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Diploma Thesis

Financial Analysis of Chosen Company

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Declaration of Integrity

I declare that the Diploma thesis “Financial Analysis of Chosen Company” was done solely by me. All the literature and underlying materials are presented in the „ Bibliography” section.

Prague, 31th March, 2011

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Vratislav Veselý

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Financial Analysis of Chosen Company

Finanční analýza vybraného podniku

Summary

This diploma thesis deals with financial analysis, which is a basic tool of financial management for financial decision making and planning. It judges strengths and weaknesses of companies and is fundamental in forecasting into the future.

The first part deals with the theoretical background of financial analysis. It describes the different kinds of this tool; discusses different users and their goals. Data, its features and suitability for the analyses are examined. Financial statements as a main source of information are described.

In the practical part selected methods are applied to a chosen company. Horizontal analysis; common size balance sheet; common size income statement; indebtedness, liquidity, activity and profitability ratios are assessed for the period 2006 - 2009. The analysis assesses the changes of profitability caused by the economic crises, the acquisition and the following merger the firm underwent using the logarithmical and the pyramidal ROE decomposition. Index IN05 examines the probability of bankruptcy or creating value for the owners. Finally, the economic value added model (EVA©) judges the created value for shareholders taking into account the risk they undergo.

Key words:

Financial analysis, horizontal analysis, vertical analysis, profitability, liquidity, ratio analysis, ROE decomposition, IN05, EVA©, NACE 28

Souhrn

Tato diplomová práce se zabývá finanční analýzou, která je základním nástrojem finančního managementu pro finanční rozhodování a plánování. Hodnotí silné a slabé stránky a je základem pro předpovědi do budoucna.

První část rozebírá teoretické poznatky o finanční analýze. Popisuje různé druhy finanční analýzy; zmiňuje různé uživatele a jejich cíle. Data, jejich vlastnosti a vhodnost použití jsou dále rozebrány. Také finanční výkazy jako hlavní zdroj informací jsou popsány.

V praktické části jsou vybrané metody aplikovány na konkrétní podnik. Pro sledované období 2006 – 2009 jsou použity tyto metody: horizontální a vertikální analýza, ukazatele zadluženosti, likvidity, aktivity a rentability. Logaritmický a pyramidální rozklad hodnotí změny v rentabilitě vlastních zdrojů, která se výrazně změnila vlivem ekonomické krize a také akvizicí a následnou fúzí, kterou společnost prošla. Index IN05 usuzuje, jestli podnik s určitou pravděpodobností může zbankrotovat nebo naopak tvoří hodnotu pro vlastníky. Jako poslední je aplikován model ekonomické přidané hodnoty (EVA[©]), který hodnotí ekonomický zisk společníků (akcionářů) s ohledem na podstoupené riziko.

Klíčová slova:

Finanční analýza, horizontální analýza, vertikální analýza, rentabilita, likvidita, analýza poměrových ukazatelů, rozklad rentability vlastního kapitálu, IN05, EVA[©], NACE 28.

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1 Introduction

The topic of this diploma thesis is “Financial Analysis of Chosen Company”. Currently many firms have been experiencing hard times due to the economic crises and its consequences. Moreover, many of them undergo structural changes or are merged with or acquired by other entities. Such adjustments have significant impacts on financial condition of companies. Financial analysis is a basic tool of financial management can assess these changes, which is very critical to do so particularly in current economic conditions. This tool is used to assess firms’ strengths and weaknesses with regard to corporate finance. It helps company’s management to decide about assets volume, their financing and usage outside sources. Moreover, this tool is useful when judging strengths and weaknesses of competitors, debtors, or suppliers. Investors are interested in profitability of their equities and sustainability of reached profits. Moreover, they look for and assess new investment opportunities. However, financial analysis includes many methods that can give sometimes a wrong picture of a company. To be able to interpret the analysis results in a right way it is important to know what the proper methods are, to use the right and reliable data, and to view the analyzed company in a complex view benchmarking to a suitable subject.

2 Objectives

The objective of this diploma thesis is to apply financial analysis methods to the chosen company covering the time period from the year 2006 to 2009. The results are interpreted with respect to the results of the author's bachelor thesis that covered the period from the year 2001 to 2005. The main focus has been placed on the consequences caused by the acquisition, followed by the merger and the management replacement.

The analysis provides the former owners with information about the economic value added they reached and its value after substantial changes made by the shareholders.

The new owners are being informed if their investment brings economic profit, and therefore give them return reflecting on the risk they have been bearing. Moreover, together with the analysis carried out in the bachelor thesis, the diploma thesis presents the complex view at the company to the new management monitoring the period seven years prior to their appointment.

Future development is estimated based on the financial analysis results. Lastly, final recommendations are developed based on identified weaknesses.

3 Literature Overview

3.1 The Term “Financial Analysis” and “Financial Statement Analysis”

Financial analysis is one of the basic tools for financial planning and financial decision making. Czech authors use simply the term “Financial analysis”. On the other hand, English writing authors use the term “Financial analysis” as well as “Financial statement analysis”. Both generally refer to the same. Usually, but not necessarily the term “Financial Analysis” is perceived broader than the term “Financial Statement Analysis”.

“Financial analysis is a tool of financial management. It consists of the evaluation of the financial condition and operating performance of a business firm, an industry, or even the economy, and the forecasting of its future condition and performance. It is, in other words, a means for examining risk and expected return.” (Fabozzi, Peterson, 2003)

McMenamin (1999) focuses just on a firm.

“Financial analysis is an essential first step towards gaining a sound understanding of a business (e.g. own or a competitor’s) – its financial strengths and weaknesses, its financial opportunities and risks. Financial analysis is the evaluation of a firm’s past, present and anticipated future financial performance and financial condition. Its objectives are to identify the firm’s financial strengths and weaknesses and to provide the essential foundation for financial decision-making and planning.”

According to Sůvová et. al. (1999), financial analysis in the narrowest concept stands for an analysis of accounting data or financial statements. In a broader concept a dissection is supplemented by an evaluative process that is used for a further financial decision making in a firm. In the broadest concept, financial analysis is a process of extracting information from accounting data as well as other sources (financial and non-financial) inside and outside a firm. This procedure includes an analysis and an evaluating of a firm’s financial situation. Various users use these outputs for financial and other kinds of decision makings.

Grünwald and Holečková (2006) see financial analysis as a very important part of business management. It is closely related to accounting and financial management and it interconnects them. Accounting purveys information to a financial manager. Financial analysis uses this information; compares and analyzes them between each other; and

finally, makes some conclusions about a financial situation, which could be used to set up some measures, or to manage a company in a better way.

3.2 Fundamental and Technical Financial Analysis

Mrkvička (1997) and Sůvová et. al. (1999) note there are two basic approaches how to carry out a financial analysis.

First, fundamental analysis uses and assess mainly qualitative data. The most important feature is a professional judgment and estimates based on theoretical knowledge as well as empirical experience. Quantitative data are used as well; however, they are not processed by any mathematical algorithmic method.

Second, technical financial analysis applies quantitative algorithmic, statistic and other mathematic methods. Data are assessed quantitatively as well as qualitatively. (Veselý, 2007)

3.3 Internal and External Financial Analysis

Mrkvička (1997) and Synek (2003) distinguish between so called internal and external financial analysis.

Internal financial analysis is the synonym for evaluation of a firm's economy. Analyst uses all information from a firm's information system, data originated in the financial as well as the managerial accounting, cost calculations, plans, statistics, etc. (Mrkvička, 1997) It is focused on comparing past and present data with plans and trends; a firm to others in the same industry, competitors or some average (recommended) values. (Synek, 2003) Internally, financial analysis can be used also to evaluate firm's divisions, departments or its product lines. (Fabozzi, a další, 2003)

In contrast, external financial analysis cannot use any of firm's internal information and thus uses publicly available financial and accounting information. (Mrkvička, 1997). It is usually carried out by external users – banks, investors, business partners, employees, government or competitors. (Synek, 2003)

3.4 Users of Financial Analysis

Many various groups of people employ financial analysis with a different purpose and with different viewpoints.

First, owners of a firm and investors who own firm's shares are concerned primarily with present and expected profit and its trend in time as well as its covariance with profits of other firms. As a result, this group may concentrate on profitability of a firm, financial conditions that influence the ability to pay out dividends, and to avoid bankruptcy. (Horne, 2002)

Second, managers of a firm apply financial analysis for a purpose of internal control. Moreover, they are interested in all aspects that are evaluated by outside suppliers of capital. (Horne, 2002) Managers analyze also other companies and competitors. (Grünwald, a další, 2006)

Third, banks and other creditors carry out financial analysis to evaluate firm's liquidity - a capability to meet loan repayments and interests; moreover, to find out the level of existing borrowings and the assets available as a security for the loan. (McMenamin, 1999) As a result, these creditors can better decide if they will provide a loan to a firm or not.

Forth, suppliers use financial analysis in a short term to assess if a firm is capable to pay its business credits. In a long term they are concerned about long term stability - if a firm will be capable to buy their goods or services also in the future. (Grünwald, Holečková, 2006)

Fifth, mainly long time customers are interested in financial situation of a firm because of the reliability of future supplies needed for their own future business activities. (Grünwald, Holečková, 2006)

Besides, Sůvová et. al. (1999) mention employees who assess companies to ensure themselves about their future jobs' prospects. Finally, McMenamin (1999) adds credit rating agencies, trade unions, and society in general.

3.5 Data and its Sources for Financial Analysis

High quality data is the base for every high quality analysis, including financial statement analysis. Sůvová et. al. (1999) put emphasis on two important qualities to be fulfilled.

First, data have to be reliable. It is always important to use primary data to be sure they are not changed or aggregated in order to see all details. Somehow sorted out data are already edited according to some purpose that an analyst could not need. Moreover, company should follow corresponding laws and accounting principles so that their data are reliable. In the Czech Republic, financial statements have to follow the law “č. 563/1991 Sb., O účetnictví” (Česko (Československo), 1991), and the Czech Generally Accepted Principles (GAAP) which are primary contained in the Accounting Act, supplemented by the Ministry of Finance Provisions on Accounting and Czech Accounting Standards for entrepreneurs, banks, insurance, non-profit organizations, and other governmental entities. (Lörinzová, 2010). Listed companies and companies with its debt publicly traded in the Czech Republic are required to apply IFRS (International Financial Reporting Standards) in the annual accounts.

Second, data have to be comparable. Specifically, they have to be comparable from one period to another. Thus, the accounting and the financial reporting principles of an analysed company should be the same for the observed period or it should be borne in mind that some processes have possibly changed. Additionally, when comparing a company to some other companies, these have to be comparable too. Companies of the same size, industry, region, structure or subject to the same laws should be compared.

Stickney et. al. (2007) mention balance sheet, income statement and statement of cash flows as a main data source for financial analysis. According to the law “zákon o účetnictví č. 563/1991 Sb.”, §21a in the current version in the Czech Republic, all firms that are registered in the Register of companies are obliged to disclose a balance sheet, income statement and supplement to final accounts as a part of final accounts. (Česko (Československo) 1991)

Balance Sheet – shows company’s financial position, resources (assets) and claims on those resources (liabilities and equity) at a specific date. The basic and simplified structure is depicted in the following Figure 1.

Figure 1: Balance sheet – basic structure

ASSETS	EQUITY + LIABILITIES
Long-term fixed assets	Own equity
- intangible assets (software, goodwill, valuable rights)	- registered capital
- tangible assets (buildings, land, machines, equipment, vehicles)	- funds (capital fund, funds created from profit)
- financial assets (shares, bonds)	- net profit or loss
	- profit or loss brought forward
Current assets	Liabilities
- inventory (material, products, goods)	- long-term liabilities (to suppliers, employees, debentures)
- receivables (to customers)	- short-term liabilities (to suppliers, employees, debentures)
- short term financial assets, valuables	- bank loans
- cash at bank and cash in hand	- provisions
Accruals and deferrals	Accruals and deferrals

Source: Lörinzová (2010)

Income Statement – provides information about the performance of a company over a period of time and shows a profit (loss) a company reached during this period. (Lörinzová, 2010) Net income (earnings, profit) equals revenues and gains minus expenses and losses. The simplified income statement can be constructed like an example at the Figure 2.

Figure 2: Income statement – basic structure

Income statement	
External operating expenses	External operating revenues
External financial expenses	External financial revenues
Extraordinary expenses	Extraordinary revenues
Net profit/loss	

Source: Walder (2009)

However, in the Czech Republic income statement is usually prepared in the vertical format by nature. Figure 3 shows this statement in such form in the simplified structure.

Figure 3: Income statement – vertical form by nature - simplified

INCOME STATEMENT	
+	Merchandise revenue
-	Cost of merchandise sold
=	<i>(Gross profit)</i>
+	Products and services revenues, self-manufactured asset revenueisation
-	Raw material and services costs
=	<i>(Value added)</i>
-	Payroll costs
-	Taxes
+	Value adjustments
-	Other operating charges
=	Operating income/loss
+	Income from participating interest
+	Income from other financial investments and loans
-	Financial investments expenses
+	Value adjustments of financial assets
+	Interest receivable income
-	Interest payable expense
=	Income/loss from financial operations
-	Income tax on ordinary activities
=	Income from ordinary activities
+	Unusual income
-	Unusual expenses
=	Unusual income/loss
-	Income tax on unusual income
=	Net income/loss for fiscal period

Source: Lörinzová (2010), own processing

Moreover, there are several kinds of profit in the financial terminology, which are widely used. (Stickney, et. al., 2007)

- EBT – earnings before taxes. In the Czech income statement EBT can be found under the term “výsledek hospodaření před zdaněním” (translation: net income before taxes). This kind of profit excludes taxes and thus, can be used to compare firms with different tax burdens (firms from different countries, or companies that carry some loss from past)
- EBIT – earnings before interests and taxes. EBIT is usually calculated by adding “výnosové úroky” (translation: the interest expenses) back to “výsledek hospodaření před zdaněním” (translation: net income before taxes). This kind of profit eliminates the influence of taxes and different capital structure, which determines the amount of interest paid for the usage of outside sources.
- EBITDA – earnings before interests, taxes and depreciation. This kind of profit cannot be found directly, however can be calculated by figuring in depreciation to EBIT.

Furthermore, often there are “total sales” used in the ratios calculations. Because all the ratios are tightened to the main operations of a company, “sales” used in the calculations should come from the main operations. (Stickney, et. al., 2007) Thus, “total sales” are represented as the sum of income statement items “Merchandise revenue” and “Internal activities (product and service revenue, and revenueisation)”

Statement of Cash Flow – informs an analyst about the company’s ability to generate net cash flow. Net cash flow equals inflows minus outflows. This financial statement observes three principal business activities that generate cash flows (operating, investing and financing) and provides information on the sources and uses of cash.(Stickney, 2007)

Furthermore, Mrkvička (1997) adds **supplement to final accounts** that includes facts about the analyzed accounting entity, accounting principles and methods, and some supplemental information to the other financial statements.

Finally, Šůvová et. al. (1999) mention **annual report**. According to the law this document has to be created by each company in the Czech Republic that is obliged to be

audited. (Česko (Československo), 1991) It contains information from final accounts; however, it has a looser form and provides an analyst with further information that is not present in the financial statements. The firm's management exhibits and judges the results for the last year accounting period, and talks about future prospects.

3.6 Sequential Steps in Financial Analysis

According to Stickney et. al. (2007) effective financial analysis involves 6 sequential steps:

- 1) identify the economic characteristic of the industry in which a particular firm participates;
- 2) identify the strategies that the firm pursues to gain and sustain a competitive advantage;
- 3) assess the quality of the firm's financial statements;
- 4) analyze profitability and risk;
- 5) prepare forecasted financial statements;
- 6) value the firm.

Rosochatecká et. al. (2006) and Šůvová et. al. (1999) have a different view and suggest these steps:

- 1) the selection and preparation of data and methods;
- 2) calculations based on chosen methods;
- 3) calculation assessment – in general and detailed;
- 4) deeper analysis;
- 5) strengths, weaknesses and risk assessment, suggestions to possible measures.

4 Methodology

This diploma thesis is based on the bachelor thesis (Veselý, 2007) carried out in the year 2007, which analysed the years 2001 – 2005. First, the industry, the observed company operates in is analyzed. Second, the company itself and its history are described. Finally, the financial analysis of the chosen company is carried out. The continued analysis in this diploma thesis focuses on the years 2006 – 2009. Used methods are described in detail further in this chapter. The financial analysis include: common size (vertical) analysis; horizontal analysis; ratio analysis of indebtedness, liquidity, activity and profitability; complex financial analysis tools as pyramidal decomposition of the return on equity, the index IN05 and finally, the economic value added analysis (EVA© analysis) The company's results are compared to its closest competitor (called CB farther in the text) and to the industry the company operates in. The industry benchmark is the branch NACE 28 – Manufacture of machinery and equipment n.e.c.

4.1 Methods

4.1.1 Vertical Analysis

Bodie et. al. (2008) consider common-size balance sheet and income statement (in Czech textbooks called vertical analysis) to be useful for comparing firms of different sizes. Common-size balance sheet conducted in this way. Each item of the balance sheet is expressed as a percentage of total assets. Additionally, to get a common-size income statement, each item of the income statement is shown as a percentage of total sales. (Horne, 2002) These analytical tools are helpful in highlighting financial data relations, both within financial statement as well as across statements. (Stickney et. al., 2007)

4.1.2 Horizontal Analysis

According to Kislingerová and Hnilica (2008) horizontal analysis is used to quantify yearly changes of balance sheet and income statement items. The following formula gives the percentage change of an item “*i*” from the value at time (t-1) to the value at the time t.

$$I_{t/(t-1)}^i = \frac{B_i(t) - B_i(t-1)}{B_i(t-1)} \times 100$$

$B_i(t)$ stands for the value of a balance sheet or income statement item at the time t , $I_{t/(t-1)}^i$ stands for the yearly percentage change of an item.

This formula is very simple; however, there are some problems emerging from math fundamentals. If the $B_i(t-1)$ equals zero the percentage change cannot be calculated since it is unreasonable to divide by zero. Furthermore, there are other problems if the value either at the time t or $(t-1)$ or both t and $(t-1)$ is negative. Therefore, the formula has to be rearranged in these cases as follows:

- $B_i(t)$ is negative and $B_i(t-1)$ is negative.

It has to be marked that the positive value expresses the increase of a loss and the negative value means the decrease of a loss.

- $B_i(t)$ is positive and $B_i(t-1)$ is negative. The company got from a loss to a profit. Consequently the formula is rearranged like this:

$$I_{t/(t-1)}^i = \frac{|B_i(t)| + |B_i(t-1)|}{|B_i(t-1)|} \times 100$$

- $B_i(t)$ is negative and $B_i(t-1)$ is positive. The company got from a profit to a loss. Thus, the formula is changed to the following form:

$$I_{t/(t-1)}^i = - \left(\frac{|B_i(t)| + |B_i(t-1)|}{|B_i(t-1)|} \times 100 \right)$$

4.1.3 Ratio Analysis

There are many ways how to classify financial ratios and how to call each class. They overlap and interconnect each other. Nevertheless, all together they include the same ratios. Basically, there are four main groups of ratios that are applicable to all firms:

1. Debt Ratios
2. Liquidity Ratios
3. Activity ratios
4. Profitability Ratios

Horne (2002), Kisslingerová and Hnilica (2008) add one more group, that include some ratios applicable to publicly traded companies – Market Value Ratios. These are not described since the analyzed company is privately owned.

