

**Czech University of Life Sciences Prague**

**Faculty of Economics and Management**

**Department of Trade and Accounting**



**Diploma thesis**

**Evaluation of business activity using financial analysis**

**Martina Kučerová**

© 2012 CULS in Prague

# CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Department of Trade and Accounting

Faculty of Economics and Management

## DIPLOMA THESIS ASSIGNMENT

Kučerová Martina

Economics and Management

Thesis title

**Evaluation of business activity using financial analysis**

### Objectives of thesis

The aim of the thesis is to evaluate the business activity of the company, using financial analysis to identify the problematic areas and to suggest possible solutions of the problems and predict future development.

### Methodology

Methodology for the literature overview is based on data collection from the relevant specialized publications and other written or online sources. The methods of analysis, synthesis, comparison and deduction are used to prepare the practical part and to formulate the conclusions of the thesis. The evaluation of the business activity will be carried out by the method of financial analysis, using liquidity ratios, Asset turnover ratios, financial leverage ratios and profitability ratios, horizontal and vertical analysis. Financial ratios will be used to analyze trends and to compare the firm's financials to those of other firms and predict future development.

### Schedule for processing

1. Introduction	9/2011
2. Objectives and methodology	9/2011
3. Literature overview	9/2011
4. Practical part	12/2011
5. Results and discussion	1/2012
6. Conclusions	2/2012
7. Literature	
8. Appendices	

**The proposed extent of the thesis**

60 - 80 stran

**Keywords**

Evaluation, Financial Statements, Financial analysis, liquidity ratios, asset turnover ratios, financial leverage ratios, profitability ratios, vertical analysis, horizontal analysis

**Recommended information sources**

Meigs, Williams, Haka, Bettner: Accounting, USA, Irwin/McGraw-Hill, 1999, ISBN 0-07-289709-0

Sůvová H. a kol.: Finanční analýza v řízení podniku, v bance a na počítači. 1. vyd. Praha: Bankovní institut, 1999. 622 s. ISBN 80-7265-027-0

Baye. M.: Managerial Economics & Business Strategy. McGraw-Hill/Irwin, 2007, ISBN 978007305019

Máče M., Finanční analýza obchodních a státních organizací, Grada Publishing, a.s., první vydání, Praha 2006, ISBN 80-247-1558-9

Kislingerová E. a Hnilica J., Finanční analýza: krok za krokem, C. H. Beck, první vydání, Praha 2005 ISBN 80-7179-321-3

**The Diploma Thesis Supervisor**

Lőrinczová Enikő, Ing., Ph.D.

**Last date for the submission**

březen 2012

**doc. Antonín Valder, CSc.**  
Head of the Department



**prof. Ing. Jan Hron, DrSc., dr.h.c.**  
Dean

Prague October 24. 2011

**Declaration**

I declare that I have worked on my diploma thesis titled “Evaluation of business activity, using financial analysis” by myself, under the direction of my diploma thesis supervisor and I have used only the sources mentioned at the end of the thesis.

**In Prague on** \_\_\_\_\_

**Signature** \_\_\_\_\_

## Acknowledgement

I would like to thank Ing. Lőrinczová Enikő Ph.D., the supervisor of my diploma thesis, for the consultations and rich advices during the work on my diploma thesis. I also have to thank the owner of business which I was able to use as a case study, and all other persons, for their advice and support during my work on this Thesis.

# Hodnocení podnikatelské činnosti pomocí finanční analýzy

---

## Evaluation of business activity using financial analysis

### **Souhrn:**

Cílem této diplomové práce je aplikovat metody finanční analýzy na vybraném podniku pro jeho první tři účetní období 2009, 2010 a 2011. Práce navazuje na mou bakalářskou práci na téma „Investiční analýza podnikatelského záměru“ aplikovaná na stejný podnik. Tato práce se skládá ze tří hlavních částí a to teoretické části, praktické části a diskuze, v první části budou popsána teoretická východiska a metody finanční analýzy, v druhé části budou tyto metody aplikovány na konkrétní podnik. V třetí části budou rozebrány výsledky analýzy společně se shrnutím problematiky sestavování účetních výkazů pro účely finanční analýzy, rozbořem podkladových dat pro potvrzení, či vyvrácení hypotéz stanovených vlastníkem podniku a ohodnocení aplikovaných návrhů z mé bakalářské práce.

### **Summary:**

The aim of this thesis is to apply methods of financial analysis on chosen business for its first three accounting periods 2009, 2010 and 2011. The thesis is further analysis of my bachelor thesis on topic "Investment analysis of a business plan" which was applied to the same business. This thesis consists of three main parts, the literature overview, practical part and the third one is results and discussion, the first part will be describing the theoretical foundations and methods of financial analysis, in the second part of these, methods will be applied to a specific business. In the third part the results of analysis will be discussed together with a summary of the issue of constructing financial statements for the purposes of financial analysis, analysis of the initial data to prove or disprove the hypotheses stated by the business owner, and evaluation of applied suggestions from my bachelor thesis.

**Klíčová slova:** Finanční analýza, účetní výkazy, rozvaha, výkaz zisku a ztrát, poměrové ukazatele, soustavy poměrových ukazatelů, rentabilita, finanční páka, hodnocení

**Keywords:** Financial analysis, financial statements, balance sheet, income statement, financial ratios, systems of financial ratios, profitability, financial leverage, evaluation

**CONTENT:**

<b>1. INTRODUCTION .....</b>	<b>4</b>
<b>2. OBJECTIVES.....</b>	<b>5</b>
2.1. Hypotheses .....	5
2.2. Methodology .....	6
<b>3. LITERATURE REVIEW.....</b>	<b>8</b>
3.1. Definitions.....	8
3.2. Fundamentals of financial analysis.....	9
3.2.1. History of financial analysis .....	9
3.2.2. Information sources for financial analysis .....	10
3.3. Methods of Financial analysis .....	14
3.3.1. Analysis of extensive (absolute) ratio .....	15
3.3.2. Analysis of financial resources funds .....	16
3.3.3. Analysis of financial ratios .....	18
3.3.4. Ratios as a system .....	26
<b>4. PRACTICAL PART – CASE STUDY.....</b>	<b>28</b>
4.1. Characteristics of chosen business.....	28
4.2. Market position and situation .....	29
4.2.1. Accommodation facilities and its division .....	29
4.2.2. Market situation .....	30
4.3. Business specifications .....	31
4.4. Analysis of extensive (absolute) ratio.....	36
4.4.1. Horizontal analysis (trend analysis) .....	36
4.4.2. Percentage (vertical) analysis .....	40
4.5. Analysis of financial resources funds .....	43
4.5.1. Analysis of net working capital .....	43
4.5.2. Analysis of net quick assets.....	44
4.6. Analysis of financial ratios.....	44
4.6.1. Analysis of profitability.....	44
4.6.2. Analysis of liquidity .....	47
4.6.3. Analysis of financial stability .....	48
4.6.4. Analysis of activity .....	49

4.6.5.	Cash flow analysis .....	51
4.7.	Du Pont system.....	54
<b>5.</b>	<b>RESULTS AND DISCUSSION.....</b>	<b>57</b>
5.1.	Discussion of Financial statements construction.....	57
5.2.	Results of financial analysis .....	58
5.3.	Prove or disprove of hypotheses.....	60
5.4.	Evaluation of applied suggestions from BT.....	61
5.4.1.	Marketing improvement .....	61
5.4.2.	Attract more of foreign guests .....	63
5.4.3.	Change of apartment's disposition:.....	63
<b>6.</b>	<b>CONCLUSION.....</b>	<b>64</b>
<b>7.</b>	<b>BIBLIOGRAPHY.....</b>	<b>67</b>
<b>8.</b>	<b>SUPPLEMENTS.....</b>	<b>70</b>



# **1. Introduction**

This diploma thesis is focused on financial analysis and its application to certain business, which required staying incognito, so during the thesis I am using alias name “Bedřichov point”. The process of an investment project Bedřichov Point realization started in March 2006, was officially opened on 25.9.2008 and have been operating successfully ever since. Thanks to its short operating period, I am able to study just the first three accounting – calendar years of its operating 2009, 2010 and 2011. Bedřichov Point is a small accommodation facility in Jizerské Mountains, in Northern Bohemia.

The aim of this thesis is to apply methods of financial analysis to chosen business and to assess the financial health of the business. The evaluation will be focused not only on the profitability of the business, but also the liquidity and other factors of business performance. The thesis will be divided into three main parts, first will contain of the theoretical foundations and methods of financial analysis. The second part will be practical, where methods summarized in theoretical part will be applied to a particular business. The practical part will also contain characteristic of the business its position on the market and construction of financial statements according to specifications of the business. Third part will contain results and discussions of not only applied methods of financial analysis and financial statements, but also deeper analysis of data proving or disproving hypotheses and evaluation of applied suggestions from bachelor thesis, which had great influence on the financial results of the business.

My bachelor thesis, on topic “investment analysis of a business plan”, was conducted on the same business, as now my diploma thesis. I felt it would make a great contribution to continue with further analysis of the same business. The reason why I have chosen this business in first place was that I come from the same mountain village, where this small accommodation facility was opened. I am very interested in development of the area and any activity related to tourism. I was able to obtain the initial hypotheses stated by the owner prior the beginning of the business operation, which are strongly related to the topic of my diploma thesis.

## **2. Objectives**

The aim of the thesis is to evaluate the business activity and financial health of chosen company by using financial analysis. To identify the problematic areas and to suggest possible solutions for reduction of problems detected. On the other hand, to state businesses strengths, this might be the pillar for its future activities.

Financial analysis is conducted upon financial statements most suitable for the purpose of chosen business, which are the alpha and omegas for obtaining precise and significant results of financial analysis. Therefore, the composition of financial statements, from initial internal data of the business, is also a vital objective of the thesis.

And finally determining whether my findings prove or disapprove the hypotheses estimated by owner prior the beginning of the business operation.

### **2.1.Hypotheses**

- Sales from the first calendar year of operating to be CZK 500 000 and to be increasing by 20% from year to year during first 3 years of operating, before stabilisation
- Operating costs (excluding extraordinary items, further specified in following table) in the first calendar year of operating CZK 200 000 and to be increasing by 10% from year to year during first 3 years of operating, before stabilisation, accept the constant expenses

**Table 2.1 - Hypotheses of financial development**

<b>Expenses</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Energy (power + heating)	66000	72600	79860
Wages	50000	55000	60500
Laundry	17000	18700	20570
Travel expenses	24000	26400	29040
Web presentations	10000	11000	12100
Propagation material	10000	11000	12100
Communication	20000	22000	24200
Material consumption	5000	5500	6050
Constant expenses	23000	23000	23000
<b>TOTAL</b>	<b>225000</b>	<b>245200</b>	<b>267420</b>
<b>Sales</b>	<b>500000</b>	<b>600000</b>	<b>720000</b>

## **2.2.Methodology**

Methodology for the literature overview is based on data collection from relevant specialized publications and other written or online sources. The methods of analysis, synthesis, comparison and deduction are used to prepare the practical part and to formulate the conclusions of the thesis. The evaluation of the business activity will be carried out by the method of financial analysis, using liquidity, turnover, leverage and profitability ratios, horizontal and vertical analysis.

