-6.11%	-19.48%	-23.25%
Long-term financial assets	-5.17%	548.79%	-2.31%	2.56%	33.81%
<b>Current assets</b>	<b>48.04%</b>	<b>11.28%</b>	<b>37.61%</b>	<b>29.70%</b>	<b>58.15%</b>
Inventory	40.13%	37.04%	32.97%	20.90%	50.87%
Long-term receivables	0.00%	0.00%	0.00%	0.00%	26552.00%
Short-term receivables	-42.89%	41.99%	62.32%	109.34%	33.03%
Short-term financial assets	1806.10%	-74.92%	40.45%	-95.16%	3988.54%
<b>Accruals</b>	<b>212.68%</b>	<b>-24.06%</b>	<b>1.90%</b>	<b>-1.82%</b>	<b>16.21%</b>

Table 23: Time-series analysis of assets of XY



## APPENDIX P II: CROSS-SECTIONAL AND TIME-SERIES ANALYSIS OF SE AND LIABILITIES

(in eur)	2009	2010	2011	2012	2013
<b>TOTAL SE &amp; LIABILITIES</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
<b>Stockholders' Equity</b>	<b>69.90%</b>	<b>53.72%</b>	<b>58.82%</b>	<b>52.82%</b>	<b>45.49%</b>
Registered capital	2.58%	2.54%	2.16%	1.92%	1.40%
Capital funds	76.78%	75.64%	85.42%	76.09%	56.09%
Funds from earnings	0.05%	0.05%	0.04%	0.04%	0.03%
Profit/loss - previous years	-6.91%	-9.36%	-20.86%	-25.64%	-18.35%
Profit/loss - current year	-2.60%	-15.15%	-7.94%	0.40%	6.33%
<b>Liabilities</b>	<b>30.07%</b>	<b>42.71%</b>	<b>38.57%</b>	<b>45.27%</b>	<b>53.40%</b>
Reserves	0.20%	0.31%	0.30%	0.33%	0.45%
Long-term payables	0.06%	0.09%	2.62%	1.25%	0.79%
Short-term payables	12.24%	18.95%	15.55%	27.91%	35.33%
Bank loans	17.57%	23.36%	20.10%	15.79%	16.83%
<b>Accruals</b>	<b>0.02%</b>	<b>3.58%</b>	<b>2.61%</b>	<b>1.92%</b>	<b>1.11%</b>

Table 24: Cross-sectional analysis of SE and liabilities of XY

(in eur)	2009	2010	2011	2012	2013
<b>TOTAL SE AND LIABILITIES</b>	<b>9.76%</b>	<b>1.51%</b>	<b>17.50%</b>	<b>12.35%</b>	<b>37.53%</b>
<b>Stockholders' Equity</b>	<b>-3.58%</b>	<b>-22.00%</b>	<b>28.67%</b>	<b>0.88%</b>	<b>18.45%</b>
Registered capital	0.00%	0.00%	0.00%	0.00%	0.00%
Capital funds	0.00%	0.00%	32.69%	0.08%	1.37%
Funds from earnings	0.02%	0.00%	0.00%	0.00%	0.00%
Profit/loss - previous years	-3451.29%	37.58%	161.82%	38.06%	-1.55%
Profit/loss - current year	-63.51%	492.43%	-38.41%	-105.61%	2095.21%
<b>Liabilities</b>	<b>62.48%</b>	<b>44.15%</b>	<b>6.11%</b>	<b>31.86%</b>	<b>62.24%</b>
Reserves	-6.43%	51.70%	14.43%	22.47%	92.13%
Long-term payables	76.67%	42.87%	3331.97%	-46.56%	-12.96%
Short-term payables	47.00%	57.14%	-3.60%	101.67%	74.09%
Bank loans	76.94%	35.01%	1.11%	-11.77%	46.61%
<b>Accruals</b>	<b>-78.14%</b>	<b>16426.86%</b>	<b>-14.24%</b>	<b>-17.50%</b>	<b>-20.00%</b>

Table 25: Time-series analysis of SE and liabilities of XY

## APPENDIX P III: CROSS-SECTIONAL AND TIME-SERIES ANALYSIS OF REVENUES

(in eur)	2009	2010	2011	2012	2013
Revenues from sold goods	48.82%	61.70%	73.65%	79.65%	66.41%
Production	45.82%	36.52%	25.09%	19.90%	29.95%
<i>Revenues from own products and services</i>	25.81%	20.55%	21.35%	17.02%	21.72%
<i>Change in inventory of own products</i>	20.01%	15.96%	3.74%	2.89%	8.23%
Revenues from disposals of FA and mat.	2.76%	0.07%	0.31%	0.05%	2.68%
Other operating revenues	2.06%	1.41%	0.73%	0.29%	0.82%
Interest revenues	0.0004%	0.0008%	0.0015%	0.0004%	0.0004%
Other financial revenues	0.54%	0.31%	0.22%	0.11%	0.14%
<b>REVENUES</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

Table 26: Cross-sectional analysis of revenues of XY (self-conducted, data: fin. stats. XY)