4.1.3.1 Debt Ratios

Company's assets are basically financed by own equity and outside sources in different portions in each firm. (Fabozzi, Peterson, 2003) First, own equity does not pose an obligation and thus, it does not take any risk to the firm. Second, debt financing require the firm to pay interests and to repay the principal at some point of time. Consequently, these obligations bear some financial risk. Debt ratios show these risks inherent in using debt to finance company's assets. The more debt a company uses the higher the risk. There are two subgroups of debt ratios. First, component percentage ratios show how much debt the company uses. Second, coverage ratios say if the company is able to cover the interest charges. Fabozzi and Peterson (2003) mention these ratios:

$$\text{Total debt to assets ratio} = \frac{\text{Total debt}}{\text{Total assets}}$$

Total debt to assets ratio says what portion of the company's assets is financed by the debt. Total debt stands for outside sources in this case.

$$\text{Debt to equity ratio} = \frac{\text{Total debt}}{\text{Book value of shareholders' equity}}$$

Debt to equity ratio shows how much debt the firm has relatively to one unit of the equity. Basically it provides the same information as the total debt to assets ratio.

$$\text{Interest coverage ratio} = \frac{\text{EBIT}}{\text{Interest expenses}}$$

The interest coverage ratio, sometimes called “times interest – covered ratio”, shows how well the company is able to cover its interest payments by the available profit the company is able to generate.

Cash flow interest coverage ratio =

$$= \frac{\text{Cash flow from operations} + \text{Interest} + \text{Taxes}}{\text{Interest}}$$

In some cases, cash flow from operations is a better measurement of available fund, therefore it is possible to use the ratio mentioned above.

4.1.3.2 Liquidity Ratios

Liquidity reflects the ability of a firm to meet its short – term obligations using those assets that are most readily converted into cash. (Fabozzi, Peterson, 2003) Bodie et. al. (2008), mention three ratios used to measure liquidity:

Current ratio =

$$= \frac{\text{Current assets} - \text{Long term receivables}}{\text{Current liabilities} + \text{Short term bank loans} + \text{Other short term help}}$$

Current ratio shows the firm’s ability to cover its liabilities by its current assets. If the value is too high, it can indicate a non effective usage of capital. Usually the formula contains just current assets in the numerator and current liabilities in the denominator.

Nevertheless, Grünwald and Holečková (2006) note it is important to deduct long term receivables in the numerator since these resources are not available in short term. Furthermore, it is necessary to add short term loans and other short term financial help because these have to be paid off in short term. The latter holds for other liquidity ratios as well. Moreover, the liquidity of particular current assets has to be taken into account when interpreting this ratio.

Quick ratio =

$$= \frac{\text{Cash} + \text{Marketable securities} + \text{Short term acc. receivables}}{\text{Current liabilities} + \text{Short term bank loans} + \text{Other short term help}}$$

Quick ratio, sometimes called “acid test” is according to Bodie et. al. (2008) a better measure of liquidity because it excludes inventory, which can be sometimes illiquid compared to other current assets. Rosochatecká et. al. (2006) consider quick ratio to be a tool judging a relatively longer period liquidity than the following ratio.

$$\text{Cash ratio} = \frac{\text{Cash} + \text{Marketable securities}}{\text{Current liabilities} + \text{Short term bank loans} + \text{Other short term help}}$$

This ratio measures the immediate liquidity. Accounts receivable are excluded because they are also less liquid than cash and need some time to be converted. According to Rosochatecká et. al. (2006) it is not necessary for a firm to cover all of its current assets by cash if the company is able to get a bank loan. It also matters if the firm’s customers pay on time.

4.1.3.3 Activity Ratios

Activity ratios are used to evaluate the management of different asset classes, mainly inventories, accounts receivable, long lived assets and total assets.

Fabozzi and Peterson (2003) mention these activity ratios:

$$\text{Inventory turnover ratio} = \frac{\text{Total Sales}}{\text{Inventory}}$$

This ratio indicates the speed with which the inventory is turned over to produce goods. English writing authors (Bodie, 2008) (Fabozzi, Peterson, 2003) usually use “cost of goods sold” instead of sales. However, Czech authors (Rosochatecká, 2006) (Kisllingerová, Hnilica, 2008) use sales as the numerator.

Furthermore, total assets turnover and long lived assets turnover can be calculated.

$$\text{Total assets turnover} = \frac{\text{Total Sales}}{\text{Total assets}}$$

$$\text{Long lived assets turnover} = \frac{\text{Total Sales}}{\text{Fixed assets}}$$

Total assets turnover and long lived assets turnover express how effectively all assets and long lived assets respectively were used. The higher number the better.

Besides, Horne (2002) adds average collection period that says how many days in average it takes to convert receivables to cash. In this case the lower number the better. Grünwald and Holečková (2006) suggest using just trade receivables, since this ratio is important mainly with regard to business credit in business contact.

$$\text{Average collection period} = \frac{\text{Trade receivables}}{\text{Total Sales}} \times 365$$

Finally, Rosochatecká et. al. (2006) and Horne (2002) suggest using one more ratio.

$$\text{Average payable period} = \frac{\text{Trade payables}}{\text{Total Sales}} \times 365$$

Average payable period shows in how many days on average a firm usually pays its accounts payable. It is also valuable to compare this ratio to average collection period when analysing company’s liquidity. Rosochatecká et. al. (2006) recommend the average payable period to be around 30 days. Again, there are trade payables used in the ratio for the same reasons they are used in average collection period. (Grünwald, Holečková, 2006)

4.1.3.4 Profitability Ratios

The two basic profitability ratios are return on equity (ROE) and return on assets (ROA).

$$ROE = \frac{Net\ income}{Owners'\ equity}$$

Fabozzi and Peterson (2003) state that usually investors or the owner's of the company are interested in ROE to see what return they get on their investment. It is a good way how to compare companies of different size and different earnings. Bodie et. al. (2008) claim that declining or increasing ROE shows that the firm's return on new investments offers lower respectively higher returns. Further, Rosochatecká et. al. (2006) recommend ROE should be higher than the interest rate firms pay for their debts. Nevertheless, it is important to see what influences are affecting return on equity (see logarithmical and pyramidal decomposition of ROE in chapters 5.6.1 and 5.6.2).

$$ROA = \frac{EBIT}{Total\ assets}$$

Return on assets ratio, that Fabozzi and Peterson (2003) call "basic earning power ratio" is used to evaluate how well a firm uses its assets. It is also possible to use other kinds of profit to calculate ROA; however, Kislingerová and Hnilica (2008) recommend using EBIT. ROA should express what a firm gets when using all assets. These are financed from debt as well as equity; therefore using EBIT includes benefits that are available for shareholders as well as creditors. Moreover, it is not possible to compare companies with a different capital structure using net income as numerator in the ratio. Finally, it is possible to compare companies in different countries or with different tax burden.

To analyze how a firm manages its expenses it is very useful to look at profit margins. Fabozzi (2003) uses and explains two different profit margins.

Operating margin evaluates how production facilities, human capital, administrative and sales expenses are managed. Decreasing operating profit margins could indicate

stronger competition pushing the prices of products down or inability to react to increasing operating costs adequately.

$$\text{Operating margin} = \frac{\text{EBIT}}{\text{Total Sales}}$$

Finally, net profit margin takes into consideration how firm's operations are financed and taxed. Therefore, net profit is used as the numerator in this ratio. Lowering net profit margin points out to the same problems as operating profit margin. Moreover, it is a sign of increasing cost of debt, or higher taxes.

$$\text{Net profit margin} = \frac{\text{Net income}}{\text{Total Sales}}$$

4.1.4 Complex Financial Analysis Tools

4.1.4.1 Index IN 05

There is a group of tools called bankruptcy or value based prediction models. The best known is Altman's Z – score. These models were developed using multiple discriminant analysis. It intends to evaluate a company in one number and predict if the company is about to go bankrupt with some certain probability. Ivan and Inka Neuimaier created models that reflect the business environment of the Czech Republic. IN 95 indicates the probability of going bankruptcy. Model IN 99 can be called “owner's value model”. This index says if a firm creates value for the owners. Model IN 01 is a combination of the two forgoing. Finally, Mr. and Mrs. Neuimaier (2005) recently developed model IN 05 that is considered to be the most accurate. The value of the index can be calculated as follows:

$$\begin{aligned}
IN\ 05 = & \left(0.13 \times \frac{\text{total assets}}{\text{total liabilities}} \right) + \left(0.04 \times \frac{EBIT}{\text{interest payments}} \right) \\
& + \left(3.97 \times \frac{EBIT}{\text{total assets}} \right) + \left(0.21 \times \frac{\text{sales}}{\text{total assets}} \right) \\
& + \left(0.09 \times \frac{\text{current assets}}{\text{short term liabilities}} \right)
\end{aligned}$$

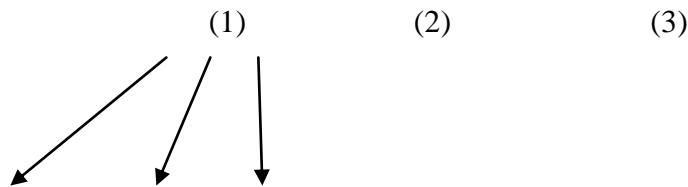
The value is then compared to the three sub-ranges:

- IN 05 is lower than 0.9; there is a high probability (86%) that the firm will go bankrupt;
- IN 05 is between 0.9 and 1.6; the analyzed firm can end up in both other groups;
- IN 05 is higher than 1.6; there is a probability of 67% that the firm creates the economic value for the owners.

4.1.4.2 Pyramidal Decomposition of ROE

To be able to understand the factors affecting firm's ROE and its trend over time Bodie et. al. (2008) suggest using pyramidal decomposition of ROE. The first level decomposition shows that ROE is influenced by three components: (1) net profit margin, (2) total assets turnover and (3) ratio of total assets to owner's equity. These three factors represent (1) operating efficiency, (2) asset use efficiency, and (3) financial leverage.

$$ROE = \frac{\text{net income}}{\text{own equity}} = \frac{\text{net income}}{\text{sales}} \times \frac{\text{sales}}{\text{total assets}} \times \frac{\text{total assets}}{\text{own equity}}$$



$$ROE = \frac{\text{net income}}{EBT} \times \frac{EBT}{EBIT} \times \frac{EBIT}{\text{sales}} \times \frac{\text{sales}}{\text{total assets}} \times \frac{\text{total assets}}{\text{own equity}}$$

Net profit margin can be further decomposed to three other ratios. Finally, the ratios are rearranged to group together, which is useful in another decomposition described further. It dissects the strategy by which a firm achieves certain profitability. Some companies use strong financial leverage; are burdened by interest payments; reach high operating margins and have low assets turnover or vice versa; etc.

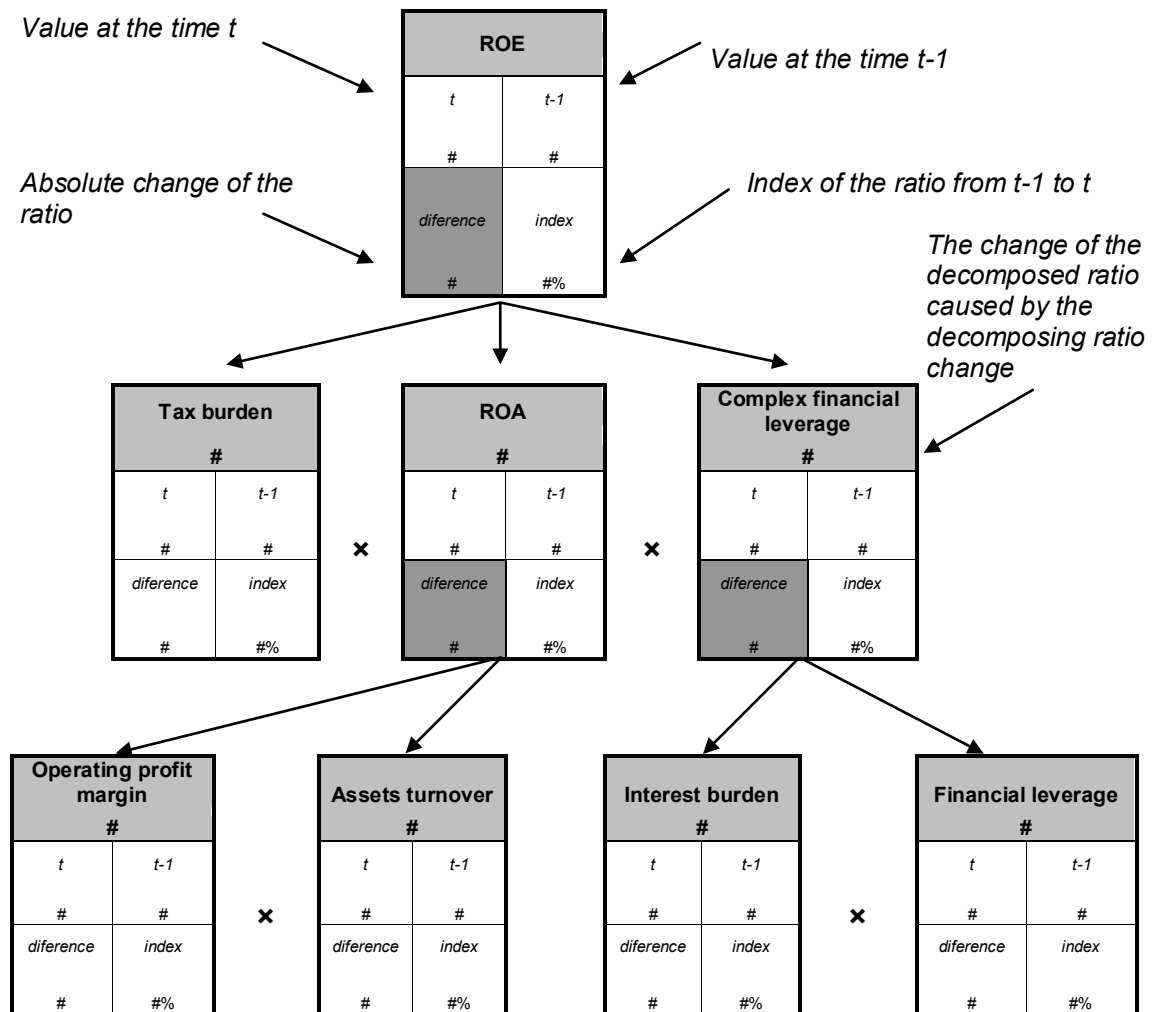
$$ROE = \frac{\text{net income}}{EBT} \times \frac{EBIT}{\text{sales}} \times \frac{\text{sales}}{\text{total assets}} \times \frac{EBT}{EBIT} \times \frac{\text{total assets}}{\text{own equity}}$$

(1) (2) (3) (4) (5)

Kislingerová and Hnilica (2008) call the ratio (1) the tax burden. The ratios (2) operating profit margin, (3) total asset turnover represent together the return on total assets (ROA). The ratios (4), (5) symbolize interest burden and financial leverage respectively. Together (4) and (5) express complex financial leverage.

Furthermore, authors (Kislingerová, Hnilica, 2008) recommend using a logarithmical method of ROE decomposition, which quantifies how much each component contributes to the change of a decomposed ratio.

Figure 4: Logarithmical decomposition of ROE



Index ROE

$$I_{ROE} = \frac{ROE_t}{ROE_{t-1}} \times 100 \quad [\%]$$

Index of component X

$$I_X = \frac{X_t}{X_{t-1}} \quad [\%]$$

Component X represents any component of the decomposition.

Total absolute change of ROE

$$\Delta_{ROE} = ROE_t - ROE_{t-1}$$

Change of ROE caused by factor X

$$\Delta_{ROE X} = \frac{\ln(I_X)}{\ln(I_{ROE})} \times \Delta_{ROE}$$

Just for control this equation must hold. $\Delta_{ROE} = \sum_{x=1}^n \Delta_{ROEX}$, where n is the number of components.

These equations hold for ROE decomposition as well as for further decompositions.

4.1.5 Economic Value Added (EVA©)

Stickney et. al. (2007), Bodie et. al. (2008) as well as Grünwald and Holečková (2006) mention “economic value added”, shortly called EVA©, as a useful tool for performance evaluation. This indicator is mainly meaningful for shareholders since it takes into consideration the concept of economic profit, which takes into account the implicit costs of forgone opportunities, meanwhile bearing the same level of risk. Thus, it judges common explicit costs as well as capital costs. Subsequently, the economic profit equals zero if the net income equals expected profitability of capital while undergoing certain risk. For this reason this concept claims that a firm creates value for shareholders if EVA© is higher than zero. This concept was worked up and published by a consulting firm Stern, Steward & Co in the year 1991 and has a trademark on this tool.

The basic formulas for EVA© calculation follows.

$$EVA© = NOPAT - \text{capital} * WACC$$

$$WACC = r_d \times \frac{D}{C} \times (1 - t) + r_e \times \frac{E}{C}$$

NOPAT – net operating profit after taxes

Capital – sum of bearing interest outside sources (D) and owner’s equity (E)

WACC – weighted average cost of capital

r_d = cost of debt = interest rate on interest bearing outside sources

$$r_d = \frac{\text{interest expense}}{D}$$

r_e = cost of equity

t – corporate income tax

According to Kisslingerová and Hnilica (2008) NOPAT cannot be found in an income statement and cannot be reached by taxing an operating income. However, net income for the period could be modified to get NOPAT. Impacts of some accounting and non continuing influences have to be abolished (creating of reserves, sale of some long lived assets or material) to reflect the real productivity of a firm. Further, the effects of financial structure have to be eliminated; thus, interest expenses have to be added back. Finally, financial profits/losses from interest in subsidiaries and financial investments have to be deducted. Grünwald and Holečková (2006) further recommend taking away earnings coming from activities that are not part of the main operations such as renting of some properties etc.

Determining a proper cost of equity is crucial for the right EVA calculation. Calculating cost of equity is complicated since this is not an explicit expense. The best known practice is the capital asset pricing model. Nevertheless, it is not very suitable for privately held companies that are not publicly traded. In the Czech Republic the easiest way to estimate a cost of equity is to use a method described in the publication of the Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)(obchodu, 2010). The model arises from the rating agencies approach to creditors' risk, which could also be applied to an equity holders' risk. The rating process of these agencies is kept private. However, there is a function for risk calculation developed using assigned ratings and publicly accessible data. Finally, the risk involved in the business represents an alternative cost of equity. It is a return on equity that could be reached by investing in an alternative bearing the same level of risk. Cost of equity - r_e is calculated this way:

$$r_e = r_f + r_{FINSTAB} + r_{LA} + r_{POD} + r_{FINSTRU}$$

Risk free rate (r_f) is represented by the 10 year government bonds yield.

Risk premium for financial stability ($r_{FINSTAB}$) characterizes relations between assets and liabilities. The calculation is based on comparing firm's current ratio (L3) and sector average cash ratio (XL1) and quick ratio (XL2).

if $L3 \leq XL1 \rightarrow r_{FINSTAB} = 10\%$

if $L3 \leq XL2 \rightarrow r_{FINSTAB} = 0\%$

if $XL1 < L3 < XL2 \rightarrow r_{FINSTAB} = \frac{(XL2-L3)^2}{(XL2-XL1)^2} \times 0.1$

Risk premium for company size (r_{LA}) is based on so called usable funds (UZ), which is calculated as a sum of own equity (VK), and bank loans and bonds; which form the interest bearing debt (D).

if $UZ \leq CZK 100 \text{ millions} \rightarrow r_{LA} = 5\%$

if $UZ \geq CZK 3 \text{ billions} \rightarrow r_{LA} = 0\%$

if $CZK 100 \text{ millions} < UZ < CZK 3 \text{ billions} \rightarrow r_{LA} = \frac{(3-UZ)^2}{168.2}, UZ \text{ in billions}$

Risk premium for business risk (r_{POD}) is based on ROA, the business activity a firm operates in and the interest rate on issued bonds and used bank loans (UM).

if $ROA > \frac{UZ}{A} \times UM \rightarrow r_{POD} = \text{sector average } r_{POD} \text{ value}$

if $ROA < 0 \rightarrow r_{POD} = 10\%$

if $0 < ROA < \frac{UZ}{A} \times UM \rightarrow r_{POD} = \frac{(\frac{UZ}{A} \times UM - ROA)^2}{(\frac{UZ}{A} \times UM)^2} \times 0.1$

Risk premium for financing structure ($r_{FINSTRU}$) reflects the usage of outside sources and can be reached indirectly as described below.