Theoretical part of the thesis, in which the methods of financial analysis are identified, is based on the resources, on two books in particular, “Finanční analýza” written by Mrkvička J. and Kolář P. for maintaining unified methodology, together with Principles of Managerial Finance by Gittman J. Practical part of my diploma thesis contains financial analysis performed as case study of small accommodation facility “Bedřichov Point”. I had conducted my bachelor thesis, with title Investment analysis of a business plan, on the same business as I will for my diploma thesis. The facility officially opened on 29.9.2008, so the analysis will be performed on the period of three business years, which are consistent with the calendar years, concretely from 1. 1. - 31. 12. 2009, 1. 1. -31. 12. 2010 and 1. 1. - 31. 12. 2011. I chose this firm because of the provision of needed data and the financial analysis information. In the theoretical part are closely identified the methods of financial analysis, which are closely elaborated and applied to the case study in the practical part of the thesis. As I will be performing the technical financial analysis, I will apply methods of trend analysis of time series, percentage – vertical analysis, analysis of net working capital and net quick assets ratios. Very important part will also play the financial ratios organised in table below. To summarize and point out the interrelations, between the results of previous ratios, will be constructed DuPont pyramid system of ratios.

<b>Profitability ratios</b>	<b>Liquidity ratios</b>	<b>Financial stability ratios</b>	<b>Activity ratios</b>	<b>Cash flow ratios</b>
Return on equity	Current ratio	Debt ratio	Asset turnover	CF solvency
Return on assets	Quick ratio	Equity ratio	Inventory turnover	CF operating margin
Return on capital employed	Cash ratio		Account receivables turnover	CH profit of total asset
Profit margin on sales				CF profit of equity

From above mentioned information implies that I will attempt to perform the financial analysis in its widest sense. Methods used in the thesis will contain of literature review, description, analysis, comparison and synthesis. The work is divided into chapters, which are further divided into sections and subsections numbered by decimal classification.

### **3. Literature review**

The aim of this section is to outline the basic theoretical background to help the potential users to understand the meaning of financial analysis and context contained in the practical part of not only this diploma thesis, but also beyond. The processing of the theoretical part will be formed based on a variety of publications devoted to financial analysis and managerial finance. While defining the methods of financial analysis the primary sources were “Finanční analýza” written by Mrkvička J. and Kolář P. for maintaining a unified methodology, together with Principles of Managerial Finance by Gittman J.

#### **3.1. Definitions**

**Financial analysis:** “The process of evaluating businesses, projects, budgets and other finance-related entities to determine their suitability for investment. Typically, financial analysis is used to analyze whether an entity is stable, solvent, liquid, or profitable enough to be invested in. When looking at a specific company, the financial analyst will often focus on the income statement, balance sheet, and cash flow statement. In addition, one key area of financial analysis involves extrapolating the company's past performance into an estimate of the company's future performance. “<sup>1</sup>

Definitions sourced from PIKE R./NEALE B., Corporate finance and investment<sup>2</sup>

- **Balance Sheet** “A financial statement that lists the assets held by a business at a point in time and explains how they have been financed”
- **Income statement** “A financial statement that details for a specific time period the amount of revenue earned by a firm, the costs it has incurred, the resulting profit and how it has been distributed”
- **Cash flow statement** “A financial statement that explains the reasons for cash inflows and outflow of a business, and highlights the resulting change in cash position”

---

<sup>1</sup> INVESTOPEDIA [www.investopedia.com/terms/f/financial-analysis.asp#axzz1gz0UPKnz](http://www.investopedia.com/terms/f/financial-analysis.asp#axzz1gz0UPKnz)

<sup>2</sup> PIKE R./NEALE B., Corporate finance and investment

## **3.2.Fundamentals of financial analysis**

### **3.2.1. History of financial analysis**

The financial analysis has been with us for as long as the actual money had existed. It is clear that its form and methods had always been adequate to the time. So it would be impossible to relevantly compare analysis of trader from the Middle Ages with the analysis performed using strongly advanced computerised technology. Over the time the structure and levels of performed financial analysis had changed, however the principles and reasons for which the analyses are done remained basically the same.

The roots of modern financial analysis methods lay in the United States of America, where the largest number of theoretical publications was written to this topic and also the practical application of these methods is the most advanced. It was also in USA where for the first time, based on information from accounting research, sectoral overviews were putted together and were used as a measure for comparison of individual businesses in given sector.

The first thing which crosses one's mind, once said financial analysis is usually analysis of any economic activity in which the main roles are played by money and time. Over the time the understanding of financial analysis was defined in a sense as break down of financial situation of the business, sector or even the whole country. In such analysis the statistical and accounting information from further or recent past are used, on the other hand even the present tendencies are considered as also the future predictions, in some cases. Financial analysis interprets the financial information while evaluating performance and perceptiveness of the company and also while comparing with other companies or with sector average.

The original understanding of financial analysis came from pointing out the differences in financial accounting indicators. As the financial analysis developed the next level of its usage was to study accounting research as information for deciding whether the business is creditworthy or not. Mainly during the world economic crisis in 30's the questions of

liquidity and business survival become very important. So the profitability and frugality becomes the target of interest.<sup>3</sup>

### **3.2.2. Information sources for financial analysis**

Financial analyses are created based on a variety of formal or informal data which are normally reviewed and tested for their relevance to the specific purpose of the analysis. For conducting the analysis data are contained in three main statements of balance sheets as of given dates, income statements for given periods, and cash flow statements for the same periods. Since financial statements are the main source for analyses, it must be very clear what their nature, coverage, and limitations are before the data and observations, derived from these statements, can be used for any analytical judgments.<sup>4</sup>

The financial statement is internal and official statement, which the business is obliged to publish at least once a year. Content of financial statement is defined by the Act No. 563/1991 Coll. Accounting, and consists of a balance sheet, income statement and notes. If the business is obliged to an audit the financial statement is included in the annual report of the company. This obligation according to § 20 of Act No. 563/1991 Coll. Accounting, applies to all companies with assets worth more than CZK 40 million and revenues of CZK 80 million, or the average number of employees exceeded 50.<sup>5</sup>

The content and explanatory power of individual statements will follow this chapter together with cash flow statement, which is by legislation currently not a mandatory part of the published information. However, it is composed by businesses as an important part of the financial statements supplements.

### **Balance sheet**

“The balance sheet, prepared as of *a specific date*, records the categories and amounts of assets employed by the business and the offsetting liabilities incurred to lenders and owners. Also called the *statement of financial condition* or *statement of financial position*, it must always balance. By definition, the recorded value of the total assets invested in the business at any point in time must be matched precisely by the recorded liabilities and

---

<sup>3</sup> MRKVIČKA J./KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

<sup>4</sup> HELFERT E.A., Financial Analysis Tools and Techniques, A guide for managers

<sup>5</sup> MRKVIČKA J./KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

owners' equity supporting these assets. Liabilities are specific obligations that represent claims against the assets of the business, rating ahead of the owners in repayment priority. In contrast, the recorded shareholders' equity in effect represents a residual claim of the owners on the remaining assets after all liabilities have been subtracted.”<sup>6</sup>

ASSETS	LIABILITIES + EQUITY
CURRENT ASSETS	CURRENT LIABILITIES
Inventory	Account payables
Accounts receivables	Note payables
Cash and cash equivalents	Accruals
Marketable securities	
Other current assets	+ Long-term debt
GROSS FIXED ASSETS	SHAREHOLDER'S EQUITY
Land and buildings	Preferred stock - cumulative
Machinery and equipment	Common stock – par
Furniture and fixtures	Paid-in capital in excess of par on common
Vehicles	stock
Other (includes financial leases)	Retained earnings
- Accumulated depreciation	
<b>TOTAL ASSETS</b>	<b>= TOTAL LIABILITIES+EQUITY</b>

Source: GITTMAN L.J., Principles of managerial finance

### **Income statement**

“The income statement reflects the effect of management’s operating decisions on business performance and the resulting accounting profit or loss for the owners of the business *over a specified period of time*. The profit or loss calculated in the statement increases or decreases owners’ equity on the balance sheet. Thus, the income statement is a necessary adjunct to the balance sheet in explaining this major component of change in owners’ equity, and it provides a variety of performance assessment information. The income statement, also referred to as the *operating statement*, *earnings statement*, or *profit and loss statement*, displays the revenues recognized for a specific period, and the costs and expenses charged against these revenues, including write-offs and taxes”<sup>7</sup>

<sup>6</sup> HELFERT E.A., Financial Analysis Tools and Techniques, A guide for managers

<sup>7</sup> HELFERT E.A., Financial Analysis Tools and Techniques, A guide for managers



<b>Sales</b>
- Cost of Sales
<b>GROSS PROFIT</b>
- Selling expenses
- General and administrative expenses
- Lease expenses
- Depreciation expenses
<b>OPERATING PROFIT (EBIT)</b>
- Interest expenses
<b>PROFIT BEFORE TAX (EBT)</b>
- Taxes
<b>PROFIT AFTER TAX (EAT)</b>
- Preferred stock dividends
<b>NET PROFIT</b>

Source: GITTMAN L.J., Principles of managerial finance

Czech accounting legislation (CUL) prescribes mandatory minimum range, layout and labelling of items, but it still allows entities to choose between breaking the expenses down by its nature or by its function. On the other hand International financial reporting standards (IFRS) does not prescribe a mandatory format of this statement, but places certain requirements on the minimum items that companies are required to report. In case of IFRS the entities may also choose between breaking the expenses down by its nature or by its function.

Expenses in income statements are either classified by their nature or by their function. An income statement by nature method is the one in which expenses are presented according to their nature, such as depreciation, transports costs, rent expense, wages and salaries and so on. Such method is used in single step income statement and it is usually employed by small businesses due to its simplicity. However there is a flaw in this method, that it cannot be used to calculate gross profit within the income statement.

On the other hand, income statement by function is the one, in which expenses are presented according to their functions such are cost of goods sold, selling expenses, administrative expenses, other expenses/losses and so on. As you may see the above example is a case of income statement by function. This method allows us to calculate gross profit and operating profit within the income statement and therefore it is usually used in the multi-step format of income statement. Most large and medium sized businesses use the function method of expense disclosure. The use of function method still

requires disclosing the individual expenses by nature method under each function either on the face of the income statement or in the notes to the income statement.<sup>8</sup>

### **Cash Flow Statement**

“Because we are interested in the combined effects of investment, operating, and financing decisions, analyzing both the income statement for the period and the balance sheets at the beginning and the end of the period together provides more basic insights than either statement alone. Management decisions not only affect the profit for the period, but cause accompanying changes in most assets and liabilities, particularly in the accounts making up working capital, such as cash, receivables, inventories, and current payables. The statement that captures both the current operating results and the accompanying changes in the balance sheet is the *cash flow statement, statement of cash flows, or funds flow statement*. It gives us Income Statement in Decisional Context a dynamic picture of the ultimate changes in cash resulting from the combined decisions made during a given period. The statement is prepared by comparing beginning and ending balance sheets and using key items of the income statement for the period, all interpreted in terms of uses and sources of cash.”<sup>9</sup>

<b>CASH FLOW FROM OPERATIONS</b>
+ Net profits after tax
+ Depreciation
- Increase in accounts receivables
+ Decrease in inventories
+ Increase in accounts payables
+ Increase in accruals
= Cash provided by operating activities
<b>CASH FLOW FROM INVESTMENT ACTIVITIES</b>
- Increase in gross fixed assets
+/- Change in business interests
= Cash provided by investment activities
<b>CASH FLOW FROM FINANCING ACTIVITIES</b>
- Decrease in notes payable
+ Increase in long-term debts
+ Changes in shareholder's equity
- Dividends paid
= Cash provided by financing activities
<b>= NET INCREASE IN CASH AND MARKETABLE SECURITIES</b>

Source: GITTMAN L.J., Principles of managerial finance

<sup>8</sup> ACCOUNTING EXPLAINED [accountingexplained.com/financial/statements/income-statement-by-nature](http://accountingexplained.com/financial/statements/income-statement-by-nature)

<sup>9</sup> HELFERT E.A., Financial Analysis Tools and Techniques, A guide for managers

### 3.3. Methods of Financial analysis

It is very important to mention, before going deeper into specification of different methods of financial analysis, that there is a great disunity of terminology used in regards to financial analysis. Many authors are using the same terms with different content and on the other hand it is also very common usage of different terms for the same content.