(in eur)	2009	2010	2011	2012	2013
Revenues from sold goods	-15.90%	39.64%	48.96%	29.32%	9.33%
Production	997.22%	-11.92%	-14.26%	-5.16%	97.30%
<i>Revenues from own products and services</i>	518.05%	-11.98%	29.59%	-4.69%	67.35%
<i>Change in inventory of own products</i>	-	-11.83%	-70.73%	-7.85%	273.85%
Revenues from disposals of FA and mat.	644.49%	-97.24%	454.17%	-81.20%	7208.64%
Other operating revenues	602.13%	-24.41%	-35.23%	-52.96%	274.92%
Interest revenues	-78.91%	100.00%	128.57%	-65.63%	36.36%
Other financial revenues	1014.53%	-37.22%	-10.60%	-39.66%	62.94%
<b>REVENUES</b>	<b>58.87%</b>	<b>10.51%</b>	<b>24.78%</b>	<b>19.57%</b>	<b>31.12%</b>

Table 27: Time-series analysis of revenues of XY (self-conducted, data: fin. stats. XY)

## APPENDIX P IV: CROSS-SECTIONAL AND TIME-SERIES ANALYSIS OF EXPENSES

(in eur)	2009	2010	2011	2012	2013
Expenses from sold goods	35.85%	41.45%	47.95%	51.73%	50.30%
Production consumption	45.69%	39.63%	39.16%	36.86%	38.28%
<i>Consumption of material and energy</i>	<i>36.28%</i>	<i>32.19%</i>	<i>28.97%</i>	<i>27.93%</i>	<i>27.98%</i>
<i>Services</i>	<i>9.41%</i>	<i>7.44%</i>	<i>10.19%</i>	<i>8.93%</i>	<i>10.30%</i>
Personnel expenses	6.65%	5.14%	4.13%	4.13%	4.87%
Taxes and fees	0.68%	0.58%	0.50%	0.54%	0.48%
Depreciation of intan. and tan. assets	6.25%	5.26%	4.77%	4.50%	4.17%
Net book value of disposed FA and mat.	2.48%	0.00%	0.18%	0.11%	0.57%
Change in operating reserves and adj.	0.00%	0.00%	0.00%	0.00%	0.21%
Other operating expenses	0.32%	0.35%	1.44%	0.57%	0.68%
Interest expense	0.72%	0.91%	0.94%	0.91%	0.71%
Other financial expenses	1.29%	1.20%	0.84%	0.57%	1.14%
Income tax	0.06%	0.07%	0.09%	0.07%	-1.41%
Extraordinary expenses	0.00%	5.42%	0.00%	0.00%	0.00%
<b>EXPENSES</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

Table 28: Cross-sectional analysis of expenses of XY (self-conducted, data: fin. stats. XY)

(in eur)	2009	2010	2011	2012	2013
Expenses from sold goods	-18.62%	39.33%	36.88%	21.84%	22.18%
Production consumption	407.04%	4.54%	16.94%	6.27%	30.51%
<i>Consumption of material and energy</i>	<i>1719.54%</i>	<i>6.95%</i>	<i>6.50%</i>	<i>8.83%</i>	<i>25.91%</i>
<i>Services</i>	<i>134029.81%</i>	<i>-4.78%</i>	<i>62.15%</i>	<i>-1.02%</i>	<i>44.89%</i>
Personnel expenses	26.39%	-6.78%	-5.05%	13.02%	48.13%
Taxes and fees	537.63%	2.67%	1.75%	21.61%	11.36%
Depreciation of intan. and tan. assets	1.69%	1.36%	7.37%	6.49%	16.33%
Net book value of disposed FA and mat.	140.00%	-100.00%	-	-28.31%	528.50%
Other operating expenses	275.69%	31.12%	392.72%	-55.17%	49.83%
Interest expense	261.05%	51.40%	22.52%	8.98%	-2.30%
Other financial expenses	-5.87%	12.52%	-17.03%	-23.07%	150.41%
Income tax	-2.09%	30.15%	54.37%	-14.04%	-2832.84%
Extraordinary expenses	-	-	-100.00%	-	-
<b>EXPENSES</b>	<b>48.51%</b>	<b>20.53%</b>	<b>18.32%</b>	<b>12.91%</b>	<b>25.67%</b>

Table 29: Time-series analysis of expenses of XY (self-conducted, data: fin. stats. XY)

## APPENDIX P V: BALANCE SHEET OF XY (2009-2013)

(in eur)	2009	2010	2011	2012	2013
<b>TOTAL ASSETS</b>	<b>1,288,351</b>	<b>1,307,775</b>	<b>1,536,638</b>	<b>1,726,383</b>	<b>2,374,351</b>
<b>Fixed assets</b>	<b>644,843</b>	<b>596,624</b>	<b>561,827</b>	<b>465,466</b>	<b>384,648</b>
Intangible fixed assets	-	-	-	3,558	4,923
Tangible fixed assets	638,044	552,513	518,733	417,709	320,584
Long-term financial assets	6,799	44,111	43,094	44,199	59,141
<b>Current assets</b>	<b>629,600</b>	<b>700,589</b>	<b>964,048</b>	<b>1,250,350</b>	<b>1,977,423</b>
Inventory	410,346	562,357	747,790	904,113	1,364,016
Long-term receivables	-	-	-	200	53,304
Short-term receivables	71,200	101,094	164,098	343,515	456,990
Short-term financial assets	148,054	37,138	52,160	2,522	103,113
<b>Accruals</b>	<b>13,908</b>	<b>10,562</b>	<b>10,763</b>	<b>10,567</b>	<b>12,280</b>