According to the publication (Ministerstvo průmyslu a obchodu, 2010a) weighted average cost of capital can be calculated as follows:

$$WACC = \frac{\frac{UZ}{A} \times r_e + (1 - t) \times UM \times \left(\frac{UZ}{A} - \frac{VK}{A}\right)}{\frac{VK}{A}}$$

Similarly, the complex formula can be rearranged to get cost of equity:

$$r_e = \frac{WACC \times \frac{UZ}{A} - (1 - t) \times UM \times \left(\frac{UZ}{A} - \frac{VK}{A}\right)}{\frac{VK}{A}}$$

If a company does not use any outside sources, the risk premium for financing structure would be equal to zero. Thus:

$$WACC = r_f + r_{FINSTAB} + r_{LA} + r_{POD}$$

Consequently, in case of using some interest bearing outside sources, the risk premium for the financing structure can be calculated using the formula bellow by introducing the two formulas above. Nevertheless, the value is recommended to be limited to 10% in case the calculated value is higher than that.

$$r_{FINSTRU} = r_e - WACC$$

5 Results and Discussion

5.1 Characteristics of the Company XY

By request of the company's management the name XY will be used instead of the official name.

5.1.1 History

The company began its operations as a “machine and tractor station” (Strojní a traktorová stanice), which served as a service and development station of agriculture machines. The company's present main activity began for the first time in the late 80s. At that time, when container systems were commonly used in the Czech Republic, the firm started to supply some parts for the container systems to Humpolecké Machine Works. Subsequently the company decided to develop its own line of products - new container transport systems.

In the year 1992 the business was privatized and transformed to a private limited company XY Ltd. That time the container transport systems production has expanded significantly. Moreover, the number of users increased as well. It was not only used in agriculture, but also in construction industry and municipal utilities. (Veselý, 2007)

At the end of the year 2007 the company was acquired by a British investment group and the former management of the company was replaced. Thus, newly called XY Inc. began a new era of changes, which started off at the same time as the economic crisis begun.

5.1.2 Acquisition and Following Merger

At the end of the year 2007 the company XY Ltd. was bought by an investment group as mentioned above. A new company XY a. s. was established by the investor for this acquisition. This new entity started its activity in December 2007. Its only assets were the acquired company XY Ltd. and some cash. These assets were financed by legal capital, a loan from the entity with a controlling interest and a long term loan from a bank. The firm XY Inc. was operating with a loss, which arose from the interest expenses on the long

term loan. At the end of October 2008 the two firms were fused. XY Ltd. was struck off the register. XY Inc. took over XY Ltd.'s assets and liabilities. Thus, the new XY Inc. has an absolutely different structure of the equity and liabilities than XY Ltd. These changes will be described in detail further in the analysis itself. However, the operations of the company are still the same and in fact, the company can be perceived to be the same. The one significant change after the merger is the different structure of assets financing.

5.1.3 Products

The subject of enterprise according to the business register is: locksmithery, tool engineering, motor vehicle servicing and other means of transport and industrial machines servicing.

According to the Statistical classification of economic activities in the European Community NACE (Eurostat, 2008) the company's activities are included in the section C - Manufacturing, division 28 - Manufacture of machinery and equipment n.e.c., group 28.2 Manufacture of other general-purpose machinery, class 28.22 Manufacture of lifting and handling equipment.

The company is the largest producer of container transport systems in the Czech Republic. The company's production portfolio consists of two major lines:

- 1) telescopic and articulated container transport system with a lifting capacity up to 8 tones (approximately 77% of total sales); and
- 2) containers of various size and types (13% of total sales). As supplementary products, XY manufactures automatic feeders for agricultural and packaging industry; and public transport access ramps for disabled (10% of total sales).

5.1.4 Location

The company is situated in the Central Bohemia region. The average age of population was 40.1; and unemployment rate 9.3%; the average monthly gross wage in Central Bohemia in the sector NACE 28 was CZK 26,070 in the year 2009. (Český statistický úřad, 2010) The firm benefits from its position in the central part of the Czech Republic. Its plant is located nearby a speedway and important railways. On the contrary,

XY has been contending for qualified labor force due to presence of two neighboring large car manufacturing companies.

5.1.5 Property, Plant and Equipment

The company owns one plant, which consists of 8 manufacturing, administrative, and storage properties. The manufacturing plants are equipped with new technologies, which are reflecting the business plan. Outdoor area is suitable for manipulation, loading, storage and expedition of material, components and products themselves. The long lived assets were depreciated to 46% of their historical value in 2009.

5.1.6 Work Force

XY employed 91 full time equivalent employees, which include 6 employees in the top management in 2009.

Table 1: Employee structure of XY according to achieved education in 2009

Employee structure according to achieved education	
University degree	14
High school degree	17
Skilled workers	60

Source: XY's internal documents

Table 2: Employee structure of XY according to age in 2009

Employee structure according to age	
18 - 30	10
31 - 40	19
41 - 50	38
51 - 60	21
61 and older	3

Source: XY's internal documents

5.1.7 Basic Economic Results 2001 – 2009

Table 3: Basic economic results of XY for period 2001 – 2009; in thousands CZK

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total Revenues	138,689	188,406	187,047	223,394	216,978	289,863	266,054	258,162	173,524
Total Costs	131,844	178,943	171,771	210,135	197,834	266,077	237,894	239,644	165,145
Net Income	6,845	9,463	15,276	13,259	19,144	23,786	28,160	18,518	8,379
ROA	0.13	0.16	0.19	0.18	0.21	0.23	0.24	0.18	0.09
Total debt to assets ratio	0.31	0.27	0.39	0.27	0.28	0.27	0.21	0.84	0.77

Source: XY's financial statements for period 2001 - 2009, own calculations

5.1.8 Customers

Main customers are small and medium size construction firms (60% of total sales), companies engaged in waste and rubbish disposal management (30% of total sales), fire departments and Czech army (10% of total sales). In particular, the most important customers are Road and Motorway Directorate of the Czech Republic, Ministry of Defence and Army Forces of the Czech Republic, Pražské služby Inc. Other very important customers are partner firms in the Czech Republic and Slovakia that sell service and install XY's products. Moreover, there is one such partner in the Netherlands that distributes XY's products in the Western Europe. Finally, remaining customers are dealers of freight cars like Mercedes, Man, Volvo, Scania, Avia, Daf, Nissan, Iveco, Renault etc.

5.1.9 Suppliers

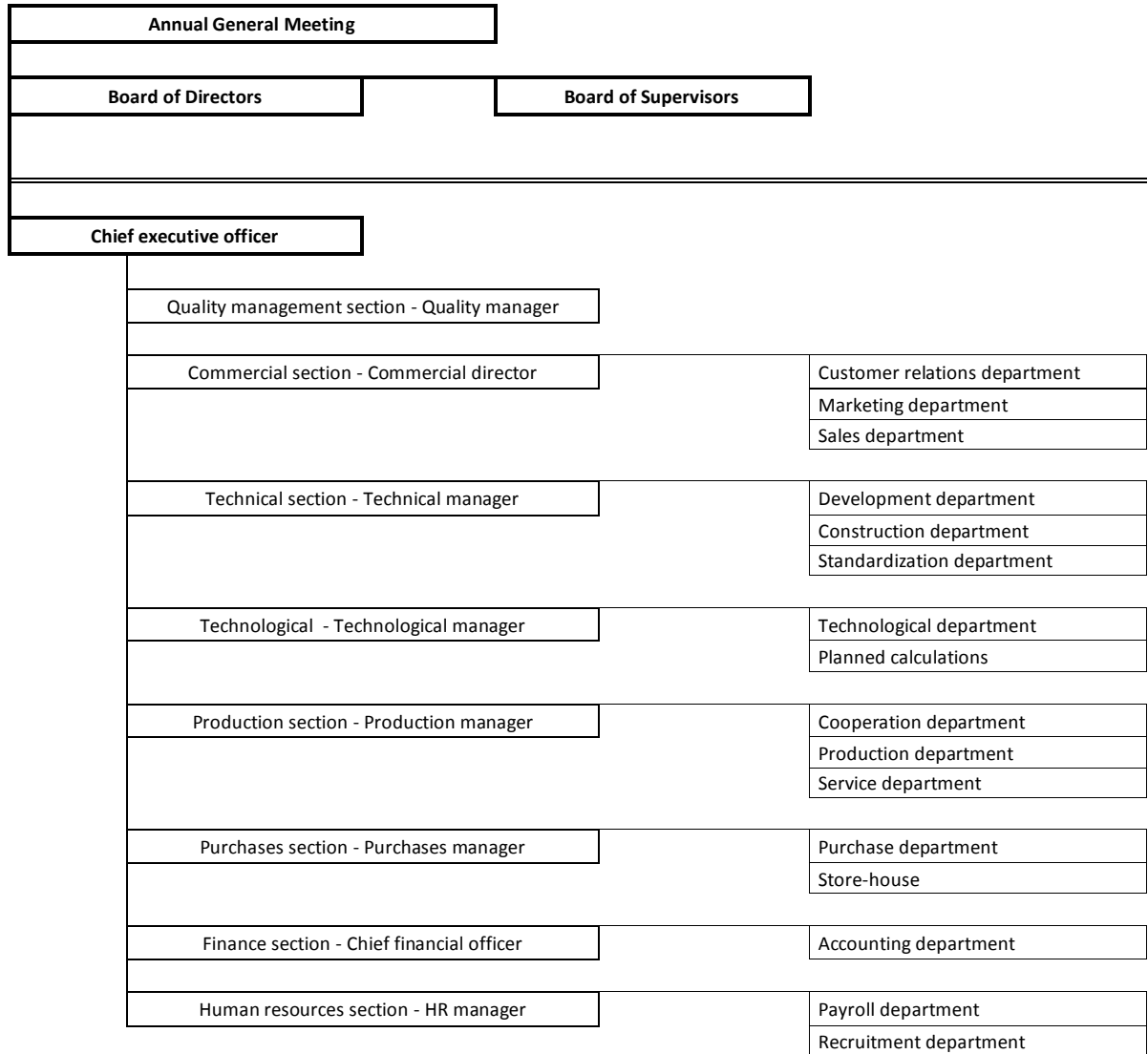
First, XY buy either ready to use components or semi manufactured goods. Semi manufactured goods are consequently modified and finished. Each supplier must be rated according to ISO 9001 certificate and COS certificate No. 051622 (Czech defensive standard for the Czech Republic army). Both of these norms require the firm to evaluate all suppliers on a regular basis according to already defined requirements like quality, price, security of supply and response time. The company had 15 major suppliers in 2007, which accounted approximately for 60% of all supplies.

5.1.10 Competitors

XY's estimated share on the Czech market was 50% in 2007. The biggest competitors are two Czech firms, which account for approximately 30% and 10% of the market. The remaining 10% is produced by higher number of small entrepreneurs and foreign firms.

5.1.11 Organizational Structure

Figure 5: Organizational structure



5.1.12 Industry the Company Operates in

Generally, the company operates in mechanical engineering field. According to the statistical classification of economic activities in the European Community NACE Rev. 2, the main company's activities fall within the class NACE 28.22 Manufacture of lifting and handling equipment, which is a subgroup of Group 28.2 Manufacture of other general-purpose machinery and Division 28 – Manufacture of machinery and equipment n.e.c. These are part of the section C – Manufacturing. According to the previous classification OKEČ the firm belongs to the Division 29.22, group 29.2. The names stay the same. Some statistics are associated to products classified according to SKP, which is based on OKEČ. Later, another classification used is CZ – CPA, which is based on CZ – NACE classification. The division NACE 28 is a very traditional sector of a Czech manufacturing industry. Czech machines and products are generally considered of very good quality and fulfilling high standards.

Position within the Manufacturing Industry

This division SKP 29 created 10.1% of sales in manufacturing industry in 2008. This percentage has been rising since the year 2002 to 2008. (Ministerstvo průmyslu a obchodu, 2009) In 2009 CZ – CPA 28 created over 8% of sales in the manufacturing industry. Moreover, Manufacture of machinery and equipment is the 3rd largest employer within the manufacturing industry employing 11% of all employees in this sector in 2009. (Ministerstvo průmyslu a obchodu, 2010b)

Price Trends

The product prices of Group SKP 29.2 were rising from the year 2000 to 2008 except the year 2005. Prices in the division SKP 29 were increasing for the whole period. Prices in the newly classified groups NACE 28.2 and NACE 28 increased in 2008 as well as 2009. For particular numbers see Table 4 and Table 5. It is obvious the prices of the year 2008 had not been affected by the coming financial and economic crises yet. In 2009 the prices increased; however, not as significantly as during the two previous years.

Table 4: Year to year price indices of SKP 29.2, SKP 29 for the period 2000 – 2008

	01/00	02/01	03/02	04/03	05/04	06/05	07/06	08/07
SKP 29.2	100.8	100.8	101.1	102.1	99.3	102.2	104.6	105.0
SKP 29	101.4	101.2	100.7	102.2	101.9	102.1	103.3	103.9

Source: Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2009)

Note: previous year value = 100

Table 5: Year to year price indices of NACE 28, NACE 28.2 for the period 2008 - 2009

%	09/08	08/07
CZ - NACE 28.2	102.4	104.2
CZ - NACE 28	101.6	102.5

Source: Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010b)

Note: previous year value = 100

Basic production characteristic

Service and manufactured goods revenues in the division NACE 28 and group 28.2 were increasing from the year 2005 to 2007. Consequently, these declined in the year 2008 and 2009 due to the economic crises. In contrast, the value added and the number of employees were rising during the period in both the group 28.2 as well as the division 28 except the year 2009. The value added was not affected by the revenue slump due to sharp decrease in total costs in the year 2008. The labor productivity based on the value added was rising from 2006 to 2009, which shows the companies reacted well during the crises by lowering payroll costs. For particular values see Table 6.

Table 6: Basic production characteristic of NACE 28 and NACE 28.2 for the period 2006 – 2009

	2005	2006	2007	2008	2009
<i>Service and manufactured goods revenue, thousands CZK, current prices</i>					
CZ - NACE 28.2	74,282,629	90,372,808	107,240,180	101,720,699	78,264,229
CZ - NACE 28	209,608,494	245,989,287	295,140,754	288,670,511	219,229,256
<i>Value added, thousands CZK, current prices</i>					
CZ - NACE 28.2	20,632,837	25,697,531	28,912,523	29,571,331	26,689,626
CZ - NACE 28	58,508,750	70,980,051	79,715,752	80,293,222	72,364,355
<i>Total costs, thousands CZK, current prices</i>					
CZ - NACE 28.2	55,475,224	67,002,163	80,866,448	75,262,499	53,298,856
CZ - NACE 28	159,965,336	188,637,242	229,213,044	221,187,114	152,912,383
<i>Labor productivity, thousands CZK/employee, current prices</i>					
CZ - NACE 28.2	531.2	619.9	667.8	675.5	698.8
CZ - NACE 28	x	116.9	107.3	100.2	106.2

Source: Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010b)

Foreign Trade

The product group SKP 29 had been showing the foreign trade deficit until the year 2002. Afterwards, SKP 29 maintained positive foreign trade balance thanks to the increased competitiveness of Czech products due to FDI, new know-how, and EU accession. To maintain this positive trend it is important to continue in investments to new technologies, innovations, and skilled labor. The pace of the positive foreign trade balance growth in the year 2007 slowed down, while being affected by the Czech crown appreciation in relation to USD as well as EUR. (Ministerstvo průmyslu a obchodu, 2009) In 2009 the CPA 28 kept the positive foreign trade balance in spite of the crises. The main exporting destination is Germany, which accounted for 34% of CZ – CPA 28's exports in the year 2009. Other main exporting countries are other EU countries and Russia. The most of imported goods come from Germany (40%). Other significant importing partners are Italy (9%), other EU countries, USA and China. (Ministerstvo průmyslu a obchodu, 2010b)

Foreign Direct Investments

As mentioned earlier foreign direct investments are very important for this sector. They bring know how and new technologies with them and thus, make NACE 28 more competitive. Therefore, there are some investments incentives such as tax benefits. Furthermore, foreign investors are also attracted to come by stable legislation, good position of the Czech Republic, transportation connections, and sufficient supply of high quality labor. (MPO, 2010)

Future Perspectives

According to The Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2009), to be still and more competitive the Czech businesses in the NACE 28 have to continue in adapting processes related to various certificates such as quality management ISO 9001, environmental management systems ISO 14001, and occupational health and safety management system OHSAS 18001. Last years the sector NACE 28 has been showing growth, however, the economic crisis hit machinery engineering as well as the whole economy. This sector is mainly dependent on the export, primarily to Germany - the largest importer of Czech products. After the slump in the NACE 28 production in 2009 by 27.2 % this sector is expected to growth again together with the recovery of the whole EU economy. Rising prices of steel could possibly hurt this expected growth. (Šitner, Kubátová, 2010)

The long term perspectives of manufacture of machinery and equipment are still favorable, however, there are certain aspects that have to be borne in minds. After the communistic regime fall, Czech export benefited for a long time also from lower material, energy and costs. (Bajer, 2010) Nevertheless, the Czech mechanical engineering is traditionally well known and considered to be high quality and reliable. Currently, the costs of production are almost the same as in the Western Europe. The labor cost is still lower; on the other hand, the labor productivity is lower as well. Therefore, companies will have to focus on traditional qualities of the Czech machinery to be able to stay competitive. To sustain and maintain these qualities there should be a proactive approach at the national level. It will be very important to support research for innovations and to support university education in technical major as well as lower level education of skilled labor, of which there is a scarcity. The foreign capital should be still attracted to leverage the ability to innovate and enter new markets. (Honsová, Němec, 2010)

5.2 Results of Financial Analysis 2001 - 2005

This diploma thesis as mentioned earlier continues in financial analysis of a company carried out in the bachelor thesis (Veselý, 2007). The first part covered the years 2001 - 2005. The main trends and conclusions are repeated in this chapter. Moreover, the particular values of financial ratios for years 2001 – 2005 are presented again together with values for the newly analyzed years 2006 – 2009.