In regard of financial analysis methods, we often find the basic division into fundamental analysis and technical analysis. But even in usage of these terms there is disunity. Based on G. Foster<sup>10</sup> interpretation it is possible to characterize the two forms of financial analysis as following:

- **Fundamental financial analysis** – is focusing on evaluation of rather qualitative data about the business, while the main analysis method is professional estimation based on deep empirical and theoretical experience of the analyst.
- **Technical financial analysis** – is understood as a quantitative evaluation of economic data while using mathematical, statistical and other algorithmic methods. The results are interpreted both in qualitative and quantitative way.

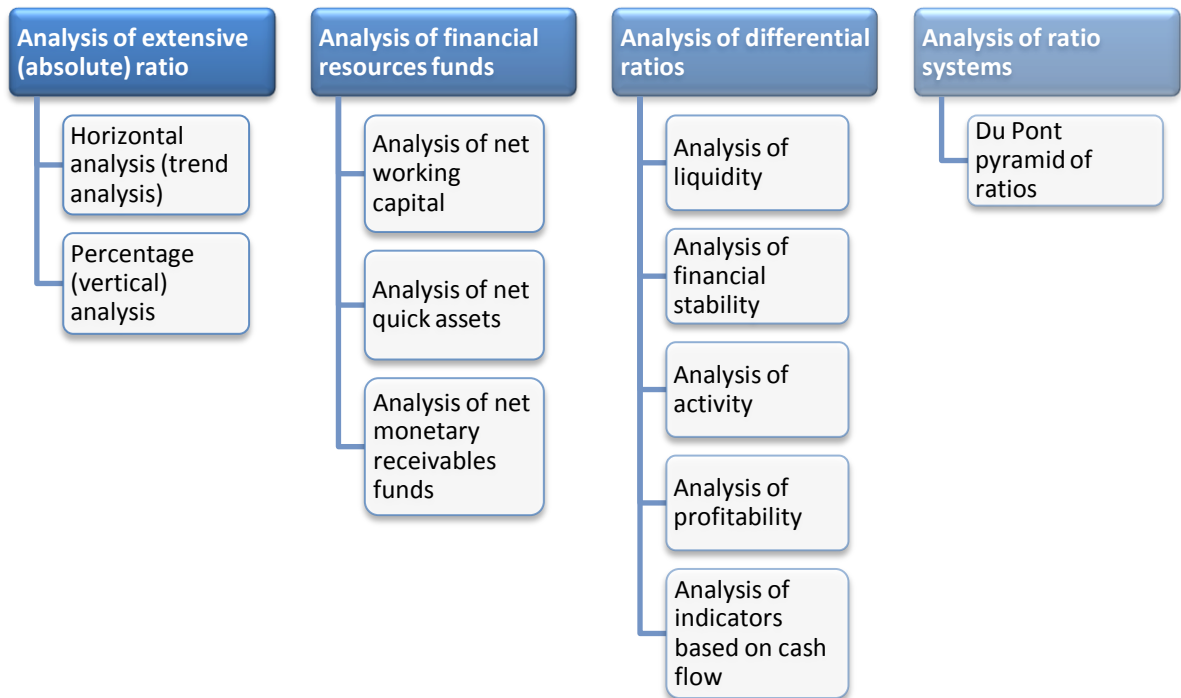
Once mentioned characteristics of financial analysis are stated we can continue by clarifying the elementary technical financial analysis methods:<sup>11</sup>

---

<sup>10</sup> FOSTER G. Financial statement analysis

<sup>11</sup> MRKVIČKA J. / KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

**Scheme 3.1: Methods of technical financial analysis**



### 3.3.1. Analysis of extensive (absolute) ratio

Horizontal and vertical analysis of cash flow is the starting point of financial analysis. Both approaches allow seeing original absolute data from financial statements in certain relations. Horizontal analysis is looking at the development of examined variable over the time, mainly in comparison to a previous time period. For certain variable has to observe the absolute changes and the percentage changes (relative).<sup>12</sup>

#### Horizontal analysis

Concern of horizontal analysis, also known as trend analysis, is to compare item changes in individual statements in time order. It also offers deduction of item development in future, but it is very important to keep in mind that the business might be performing differently in future compare to past. There are several aspects which may influence level of explanatory power of this analysis and they are (Conditions mentioned

<sup>12</sup> KISLINGEROVÁ E. / HNILICA J. Finanční analýza krok za krokem

lower are generally applicable to all technical financial analysis methods based on accounting information.)<sup>13</sup>:

- Availability of representative time series, two years at minimum
- Comparability of data in time series for certain business (legislation changes)
- Exclusion of any random aspects, which are in any way influencing variable
- While predicting future development it is necessary to include objectively potential changes such as inflation, regulation and deregulation of prices, ...

In case that all input data meet the higher mentioned conditions the conduction of horizontal analysis become from mathematical and statistical point of view very simple:

$$\text{absolute change} = \text{indicator}_t - \text{indicator}_{t-1}$$

$$\text{percentage change} = \frac{\text{absolute change}}{\text{indicator}_{t-1}} \times 100$$

### **Vertical analysis**

This method, also known as structural, lies in expression of individual items of accounting statements as percentage of one chosen base taken as 100%. For balance sheet analysis, the amount of the total assets (or total liabilities and equity) is taken as a base. For Income statement the base is considered to be Total sales.<sup>14</sup>

#### **3.3.2. Analysis of financial resources funds**

First of all it is important to define “fund” as it has different meaning in accounting, where it relates to source of coverage of assets and in financial analysis is as a “fund” understood indicators calculated as difference between certain assets and liabilities items. The most common funds in financial analysis are net working capital, cash flow and receivables funds.

---

<sup>13</sup>MRKVIČKA J. / KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

<sup>14</sup>MRKVIČKA J. / KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

## **Net working capital**

Net working capital (also referred to as operating capital) is calculated as the difference between the value of total current assets and total current liabilities. There is another method which may be used to calculate net working capital and that would be:

$$\text{Net working capital} = (\text{longterm liabilities} + \text{equity}) - \text{fixed assets}$$

Value of net working capital is an important indicator of business solvency - the higher the value the better chance for the business to pay its financial obligations. The situation, once the result reaches a negative value, is called *uncovered debt*. The result of the ratio is in absolute values – monetary unit and evaluation in combination with liquidity differential ratios (terminology mentioned in chapter 3.3.3. Analysis of differential ratios) is recommended. While analysing the net working capital ratio, it is very important to take into consideration the possibility of ratio distortion caused by failure to exclude lower liquidity or illiquid items from current assets.<sup>15</sup>

## **Analysis of net quick assets**

„Current assets are readily convertible into cash minus current liabilities. A large amount of net quick assets often characterizes a conservative firm with a very liquid financial position.”<sup>16</sup>

Such a ratio is stricter than net working capital thanks to consideration of only the most liquid assets, but on the other hand the ratio takes into consideration only immediate payables (liabilities due to current date or older). The calculation is as follows (where Available funds” contains cash, marketable securities and accounts receivable):

$$\text{Net quick assets} = \text{available funds} - \text{immediate payables}$$

The disadvantage of this ratio is the possibility to manipulate the result of temporal delayed payments due to the time of the assessment of liquidity.

---

<sup>15</sup> MRKVIČKA J. / KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

<sup>16</sup> SCOTT D.L., An A to Z Guide to Investment Terms for Today's Investor

### **Analysis of net monetary receivables funds**

It represents certain compromise between the two indicators mentioned above, it is designed in order to include the short term receivables (without unenforceable) complete with quick assets and their equivalents.<sup>17</sup>

*Net monetary receivables fund*

*= current assets – inventories – illiquid receivables – Current liabilities*

### **3.3.3. Analysis of financial ratios**

The bases of financial analysis methodology are the financial ratios and therefore are also the most frequently use. Such ratios characterize the relationship of two items from financial statements by its quotient. To gain certain explanatory power of the ratio index, there must be correlation between the two items placed into ratio. While choosing the appropriate ratio, we have to always keep in mind what is the goal that we want to achieve by using the financial ratio. There is an existence of a large number of financial ratios, which is why they are organized into groups, which are aimed at certain aspect of financial state of the business, such as profitability, liquidity, financial stability etc.<sup>18</sup>

### **Analysis of liquidity ratios**

Definition of liquidity is: *“Liquidity refers to how quickly and cheaply an asset can be converted into cash. Money (in the form of cash) is the most liquid asset. Assets that generally can only be sold after a long exhaustive search for a buyer are known as illiquid.”*<sup>19</sup>

Business's ability to pay its financial obligations as they fall due date are measured by liquidity indexes. For the business to be solvent it must have part of its assents highly liquid, which means the assents must have the ability to quickly convert into money. Liquidity and profitability of the business have the opposite relation, the business with large share of highly liquid assets usually reach lower profitability. There are three levels of short-term liquidity indexes:

---

<sup>17</sup> MRKVIČKA J. / KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

<sup>18</sup> MÁČE M., Finanční analýza obchodních a státních organizací

<sup>19</sup> MOFFATT M., <http://economics.about.com/cs/economicsglossary/g/liquidity.htm>

- **Current ratio**                      **Current ratio** =  $\frac{\text{Current assets}}{\text{Current liabilities}}$

This ratio is also known as “working capital ratio”. It measures company's ability to pay its short-term obligations. The result can be interpreted as how many times are the Current liabilities (debt and payables) covered by short-term assets (cash, inventory, receivables).

- **Quick ratio**                      **Quick ratio** =  $\frac{\text{Current assets} - \text{Inventories}}{\text{Current liabilities}}$

It is also known as “liquid ratio“or “acid test ratio“. In comparison with current ratio the quick ratio is more conservative and more likely used liquidity measure because of exclusion of inventory from current assets. The reason for inventory exclusion is that for some businesses it might be difficult to turn their inventory into cash. In the event of short-term obligations need to be paid off immediately, there might appear a situation in which the current ratio would overestimate business's short-term financial strength.

- **Cash ratio**                      **Cash ratio** =  $\frac{\text{Cash} + \text{Cash Equivalents}}{\text{Current liabilities}}$

The cash ratio is another measure of a company's liquidity which is even more precise than both current and quick ratios by measuring the amount of cash or cash equivalents which are in current assets to cover the current liabilities.