Figure 20: Balance Sheet XY for 2009-2013 – *Assets* (self-conducted, data: fin. stats. XY)

(in eur)	2009	2010	2011	2012	2013
<b>TOTAL LIABILITIES</b>	<b>1,288,351</b>	<b>1,307,775</b>	<b>1,536,638</b>	<b>1,726,383</b>	<b>2,374,351</b>
<b>Equity</b>	<b>900,600</b>	<b>702,479</b>	<b>903,852</b>	<b>911,798</b>	<b>1,079,991</b>
Registered capital	33,194	33,194	33,194	33,194	33,194
Capital funds	989,178	989,179	1,312,568	1,313,673	1,331,669
Funds from earnings	664	664	664	664	664
Profit/loss - previous years	(88,994)	(122,436)	(320,558)	(442,575)	(435,732)
Profit/loss - current year	(33,442)	(198,122)	(122,016)	6,842	150,196
<b>Other sources</b>	<b>387,468</b>	<b>558,525</b>	<b>592,676</b>	<b>781,496</b>	<b>1,267,888</b>
Reserves	2,640	4,005	4,583	5,613	10,784
Long-term payables	821	1,173	40,257	21,512	18,724
Short-term payables	157,706	247,817	238,904	481,799	838,774
Bank loans	226,301	305,530	308,932	272,572	399,606
<b>Accruals</b>	<b>283</b>	<b>46,771</b>	<b>40,110</b>	<b>33,089</b>	<b>26,472</b>

Figure 21: Income Statement XY for 2009-2013 – *Liabilities* (self-conducted, data: fin. stats. XY)

## APPENDIX P VI: INCOME STATEMENT OF XY (2009-2013)

(in eur)	2009	2010	2011	2012	2013
Revenues from sold goods	768,889	1,073,713	1,599,387	2,068,264	2,261,153
Production	721,501	635,528	544,881	516,768	1,019,572
<i>Revenues from own products and services</i>	<i>406,410</i>	<i>357,715</i>	<i>463,567</i>	<i>441,834</i>	<i>739,430</i>
<i>Change in inventory of own products</i>	<i>315,091</i>	<i>277,813</i>	<i>81,314</i>	<i>74,934</i>	<i>280,142</i>
Revenues from disposals of FA and mat.	43,494	1,200	6,650	1,250	91,358
Other operating revenues	32,396	24,488	15,861	7,461	27,973
Interest revenues	7	14	32	11	15
Other financial revenues	8,509	5,342	4,776	2,882	4,696
<b>REVENUES</b>	<b>1,574,796</b>	<b>1,740,285</b>	<b>2,171,587</b>	<b>2,596,636</b>	<b>3,404,767</b>

Figure 22: Income Statement XY for 2009-2013 – *Revenues* (self-conducted, data: fin. stats. XY)

(in eur)	2009	2010	2011	2012	2013
Expenses from sold goods	576,619	803,410	1,099,680	1,339,827	1,637,063
Production consumption	734,820	768,161	898,275	954,601	1,245,874
<i>Consumption of material and energy</i>	<i>583,442</i>	<i>624,017</i>	<i>664,550</i>	<i>723,256</i>	<i>910,669</i>
<i>Services</i>	<i>151,378</i>	<i>144,144</i>	<i>233,725</i>	<i>231,345</i>	<i>335,205</i>
Personnel expenses	106,941	99,693	94,656	106,981	158,474
Taxes and fees	11,006	11,300	11,498	13,983	15,572
Depreciation of intan. and tan. assets	100,591	101,962	109,472	116,574	135,612
Net book value of disposed FA and mat.	39,833	-	4,130	2,961	18,610
Change in operating reserves and adj.	-	-	-	-	6,990
Other operating expenses	5,113	6,704	33,032	14,807	22,185
Interest expense	11,625	17,600	21,563	23,499	22,958
Other financial expenses	20,715	23,308	19,338	14,877	37,254
Income tax	975	1,269	1,959	1,684	(46,021)
<i>Due tax</i>	<i>975</i>	<i>1,269</i>	<i>1,959</i>	<i>1,684</i>	<i>7,083</i>
<i>Deferred tax</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>(53,104)</i>
<i>Ordinary activity</i>	<i>975</i>	<i>1,269</i>	<i>1,959</i>	<i>1,684</i>	<i>(46,021)</i>
Extraordinary expenses	-	105,000	-	-	-
<b>EXPENSES</b>	<b>1,608,238</b>	<b>1,938,407</b>	<b>2,293,603</b>	<b>2,589,794</b>	<b>3,254,571</b>

Figure 23: Income Statement XY for 2009-2013 – *Expenses* (self-conducted, data: fin. stats. XY)