In the first observed period the company XY followed very careful strategy concerning outside sources and bore low risk. It had a very high ratio of own equity, did not acquire any new long term debts and was paying off the old ones. Total assets had built up over the period by the amount of current assets as the production grew. The long-lived assets were modestly diminishing. The net income was rising each year. The exception was the year 2004 - the net income decreased due to high energy and material costs. The firm's liquidity was during the whole period very good and all three kinds of liquidity ratios reached much higher values than the industry average. The asset structure differed from the one of industry. XY had much more financial assets and inventory. As a result, the asset structure, the asset turnover and the liquidity ratios analysis showed the company had some problems with inventory management and used its resources probably inefficiently. In spite of this probable inefficiency; and much high owner's equity to total assets ratio the firm

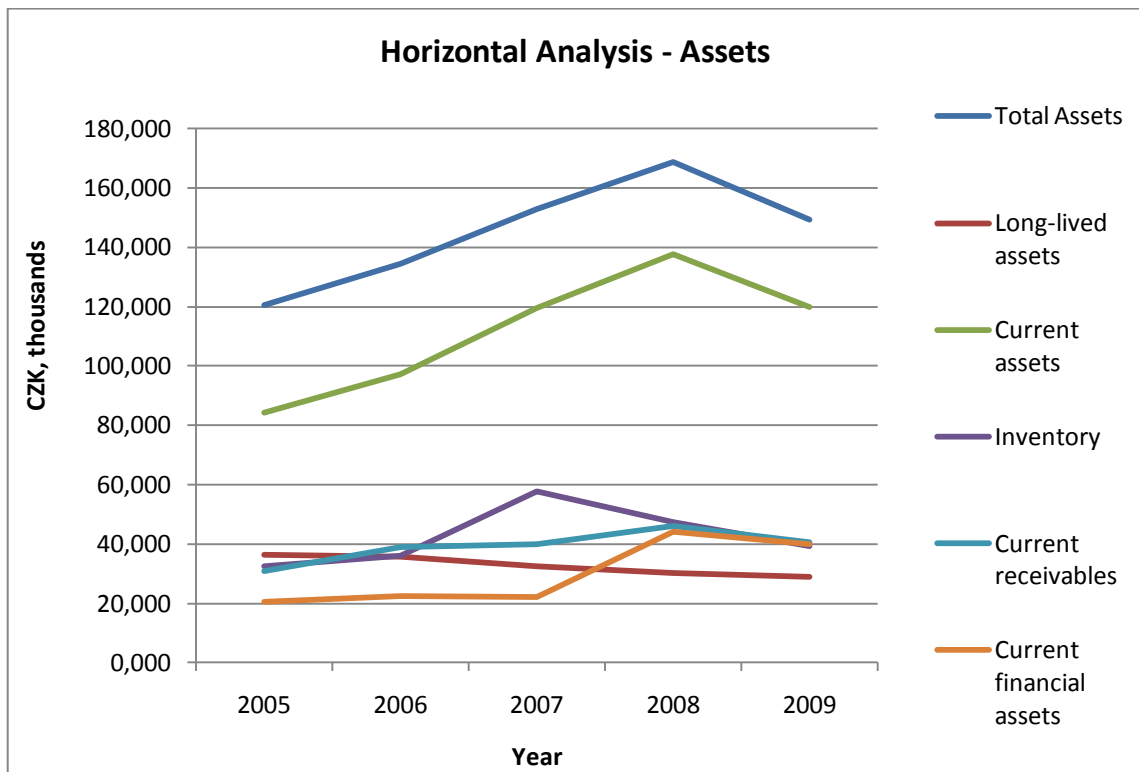
reached higher return on assets as well as return on equity, which were growing each year except 2004. The index IN01 proved the XY's overall good financial conditions. The values were increasing during the whole period and showing the company was creating value for the owners. The company was ready for some new investments financed by a new debt. Finally, the only important issue was to set the level of risk the equity holders want to bear and returns they want to earn.

5.3 Horizontal Analysis

5.3.1 Balance Sheet Horizontal Analysis

The total assets increased from the year 2005 to 2008. In the year 2009 total assets decreased by 11.5%. It is obvious total assets copied the trend of current assets (see Graph 1). Long-lived assets gradually fell by 21% over the observed period due to the depreciation and the sale of some capital equipment and land.

Graph 1: Assets of XY for the period 2005 – 2009; in thousands CZK



Source: XY's balance sheets, own processing

In the year 2006 inventories, current receivables and financial assets growth generated an increase in current assets of 15.6%.

A strong current assets increase of 22.9% in 2007 is caused by a surge of the inventory by 60.2% due to a big mistake in planning and ordering large quantity of material for unrealistically predicted production. Other main components – financial assets and accounts receivable did not change so significantly.

The inventory in the year 2008 decreased by 17.6%; current receivables accumulated by 15.6% due to a higher balance of trade receivables and a tax receivable (CZK 2,851,000), which arose from higher income tax advance payments. The profit from the previous year was not distributed to the share holders; neither was reinvested to any long-lived assets or other current assets. Thus, the financial assets surged by 99.9% (CZK 22,001,000). Consequently, the current assets were pushed up by 15.2%.

The economic crises in the year 2009 reduced the firm's production. Consequently, the inventory fell by 17.7% and current financial assets decreased by 9.2%. The trade receivables dropped by 17.2%; however, the tax receivable increased again by 65.1% due to higher income tax advance payments. Finally, the current assets dropped by 13.1% this year.

5.3.2 Own Equity and Liabilities Horizontal Analysis

It is obvious owner's equity and liabilities together behaved in the same way like the total assets. However, significant changes (see Graph 2) occurred in the year 2008 when the company went through the merger mentioned in the chapter 5.1.2.

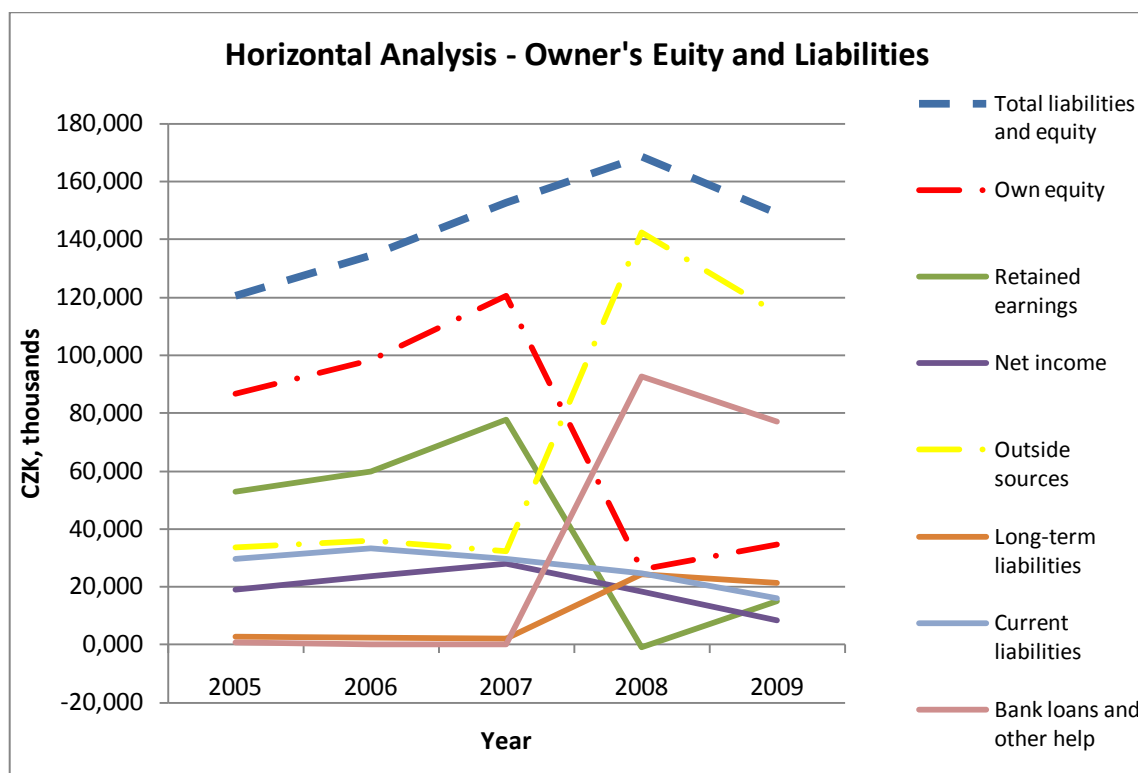
The owner's equity increased by 13.2% in 2006 and 22.5% in 2007. This was caused by increasing retained earnings (12.8% and 29.7% respectively). Moreover, the net income contributed to this growth. It rose by 24.3% in 2006 and 18.4% in 2007.

In the year 2008 the company was acquired by a British investment group and went through a merger with a new company set up just for the acquisition. Thus, the newly merged company took over XY Ltd.'s liabilities. However, it had absolutely different own equity value. Thus, the own equity in the year 2008 is lower by 78.3% (CZK 120,432,000 in 2007, CZK 26,163,000 in 2008) than in the previous year. The new value of the own equity comprised mainly by legal capital – 95.2% higher (CZK 26,000,000) than the previous one; retained earnings deficit (CZK -787,000), which arose from the new

business's (XY Inc.) activities at the end of 2007 – expenses connected to the acquisition; and the net income of already merged companies, which is 34.2% lower compared to the XY Ltd.'s profit in 2007. A new significant item lowering total owner's equity arose this year – Other paid in capital (Capital funds). This item is negative (-CZK 17.568.000) and was formed during the merger. This amount reflects the sum of the old company's equity items, which were taken over as other capital funds, lowered by the amount of the XY Inc.'s expiring equity holding in the old company XY Ltd.

In the year 2009 the retained earnings got out of the red numbers and rose by 222.6% (to CZK 15,131,000). Even if the net income fell by 54.8% the own equity increased by 32% this year.

Graph 2: Own equity and liabilities of XY for the period 2005 – 2009; in thousands CZK



Source: XY's balance sheets, own processing

The outside sources added 6.9% in 2006 due to enlarged current liabilities in spite of the long term debt redemption.

In the year 2007, current liabilities came back from the high value of 2006 (decline 10.6%); other main outside sources stayed without any significant change, and thus outside sources went down by 10.3%.

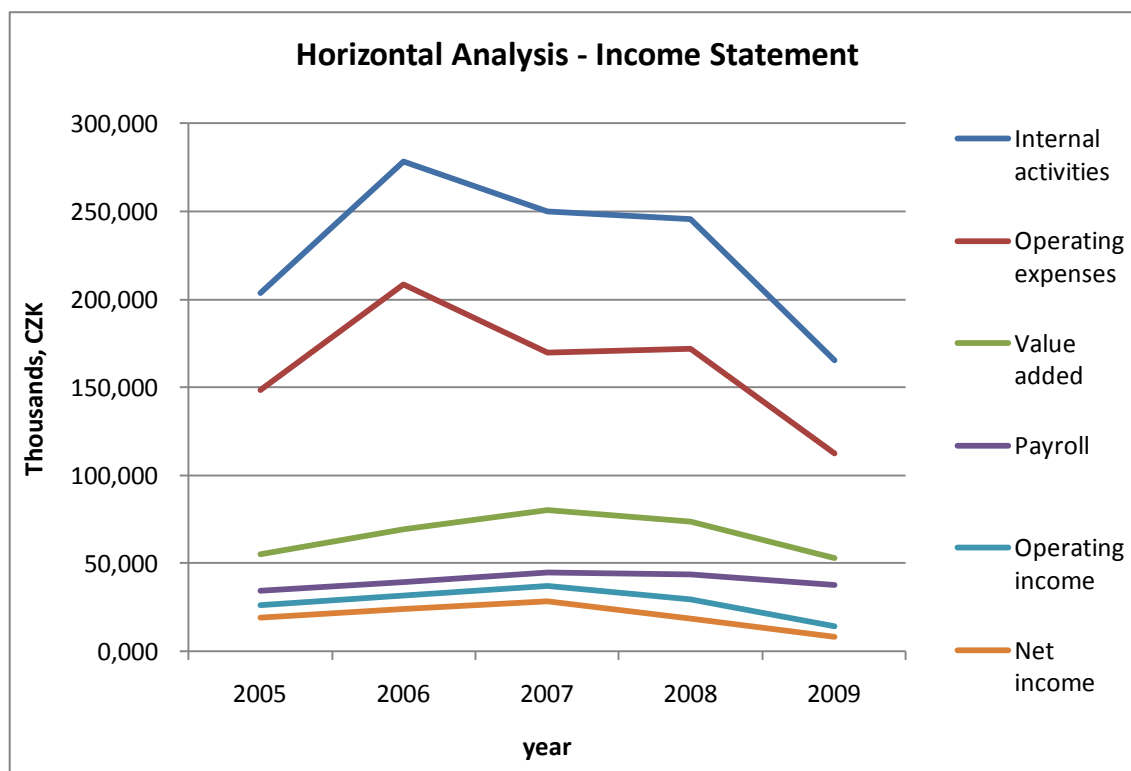
There were significant changes concerning outside sources in the year 2008 due to the merger already mentioned above. The investor financed the acquisition mainly by the long term debt, thus the item bank loans boosted from 0 to CZK 92,847,000. Furthermore, the long term liabilities surged by 961.3% (CZK 22,187,000) due to a new loan from the entity with a controlling interest. This loan was provided to the newly formed company for an easier development. The current liabilities decreased by 16.9%. Finally, the outside sources increased by 339.2% (CZK 32,404,000 in 2007 and CZK 142,325,000 in 2008)

In the year 2009 the total outside sources dropped by 19.6%. There were several factors that generated this change. First, the obligation to the entity with controlling interest decreased. Second, current liabilities fell by 35.3% due to a lower production caused by the economic downturn. Finally, 16.9% of the long term bank loan was paid off.

5.3.3 Income Statement Horizontal Analysis

The Graph 3 shows the main income statement items development over the analyzed period.

Graph 3: Income statement items of XY for the period 2005-2009; in thousands CZK



Source: XY's income statements, own processing

The main items determining net income are obviously internal activities, which include service and manufactured goods revenues, change in manufactured goods inventory and capitalization of expenses; and operating expenses, which include raw material and utilities expenses and outside services used.

Both components increased in 2006, internal activities by 36.8% and operating and producing expenses by 40.7%. Thus, the value added boosted by 26.3%.

In the year 2007 XY managed to sell more pieces of its products; however, the lower prices mainly due to Czech currency appreciation and price pressure from the Dutch partner made the internal activities drop by 10.1%. On the other hand, operating and production expenses decreased even more – by 18.8% due to measures lowering costs. These caused the value added to rise by 15.7%.

In spite of the economic crisis the company still profited from several long term agreements in the year 2008. The internal activities declined by 6.8% and the costs of the production fell just by 5.1%. However, this year a part of the firm's internal revenues and production expenses started to be recorded as merchandise revenue and cost of merchandise sold respectively. Thus, to be able to compare the values before and after the change this is taken into account. The values are added back to part II and B of the income statement. As a result, the internal activities together with the merchandise revenue declined just by 1.7% and the operating and production expenses together with the cost of merchandise sold increased by 1.4%. These accounting changes are not being mentioned further; however they are taken into account. Finally, the value added decreased by 8.3%.

The economic downturn in the EU strongly influenced XY in the year 2009. The demand after the trucks used for carrying container mechanisms diminished by 49% compared to 2008 levels. Consequently, the internal activities and merchandise revenues plunged by 32.8%. This fall was partially offset by a drop in operating, production expenses and cost of merchandise sold by 34.7%. Still, the value added lost 28.4%.

The payroll costs reflect to some extent the level of production. In the years 2006 and 2007 the payroll increased by 13.1% and 14% respectively. In 2008 these costs slightly decreased (1.6%) as the level of production was lower as mentioned above. The payroll significantly fell in 2009. The strong drop in production resulted in 14.7% decrease in the costs related to employees. However, the payroll costs did not decrease in the same

proportion to the production. The company sustained many workplaces just to be able to keep skilled labor within the business for the future.

The operating income showed the same development trends as the value added. It increased in 2006 by 18.8%. Although the value added improved just by 15.7%, the operating income added 18.7% due to the income from material sale in 2007. In the year 2008 the operating income fell by 21.3% as the value added dropped and the payroll costs stayed almost the same. In the last observed year operating income plunged by 51.6% due to the lower value added and payroll costs, which did not decrease as much as the production as mentioned earlier.

The XY's net income usually copied the operating income since the income from financial operations was negative; however, not very significant for the most of the observed period. The net income increased by 21.3% and 20.4% in 2006, 2007 respectively.

In contrast, after the merger the company was financed by a long term debt and the income from financial operations was burdened by interests on the loan. In 2008 the loss from financial operations deepened by 629.4% (5 287 000) and thus further pushed down the net income, which declined by 34.2%.

Even if the loss from financial operations diminished by 37.8% in 2009, the net income plunged very significantly by 54.8% this period compared to the previous year due to the factors described above.

5.4 Vertical Analysis

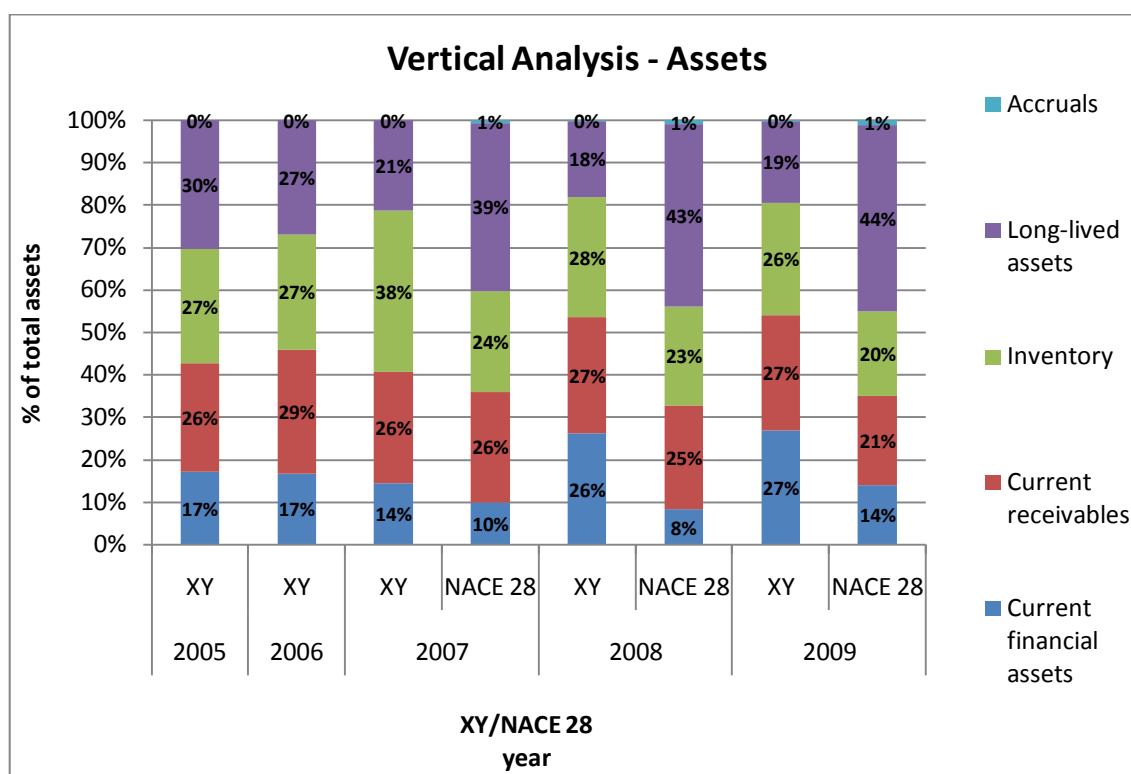
5.4.1 Common Size Balance Sheet - Assets

The asset structure follows certainly obvious trend. The share of current assets has been increasing and the share of long lived assets has been declining during most of the observed years. This progress is determined mainly by the level of production. As the firm's output rises it uses more of receivables, material; it has more of its unfinished and finished products in the inventory. At the same time the company did not invest any significant amount to the long lived assets, which are gradually depreciated.

The long share of long lived assets on the total assets was 26.6% in 2006 and decreased to 17.9% in 2008. In the year 2009 the portion of long lived assets rose to 19.3%

as the production significantly fell this period. On the other hand, current assets made up major quantity of XY's assets. In 2006 this kind of assets represented 72.3%. This portion increased to 81.6% in 2008. In 2009 the share of current assets on total assets diminished to 80.2%. These values differed from the industry average. In NACE 28 the portion of current assets and long lived assets changed from 59.8% to 55% and from 39.5% to 42.9% respectively during the period 2007 – 2009. This is shown in more detail in the Graph 4.