### **Analysis of profitability ratios**

Profitability is *“The state or condition of yielding a financial profit or gain.”*<sup>20</sup>

Definition of profitability ratios is: *“A class of financial metrics that are used to assess a business's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time. For most of these ratios, having a higher value relative to a competitor's ratio or the same ratio from a previous period is indicative that the company is doing well.”*<sup>21</sup>

Financial health of the business is mainly defined as liquidity plus profitability. Profitability ratios are one of the most frequently used methods, because they give the

---

<sup>20</sup> BUSINESS DICTIONARY, [www.businessdictionary.com/definition/profitability.html](http://www.businessdictionary.com/definition/profitability.html)

<sup>21</sup> INVESTOPEDIA, [www.investopedia.com/terms/p/profitabilityratios.asp#axzz1lnfocpNj](http://www.investopedia.com/terms/p/profitabilityratios.asp#axzz1lnfocpNj)



information about the profits which were gained by invested capital. The most general form of this ratio is: 
$$\frac{\textit{Profit}}{\textit{Invested capital}}$$

The profitability ratios indicate how many units of profit (CZK) are produced per 1 unit (CZK) of denominator and the results are expressed as a percentage. Profit in the numerator can be supplemented in several forms, which depend on the purpose of the current analysis. As stated in the subsection 3.2.2, concerned with the sources of data for financial analysis, where each category of profits were clarified, profit before interest and taxes (EBIT) will be used to compare the production power for businesses where different tax treatment is applied and the proportion of external sources - debts in liabilities. The form of profit before tax (EBT) will only reflect possible differences in the amount of taxes, admits the structure of financial management and its impact on business performance and is useful for example in the time comparison of a business when there was a change in tax rates. Profit after tax (EAT) is particularly suitable for assessing the performance of the business by owners (shareholders or associates). The form of ratio including EAT allows the possibility of management influencing the interest and tax expenses. Now the characteristics of the most common indicators of profitability will follow.<sup>22</sup>

- **Return on Equity (ROE)** 
$$\text{ROE} = \frac{\text{EAT}}{\text{Equity}} \times 100$$

This ratio indicates how profitable the business is by comparing its net income (EAT) to its shareholders' equity. The return on equity ratio measures how much the shareholders/owners earned for their investment into the business. The higher the ratio percentage, the more efficient management is in utilizing its equity base and the better return is to investors.

Return on equity may also be calculated by dividing net income by average shareholders' equity. Average shareholders' equity is calculated by adding the shareholders' equity at the beginning of a period to the shareholders' equity at period's end and dividing the result by two.<sup>23</sup>

---

<sup>22</sup> SEDLACEK J, Finanční analýza podniku. 1. vydání

<sup>23</sup> INVESTOPEDIA, [www.investopedia.com/terms/r/returnnonequity.asp#axzz11nfocpNj](http://www.investopedia.com/terms/r/returnnonequity.asp#axzz11nfocpNj)

There are several ways of calculating return on equity, besides the general form mentioned above. One of those would be:  $ROE = Profitability \times Efficiency \times Leverage$

Where “profitability” (usually called Profit Margin) is calculated as Net Income/Sales, “Efficiency” (usually called Asset turnover) is calculated as Sales/Assets and Leverage (usually called Financial Gearing) is calculated as Assets/Shareholders’ Equity. Another possibility would be:  $ROE = ROA \times Leverage$

- **Return on Assets (ROA)**  $ROA = \frac{EBIT}{Total\ assets} \times 100$

Return on Assets measures how profitable a business would be relative to its total assets, if there would be no taxation. Ratio in this form points out the “gross” profitability from the outside point of view. This ratio can be very helpful for businesses deciding whether or not to initiate a new project (undertake loan). The result of ROA allows setting of the marginal interest rate at which the business can accept loan. If ROA is above the loan rate, which the business is borrowing at, then the project should be accepted, if not then it is rejected.<sup>24</sup>

In several publications we may also find this ratio where as a numerator there is EAT instead of EBIT.

- **Return on Investment (ROI)**  $ROI = \frac{EBIT \times (1 - tax)}{Total\ assets} \times 100$

Ratio determines the “net” profitability of the business from the point of view of the owner who is at the same time also a creditor. Ratio may also be calculated as:

$$ROI = ROE + \frac{(total\ assets - equity) \times average\ interest\ rate\ of\ foreign\ capital \times (1 - tax)}{Total\ Assets}$$

With this ratio it is important to keep in mind that the calculation and, therefore the definition, can be modified to suit the situation, for which the ratio is calculated. It depends on what items are included in variables. Formula mentioned above is however not the most common one that would be:

$$ROI = \frac{(Gain\ from\ investment - Cost\ of\ investment)}{Cost\ of\ investment}$$

- **Return on Capital Employed (ROCE)**  $ROCE = \frac{EAT + foreign\ capital \times (1 - tax)}{Capital\ employed} \times 100$

---

<sup>24</sup>MRKVIČKA J. / KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

This ratio examines the rate of profit the business makes on the long-term capital invested in it. Nominator includes total revenues of all investors and from the denominator is excluded short-term capital. Also in case of this ratio there exists more forms of the formulas such as:  $ROCE = \frac{EBIT}{\text{Capital employed}} \times 100$

- **Profit Margin on Sales (PMOS)**

Profit Margin on Sales ratio (also just Profit Margin) shows how much profit is generated from every CZK of sales. It can be considered in several forms of a percentage, gross, operating and net profit levels:<sup>25</sup>

$$\begin{aligned} \text{Gross PMOS} &= \frac{\text{Gross profit}}{\text{Sales}} \times 100 & \text{Operating PMOS} &= \frac{\text{operating profit}}{\text{Sales}} \times 100 \\ \text{Net PMOS} &= \frac{\text{Net profit}}{\text{Sales}} \times 100 \end{aligned}$$

- **Return on Sales (ROS)**       $\text{ROS} = \frac{\text{Direct debit} - \text{Variable cost} - \text{Cost of trade credit}}{\text{Sales}}$

During short-term decision making process whether or not to increase production and sales by using spare investment capacity it is vital whether the business result is profit or loss from additional sales. Return on sales ratio allows fast and simple way of finding out.

### Analysis financial stability

Ratios of financial stability (also called debt ratios or financial structure ratios) provide a general idea of the business's overall debt load as well as its mix of equity and debt. Debt ratios may be used to determine the overall level of financial risk which both the business and its shareholders are facing. Once again the results are usually given in percentage.

- **Debt Ratio**       $\text{Debt Ratio} = \frac{\text{Total Liabilitie (Total Debt)}}{\text{Total assets}} \times 100$

It is a ratio that indicates the proportion of business debt relative to its assets. The measure gives an idea of the business leverage and it also provides the information about potential risks the business might be facing in terms of its debt amount.<sup>26</sup>

- **Equity Ratio**       $\text{Equity Ratio} = \frac{\text{Total Shareholder's Equity}}{\text{Total assets}} \times 100$

---

<sup>25</sup> MRKVIČKA J. / KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

<sup>26</sup> O'CONNEL V., Financial management teaching block material

This is a complementary ratio to the one mentioned above and their sum is equal to 100%. The Equity Ratio measures the proportion of the total assets that are financed by shareholders, and not creditors. Both of these ratios are crucial and most commonly used for the business financial situation evaluation. Reciprocal of the Equity Ratio is Financial Leverage ratio.<sup>27</sup>

- **Debt-Equity Ratio**      **Debt – Equity Ratio** =  $\frac{\text{Total Liabilities}}{\text{Total Equity}} \times 100$

This ratio is very popular in Anglo-Saxon countries however it can be easily substituted by combination of Debt and Equity ratios which are more likely to be used in the Czech Republic.

- **Times Interest Earned**    **TIE** =  $\frac{\text{EBIT}}{\text{Interest expense}}$

This ratio is used to measure business's ability to meet its debt obligations. It is calculated by taking EBIT and dividing it by the total interest payable on bonds and other debts. It states how many times a business can cover its interest expenses on a pre-tax basis. Failing to meet these obligations could force a business into bankruptcy. It is another ratio which is very popular in Anglo-Saxon countries.<sup>28</sup>

### Analysis of activity ratios

Analysis of activity is performed based on activity ratios which are frequently used while basic comparison of businesses in same industry. The asset turnover ratio and inventory turnover ratio are the most common examples of activity ratios.

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

This ratio measures a business's efficiency at using its assets for generating sales.

- **Inventory Turnover**    **IT** =  $\frac{\text{Sales}}{\text{Inventory}}$

The ratio represents how many times, in certain period, the inventories are transformed into different forms of assets until sold good or service and once again bought inventory. Above mentioned calculation is more frequently used formula, however from the methodological point of view the correct formula would consist in

---

<sup>27</sup> MRKVIČKA J. / KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

<sup>28</sup> MRKVIČKA J. / KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

the numerator “Cost of Sales” instead of Sales. The reason for that is that sales are recorded at market value, while inventories are usually recorded at cost. As in case of profitability ratios, it is recommended for average inventory to be replaced for the ending inventory level to minimize seasonal factors. The index may also be expressed by period of time, usually in amount of days. The days in the period can then be divided by the inventory turnover formula to calculate the days it takes to sell the inventory, it is also called "inventory turnover days".<sup>29</sup>

- **Account Receivables Turnover**  $ART = \frac{Sales}{Accounts\ Receivable}$

Once again this ratio represents in how long the account receivables are transformed into cash. It can be expressed in many forms including accounts receivable turnover in days which would be calculated analogically as Inventory Turnover days.

Above mentioned Activity indexes are most commonly used, in specific cases there are also ratios such as Accounts Payable Turnover and Capital Intensity Ratio. Account Payable Turnover is a ratio which indicates how many times a company pays off its suppliers during given period. It measures how a company manages paying its own bills. The Capital Intensity Ratio represents how much of an investment in fixed assets was required during a given period of time to produce 1CZK of sales. The ratio formula is sales divided by fixed assets for a specified period of time. This ratio might be also used as a measure of business flexibility in the relation to potential decrease of sales.<sup>30</sup>

### Cash flow Analysis

All ratios and indexes mentioned up to now were based either on data from balance sheet or from Income statement. However, the worldwide tendency is to use the cash flow, based on which the ratios are formulated, has more of the explanatory power for resulting financial analysis.<sup>31</sup>

- **Cash flow solvency ratio**  $CFS = \frac{Cash\ flow\ from\ operations}{Current\ liabilities}$   $CFS = \frac{Cash\ flow\ from\ operations}{Total\ liabilities}$

---

<sup>29</sup> INVESTOPEDIA,

[www.investopedia.com/terms/i/inventoryturnover.asp#axzz1n1claeDx](http://www.investopedia.com/terms/i/inventoryturnover.asp#axzz1n1claeDx)

<sup>30</sup> MRKVIČKA J. / KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

<sup>31</sup> MRKVIČKA J. / KOLÁŘ P. Finanční analýza 2. Přepřacované vydání

The first formula is as an alternative to a common liquidity ratio and represents the ability of the business to pay its Current liabilities from the cash flow in given period of time. The second formula, in certain publications also called the Degree of debt-relief ratio, and it represents the ability of the business to pay all its debts from the cash flow in certain time-period.

- **Operating Cash flow margin ratio**  $OCFM = \frac{\text{Cash flow from operations}}{\text{Sales}} \times 100$

The operating cash margin ratio is somewhat similar to a traditional profit margin ratio except for this ratio in place of net income as the numerator is Cash flow from operations. Thus, the operating cash margin ratio provides a more robust indicator of performance based on cash generating ability as opposed to a profit margin ratio with its focus on accrual based accounting income. Essentially, the operating cash margin ratio highlights the timing of cash flows with respect to the timing of sales. Therefore, this ratio can prove useful as part of a process to evaluate cash management performance, as well as, credit granting policies and receivable collections.