Graph 4: Assets categories as % of total assets of XY and NACE 28 for the period 2005 - 2009



Source: XY's balance sheets, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a), own processing

XY's long lived assets consisted predominantly of tangible assets; therefore, the long lived assets are not further decomposed in the analysis. In the sector NACE 28 long lived assets are represented mainly by tangible assets too; moreover, small portion is comprised of financial investments (4.2% in 2007, 4.4% in 2008 and 3.4% in 2009). Accruals in XY as well as in NACE 28 are not a significant item.

It is obvious XY had a higher percentage of the inventory as well as current financial assets than the NACE 28 average was during the whole comparable period. In 2008 and 2009 it had a higher ratio of current receivables as well. The XY's ratio of inventory to total assets increased in 2007 to 38% due to the planning mistake already reflected in the

horizontal analysis. This ratio declined in the two following years in 2008 and 2009 to 28% and 26% respectively. But, it is still higher than the sector NACE 28 average (2007 – 24%, 2008 – 23%, 2009 – 20%).

Further, the company maintained significantly higher share of current financial assets on total assets compared to the sector average. In 2007 the firm reached 14% and the sector average was 10%. Consequently, the share surged to 26% in 2008 and 27% in 2009. In contrast, the average share of current financial assets on total assets in the sector NACE 28 declined to 8% in 2008 and then rose to 14% in 2009.

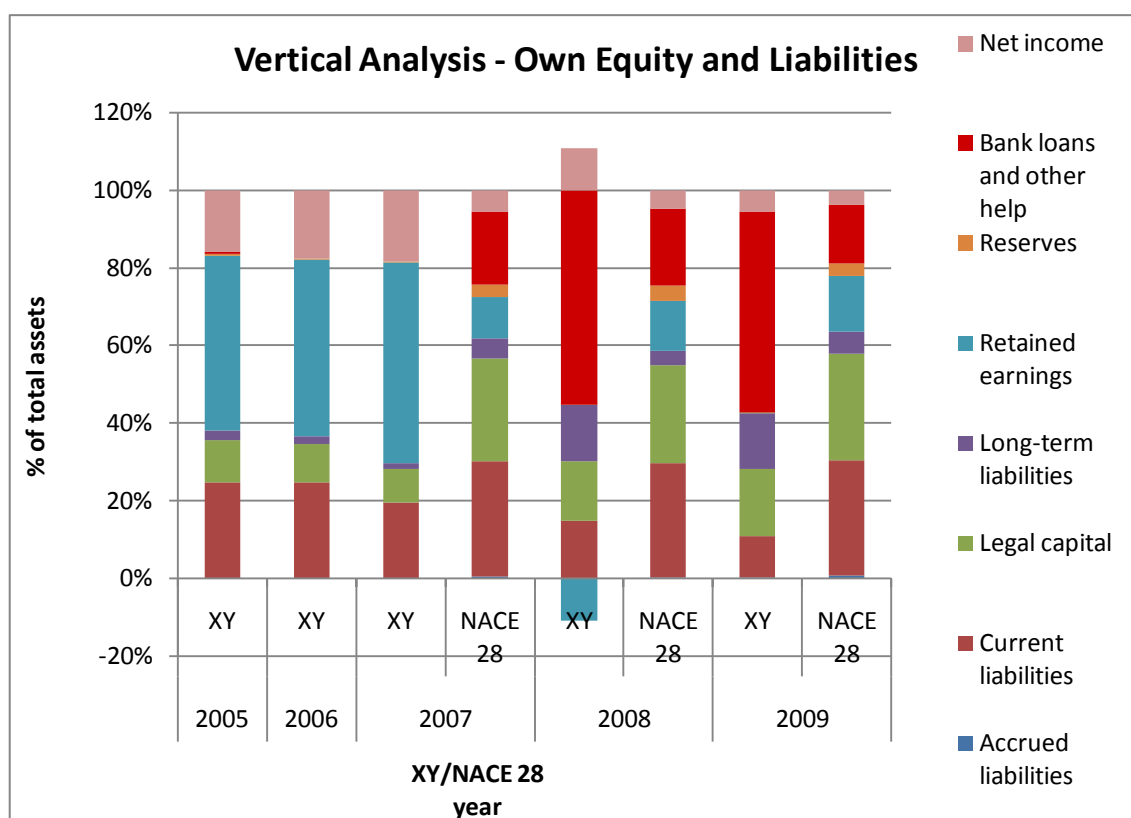
XY's current receivables to total assets ratio did not change very much. This kind of assets made up 26% in 2007, 27% in 2008 and 27% in 2009. The average values differed in 2008 – 28% and 2009 – 21%.

5.4.2 Common Size Balance Sheet - Equity and Liabilities

During the period analyzed in the bachelor thesis (Veselý, 2007) the company was financed mainly by own equity. The same held until the already mentioned merger in 2008. In 2006 and 2007 the ratio of own equity to total asset reached 73.1%, 78.8% respectively. On the other hand, the outside sources in 2006 and 2007 financed 26.9%, respectively 21.2% of total assets. These values are very high compared to the average sector values. In 2007 average ratio of own equity to total assets in the sector was 42.4% and outside sources to total assets 57%. During the two following years the structure with regard to equity and outside sources changed just by +/-3%. In contrast, during the merger the XY's equity and liabilities structure changed significantly. In 2008 the own equity and the outside sources financed 15.5% and 84.4% respectively of total assets. In 2009 these ratios changed to own equity representing 17.4% and outside sources 76.6% of the total balance.

Graph 5 shows vertical analysis of own equity and outside sources in more detail. Since the reported values for NACE 28 sum together retained earnings, legal reserves and capital funds, the same was done for XY in order to be able to compare these values.

Graph 5: Equity and liabilities of XY and NACE 28 for the period 2005 – 2009; % of total assets



Source: XY's balance sheets, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a), own processing

The graph shows XY did not have almost any long term debts from 2005 to 2007. In contrast, companies in NACE 28 used long term debts to cover 18.7% in 2007, 19.9% in 2008 and 15.1% in 2009 of their assets. In the 2008 the situation changed in XY rapidly and its total long term debt to total assets ratio reached 55.1% in 2008 and 51.7% in 2009.

Reserves do not comprise significant amount in the firm. In NACE 28 reserves fluctuated between 3.1% and 4%.

Current liabilities portion decreased from 24.7% in 2006 to 19.4% in 2007, 14.6% in 2008 and 10.7% in 2009. The average fraction in the sector stayed almost the same for the whole period, approximately 29.5%.

The XY's long term liabilities ratio was not significant until the merger. It reached 2% in 2006 and 1.5% in 2007. Afterwards, the ratio increased to 14.2% in 2008 and then decreased to 14.2%. The average value is lower for all years. 5.4% in 2007, 3.6% in 2008 and 5.8% in 2009.

Very large source of financing was retained earnings for the company. In 2006 and 2007 the portion of profits brought back to the business on total assets was 44.5% and 50.8% respectively. In contrast, in the year 2008 the retained earnings together with capital funds were negative (-11%) as the newly merged company brought a loss from XY Inc.; and moreover, there is a negative charge in capital funds, which is explained in the chapter 5.3.2. In 2009 the ratio increased to 0.1%. The average ratio of retained earnings + capital funds in NACE 28 increased from 10.6% in 2007 to 12.9% in 2008 and 14.3% in 2009.

The firm's net income to total assets ratio was higher than the average one for the whole sector. It rose from 17.7% in 2006 to 18.4% in 2007. Afterwards, it fell to 11% in 2008 and 5.6% in 2009. The average values for NACE 28 were 5.6% in 2007, 4.7% in 2008 and 3.6% in 2009.

Accrued liabilities do not reach significant values.

5.4.3 Common Size Income Statement

The most significant item in the common size income statement is obviously internal activities, which together with the merchandise revenue represent the denominator for the ratio calculation; and thus, reaches almost 100% until 2007. Internal activities to total sales equal 94.8% in 2008 and 79% in 2009. In addition, the share of the merchandise revenue was 5.2% in 2008 and 21% in 2009. The reason behind this change is the way the firm recorded some parts of its production. Before 2008, all accessories of the sold products were recorded as own production. After the merger, some parts that are in fact just bought and resold (even as a part of the final product) are correctly recorded as merchandise. XY's production and operating expenses comprise 75% in 2006, 67.8% in 2007; cost of merchandise sold is almost 0 for this period. Afterwards, operating and production expenses represented just 65.5% in 2008 and 48.7% in 2009; nevertheless, the cost of merchandise sold portion reached 4.5% in 2008 and 19.2% in 2009. As a result of the changes described above, the ratio of value added to total sales increased over the observed period. It showed these values: 25% in 2006, 32.2% in 2007, 30% in 2008 and 32% in 2009. This can be viewed as a positive sign. The average sector values showed similar progress; however, reached lower values: 27.4% in 2007, 26.97% in 2008 and 27.43% in 2009.

The payroll expenses corresponded to 14.1% of total sales in 2006. This value increased to 17.8% in 2007, 17.9% in 2008 and 22.7% in 2009. This increasing trend is caused by two factors. First, in 2007 sales decreased but the production itself increased and thus, there was more work for employees. Second, in 2009 the production decreased significantly; nevertheless, the wages were not cut proportionally to be able to keep employees for the future. Moreover, new management required probably higher salaries, which caused further increase in payroll expenses in 2008 as well as 2009.

Another significant item on the income statement is “receipt from sale of long lived assets and raw materials”; and “book value of long lived assets and raw materials”. Their ratio to total sales fluctuated from 3.3 % to 5.6% and from 2.3% to 3.5% respectively.

The value of operating income to total sales ratio decreased over the period. In 2006 the ratio was 11.3%. In the following year it increased to 14.9%; nevertheless, it decreased in 2008 to 12% and 8.6% in 2009. This progress is mainly explained by the changes described above and shows the negative influence of the economic crises.

In the financial section of the income statement were no significant items. The only exceptions are interest expenses in years 2008 and 2009. These correspond to 2.6%, respectively 2.2% of total sales due to a new long term debt.

The income tax on ordinary activities to total sales decreased over the period due to the lowering corporate tax rate. It was 2.3% in 2006, increased to 3.4% in 2007 and then decreased to 2% and 1.2% in 2008, 2009 respectively.

The net profit to total sales ratio stands for net profit margin. The ratio reached 8.6% in 2006 and rose to 11.3% in 2007. The two other years the ratio was newly burdened by the interest expenses and thus decreased to 7.5% in 2008 and 5.1% in 2009.

5.5 Ratio Analysis

5.5.1 Debt Ratios

The debt ratios show the firm’s long term financial stability and solvency. The Table 7 shows the company was further decreased its indebtedness after the first analysed period (2001 – 2005).

Table 7: Total debt to total assets ratio for the period 2001 – 2009

Total debt to total assets ratio	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	0.31	0.27	0.39	0.27	0.28	0.27	0.21	0.84	0.77
CB	-	-	-	-	-	0.65	0.68	0.66	0.59
NACE 28	-	-	-	-	-	-	0.57	0.57	0.54

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

In 2007 the long term debt even came down to zero and the majority of outside sources consisted of current liabilities – mainly trade payables. Comparing these values to the competitor and the average number for the sector NACE 28 it is obvious such portion of outside sources is very uncommon and very low. Nevertheless, after the fusion in 2008 the situation changed rapidly. The ratio reached high values, which are in contrast higher than the ratio of NACE 28 as well as the competitor's one. In 2009 the ratio decreased as the company paid off part of its debt and retained the net income of 2008. However, a quite significant part of the outside sources is a liability to the entity with a controlling interest. It is so called inferior loan, which means this loan can be settled only if all other liabilities are settled in a case of a bankruptcy. Thus, from a risk point of view this liability can be viewed as equity. Taking this into account the ratio reached 0.71 and 0.64 in 2008 and 2009 respectively. Consequently, these values are lower and closer to the average, but still showing higher usage of outside sources than the company's competitor used and the average was.

Table 8: Total debt to equity ratio for the period 2001 - 2009

Total debt to equity ratio	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	0.45	0.36	0.63	0.37	0.39	0.37	0.27	5.44	3.31
CB	-	-	-	-	-	1.90	2.12	1.92	1.46
NACE 28	-	-	-	-	-	-	1.34	1.33	1.18

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

The Table 8 just shows the total indebtedness from a different perspective and says how much outside sources the firm uses compared to owner's equity. Obviously the values tell the same as the Table 7. Yet, the impact of the liability to the owner has to be taken into account. As a result, the ratio was 4.59 in 2008 and 2.76 in 2009.

Table 9: Interest coverage ratio for the period 2001 - 2009

Interest coverage ratio	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	16.2	32.4	96.5	123.5	392.4	760.7	n/a	4.7	3.9
CB	-	-	-	-	-	1.7	2.7	0.4	-0.7
NACE 28	-	-	-	-	-	-	8.6	5.0	6.5

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

As shown in the Table 9 XY did not have any problems to cover the interest payments, because it did not have much of long term debt. In 2007 there were even no interest expenses. Afterwards, the company covered the interest expenses more than the competitive business. However, the coverage was not as high as the average one. Moreover, Rosochatecká et. al. (2006) suggest this ratio to be optimally over 5. Hence, it underpins the two previously mentioned ratios and the high level of the debt. The ratio was pushed down by the low profits in 2008 and 2009 due to the economic crises. Furthermore, the company had quite large reserves of cash. Therefore, interest coverage ratio values are considered to be acceptable. Some possible problems could emerge if the economic situation remains unfavourable over a longer period of time.

5.5.2 Liquidity Ratios

Liquidity ratios illustrate company's short term ability to pay off its current liabilities. The cash ratio has been rising since the year 2006. The values, which are much higher than the average and CB's ones, say the company had a lot of cash available to settle its short term obligations. It could show possible inefficiency in using the invested capital. This money could be used to pay off the liability to the entity with a controlling interest. On the other hand, this very good liquidity position can lower the costs of some new debt in spite of the high indebtedness. The cash can be also prepared for the future to finance receivables and inventory when the production increases again during the economic recovery.

Table 10: Cash ratio for the period 2001 - 2009

Cash ratio	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	0.41	1.02	0.59	0.82	0.69	0.67	0.74	1.10	1.27
CB	-	-	-	-	-	0.16	0.11	0.04	0.01
NACE 28	-	-	-	-	-	-	0.23	0.19	0.36

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

Since 2005 the quick ratio has been increasing - showing improving already good liquidity. The numbers are again higher than the ones for CB as well as NACE 28. The high numbers arise from the large portion of cash as well as quite high portion of receivables, which is discussed in the chapter 5.5.3.

Table 11: Quick ratio for the period 2001 - 2009

Quick ratio	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	1.62	1.93	1.58	1.89	1.73	1.84	2.08	2.24	2.56
CB	-	-	-	-	-	1.42	1.24	0.64	0.34
NACE 28	-	-	-	-	-	-	0.83	0.76	0.91

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

The XY's current ratio has fluctuated since 2001; however, at the same time it has followed an increasing trend. The values exceeded the CB's values except the year 2006. Moreover, it surpassed the average values for the sector NACE 28 at least 2.6 times. These show the firm's very good liquidity. The problem may be a large accumulation of inventories. XY had problems with the inventory in past and these problems probably persists. Thus, the issue is if the company would be able to convert these stocks to cash when needed.

Table 12: Current ratio for the period 2001 - 2009

Current ratio	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	3.01	3.27	2.20	3.34	2.82	2.93	4.03	3.43	3.81
CB	-	-	-	-	-	3.44	2.87	2.29	1.55
NACE 28	-	-	-	-	-	-	1.37	1.31	1.42

Source: own calculation, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

5.5.3 Activity Ratios

The inventory turnover (see Table 13) was fluctuating during the whole period. From 2002 this ratio generally followed a decreasing trend with exception in 2006 and 2008. Moreover, in 2007 and 2009 XY even reached worse values than CB and NACE 28 on average. The comparison to years 2002 and 2003 shows the firm is able to manage its inventory more effectively. Nevertheless, looking in detail at the balance sheet there is an obvious improvement since 2008. Raw materials decreased in 2008 and 2009 by 18.7% and 27.9% respectively. Work in progress together with finished products decreased in 2008 as well. As a result, the inventory turnover increased to 5.17. Alternatively, at the end of 2009 the production in the company increased compared to the previous part of the year; and thus, the balance of work in progress and finished products were quite high and did not correspond to the low sales throughout the whole year. Therefore, the inventory turnover remained low in 2009 even if it seems the situation may have got better. Still, the values are lower than during the period 2001 – 2005 and there is a space for an improvement.

Table 13: Inventory turnover ratio for the period 2001 – 2009

Inventory turnover ratio	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	6.83	10.02	8.32	7.34	6.23	7.72	4.33	5.17	4.22
CB	-	-	-	-	-	3.86	4.74	3.76	3.12
NACE 28	-	-	-	-	-	-	5.16	4.92	4.30

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

The Table 14 shows the average collection period fluctuated from 2001 to 2003 and prolonged each year since 2004. This trend is explained by an exclusive business credit given to the Dutch partner and his increasing share on XY's sales. Furthermore, the economic crises in 2008 and 2009 generally worsened the payment behaviour of customers. In comparison to CB these numbers are not very satisfying either. On the other hand, the company has a lot of cash available; and thus, is not in a strong need to get paid as soon as possible. Further, the easy business credit policy can attract more customers. Finally, the increased production at the end of the year (as described in the previous paragraph) has to be taken into account.

Table 14: Average collection period for the period 2001 - 2009

Average collection period	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	46.67	24.67	69.58	36.68	48.08	50.74	57.20	63.81	78.60
CB	-	-	-	-	-	53.99	43.98	25.80	29.92

Source: own calculations, XY's financial statements, CB's financial statements

In contrast, the average payable period (Table 15) varied from 2001 to 2005. Since 2006 this ratio is quite stable. The value under 30 days indicates the company is very reliable in paying to its suppliers. The CB's average payable period is longer than the XY's one. This comparison to CB highlights this quality.

Table 15: Average payable period for the period 2001 - 2009

Average payable period	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	26.53	11.25	48.01	17.39	41.45	29.52	29.32	23.93	23.42
CB	-	-	-	-	-	34.40	33.65	44.51	55.89

Source: own calculations, XY's financial statements, CB's financial statements

The total assets turnover fluctuated from 2001 to 2006. Since 2006 it has been decreasing due to the lowering sales. This trend was the same as in the sector NACE 28 in general. On the other hand, the values are still higher than ones of CB and the average. This means XY is still better in using its assets in terms of generating sales. Further, the ratio is expected to increase again together with the economic recovery.

Table 16: Total assets turnover for the period 2001 - 2009

Total assets turnover	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	1.61	2.10	1.52	2.02	1.69	2.07	1.64	1.46	1.11
CB	-	-	-	-	-	1.61	1.61	1.30	0.84
NACE 28	-	-	-	-	-	-	1.23	1.15	0.85

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

The long lived assets turnover shows an upward trend from 2001 to 2008 and a plunge in 2009. The values surpassed the compared ones very significantly. This development is determined mainly by changes in sales volume and gradually depreciated long lived assets. XY did not make any significant investments and thus, the positive trend expresses increasing efficiency in using the long lived assets. This is possible thanks to

a large scale cooperating with small suppliers and partners. On the contrary, this cooperation increases costs of supplied material and services. According to this extensive usage of the cooperation and available information, the firm was probably at the edge of its capacities in 2007 and 2008. Thus, the further pressure on costs (due to a possible currency appreciation, competition, rising input prices) and capacity issues could force the company to invest in new production facilities if the output in the future exceeds the pre-crisis level. This would lower the long lived assets as well as total assets turnover for some time until higher sales offset that.

Table 17: Long lived assets turnover for the period 2001 - 2009

Long lived assets turnover	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	3.39	4.55	4.67	5.65	5.57	7.78	7.71	8.12	5.74
CB	-	-	-	-	-	5.79	4.14	2.55	1.33
NACE 28	-	-	-	-	-	-	3.11	2.68	1.95

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

5.5.4 Profitability Ratios

The operating profit margin shows how a company is able to transfer sales to EBIT. Thus, it is useful for comparison of operational effectiveness of firms with a different financing structure.

The XY's operating profit margin peaked in 2003, afterwards fell and peaked again in 2007. 0.15 in 2007 was the highest value during the observed period and surpassed significantly the NACE 28 average (0.07) as well as CB (0.03) values. Since 2008 XY's operating profit margins went down. The 2008 slump was caused mainly by higher material and energy prices plus strong Czech crown appreciation against Euro (see Appendix 5 and Appendix 6). Moreover, product prices did not change simultaneously in the same proportion. Still, the value exceeded the compared ones. In 2009 the margin further plunged and the number approximated the sector average. This significant change was caused primarily by sharp fall in the production and not adequately shortened costs in general. However, if the value added to total sales ratio is calculated (Table 19), it is obvious that the services used and material costs were decreased proportionally to the lower production. This was possible thanks to the lower prices for materials, which offset

the higher prices of energies (see Appendix 5). The item making the operating profit margin fall was payroll expenses. As mentioned in the horizontal and vertical analysis of the firm's income statement salaries and jobs were not cut so much in order to keep skilled employees for the future. To summarize, even if the operating profit margin deteriorated in the last two years, the reached values are still higher than the compared ones. Moreover, it is expected XY will increase the ratio as the production increases again in the future without a proportional increase in the payroll expenses, which is positive. A threat could be a possible increasing of material and energy costs and Czech crown appreciation.

Table 18: Operating profit margin for the period 2001 - 2009

Operating profit margin	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	0.08	0.08	0.12	0.09	0.12	0.11	0.15	0.12	0.08
CB	-	-	-	-	-	0.01	0.03	0.01	-0.02
NACE 28	-	-	-	-	-	-	0.07	0.07	0.07

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

Table 19: Value added/Total sales for the period 2001 - 2009

Value added/Total sales	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	0.28	0.27	0.31	0.26	0.27	0.25	0.32	0.30	0.32
CB	-	-	-	-	-	0.18	0.16	0.10	0.04
NACE 28	-	-	-	-	-	-	0.27	0.27	0.27

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

The net profit margin followed the same pattern as the operating profit margin until 2007, when it reached its highest value. From 2008 the ratio is burdened by the long term debt interest payments; and thus, fell more than the previously analysed ratio. The values will probably not reach the pre merger values for some time due to the interest payments; however, the company shows better margins than the average for the sector and the competitor. Finally, XY should be able to maintain these above average results if the production increases in the future.

Table 20: Net profit margin for the period 2001 - 2009

Net profit margin	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	0.05	0.05	0.09	0.06	0.09	0.09	0.11	0.08	0.05
CB	-	-	-	-	-	0.01	0.02	-0.01	-0.05
NACE 28	-	-	-	-	-	-	0.05	0.04	0.04

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

The return on assets was increasing each year from 2001 to 2007 except the year 2004. In 2007 ROA was 0.24 which highly exceeded the sector average and CB's ROA. In 2008 and 2009 the ratio decreased to 0.18 and 0.09 respectively. Notably, the latter mirrors the economic crises and the value came much closer to the average compared to the past. The economic recovery should help XY to increase ROA again to pre crises levels. Before the merger the company's facilities were probably at the edge of their capacities. Therefore, if XY will want to surpass this production levels reached in 2007 it will have to invest in new assembly halls and machines. As a result, the ROA will be under pressure as the total assets increase.

Table 21: Return on assets for the period 2001 - 2009

ROA	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	0.13	0.16	0.19	0.18	0.21	0.23	0.24	0.18	0.09
CB	-	-	-	-	-	0.02	0.05	0.01	-0.02
NACE 28	-	-	-	-	-	-	0.09	0.08	0.06

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

From 2001 to 2006 the ROE copied the ROA progress.

Table 22: Return on equity for the period 2001 - 2009

ROE	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	0.12	0.15	0.21	0.17	0.22	0.24	0.23	0.71	0.24
CB	-	-	-	-	-	0.03	0.09	-0.04	-0.11
NACE 28	-	-	-	-	-	-	0.13	0.11	0.08

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

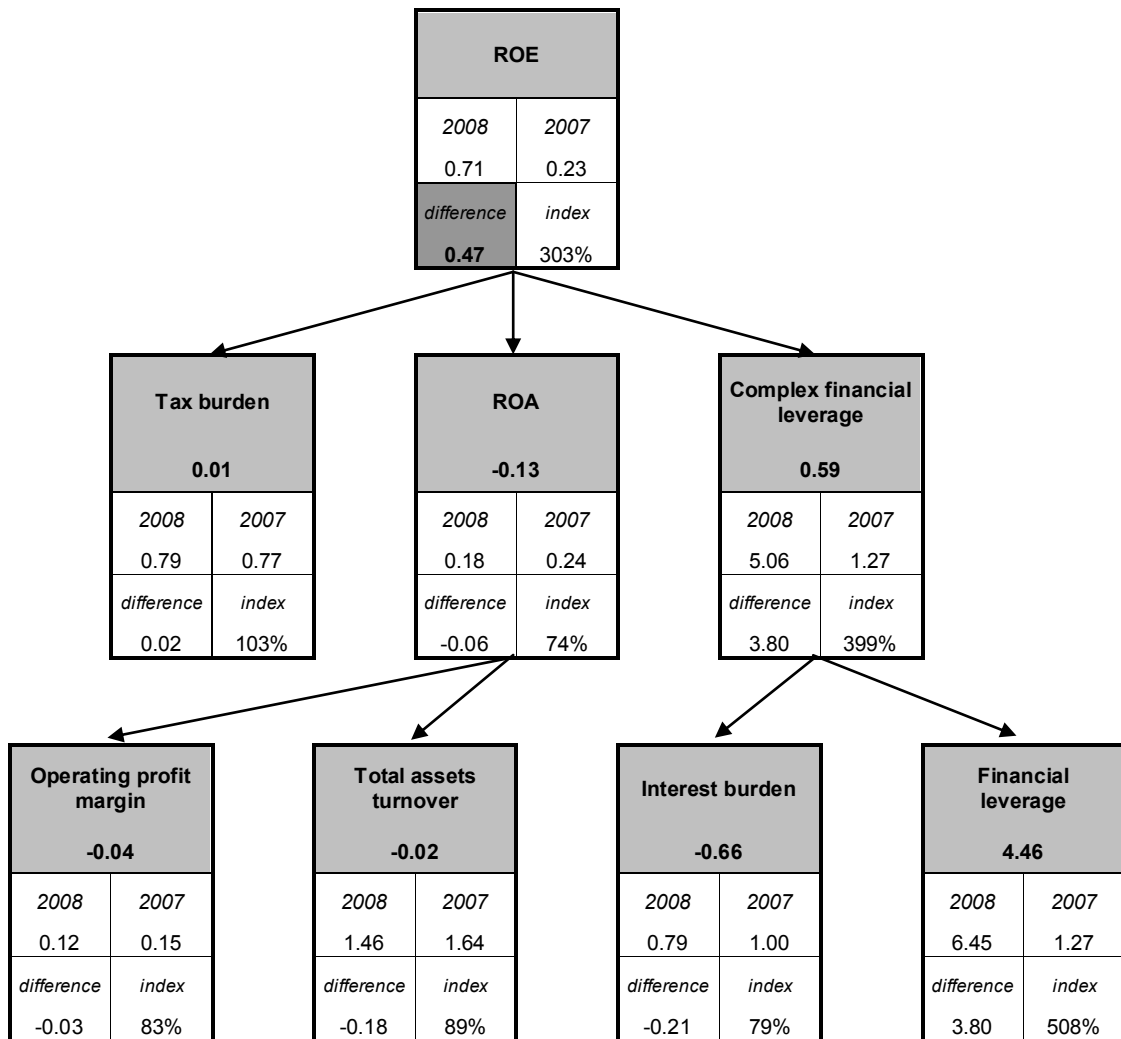
In 2007 the ratio fell slightly even if the net income was the highest in the firm's history. These premerger values are significantly higher than the average and CB's are. Moreover, it shows how effective the company was even if it used more of own finance resources than the competitor and most of other companies in the sector. In 2008 ROE surged to heights due to the merger and the new equity and liabilities structure. In 2009 the ratio plunged due to the lower profit and a higher equity. Nevertheless, it is still high enough to outtop the compared values.

5.6 Complex Financial Analysis Tools

5.6.1 ROE Logarithmical Decomposition

To better understand the rapid changes of the ROE in 2008 and 2009 it is useful to carry out a logarithmical decomposition. The Figure 6 goes into details of the change from 2007 to 2008. The ROE surged by 0.47, which is 303% of the previous year value. The first decomposition level shows the ROE jump was caused mainly by a much stronger usage of the complex financial leverage. This ratio increased to 399% compared to the previous year value; and thus, was responsible for ROE growth of 0.59. In contrast, ROA fell by 0.06 causing ROE decrease by 0.13. The tax burden change did not have a significant impact on ROE. More detailed view reveals that the ROA was pushed down by the lowering operating profit margin as well as the total asset turnover. Furthermore, XY was burdened by the interest payments much more in 2008 than in 2007, which caused the complex financial ratio to decrease by 0.66. Nevertheless, the financial leverage itself as a ratio of total assets to equity increased so strongly that it pushed the complex financial leverage up by 4.46.

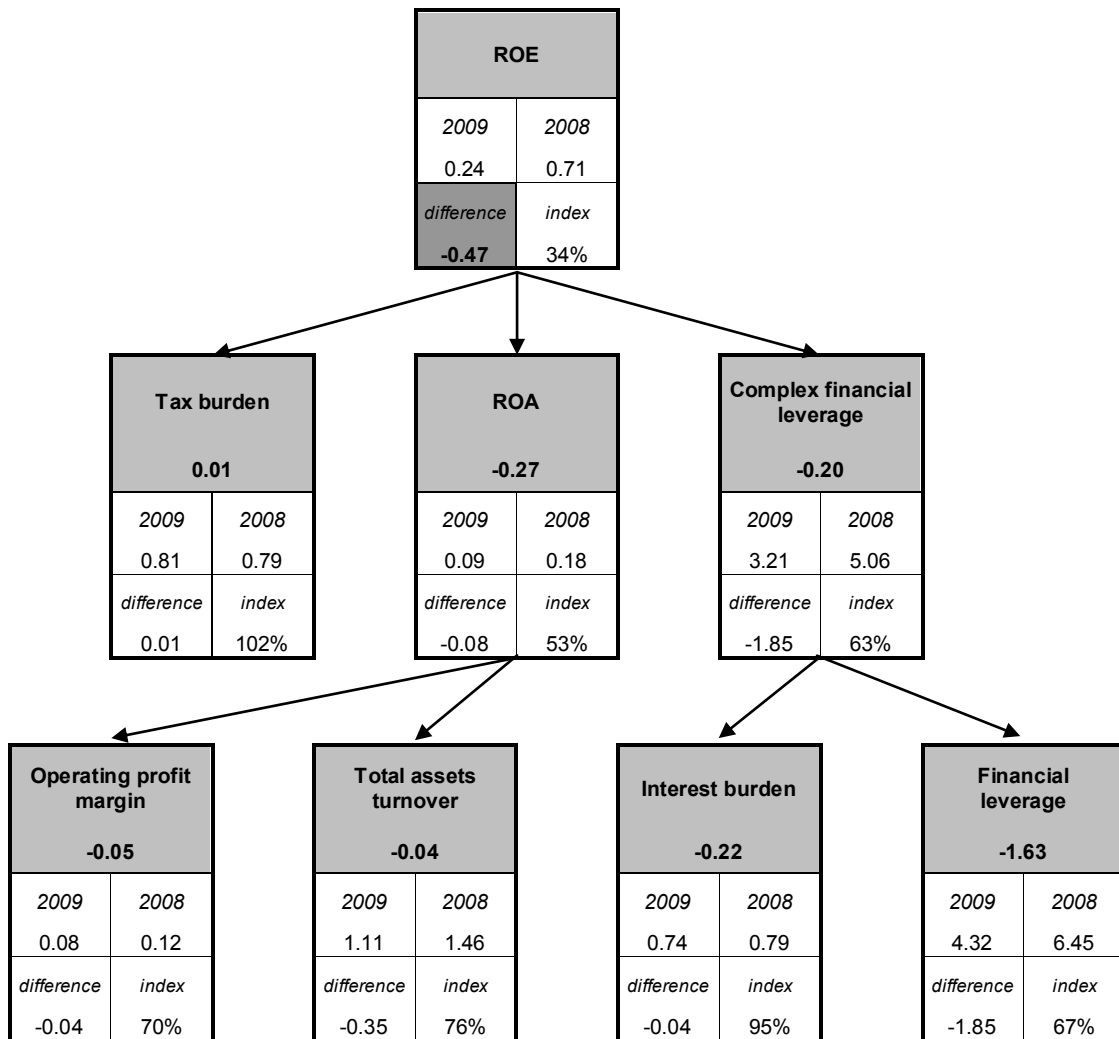
Figure 6: XY's ROE logarithmical decomposition - 2008/2007



Source: own calculations, XY's financial statements

On the other hand, the following year the ROE dropped by the same amount 0.47 due to the factors examined in Figure 7. Again, there were not any significant changes of the tax burden. However, ROA as well as the complex financial leverage pushed ROE down by 0.27 and 0.20 respectively. ROA fell by 0.08 (47%), which is more than in the previous case, again due to the worsening operating profit margin and total assets turnover. The complex financial leverage decreased by 1.85. This was caused by negatively stronger interest burden. Moreover, the financial leverage decreased this year, which negatively affected the complex financial leverage more than the interest burden.

Figure 7: XY's ROE logarithmical decomposition - 2009/2008



Source: own calculations, XY's financial statements

In summary, the ROE changes in the two last analysed years were determined by operational as well as financing matters. The ratio was negatively affected in both years by the worsening operating profit margin as well as total assets turnover. In 2008 the stronger usage of financial leverage pushed the ROE up in spite of the interest burden; however, it brought much more risk to the company. In contrast, in 2009 the financial leverage decreased - lowering the risk; nevertheless, decreasing ROE as well.

5.6.2 ROE Pyramidal Decomposition

In spite of the ROE decline in 2009 and worsened operating effectiveness in 2008 XY was reaching better ROE value than the sector on average and the competitive business. Therefore, the ROE pyramidal decomposition is carried out to see what makes the company better compared to other companies in the sector and the competitor. The years chosen are: 2007 representing the pre-crisis situation (Figure 8), and the year 2009 showing impact of the economic crises for all subjects and the merger for XY (Figure 9).

Figure 8: ROE pyramidal decomposition - 2007

2007						
					ROE	
XY					0.23	
CB					0.09	
NACE 28					0.13	
					↓	
		NI/Sales	Sales/Assets	Assets/Equity		
XY		0.11	1.64	1.27		
CB		0.02	1.61	3.12		
NACE 28		0.05	1.23	2.35		
					↓	
		NI/EBT	EBIT/Sales	EBT/EBIT	Sales/Assets	Assets/Equity
XY		0.77	0.15	1.00	1.64	1.27
CB		1.00	0.03	0.63	1.61	3.12
NACE 28		0.72	0.07	0.88	1.23	2.35

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

In 2007 the outstanding ROE compared to the CB and the average for the sector NACE 28 was driven mainly by a much higher net profit margin, which is five times and two times higher than the CB's and the average one respectively. In contrast, XY's ROE was pushed down by the assets to equity ratio, which is lower. The total assets turnover is comparable to the CB and is slightly higher than the average. Furthermore, the company was able to reach such good net profit margin thanks to a great operating profit margin (EBIT/Sales), a zero interest burden and a tax burden that is slightly better than the average.

Figure 9: ROE pyramidal decomposition - 2009

2009					
					ROE
XY					0.24
CB					-0.11
NACE 28					0.08
					↓
					↙ ↘
					NI/Sales Sales/Assets Assets/Equity
XY					0.05 1.11 4.32
CB					-0.05 0.84 2.46
NACE 28					0.04 0.85 2.20
					↓
					↙ ↓ ↘
					NI/EBT EBIT/Sales EBT/EBIT Sales/Assets Assets/Equity
XY					0.81 0.08 0.74 1.11 4.32
CB					0.97 -0.02 2.60 0.84 2.46
NACE 28					0.71 0.07 0.85 0.85 2.20

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

In the year 2009 the company reached almost the same value as in the year 2007; however, the factors determining this value changed. The company's net profit margin as well as total assets turnover decreased and got much closer to the CB's and the average sector values. On the other hand, the firm kept its ROE high since it increased its financial leverage that is in contrast twice as higher than the average in 2009. The net profit margin came near to the compared value due to the operating profit margin, which is almost the same as the average. Moreover, the interests burdened company's earnings more than usually. Finally, the tax burden ratio was higher than the average; and thus contributed to the increase of the net profit margin. The second level decomposition and comparison to CB is not relevant since it reached a negative operating profit.

5.6.3 Index IN05

Index IN 05 (see Table 23) shows obvious increasing trend until the year 2007. However, after the merger the value changed rapidly and IN 05 reached lower values in 2008 and 2009 than at the beginning of the recorded period.

Table 23: Index IN05 for the period 2001 - 2009

IN 05	2001	2002	2003	2004	2005	2006	2007	2008	2009
XY	2.18	3.16	5.45	6.86	17.60	32.51	123.98	1.66	1.27
CB	-	-	-	-	-	0.84	0.96	0.65	0.39
NACE 28	-	-	-	-	-	-	1.30	1.11	1.05

Source: own calculations, XY's financial statements, CB's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

From the year 2001 to 2007 XY evidently fell into the category of firms that create value for the owners since the index exceeded the limit value of 1.9. Since 2008 the company has been burdened by the long term loan and the interests on it, which significantly increase the risk involved in the business activity. Furthermore, in 2008 company's earnings were lower due to the rising input prices and the currency appreciation. In 2009 the company was hit by the economic crises. As a result, the company fell into the range indicating the firm can possibly end up in a bankruptcy as well as create a value for the owners. This reflects the higher risk as well as the worse economic results. XY followed the same trend as the sector in average and CB. Yet, the comparison shows the firm is still relatively strong in this index. With regard to the future, the company will most likely increase the share of owner's equity as it repays the long term debt and the loan from the entity with the controlling interest. Thus, the risk involved in the business will decrease. Moreover, the firm will benefit from the general economic recovery and improve the economic results. Hence, the index could be expected to rise again and get to the top range.

5.6.4 Economic Value Added (EVA©)

The Table 24 represent the progress of economic value added, which XY reached in the last three analyzed years. In 2007 the company did not use any interest bearing outside sources and covered its assets mainly by own equity, which is theoretically more expensive. On the contrary, due to this financing structure the risk involved in the business is not as high as in the following years. As shown, XY reached EVA© of CZK 11,637,000. This means the company created further economic value for the owners beyond the required return on capital.

Despite the high risk that arose from the different financing structure, the firm created higher economic profit in 2008 (CZK 13,010,000). This shows that even the higher

risk and the lower net income created higher economic value for the owner thanks to the stronger usage of outside sources. This is definitely a positive signal for the new owners.