- **Cash flow profitability of total asset**  $CFP = \frac{\text{Cash flow from operations}}{\text{Total assets}} \times 100$

This ratio (also known as Cash Return on Assets) compares in the numerator cash flow from operations to the value of total asset in the denominator, and it provides an indication of how well the assets of a company are utilized to generate a cash flow return. The ratio can be used internally by the company's analysts, or by potential and current investors. The ratio does not however include any future commitments regarding assets, nor does it include the cost of replacing older ones.

- **Cash flow level of self-financing investment**  $= \frac{\text{Cash flow from operations}}{\text{Investment}} \times 100$

It is an indicator that characterizes the level of financial coverage of business's investments from its own internal financial sources. If the result is greater than 100%, then it allows for alternative uses of available funds, but if the value is lower, it leads to the need for external financing of investments.

- **Cash flow profitability of Equity**  $= \frac{\text{Cash flow from operations}}{\text{Shareholder's Equity}} \times 100$

Ratio is also known as Cash Return on equity and it indicates how much cash flow is relevant to 1CZK of invested capital. The ratio is derived from ROE –Return on

Equity, in which EAT is replaced by the cash flow from operations. There is no influence of depreciation or long-term reserves.

- **Cash flow interest expenses coverage** =  $\frac{\text{Cash flow from operations} + \text{Interest expenses}}{\text{Interest expenses}} \times 100$

It indicates the company's ability to pay interest expense from the cash flow generated. The indicator is derived from the Times Interest Earned ratio.

### 3.3.4. Ratios as a system

Ratios as system builds on the analysis of ratio indexes divided into individual groups, in which were presented in previous subsections. “The ratios discussed in previous chapters have many elements in common, as they are derived from key components of the same financial statements. In fact, they’re often interrelated and can be viewed as a system. The analyst can turn a series of ratios into a dynamic display highlighting the elements that are the most important levers used by management to affect operating performance.”<sup>32</sup>

### Du Pont system

The most common method of using the ratio indexes in pyramid decomposition is so called Du Pont diagram. “The DuPont system of analysis is used to dissect the firm’s financial statements and to assess its financial condition. It merges the income statement and balance sheet into two summary measures of profitability ROA and ROE.”<sup>33</sup> Even Du Pont diagram has different interpretations in different sources, so it can be set up based on either earnings before or after tax.

The Du Pont system calculates the ROA by putting together Net profit margin, which measures the firm’s profitability on sales, with its Total asset turnover, which indicates how efficiently the business has used its assets to generate sales.

There is also a modified DuPont Formula which relates the business’s ROA to its ROE using the financial leverage multiplier (FLM), the ratio of total assets to common stock equity. Converting ROA into ROE by use of the FLM takes into consideration the impact of financial leverage on the owner’s return. The application of Du Pont system is best explained by placing ratios into “pyramid”, and moving from the rightmost value ROE to

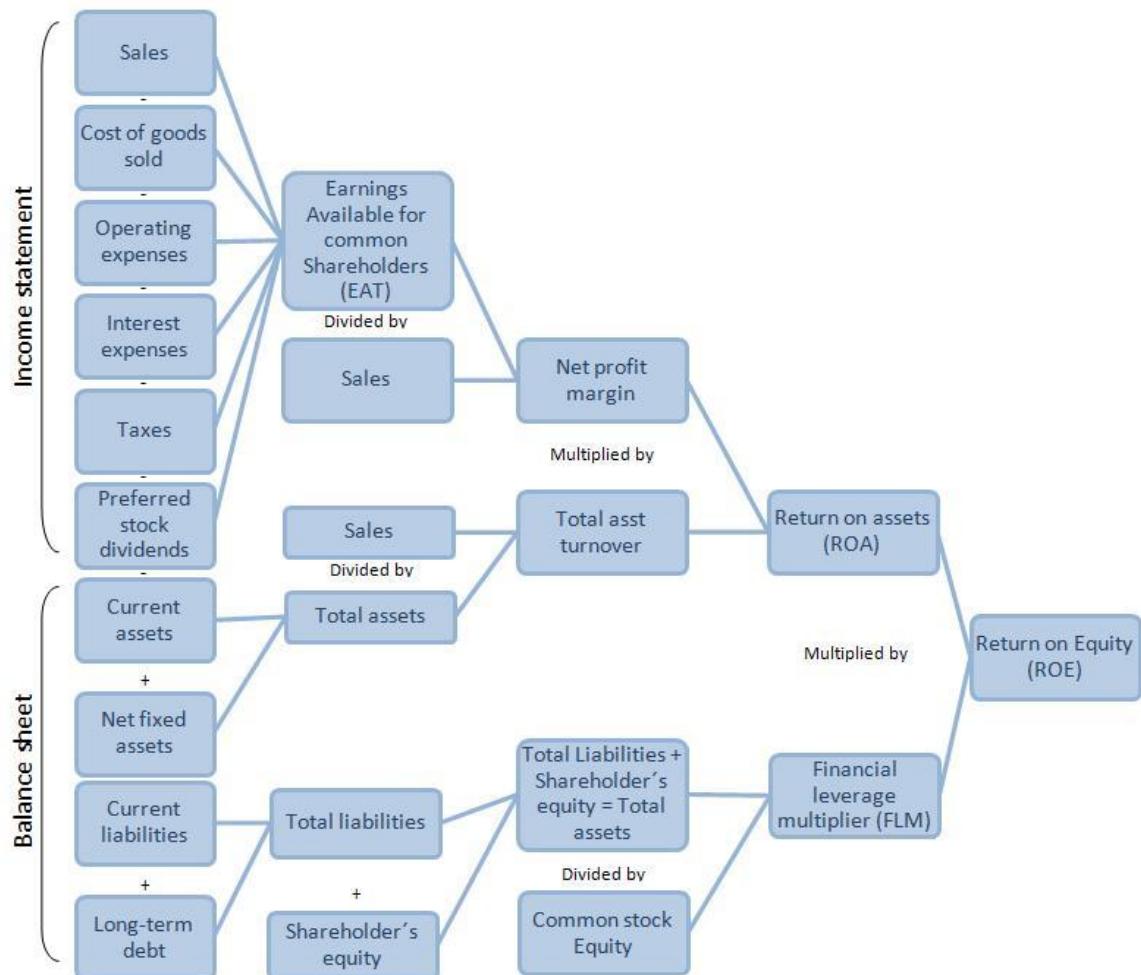
---

<sup>32</sup> HELFERT E.A., Financial Analysis Tools and Techniques, A guide for managers

<sup>33</sup> GITTMAN L.J., Principles of managerial finance

the left, the evaluator may dissect and analyze the inputs of the formula, while isolating the potential cause of the below or above average results.<sup>34</sup>

**Scheme 3.2: DuPont system structure**



<sup>34</sup> GITTMAN L.J., Principles of managerial finance



## **4. Practical part – Case study**

The main portion of the practical part of the thesis will contain application of the financial analysis methods explained in the theoretical part of the thesis. Before the actual application of methods, on selected business, there will be an introduction of analysed business, its specifications and the market situation. The financial analysis itself will begin by analysis of absolute indicators, which will assess their development over time and structure, followed by analysis of financial resources. Financial ratios, divided into separate groups, will focus on individual aspects of financial results of the business, summarised in the pyramid DuPont system of ratios. Final chapter of the practical part will be dedicated to evaluation of applied suggestions stated in my bachelor thesis.

### **4.1. Characteristics of chosen business**

Chosen case study for application of financial analysis is the same business as I have had preformed an investment analysis on, during my Bachelor thesis, which is a small accommodation facility which required staying incognito so I will be using alias name Bedřichov Point.

“Native son of Rožnov built Bedřichov Point building, and that gave to it typical features and shapes of Wallachian cottage. Bedřichov Point offers modern accommodation suitable for family vacation, social events or even business events. Bedřichov Point is located in northern Bohemia in Jizerské Mountain in small mountain village Bedřichov. This village is easily accessible from nearby cities of Liberec (9km) and Jablonec nad Nisou (7km). Both of these cities are connected to highway from capital city Prague (104km Prague – Bedřichov). Bedřichov Point is situated in quiet area, hidden from busy main street but easily accessible by car or by foot. Destination to the village centre is about 5-10 minutes by foot and the closest ski-tow is just about 300 meters so the Bedřichov Point is very well strategically situated in the area. Bedřichov Point has four apartments with capacity of two to eight beds (1.apartment – 2 beds, 2.apartment – 2+2 beds, 3.apartment – 2+3+2 beds, 4.apartment – 4+4 beds) so the total capacity is 21 beds, from which 10 are main beds in the living areas, 9 beds are located in attics of the apartments

and 2 extra beds, which is an unroll double-couch in apartment 3. Each apartment has its own kitchen and bathroom. ”<sup>35</sup>

The business has certain specifics which will be closely discussed in chapter 4.3 *Business specifications*. In most cases for more precise financial analysis it is adequate to compare the results of the business to the industry. Unfortunately the CZ-NACE 55 data are for the analysed years available only in very limited to zero scope, but as the business has no standard form, the comparison would be inadequate.

## 4.2. Market position and situation

First of all this chapter will contain system of accommodation facilities categories and classifications, with regard to legal restrictions, and position of Bedřichov point in certain category. Then will follow the market situation, which will outline ten years of accommodation facilities development in Bedřichov village.

### 4.2.1. Accommodation facilities and its division

Accommodation facilities are classified by kind into categories and by requirements on area and amenities into classes which are marked with star. Ministry for Regional Development in Decree No. 501/2006 Coll. about the general requirements for land use specifies the terminology of the classification in §2 General terminologies: Accommodation establishments are classified into categories by type:

- **Hotel** is an accommodation facility with at least 10 guestrooms equipped for temporary accommodation and related services
- **Motel** is an accommodation facility with at least 10 guestrooms equipped for temporary accommodation and related services for motorists
- **Pension** is an accommodation facility with at least five rooms with limited range of corporate and additional services, but with comparable accommodation services to hotels and is divided into four classes
- **Other accommodation facilities** are tourist hostels, campsites and group of bungalows, or cultural or historical property used for temporary accommodation

---

<sup>35</sup> KUČEROVÁ M., Investment analysis of a business plan, Bachelor thesis

These categories are divided into classes – amount of stars, depending on level of amenities from which the price is derived.<sup>36</sup>

Bedřichov Point has the standards of pension with three to four stars, but it doesn't meet the requirement of the minimum of five rooms (it has only four), so it falls into category of other accommodation facility – touristic hostels/mountain cottage. Regarding to the CZ-NACE classification Bedřichov Point would fall into category 55.10.9 - Other accommodation facilities, into section I. Accommodation and food service activities.

#### **4.2.2. Market situation**

All accommodation facilities in the area of Bedřichov are to form a market on which Bedřichov Point is competing. In following table we can see development, in numbers, of accommodation facilities in the Bedřichov area from year 2000 to 2010. The highest demand in given area is for pensions, which as we may see are the main two categories of accommodation represent in the area and both of these are basically in the same category as Bedřichov Point. From the total numbers of accommodations it can be seen that from the year 2008, when Bedřichov Point entered the market, the total number of accommodation facilities has been lower, compare to previous years. However the total number of beds has been steadily increasing. It might be the reason for steady lowering percentage of beds utilization, as clear from the graph, where you may also see the percentage utilization of Bedřichov point, from the year of its operations start. It is important to mention that in year 2008 Bedřichov point started its operation in September so the percentage is done only for the quartile.

The marketing strategy of Bedřichov Point was to open facility with standards of three stars hotel or pension with the apartment style. To differ itself from other pensions and hotels, Bedřichov Point does not only have the old historical building spirit but also the luxury of modern accommodation with sauna, large gathering room with appropriate kitchen and all necessary fittings to hospitalized groups with event program.

---

<sup>36</sup>OFICIÁLNÍ JEDNOTNÁ KLASIFIKACEUBYTOVACÍCH ZAŘÍZENÍ ČESKÉ REPUBLIKY 2010-2012

**Table 4.1 - Amount of collective accommodation facilities in Bedřichov area by category of accommodation facility<sup>37</sup>**

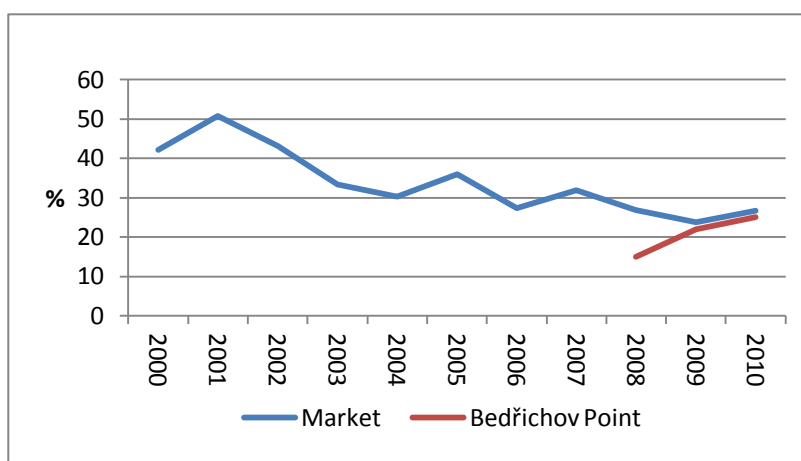
	Total facilities	Total beds	Categories									
			hotels *****	hotels ****	hotels ***	hotels **	hotels *	hotels garni	pensions	camp-sides	touristic huts	other accommodation facilities
2000	22	682	-	-	-	-	-	-	13	-	1	8
2001	24	770	-	-	-	-	-	-	13	-	1	10
2002	29	871	-	-	2	-	-	-	16	-	1	10
2003	30	904	-	-	2	-	-	-	17	-	1	10
2004	26	850	-	-	2	-	-	-	15	-	1	8
2005	26	797	-	-	2	-	-	-	15	-	1	8
2006	26	786	-	-	2	-	-	-	15	-	1	8
2007	24	771	-	-	3	-	-	-	14	-	1	6
2008	22	780	-	-	3	-	-	-	11	-	1	7
2009	22	805	.	.	3	.	.	.	12	.	1	6
2010	23	853	.	.	3	.	.	.	13	.	1	6

Source: Czech statistical office

**Table 4.2 - Utilization of collective accommodation facilities in Bedřichov area**

	No. of overnights	Beds utilization (%)
2000	78 233	42
2001	62 249	51
2002	88 579	43
2003	75 398	33
2004	63 700	30
2005	67 825	36
2006	56 638	27
2007	50 301	32
2008	38 314	27
2009	49 596	24
2010	60 090	27

**Graph 4.1 - Beds utilization**



Source: Czech statistical office

### 4.3. Business specifications

Bedřichov Point is owned and run by natural person, who has second business activity, which he/she considers to be the main one. The main business activity is strongly profitable and therefore the owner is not taking any income from the Bedřichov point for personal use, but reinvests it into the business. The investment project of analysed business was fully funded by the owner from his/her own resources, so there is no need to consider

<sup>37</sup> CZECH STATISTICAL OFFICE, [vdb.czso.cz/vdbvo/tabparam.jsp?childsel0=8&cislotab=CRU9030CU&kapitola\\_id=653&v oa=tabulka&go\\_zobraz=1&childsel0=8&pro\\_6\\_37=563536&aktualizuj=Aktualizovat](http://vdb.czso.cz/vdbvo/tabparam.jsp?childsel0=8&cislotab=CRU9030CU&kapitola_id=653&v oa=tabulka&go_zobraz=1&childsel0=8&pro_6_37=563536&aktualizuj=Aktualizovat)

any dividends to share holders, or loan payments. As the owner has two business activities, but is a natural person with one identification number of natural person (IČO), he/she has combined accounting for both of mentioned activities. The aim of this thesis is to separate the accommodation business activity from the main one to clearly analyse the financial activities of the only one analysed activity, as it is not as transparent while combined with the main activity. For that purpose I had to separate all the expenses and revenues which are related solely to the accommodation business activity and based on these data to create all three financial statements to conduct the financial analysis of the business. It also gives me, as an analyst, the advantage of knowing exactly where the data are taken from, because the input data are vital for the outcome of financial analysis. I preserved the system of allocating the expenses, so it would be easy to orientate in the system by the owner, as the main user of these thesis. However some items I believe would be more suitable to allocate differently, such as insulation of apartment No.1, worth around CZK 90 000 which is located in expenses rather than in appreciation of fixed asset.

For operating of the business there is no personal employed, there are only three people involved in operating and they are sole traders who are invoicing their payrolls. First of all there is an assistant/cleaning lady, who is paid by hour and has responsibility for accommodating, checking out guests (as there is no personal presence at all times) and cleaning of the facility. Second position is maintenance man who is invoicing CZK 12 000 per month and has the responsibility for gardening, snow disposal and any maintenance required for smooth and technical problem-free operations. The last person is working only in case of the owner's absence and is also paid per hour, he/she takes care of guests and potential guests enquires via email and call phone and in case of any urgent problem or difficulties steps in as the owner usually does so.

Due to the purpose of the business the initial investment was very high as the facility had to stand up to certain standard level and not only from the building and technical point of view, but also the interiors and apartments had to be properly equipped. It also resulted in high inventory (also spare items) at the beginning of the operations, which contained of items such as kitchen appliances, furniture, televisions, computer and so on. High amount of inventory, at the beginning of the year 2009 worth CZK 549 717, will have its influence on several results of the financial ratios, calculated in further chapters of the thesis. On the

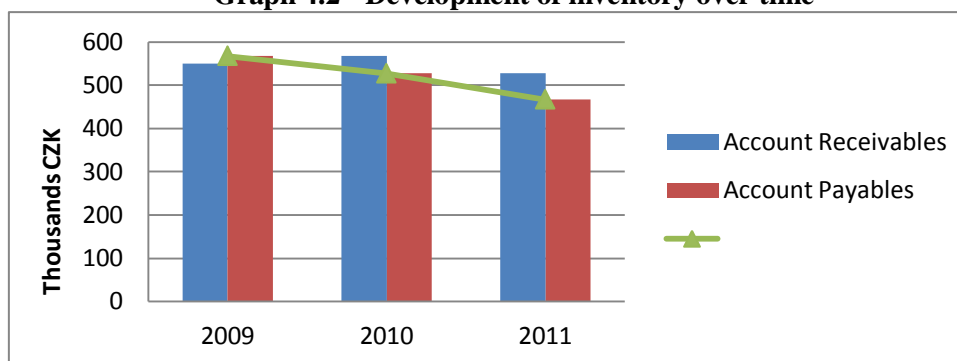
plus side it means that there was no need in the three analysed years of operating to purchase any further amount of inventories, accept low value items. In the years 2010 and 2011, there were some inventory items discarded and they were of higher value then the few items purchased. Following table shoves the development of inventory amounts also followed by illustrational graph.

**Table 4.3 - Development of Inventory over time**

Inventory	Beginning of period	Purchased	Discarded	End of period
2009	549 717,39	18 010,87	0,00	567 728,26
2010	567 728,26	4 995,07	-45 490,00	527 233,33
2011	527 233,33	5 074,78	-65 263,84	467 044,27

Source: Own calculation based on the company's internal accounting data

**Graph 4.2 - Development of inventory over time**



Source: Own construction based on the company's internal accounting data

The non-current assets include land on which the facility is located plus parking lot across the street in total value of CZK 381599 and Building of the facility in value of CZK 2 601 153, which is depreciated according to accelerated form of depreciation over 50 years starting from 2009.

**Table 4.4 - Development of depreciation over time**

Building	Beginning of period	Rate %	Depreciation	End of period
2009	2 601 153,00	0,00	52 024,00	2 549 129,00
2010	2 601 153,00	2,00	101 966,00	2 499 187,00
2011	2 499 187,00	3,92	99 885,00	2 399 302,00

Source: Own calculation based on the company's internal accounting data

Both account receivables and payables are in all three years of a low amounts. In case of receivables the amount was never higher than CZK 20 000, in the year 2009 the receivable was invoice of a firm, who organised its teambuilding event in Bedřichov point

during December 2008. The second year receivable was a payment for stay of foreign guests, whose payment transfer did not go through the bank. The business cooperates with Benefit a.s., who provides employees benefits, once an employee orders stay in Bedřichov point, points are deducted from their benefit account. At the end of the month Benefit a.s. sums all the points for sold stays and the accommodation facility bills adequate amount to them, which was the receivable in year 2011.

In case of account payables the amounts are a bit higher as they are sum of the items, the VAT for previous year and payables to suppliers for their goods or services.

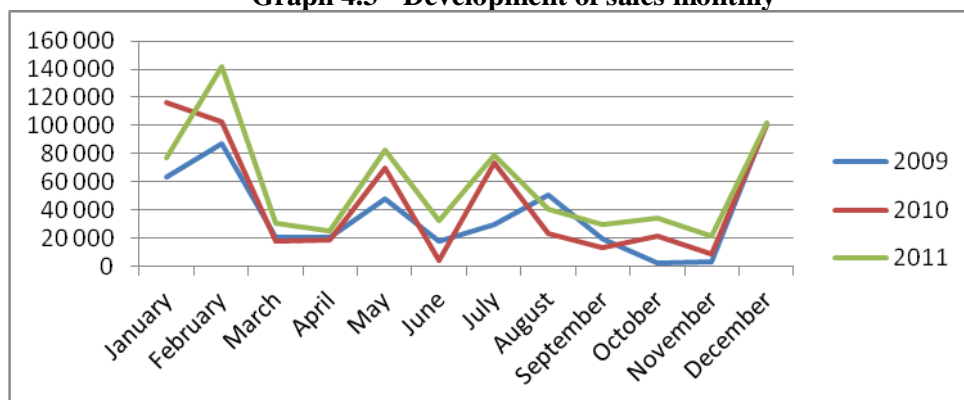
**Table 4.5 - Development of receivables and payables over time**

	Account Receivables	Account Payables
<b>2009</b>	17 560,00	44 648,76
<b>2010</b>	3 750,00	13 970,38
<b>2011</b>	19 875,00	26 787,11

Source: Own calculation based on the company's internal accounting data

From the year 2009 to 2011 there had been an increase of sales by around 23% from year to year. Bedřichov point is an accommodation facility located in mountains and therefore the sales strongly depend on seasons as clear from the graph bellow. The winter months are the most profitable, as Bedřichov is one of the best destinations for cross-country skiing in the Czech Republic and there are also skis lopes not further then 500 meters from the facility. Unfortunately the sales are in very strong correlation to the weather conditions, which also influence the change in sales in both good and bad way.