In contrast, the EVA© contracted in 2009 to CZK 195.000 mainly due to much lower NOPAT. Moreover, WACC increased this year due to the higher risk premium for business risk despite the lower cost of debt (interest expenses are floating rates tighten to PRIBOR). Nevertheless, EVA© is slightly higher than zero. Still, this means the owners earned the economic profit, which could be earned somewhere else undertaking the same risk. This could be considered as a good result taking into account the strong economic downturn.

Analyzing the three years it is impossible to identify some increasing or decreasing trend in the EVA© development. WACC in the following years will stay probably still high due to the high portion of outside sources. The lower cost of debt due to the decreasing outstanding debt and the lower cost of equity due to the lower risk will be partially offset by a higher portion of equity. However, during the economic recovery XY will most likely increase its production again. Therefore, the EVA is expected to rise again close to the value of 2008.

Table 24: Economic value added of XY for the period 2007 - 2009

EVA ©	2007	2008	2009
r_f	4.3%	4.6%	4.7%
$r_{FINSTAB}$	0.0%	0.0%	0.0%
r_{LA}	4.9%	4.9%	4.9%
r_{POD}	2.9%	3.4%	5.0%
$r_{FINSTRU}$	0.0%	10.0%	10.0%
r_e	12.1%	22.8%	24.5%
r_d	0.0%	6.0%	4.5%
D/C	0.00	0.78	0.69
E/C	1.00	0.22	0.31
NOPAT (CZK, thousands)	26,185	23,412	11,443
Capital (CZK, thousands)	120,432	119,010	111,713
WACC	12%	9%	10%
EVA (CZK, thousands)	11,637	13,010	195

Source: own calculations, XY's financial statements, Ministry of Industry and Trade of the Czech Republic (Ministerstvo průmyslu a obchodu, 2010a)

6 Conclusion

The literature overview described financial analysis as a tool for financial decision making. It studied the differences between the internal and external financial analysis. Financial statements such as balance sheet, income statements and supplement to final accounts were characterized as a source of financial data. Moreover, the possible issues arising from the data character were examined. The chosen company as well as the industry it operates in was described in detail. Consequently, the financial analysis methods were applied. These were: horizontal analysis; common size balance sheet; common size income statement; debt, liquidity, activity and profitability ratios. To better understand the changes in profitability of own resources pyramidal and logarithmical decomposition of return on equity was carried out. The value based model IN 05 was calculated and results discussed to decide if there is a probability the analyzed firm can go bankrupt or creates a value for the owners. Finally, the economic value added (EVA©) was appraised to determine what impacts the merger and changes (the company was experiencing that time) had on the value that is created for the owners. The analysis covered the period from 2006 to 2009. However, to predict trends in a long term perspective, chosen ratios are judged with regard to the previously analyzed period 2001 – 2005 as well.

The analyzed company experienced a period full of substantial changes. First, until the end of the year 2007 the firm was under the management of the former owners and there was a general economic growth. Second, at the beginning of the year 2008 a British investment group took over the entity and appointed a new management. Moreover, the economic crises influenced the company as well.

Until the year 2007 there was an obvious mark of the former management. The analyzed firm basically continued in the trends already discovered in the bachelor thesis. The company kept on putting emphasis on safety and did not use much of long term debt. It used much less outside sources than is common in the sector the company operates in. Moreover, the firm maintained very good levels of liquidity, which peaked in 2007. The company paid for its liabilities in a short period. Problems with the inventory management persisted.

XY increased the production in 2006 and 2007 without any significant investments into long lived assets thanks to a higher portion of current assets and large

scale cooperation. In 2007 the company reached the highest profit in its history. The high profitability of own equity remained almost the same from 2006 to 2007, but still surpassed the values of the compared competitor as well as the average values for the sector despite the high ratio of own equity. The company profited mainly from high asset utilization, high operating margin and low indebtedness. The index IN 05 emphasized the stable position and approved the firm probably created value for the owners.

In 2008 the company underwent big changes with regard to the financial management. The new owners leveraged the business significantly using a long term debt for the acquisition. Even if the company is paying off the debt, still, it uses much more outside sources than its competitor and is common in the sector. Thus, it bears a higher risk concerning a long term solvency. On the other hand, the firm even improved its immediate liquidity. As a result XY is considered to be very reliable in paying off its short term liabilities. It appears the new management is able to manage the inventories more effectively; however, there is still a space for further improvements.

In the last two years the XY's net income fell down, due to several factors: first, increasing input prices and Czech crown depreciation in 2008; second, high ratio of payroll expenses to sales due to the necessity to keep employees, lower demand caused by the economic downturn in 2009; third, the interest payments for the long term debt in 2008 as well as 2009. Nevertheless, the company's return on equity still surpasses very significantly the average value and the competitor's value. It boosted after the merger thanks to the financial leverage. In 2009 the value got back to the premerger level due to the low net income as mentioned above, but still is three times higher than the average return on equity in the sector.

Index IN 05 reflects the changes in the firm as well as the impacts of the economic crises. The company still scored well compared to the competitor and the average, however the value indicates the company can end up in bankruptcy as well as create a value for the owners.

The economic value analysis says the company created higher economic profit (taking into account the cost of capital) in 2008 for the new owners (despite the lower net income) than in 2007 for the old ones. This is definitely a positive signal for the new shareholders who earned the economic profit; beyond the return they could expect bearing the certain level of risk.

Even though the economic crises started to impact the company to some degree, it still reached fair return in 2009. These results reassure present owners in bargain choice of their investment decision.

In conclusion, in the future XY has a good chance to come back to results similar to the year 2007 or 2008 in case the economy will recover and continue to grow. The economic crises could even strengthen firm's position on the market since it significantly weakened its major competitor at the Czech market. The company will be probably able to pay off its debt thanks to its very good liquidity, which could be even further improved by better inventory and accounts receivable management. As a result, the owners will enjoy again higher economic profits close to 2008 values due to the decreasing risk and higher earnings. Nevertheless, there are some issues the firm must be aware of. First, the rising prices of inputs can hurt company's profit. Long term agreements with suppliers could help the company to be protected from unexpected input price fluctuations. Second, Czech crown appreciation can have a negative effect when the higher portion of production is exported. Some hedging strategies against the exchange rate risk would benefit the firm. Third, there is a high competition at the skilled labor market in the region; and thus, it will be important to retain present employees even for higher costs and continuously search for new qualified labor. Fourth, if the production is going to increase beyond the 2007 level it will be necessary to invest in new facilities or to reduce the production program to the most profitable segments. Launching a new production facility in a different region, where competition for skilled labor is less likely to occur, could result in more flexibility in regard to staff management as well as associated costs.

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8 Appendices

Appendix 1: XY's Balance Sheets

BALANCE SHEET – XY, CZK thousands

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total Assets	83,857	85,714	116,740	105,373	120,619	134,399	152,836	168,658	149,227
A. Stock subscriptions receivable	0	0	0	0	0	0	0	0	0
B. Long-lived assets	39,690	39,503	38,085	37,690	36,494	35,777	32,439	30,261	28,784
B.I. Intangible assets	475	462	287	357	498	815	344	97	3
1. Organization costs	0	0	0	0	0	0	0	0	0
2. Capitalized results of research and similar activities (capitalized R&D)	0	0	0	0	0	0	0	0	0
3. Software	475	462	287	357	498	815	344	97	3
4. Intellectual property (Patents, copyrights, "know-how", etc.)	0	0	0	0	0	0	0	0	0
5. Goodwill	0	0	0	0	0	0	0	0	0
6. Other intangible assets	0	0	0	0	0	0	0	0	0
7. Acquisition of intangible assets in process	0	0	0	0	0	0	0	0	0
8. Deposits given toward intangible asset acquisition	0	0	0	0	0	0	0	0	0
B.II. Tangible assets	39,215	39,041	37,798	37,333	35,996	34,962	32,095	30,164	28,781
1. Land (property)	190	190	189	189	297	723	189	189	189
2. Buildings, halls and structures (plant)	34,120	33,120	33,253	32,043	30,657	29,932	28,227	27,160	26,147
3. Capital equipment and property units (equipment)	4,605	4,926	4,348	4,683	5,042	4,307	3,679	2,815	1,975
4. Permanent growth (orchards and vineyards)	0	0	0	0	0	0	0	0	0
5. Herd and draught animals (long-term livestock)	0	0	0	0	0	0	0	0	0
6. Other tangible assets	0	0	0	0	0	0	0	0	0
7. Acquisition of tangible assets in process	180	805	8	110	0	0	0	0	470
8. Deposits given toward tangible asset acquisition	120	0	0	308	0	0	0	0	0
9. Adjustment(s) to gained property	0	0	0	0	0	0	0	0	0
B.III. Financial investments	0	0	0	0	0	0	0	0	0
1. Investments with controlling interest	0	0	0	0	0	0	0	0	0
2. Investments with significant influence	0	0	0	0	0	0	0	0	0
3. Other equity investments	0	0	0	0	0	0	0	0	0
4. Loans to group companies	0	0	0	0	0	0	0	0	0
5. Other investments	0	0	0	0	0	0	0	0	0
6. Acquisition of non-current financial assets	0	0	0	0	0	0	0	0	0
7. Prepayments for non-current financial assets	0	0	0	0	0	0	0	0	0

		2001	2002	2003	2004	2005	2006	2007	2008	2009
C.	Current assets	42,813	43,685	76,733	66,956	84,125	97,229	119,541	137,708	119,731
C.I.	Inventory	19,715	17,923	21,362	29,003	32,628	36,014	57,694	47,541	39,141
1.	Raw materials	10,314	10,026	13,216	14,403	19,737	19,945	30,623	24,908	17,970
2.	Work in process and manufactured parts	5,588	3,674	3,852	9,541	7,076	8,360	10,914	4,269	4,039
3.	Products (finished goods inventory)	2,790	3,428	4,294	5,059	5,815	7,461	16,157	18,364	17,132
4.	Short-term livestock	0	0	0	0	0	0	0	0	0
5.	Merchandise	0	0	0	0	0	0	0	0	0
6.	Deposits given toward merchandise acquisition	1,023	795	0	0	0	248	0	0	0
C.II.	Long-term receivables	0	0	0	27	54	0	0	95	81
1.	Long-term trade receivables	0	0	0	27	54	0	0	95	81
2.	Receivable from parties with controlling interest	0	0	0	0	0	0	0	0	0
3.	Receivable from parties with significant influence	0	0	0	0	0	0	0	0	0
4.	Receivables from partners and joint venture partners	0	0	0	0	0	0	0	0	0
5.	Estimated pre-paid items	0	0	0	0	0	0	0	0	0
6.	Other long-term receivables	0	0	0	0	0	0	0	0	0
7.	Receivable - taxes	0	0	0	0	0	0	0	0	0
C.III.	Current receivables	17,256	12,172	34,669	21,536	30,814	38,813	39,817	46,041	40,517
1.	Trade receivables (accounts and notes receivable)	17,215	12,142	33,890	21,365	26,736	38,668	39,173	42,848	35,473
2.	Receivable from parties with controlling interest	0	0	0	0	0	0	0	0	0
3.	Receivable from parties with significant influence	0	0	0	0	0	0	0	0	0
4.	Receivables from partners and joint venture partners	0	0	0	0	3,900	0	0	0	0
5.	Receivable from social security and health insurance providers	0	0	0	0	0	0	0	0	0
6.	Receivable - taxes	0	2	0	0	0	7	0	2,851	4,706
7.	Other deposits given	0	0	423	141	148	108	614	335	315
8.	Estimated pre-paid items	0	0	320	0	0	0	0	0	0
9.	Other current receivables	41	28	36	30	30	30	30	7	23
C.IV.	Current financial assets	5,842	13,590	20,702	16,390	20,629	22,402	22,030	44,031	39,992
1.	Cash	266	329	992	477	629	654	284	163	142
2.	Bank accounts (cash in bank)	5,576	13,261	19,710	15,913	20,000	21,748	21,746	43,868	13,850
3.	Short-term financial assets (short-term investments)	0	0	0	0	0	0	0	0	26,000
4.	Acquisition of current financial assets	0	0	0	0	0	0	0	0	0
D.	Accruals	1,354	2,526	1,922	727	0	1,393	856	689	712
1.	Pre-paid expenses	1,238	2,495	1,922	727	0	1,393	856	689	622
2.	Complex deferred expenses	116	0	0	0	0	0	0	0	0
3.	Accrued (un-billed) revenue	0	31	0	0	0	0	0	0	90

		2001	2002	2003	2004	2005	2006	2007	2008	2009
	Total liabilities and equity	83,857	85,714	116,740	105,373	120,619	134,399	152,836	168,658	149,227
A.	Own (total) equity	57,942	62,806	71,729	76,870	86,838	98,272	120,432	26,163	34,542
A.I.	Legal capital	13,320	13,320	13,320	13,320	13,320	13,320	13,320	26,000	26,000
1.	Legal capital	13,320	13,320	13,320	13,320	13,320	13,320	13,320	26,000	26,000
2.	Treasury stock	0	0	0	0	0	0	0	0	0
3.	Changes in legal capital	0	0	0	0	0	0	0	0	0
A.II.	Capital funds [sic]	0	0	0	0	0	0	0	-17,568	-17,568
1.	Additional paid in capital (in excess of par)	0	0	0	0	0	0	0	0	0
2.	Other paid in capital (donated capital)	0	0	0	0	0	0	0	-17,568	-17,568
3.	Gains or losses from the revaluation of assets and liabilities	0	0	0	0	0	0	0	0	0
4.	Gains or losses from the revaluation upon transformations	0	0	0	0	0	0	0	0	0
A.III.	Reserves, and other reserves from profits	1,332	1,332	1,332	1,332	1,332	1,332	1,332	0	2,600
1.	Statutory reserve fund [sic] (mandatory reserve)	1,332	1,332	1,332	1,332	1,332	1,332	1,332	0	2,600
2.	Other reserves	0	0	0	0	0	0	0	0	0
A.IV.	Retained earnings	36,445	38,691	41,801	48,959	53,042	59,834	77,620	-787	15,131
1.	Retained earnings	36,445	38,691	41,801	48,959	53,042	59,834	77,620	0	15,131
2.	Retained earnings deficit	0	0	0	0	0	0	0	-787	0
A.V.	Net income or Net loss	6,845	9,463	15,276	13,259	19,144	23,786	28,160	18,518	8,379
B.	Outside [sic] sources [of capital]	25,859	22,908	45,011	28,503	33,781	36,127	32,404	142,325	114,494
B.I.	Reserves [sic] (allowances, provisions)	4,163	3,000	3,657	3,700	527	279	409	299	117
1.	Legal reserves [sic] (tax-deductible allowances)	0	3,000	3,657	3,700	527	0	0	0	0
2.	Reserve for pensions and similar liabilities	0	0	0	0	0	0	0	0	0
3.	Income tax reserve	0	0	0	0	0	0	0	0	0
4.	Other reserves [sic] (non-tax-deductible allowances)	0	0	0	0	0	279	409	299	117
B.II.	Long-term liabilities	871	1,991	2,319	2,563	2,722	2,626	2,308	24,495	21,239
1.	Long term trade payables (accounts payable)	0	0	0	106	100	0	0	0	0
2.	Obligations to entities with a controlling interest	0	0	0	0	0	0	0	22,271	19,067
3.	Obligations to entities with significant influence	0	0	0	0	0	0	0	0	0
4.	Payable to partners and joint venture partners	0	0	0	0	0	0	0	0	0
5.	Long-term deposits received	0	0	0	0	0	0	0	0	0
6.	Bonds	0	0	0	0	0	0	0	0	0
7.	Long-term notes	0	0	0	0	0	0	0	0	0
8.	Estimated accrued items	0	0	0	0	0	0	0	0	0
9.	Other long-term liabilities	0	0	0	0	0	0	0	0	0
10.	Deferred taxes payable	871	1,991	2,319	2,457	2,622	2,626	2,308	2,224	2,172

		2001	2002	2003	2004	2005	2006	2007	2008	2009
B.III.	Current liabilities	14,235	13,360	34,937	20,050	29,768	33,222	29,687	24,684	15,967
1.	Trade payables (accounts payable)	9,785	5,535	23,383	10,037	22,997	22,498	20,076	16,102	10,593
2.	Payables to entities with a controlling interest	0	0	0	0	0	0	0	0	0
3.	Payables to entities with significant influence	0	0	0	0	0	0	0	0	0
4.	Payable to partners and joint venture partners	0	0	1,800	1,150	0	100	0	0	0
5.	Payables to employees	1,321	1,582	1,645	1,663	1,636	1,749	1,866	2,844	1,889
6.	Social security payable	808	848	1,020	1,026	993	1,081	1,068	1,466	1,034
7.	Taxes payable and subsidies	2,310	4,805	6,549	1,529	2,928	4,975	3,918	2,634	1,999
8.	Short-term deposits received	0	0	0	4,218	759	1,558	1,387	681	0
9.	Bonds	0	0	0	0	0	0	0	0	0
10.	Estimated accrued items	0	586	535	424	452	1,248	1,348	946	452
11.	Other payables	11	4	5	3	3	13	24	11	0
B.IV.	Bank loans and other help [sic]	6,590	4,557	4,098	2,190	764	0	0	92,847	77,171
1.	Long-term bank loans	6,590	4,557	4,098	2,190	764	0	0	77,407	61,731
2.	Current bank loans	0	0	0	0	0	0	0	15,440	15,440
3.	Other short term help [sic]	0	0	0	0	0	0	0	0	0
C.	Accrued liabilities	56	0	0	0	0	0	0	170	191
1.	Accrued expenses	56	0	0	0	0	0	0	170	191
2.	Unearned revenue	0	0	0	0	0	0	0	0	0

Appendix 2: XY's Income Statements

INCOME STATEMENT – XY, CZK thousands

Item		2001	2002	2003	2004	2005	2006	2007	2008	2009
I.	Merchandise revenue	31	31	32	26	37	34	32	12,810	34,639
A.	Cost of merchandise sold	18	26	21	22	23	35	36	11,032	31,777
+	Gross profit (on merchandise sold)	13	5	11	4	14	-1	-4	1,778	2,862
II.	Internal activities (product and service revenue, and revenueisation)	134,615	179,599	177,747	212,859	203,330	278,139	249,918	232,820	130,459
1.	Service and manufactured goods revenue	133,265	180,601	176,465	206,064	204,798	274,964	238,429	236,829	131,661
2.	Change in manufactured goods inventory (inventory revenueisation)	987	-1,265	1,043	6,463	-1,709	2,930	11,256	-4,242	-1,446
3.	Capitalization of expenses (self-manufactured asset revenueisation)	363	263	239	332	241	245	233	233	244
B.	Operating and production expenses	97,297	130,994	121,932	158,186	148,270	208,604	169,460	160,808	80,456
1.	Raw materials and utilities expense	71,946	87,899	88,675	110,849	125,972	184,031	147,106	138,619	64,346
2.	Outside services used	25,351	43,095	33,257	47,337	22,298	24,573	22,354	22,189	16,110
+	Value added	37,331	48,610	55,826	54,677	55,074	69,534	80,454	73,790	52,865
C.	Payroll	27,492	31,057	32,335	34,355	34,571	39,096	44,577	43,880	37,442
1.	Wages and salaries	20,260	23,049	23,946	25,387	25,508	28,808	32,593	31,840	27,581
2.	Management board compensation	0	0	0	0	0	0	0	144	144
3.	Social security expenses	7,232	8,008	8,389	8,963	9,040	10,257	11,258	11,213	9,201
4.	Fringe benefits	0	0	0	5	23	31	726	683	516
D.	Taxes and fees	118	104	146	166	374	141	289	174	206
E.	Amortization of intangible and depreciation of tangible assets	2,694	2,783	2,773	2,785	2,776	2,827	3,016	2,793	2,080
III.	Receipts from sale of long-lived assets and raw materials	3,338	7,565	6,957	9,588	13,194	10,369	13,991	8,569	5,393
1.	Receipts from sale of long-lived assets	0	1,135	1,089	813	5,243	7	4,253	0	0
2.	Receipts from sale of raw materials	3,338	6,430	5,868	8,775	7,951	10,362	9,738	8,569	5,393
F.	Book value of disposed of long-lived assets and raw materials	2,131	4,653	4,581	6,940	7,249	7,010	8,769	5,991	3,798
1.	Book value of disposed of long-lived assets	0	15	181	171	1,630	0	1,301	0	0
2.	Book value of disposed of raw materials	2,131	4,638	4,400	6,769	5,619	7,010	7,468	5,991	3,798
G.	Change in reserves and provisions relating to operating activities and complex deferred expenses	-3,344	2,504	-3,113	122	-3,306	-96	84	-392	-16
IV.	Miscellaneous operating revenue	7	225	1,622	177	89	616	1,228	1,275	973
H.	Miscellaneous operating expenses	224	874	5,678	167	261	135	1,657	1,830	1,519
V.	Transfer of operating revenue	0	0	0	0	0	0	0	0	0
I.	Transfer of operating expenses	0	0	0	0	0	0	0	0	0
*	Operating income	11,361	14,425	22,005	19,907	26,432	31,406	37,281	29,358	14,202