**Graph 4.3 - Development of sales monthly**



Source: Own construction based on the company's internal accounting data

Formulation of income statement in case of services business has slightly different structure than in case of goods producing business and therefore it will be an income statement by nature. The main difference is in exclusion of Cost of goods sold item, which cannot be calculated exactly, especially in case of small accommodation facility. Following table shows operating expenses of Bedřichov point:

**Table 4.6 - Operating expenses**

<b>FIXED PAYMENTS</b>	<b>REPAIRS AND MAINTANENCE</b>	<b>MATERIAL CONSUMPTION</b>
Energy expenses	Construction work	Cleaning supplies
Municipally fees	Carpentry	Promotional material
Insurance expenses	Joinery	Bedding
Travel expenses	Internet wiring	
Bank fees	Gardening	<b>SERVICES</b>
Social and health care	Wiring	Communication expenses
	Water, plumbing	Internet
<b>WAGES</b>	Heating works	Laundry
Assistant /housekeeping	<b>INVENTORY</b>	Domain – web site
Maintenance	Furniture	Advertising expenses
Temporary operations	Other	Other expenses

So in case of Bedřichov point there is no gross profit to be calculated and as there are no other non-operating incomes the operating profit is equal to EBIT. As already mentioned, the business had not undertake any kind of borrowing and therefore there is no interest to be paid, but there is an interest earned from the bank account. It represents only very small portion of revenues, but it still needs to be included in the income statement, which makes just slight difference between EBIT and EBT. Concerning the income tax, once we exclude the other business activity and calculate the tax base minus the discounts on tax, the result is as low that the business is not obligate to pay income tax in any of the three analysed years and therefore the results of EAT and Net Income are the same values. In following table you may see the calculation of income tax:



**Table 4.7 - Calculation of income tax**

<b>EBIT</b>	<b>76 478,19</b>	<b>22 481,22</b>	<b>120 248,66</b>
<b>Non-taxable items</b>			
Social + Health care	41 100,00	43 650,00	48 020,00
Pension insurance	-12000	-12000	-12000
<b>Tax base</b>	<b>105 578,19</b>	<b>54 131,22</b>	<b>156 268,66</b>
<b>Rounded down to hundreds</b>	<b>105 500</b>	<b>54 100</b>	<b>156 200</b>
Tax from tax base 15%	15 825	8 115	23 430
<b>Tax discounts</b>			
Tax payer	-24840	-24840	-23640
Child	-21360	-11604	-11604
<b>Tax to pay</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: Own calculation based on the company's internal accounting data

Social and health care insurances of individual entrepreneur are not recognised by the Czech Income Tax Law and therefore they must be excluded from expenses for the calculation of income tax, on the other hand pension insurance is calculated into tax base and in case of owner of Bedřichov point, he/she pays CZK 1000 per month to reach the upper limit. Tax rate for all three analysed years was 15% from the tax base which's value needs to be rounded down to whole hundreds. From the gained result, natural person could discount certain amounts, first of all for tax payer itself (the value had been decreasing from year to year) and then for child who are still a students. In year 2009 the owner could apply this discount for two children at the level of CZK 10 680 and in the years 2010 and 2011 only for one child at level of CZK 11604.

#### **4.4. Analysis of extensive (absolute) ratio**

In the previous chapters of practical part of the thesis I have tried to outline the specific context of the analyzed business. The technical financial analysis will now follow starting with examining, based on data from financial statements, the development of chosen business. First of all I will discuss the development of values over time in the horizontal analysis, and then I will discuss the structure in the vertical analysis. Statement of cash flow will be discussed in a separate section *4.6.5 Cash flow analysis*.

##### **4.4.1. Horizontal analysis (trend analysis)**

Trend analysis shows the development of individual items at the time of reporting, by percentage increase in value from the previous period. In case of Bedřichov point it will be

the calendar year. Trend analysis and percentage analysis will be performed for three years of operating 2009, 2010 and 2011, as these years are only full length accounting periods, and they will be conducted for both Income statement and Balance sheet

- **Income statement**

**Table 4.8 - Horizontal analysis of Income statement**

	2009	2010	2011	Absolute change 10/09	% change 10/09	Absolute change 11/10	%change 11/10
<b>Sales</b>	<b>441 053,60</b>	<b>523 681,22</b>	<b>652 735,06</b>	<b>82 628</b>	<b>19%</b>	<b>129 054</b>	<b>25%</b>
<b>Expenses</b>							
Material consumption	7 530,01	51 783,58	129 010,04	44 254	588%	77 226	149%
Energy consumption	73 655,39	55 785,68	64 184,07	-17 870	-24%	8 398	15%
Services	47 765,27	38 873,56	37 157,69	-8 892	-19%	-1 716	-4%
Travel expenses	23 021,00	26 082,00	32 877,00	3 061	13%	6 795	26%
Repairs and maintenance	62 735,74	106 933,18	48 909,60	44 197	70%	-58 024	-54%
Fees	8 000,00	8 000,00	8 000,00	0	0%	0	0%
Wages	28 420,00	47 240,00	43 360,00	18 820	66%	-3 880	-8%
Social + Health care	41 100,00	43 650,00	48 020,00	2 550	6%	4 370	10%
Property insurance	14 196,00	14 196,00	14 196,00	0	0%	0	0%
Depreciation	52 024,00	101 966,00	99 885,00	49 942	96%	-2 081	-2%
Bank account charges	6 128,00	6 690,00	6 887,00	562	9%	197	3%
<b>Total operating exp</b>	<b>364 575,41</b>	<b>501 200,00</b>	<b>532 486,40</b>	<b>136 625</b>	<b>37%</b>	<b>31 286</b>	<b>6%</b>
<b>EBIT</b>	<b>76 478,19</b>	<b>22 481,22</b>	<b>120 248,66</b>	<b>-53 997</b>	<b>-71%</b>	<b>97 767</b>	<b>435%</b>
other inc. (bank ac. Interest)	258,43	122,57	204,61	-136	-53%	82	67%
<b>EBT</b>	<b>76 736,62</b>	<b>22 603,79</b>	<b>120 453,27</b>	<b>-54 133</b>	<b>-71%</b>	<b>97 849</b>	<b>433%</b>
Income tax	0	0	0	0	0	0	0
<b>Net Income</b>	<b>76 736,62</b>	<b>22 603,79</b>	<b>120 453,27</b>	<b>-54 133</b>	<b>-71%</b>	<b>97 849</b>	<b>433%</b>

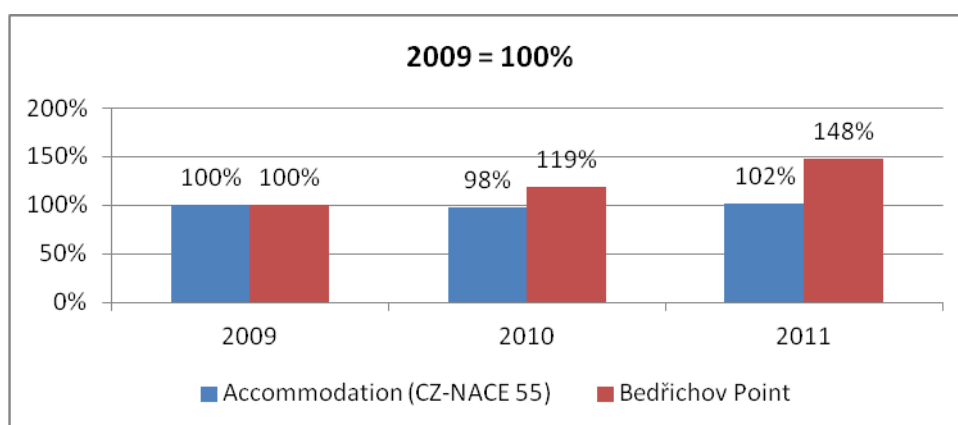
Source: Own calculation based on the company's internal accounting data

The above presented table shows, that in both years 2010 and 2011, there is a rapid increase in sales. The percentage change from year 2010 to 2011 is 25%, which is even greater than in the previous period, where it was still satisfying 19%. On the other hand we may see that the development of total operating expenses values are changing dramatically, and therefore there is no constant trends of values development over time. From the year 2009 to 2010 there has been a dramatic increase by 37%. There are several reasons for this dramatic change, first of all caused by 588% increase in material consumption, where the increase was caused mainly by discarding inventory worth over CZK 45 000. The second reason for dramatic increase in operating expenses is increase by 70% in Repairs and maintenance, which contained of thermally insulation of apartment No.1, which had constant problems with cold climate, worth around CZK 90 000. Also the change in wages

by 66% had its cause on the increase. Wages payments had increased by almost CZK 20 000 in year 2010, thanks to the fact that also the sales had increased and so did need for cleaning and accommodating of guests. Last but not least would be the change of depreciation rose up by 90%, thanks to its accelerated form. An opposite situation had appeared in percentage change from 2010 to 2011, where it was only 6%. As we may see in the table there had been only two greater percentage changes and that would be once again in Material consumption and Repairs and maintenance. In case of Material consumption the change was 149%, which is still a very high percentage, which was caused once again by discarding inventory, but this time the value was over CZK 65 000. Interesting change had presented itself in change of Repairs and maintenance where the percentage resulted negative as -54%. There is a clear reason for that, and that would no major investment in year 2011, as in case of 2010.

Quiet unstable are the results of Net income, where in 2010 the value went down to CZK 22 603 from CZK 76 736 in 2009 and to CZK 120453 in 2011. So if we look at the percentage changes we see that from 2009 to 2010 it was -71% and then massive increase to 433% in years from 2010 to 2011. Such results were influenced by the unstable trend in Total operating expenses, which were overpowering the stably increasing sales.

**Graph 4.4 - Development of sales of the business in comparison with industry<sup>38</sup>**



Source: Czech statistical office

<sup>38</sup> CZECH STATICAL OFFICE

[http://www.czso.cz/csu/redakce.nsf/i/bazicky\\_rok\\_2005\\_klasifikace\\_nace\\_rev\\_2\\_obch\\_od\\_pohostinstvi\\_ubytovani\\_casove\\_rady](http://www.czso.cz/csu/redakce.nsf/i/bazicky_rok_2005_klasifikace_nace_rev_2_obch_od_pohostinstvi_ubytovani_casove_rady)

Graph 4.1 shows the sales at current prices converted to percentages, where the base year 2009 represents 100%, the industry data are total values of NACE 55. From the comparison of sales is clear, that Bedřichov point's sales grew faster than in case of the industry as a whole.