Item		2001	2002	2003	2004	2005	2006	2007	2008	2009
VI.	Receipts from sale of securities and direct investments	0	0	0	0	0	0	0	0	0
J.	Book value of securities and direct investments sold	0	0	0	0	0	0	0	0	0
VII.	Income from investments	0	0	0	0	0	0	0	0	0
1.	Income from securities of and direct investments in group companies	0	0	0	0	0	0	0	0	0
2.	Income from other securities and direct investments	0	0	0	0	0	0	0	0	0
3.	Income from other financial investments	0	0	0	0	0	0	0	0	0
VIII.	Income from short-term financial investments	0	0	0	0	0	0	0	192	262
K.	Financial investments expenses	0	0	0	0	0	0	0	0	0
IX.	Gains from securities and derivatives value adjustment	0	0	0	0	0	0	0	0	0
L.	Expenses on securities and derivatives value adjustment	0	0	0	0	0	0	0	0	0
M.	Change in reserves and provisions relating to financial activities	0	0	0	0	0	0	0	0	0
X.	Interest income	287	109	201	245	108	35	25	58	40
N.	Interest expense	650	424	224	153	64	40	0	6,378	3,588
XI.	Other financial income	18	326	207	335	160	329	582	2,294	1,739
O.	Other financial expenses	1,502	1,648	1,069	1,758	1,620	1,684	1,447	2,293	2,263
XII.	Transfer of financial gains	0	0	0	0	0	0	0	0	0
P.	Transfer of financial expenses	0	0	0	0	0	0	0	0	0
*	Income (loss) from financial operations	-1,847	-1,637	-885	-1,331	-1,416	-1,360	-840	-6,127	-3,810
Q.	Income tax (on ordinary activities)	2,931	3,703	6,038	5,435	5,898	6,519	8,382	4,827	2,024
1.	- payable	2,931	4,546	5,710	5,297	5,734	6,515	8,700	4,911	2,077
2.	- deferred	0	-843	328	138	164	4	-318	-84	-53
**	Income from ordinary activities	6,583	9,085	15,082	13,141	19,118	23,527	28,059	18,404	8,368
XIII.	Unusual and/or extraordinary income	393	551	281	164	60	341	278	144	19
R.	Unusual and/or extraordinary expenses	14	5	0	0	25	0	145	0	5
S.	Income tax on unusual / extraordinary income	117	168	87	46	9	82	32	30	3
1.	- payable	117	168	87	46	9	82	32	30	3
2.	- deferred	0	0	0	0	0	0	0	0	0
*	Unusual income (loss)	262	378	194	118	26	259	101	114	11
T.	Tax deductible income distribution to (joint venture) partners	0	0	0	0	0	0	0	0	0
***	Net income / loss for fiscal period	6,845	9,463	15,276	13,259	19,144	23,786	28,160	18,518	8,379
	Net income before taxes	9,893	13,334	21,401	18,740	25,051	30,387	36,574	23,375	10,406

Appendix 3: CB's Balance Sheets

BALANCE SHEET – CB, CZK thousands

		2006	2007	2008	2009
	Total Assets	140,853	166,847	150,276	113,278
A.	Stock subscriptions receivable	0	0	0	0
B.	Long-lived assets	39,120	65,058	76,654	72,082
B.I.	Intangible assets	285	336	207	90
1.	Organization costs	0	0	0	0
2.	Capitalized results of research and similar activities (capitalized R&D)	0	0	0	0
3.	Software	285	336	207	90
4.	Intellectual property (Patents, copyrights, "know-how", etc.)	0	0	0	0
5.	Goodwill	0	0	0	0
6.	Other intangible assets	0	0	0	0
7.	Acquisition of intangible assets in process	0	0	0	0
8.	Deposits given toward intangible asset acquisition	0	0	0	0
B.II.	Tangible assets	38,835	64,722	76,447	71,992
1.	Land (property)	6,084	6,473	7,433	7,460
2.	Buildings, halls and structures (plant)	25,006	33,077	39,127	58,739
3.	Capital equipment and property units (equipment)	1,660	1,466	2,336	5,788
4.	Permanent growth (orchards and vineyards)	0	0	0	0
5.	Herd and draught animals (long-term livestock)	0	0	0	0
6.	Other tangible assets	0	0	0	0
7.	Acquisition of tangible assets in process	5,297	20,206	27,551	5
8.	Deposits given toward tangible asset acquisition	788	3,500	0	0
9.	Adjustment(s) to gained property	0	0	0	0
B.III.	Financial investments	0	0	0	0
1.	Investments with controlling interest	0	0	0	0
2.	Investments with significant influence	0	0	0	0
3.	Other equity investments	0	0	0	0
4.	Loans to group companies	0	0	0	0
5.	Other investments	0	0	0	0
6.	Acquisition of non-current financial assets	0	0	0	0
7.	Prepayments for non-current financial assets	0	0	0	0

		2006	2007	2008	2009
C.	Current assets	100,175	99,870	72,086	39,070
C.I.	Inventory	58,696	56,782	51,948	30,589
1.	Raw materials	33,378	24,416	25,822	11,343
2.	Work in process and manufactured parts	4,054	6,060	3,149	2,452
3.	Products (finished goods inventory)	13,150	20,004	14,997	9,604
4.	Short-term livestock	1	1	1	1
5.	Merchandise	6,688	6,251	4,492	4,606
6.	Deposits given toward merchandise acquisition	1,425	50	3,487	2,583
C.II.	Long-term receivables	7	9	3	3
1.	Long-term trade receivables	7	0	0	0
2.	Receivable from parties with controlling interest	0	0	0	0
3.	Receivable from parties with significant influence	0	0	0	0
4.	Receivables from partners and joint venture partners	0	0	0	0
5.	Other deposits given	0	0	0	0
6.	Other long-term receivables	0	9	3	3
7.	Receivable - taxes	0	0	0	0
C.III.	Current receivables	36,913	39,399	18,877	8,321
1.	Trade receivables (accounts and notes receivable)	33,511	32,447	13,806	7,835
2.	Receivable from parties with controlling interest	0	0	0	0
3.	Receivable from parties with significant influence	0	0	0	0
4.	Receivables from partners and joint venture partners	0	0	0	0
5.	Receivable from social security and health insurance providers	0	0	0	0
6.	Receivable - taxes	23	46	259	57
7.	Other deposits given	1,243	494	664	209
8.	Estimated pre-paid items	29	22	25	0
9.	Other current receivables	2,107	6,390	4,123	220
C.IV.	Current financial assets	4,559	3,680	1,258	157
1.	Cash	3,937	2,434	393	113
2.	Bank accounts (cash in bank)	622	1,246	865	44
3.	Short-term financial assets (short-term investments)	0	0	0	0
4.	Acquisition of current financial assets	0	0	0	0
D.	Accruals	1,558	1,919	1,536	2,126
1.	Pre-paid expenses	1,552	1,876	1,454	1,523
2.	Complex deferred expenses	0	0	0	0
3.	Accrued (un-billed) revenue	6	43	82	603

		2006	2007	2008	2009
	Total liabilities and equity	140,853	166,847	150,276	113,278
A.	Own (total) equity	48,517	53,433	51,320	46,022
A.I.	Legal capital	33,653	33,653	33,653	33,653
1.	Legal capital	33,653	33,653	33,653	33,653
2.	Treasury stock	0	0	0	0
3.	Changes in legal capital	0	0	0	0
A.II.	Capital funds [sic]	0	0	0	0
1.	Additional paid in capital (in excess of par)	0	0	0	0
2.	Other paid in capital (donated capital)	0	0	0	0
3.	Gains or losses from the revaluation of assets and liabilities	0	0	0	0
4.	Gains or losses from the revaluation upon transformations	0	0	0	0
A.III.	Reserves, and other reserves from profits	6,749	6,799	19,635	17,586
1.	Statutory reserve fund [sic] (mandatory reserve)	6,681	6,731	6,731	6,731
2.	Other reserves	68	68	12,904	10,855
A.IV.	Retained earnings	6,812	7,924	0	0
1.	Retained earnings	6,812	7,924	0	0
2.	Retained earnings deficit	0	0	0	0
A.V.	Net income or Net loss	1,303	5,057	-1,968	-5,217
B.	Outside [sic] sources [of capital]	92,046	113,406	98,551	67,026
B.I.	Reserves [sic] (allowances, provisions)	6,928	14,002	6,931	0
1.	Legal reserves [sic] (tax-deductible allowances)	6,928	13,856	6,928	0
2.	Reserve for pensions and similar liabilities	0	0	0	0
3.	Income tax reserve	0	0	0	0
4.	Other reserves [sic] (non-tax-deductible allowances)	0	146	3	0
B.II.	Long-term liabilities	14,000	14,000	158	0
1.	Long term trade payables (accounts payable)	0	0	0	0
2.	Obligations to entities with a controlling interest	0	0	0	0
3.	Obligations to entities with significant influence	0	0	0	0
4.	Payable to partners and joint venture partners	0	0	0	0
5.	Long-term deposits received	0	0	0	0
6.	Bonds	0	0	0	0
7.	Long-term notes	0	0	0	0
8.	Estimated accrued items	0	0	0	0
9.	Other long-term liabilities	14,000	14,000	0	0
10.	Deferred taxes payable	0	0	158	0

		2006	2007	2008	2009
B.III.	Current liabilities	27,188	31,261	26,515	18,279
1.	Trade payables (accounts payable)	21,358	24,823	23,817	14,636
2.	Payables to entities with a controlling interest	0	0	0	0
3.	Payables to entities with significant influence	0	0	0	0
4.	Payable to partners and joint venture partners	0	0	0	0
5.	Payables to employees	1,301	1,416	1,403	743
6.	Social security payable	625	717	657	296
7.	Taxes payable and subsidies	3,498	169	160	1,519
8.	Short-term deposits received	419	1,760	362	988
9.	Bonds	0	0	0	0
10.	Estimated accrued items	0	2,110	0	0
11.	Other payables	-13	266	116	97
B.IV.	Bank loans and other help [sic]	43,930	54,143	64,947	48,747
1.	Long-term bank loans	7,000	10,585	25,972	22,817
2.	Current bank loans	33,658	38,616	29,752	18,803
3.	Other short term help [sic]	3,272	4,942	9,223	7,127
C.	Accrued liabilities	290	8	405	230
1.	Accrued expenses	290	8	405	230
2.	Unearned revenue	0	0	0	0

Appendix 4: CB's Income Statements

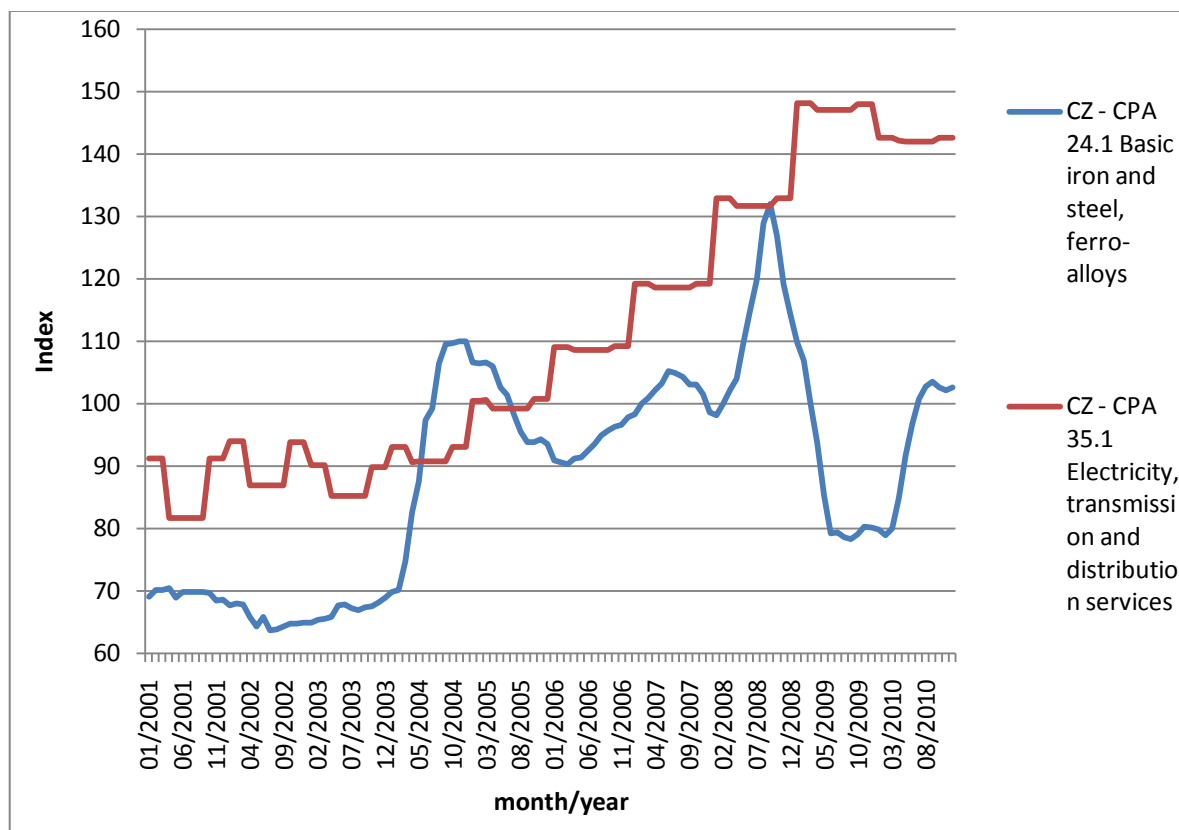
INCOME STATEMENT – CB, CZK thousands

Item		2006	2007	2008	2009
I.	Merchandise revenue	43,126	27,851	16,647	19,688
A.	Cost of merchandise sold	42,262	25,907	16,465	19,330
+	Gross profit (on merchandise sold)	864	1,944	182	358
II.	Internal activities (product and service revenue, and revenueisation)	183,493	241,418	178,663	75,899
1.	Service and manufactured goods revenue	176,440	231,868	185,746	81,790
2.	Change in manufactured goods inventory (inventory revenueisation)	5,184	9,302	-7,198	-5,891
3.	Capitalization of expenses (self-manufactured asset revenueisation)	1,869	248	115	
B.	Operating and production expenses	144,111	201,571	159,372	72,269
1.	Raw materials and utilities expense	123,514	180,428	132,033	57,080
2.	Outside services used	20,597	21,143	27,339	15,189
+	Value added	40,246	41,791	19,473	3,988
C.	Payroll	26,151	27,758	28,321	18,132
1.	Wages and salaries	18,787	19,580	19,982	13,056
2.	Management board compensation	636	636	636	636
3.	Social security expenses	6,514	6,808	6,990	3,967
4.	Fringe benefits	214	734	713	473
D.	Taxes and fees	376	273	343	283
E.	Amortization of intangible and depreciation of tangible assets	1,235	1,715	2,409	2,186
III.	Receipts from sale of long-lived assets and raw materials	4,719	18,367	9,890	5,152
1.	Receipts from sale of long-lived assets	1,897	5,775	3,272	3,790
2.	Receipts from sale of raw materials	2,822	12,592	6,618	1,362
F.	Book value of disposed of long-lived assets and raw materials	2,577	12,838	9,951	1,836
1.	Book value of disposed of long-lived assets	773	4,474	4,650	590
2.	Book value of disposed of raw materials	1,804	8,364	5,301	1,246
G.	Change in reserves and provisions relating to operating activities and complex deferred expenses	7,227	7,501	-6,777	-7,259
IV.	Miscellaneous operating revenue	6,310	1,995	19,433	6,128
H.	Miscellaneous operating expenses	9,487	3,546	12,144	1,984
V.	Transfer of operating revenue	0	0	0	0
I.	Transfer of operating expenses	0	0	0	0
*	Operating income	4,222	8,522	2,405	-1,894

Item		2006	2007	2008	2009
VI.	Receipts from sale of securities and direct investments	0	0	0	0
J.	Book value of securities and direct investments sold	0	0	0	0
VII.	Income from investments	0	0	0	0
1.	Income from securities of and direct investments in group companies	0	0	0	0
2.	Income from other securities and direct investments	0	0	0	0
3.	Income from other financial investments	0	0	0	0
VIII.	Income from short-term financial investments	0	0	0	0
K.	Financial investments expenses	0	0	0	0
IX.	Gains from securities and derivatives value adjustment	0	0	0	0
L.	Expenses on securities and derivatives value adjustment	0	0	0	0
M.	Change in reserves and provisions relating to financial activities	0	0	0	0
X.	Interest income	6	40	351	0
N.	Interest expense	1,862	3,001	3,816	2,988
XI.	Other financial income	303	1,329	535	263
O.	Other financial expenses	1,307	1,833	1,285	756
XII.	Transfer of financial gains	0	0	0	0
P.	Transfer of financial expenses	0	0	0	0
*	Income (loss) from financial operations	-2,860	-3,465	-4,215	-3,481
Q.	Income tax (on ordinary activities)	59	0	158	-158
1.	- payable	59	0	0	0
2.	- deferred	0	0	158	-158
**	Income from ordinary activities	1,303	5,057	-1,968	-5,217
XIII.	Unusual and/or extraordinary income	0	0	0	0
R.	Unusual and/or extraordinary expenses	0	0	0	0
S.	Income tax on unusual / extraordinary income	0	0	0	0
1.	- payable	0	0	0	0
2.	- deferred	0	0	0	0
*	Unusual income (loss)	0	0	0	0
T.	Tax deductible income distribution to (joint venture) partners	0	0	0	0
***	Net income / loss for fiscal period	1,303	5,057	-1,968	-5,217
	Net income before taxes	1,362	5,057	-1,810	-5,375

Appendix 5: Input Prices

Graph 6: Monthly input prices for the period 2001 - 2009



Source: own processing, Czech Statistical Office (Český statistický úřad, 2011)

Note: Index 100 = average value in 2005

Appendix 6: Average CZK/EUR exchange rate

Table 25: Yearly averages of CZK/EUR exchange rate for the period 2001 - 2009

Year	CZK/EUR exchange rate
2001	34.08272
2002	30.81212
2003	31.84369
2004	31.90387
2005	29.78356
2006	28.34297
2007	27.76205
2008	24.94245
2009	26.44502

Source: own calculations, Czech National Bank (Česká národní banka, 2011)