- **Balance sheet**

**Table 4.9 - Horizontal analysis of Balance sheet**

Balance sheet	2009	2010	2011	Absolute change 10/09	% change 10/09	Absolute change 11/10	% change 11/10
<b>Non-current assets</b>							
Property - Building	2 601 153,00	2 601 153,00	2 601 153,00	0,00	0%	0,00	0%
Property - Land	381 598,85	381 598,85	381 598,85	0,00	0%	0,00	0%
Acc. depreciation	-52 024,00	-153 990,00	-253 875,00	-101 966,00	196%	-99 885,00	65%
<b>Total non-curr. Ass.</b>	<b>2 930 727,85</b>	<b>2 828 761,85</b>	<b>2 728 876,85</b>	-101 966,00	-3%	-99 885,00	-4%
<b>Current assets</b>							
Inventory	567 728,26	527 233,33	467 044,27	-40 494,93	-7%	-60 189,06	-11%
Receivables	17 560,00	3 750,00	19 875,00	-13 810,00	-79%	16 125,00	430%
Bank account	231 296,54	181 257,20	237 735,26	-50 039,34	-22%	56 478,06	31%
Cash	202 189,20	400 424,88	621 165,88	198 235,68	98%	220 741,00	55%
<b>Total curr. Ass.</b>	<b>1 018 774,00</b>	<b>1 112 665,41</b>	<b>1 345 820,41</b>	93 891,41	9%	233 155,00	21%
<b>Total assets</b>	<b>3 949 501,85</b>	<b>3 941 427,26</b>	<b>4 074 697,26</b>	-8 074,59	-0,2%	133 270,00	3%
<b>Equity</b>							
Capital	3 828 116,47	3 828 116,47	3 828 116,47	0,00	0%	0,00	0%
Earnings	76 736,62	99 340,41	219 793,68	22 603,79	29%	120 453,27	121%
<b>Total equity</b>	<b>3 904 853,09</b>	<b>3 927 456,88</b>	<b>4 047 910,15</b>	22 603,79	1%	120 453,27	3%
<b>Current liabilities</b>							
Payables - suppliers	27 500,00	2 750,00	1 500,00	-24 750,00	-90%	-1 250,00	-45%
Accrued liab. - VAT	17 148,76	11 220,38	25 287,11	-5 928,38	-35%	14 066,73	125%
<b>Total liabilities</b>	<b>44 648,76</b>	<b>13 970,38</b>	<b>26 787,11</b>	-30 678,38	-69%	12 816,73	92%
<b>Total Eq.+Liab.</b>	<b>3 949 501,85</b>	<b>3 941 427,26</b>	<b>4 074 697,26</b>	-8 074,59	0%	133 270,00	3%

Source: Own calculation based on the company's internal accounting data

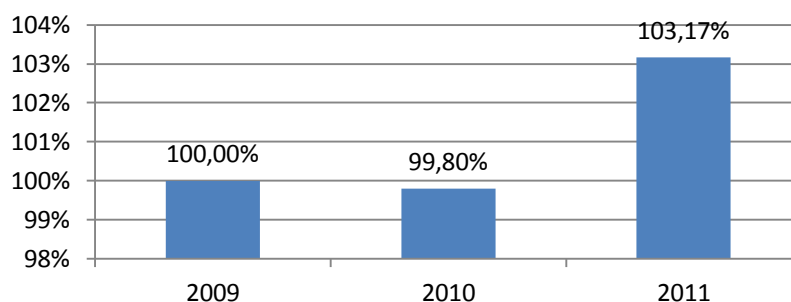
Change in total assets of the business in-between years 2009 and 2010 was nearly negligible – 0,2%, but had slightly increased in the change from years 2010 to 2011 by 3%. The slight change might be caused by the increase in cash, which had constant increasing trend and from year 2009 to 2010 had almost doubled. On the other hand the bank account change had fluctuated from decrease of -22% to increase by 31%. The change of inventory

has constant trend of declining, which is caused by the kind of the business. As most of inventories had been purchased at the beginning of operations, and there is almost no need to repurchase new one for 2-4 years of usage of the first purchased ones, there are mainly items discarded rather than purchased. As for long term tangible assets, such as building and land, there had been no change, because such a small business had no financial resources and neither drive for any expansion.

Development of sources to finance assets had been mainly based on equity, where is capital which remained constant over the years and earnings which had increasing trend. As we may see in the above table the percentage change in earnings from 2009 to 2010 was not as significant compare to the following change where the percentage reached 121%. In section of liabilities we may see dramatic percentage changes; however the CZK amounts are, in comparison to equity values, not as essential.

In following graph 4.2 we may see the development of Balance sheet total over time for clear results interpretation. Unfortunately the data published by Czech Statistical office are not available for the year 2010 and 2011 yet and therefore I am not able to make a comparison of Bedřichov point Balance sheet total results to the industry.

**Graph 4.5 - Development of Balance sheet total**



Source: Own construction based on the company's internal accounting data

#### **4.4.2. Percentage (vertical) analysis**

In this section I will build on the trend analysis and I will consider the relative size of each item in balance sheet and profit and loss account. Vertical analysis represents individual items of accounting statements as percentage of one chosen base taken as 100%.

- **Income statement**

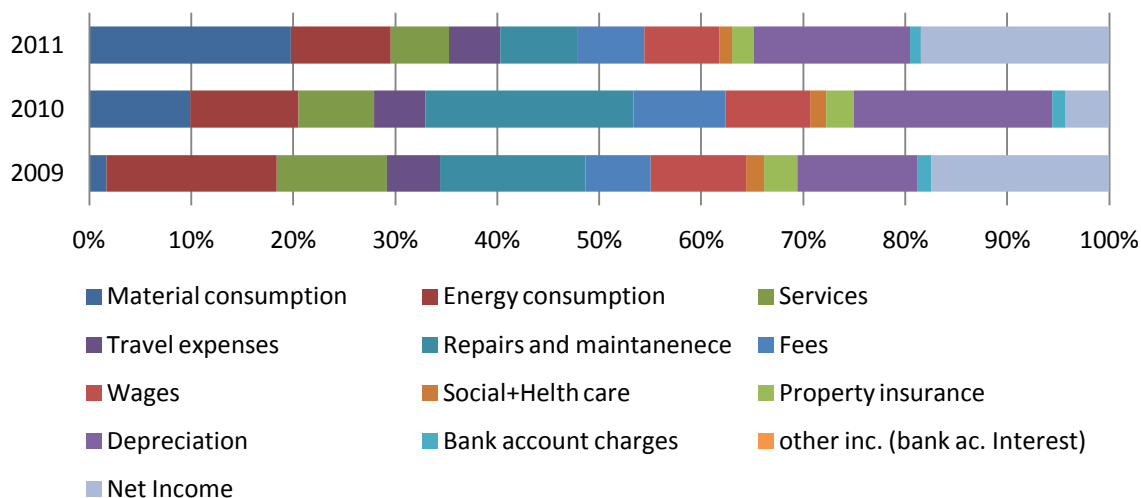
**Table 4.10 - Vertical analysis of Income statement**

Income statement	2009	2010	2011	%	%	%
<b>Sales</b>	<b>441 053,60</b>	<b>523 681,22</b>	<b>652 735,06</b>	<b>100,00%</b>	<b>100,00%</b>	<b>100,00%</b>
<b>Expenses</b>						
Material consumption	7 530,01	51 783,58	129 010,04	1,71%	9,89%	19,76%
Energy consumption	73 655,39	55 785,68	64 184,07	16,70%	10,65%	9,83%
Services	47 765,27	38 873,56	37 157,69	10,83%	7,42%	5,69%
Travel expenses	23 021,00	26 082,00	32 877,00	5,22%	4,98%	5,04%
Repairs and maintenance	62 735,74	106 933,18	48 909,60	14,22%	20,42%	7,49%
Fees	8 000,00	8 000,00	8 000,00	1,81%	1,53%	1,23%
Wages	28 420,00	47 240,00	43 360,00	6,44%	9,02%	6,64%
Social + Health care	41 100,00	43 650,00	48 020,00	9,32%	8,34%	7,36%
Property insurance	14 196,00	14 196,00	14 196,00	3,22%	2,71%	2,17%
Depreciation	52 024,00	101 966,00	99 885,00	11,80%	19,47%	15,30%
Bank account charges	6 128,00	6 690,00	6 887,00	1,39%	1,28%	1,06%
<b>Total operating exp</b>	<b>364 575,41</b>	<b>501 200,00</b>	<b>532 486,40</b>	<b>82,66%</b>	<b>95,71%</b>	<b>81,58%</b>
<b>EBIT</b>	<b>76 478,19</b>	<b>22 481,22</b>	<b>120 248,66</b>	<b>17,34%</b>	<b>4,29%</b>	<b>18,42%</b>
other inc. (bank ac. Interest)	258,43	122,57	204,61	0,06%	0,02%	0,03%
<b>EBT</b>	<b>76 736,62</b>	<b>22 603,79</b>	<b>120 453,27</b>	<b>17,40%</b>	<b>4,32%</b>	<b>18,45%</b>
Income tax	0,00	0,00	0,00	0,00%	0,00%	0,00%
<b>Net Income</b>	<b>76 736,62</b>	<b>22 603,79</b>	<b>120 453,27</b>	<b>17,40%</b>	<b>4,32%</b>	<b>18,45%</b>

Source: Own calculation based on the company's internal accounting data

The above table shows us that the total operating expenses and therefore the Net income percentage share of total sales varies from year to year as already mentioned in horizontal analysis. In case of Bedřichov point the vertical analysis does not give us as many information, due to the fact that there is only one service provide and therefore only one source of revenue. In case of expenses we may see that in year 2009 the largest portion of over 16% was energy consumption. Which is quiet unexpected result as it is the highest amount in comparison to the next two years and to the fact that in 2009 the amount of guests was the lowest from all three years. The cause of such a high energy usage was technical difficulty with heating, which resulted in high energy consumption. In year 2010 the highest portion of expenses is repairs and maintenance with percentage of over 20%. Once again as already mentioned in trend analysis, that was caused by thermal insulation of apartment No.1 worth of CZK 90 000. Right behind repairs and maintenance was depreciation (which in all other years also represents quiet large amount of expenses) with over 19%, caused by almost double amount from the year 2009 as it is a accelerating depreciation. Material consumption was the largest amount of total operating expenses, as it was almost 20% of it. Such a fact was caused by discarding of large amount of inventory worth over CZK 65 000. For better orientation of the results of vertical analysis, please see following graph:

**Graph 4.6 - Vertical analysis, percentage shares of sales**



Source: Own construction based on the company's internal accounting data

- Balance sheet**

**Table 4.11 - Vertical analysis of Balance sheet**

Balance sheet	2009	2010	2011	%	%	%
<b>Non-current assets</b>						
Property - Building	2 601 153,00	2 601 153,00	2 601 153,00	65,86%	66,00%	63,84%
Property - Land	381 598,85	381 598,85	381 598,85	9,66%	9,68%	9,37%
Accumulated depreciation	-52 024,00	-153 990,00	-253 875,00	-1,32%	-3,91%	-6,23%
<b>Total non-current assets</b>	<b>2 930 727,85</b>	<b>2 828 761,85</b>	<b>2 728 876,85</b>	<b>74,21%</b>	<b>71,77%</b>	<b>66,97%</b>
<b>Current assets</b>						
Inventory	567 728,26	527 233,33	467 044,27	14,37%	13,38%	11,46%
Receivables	17 560,00	3 750,00	19 875,00	0,44%	0,10%	0,49%
Bank account	231 296,54	181 257,20	237 735,26	5,86%	4,60%	5,83%
Cash	202 189,20	400 424,88	621 165,88	5,12%	10,16%	15,24%
<b>Total current Assets</b>	<b>1 018 774,00</b>	<b>1 112 665,41</b>	<b>1 345 820,41</b>	<b>25,79%</b>	<b>28,23%</b>	<b>33,03%</b>
<b>Total assets</b>	<b>3 949 501,85</b>	<b>3 941 427,26</b>	<b>4 074 697,26</b>	<b>100,00%</b>	<b>100,00%</b>	<b>100,00%</b>
<b>Equity</b>						
Capital	3 828 116,47	3 828 116,47	3 828 116,47	96,93%	97,13%	93,95%
Earnings	76 736,62	99 340,41	219 793,68	1,94%	2,52%	5,39%
<b>Total equity</b>	<b>3 904 853,09</b>	<b>3 927 456,88</b>	<b>4 047 910,15</b>	<b>98,87%</b>	<b>99,65%</b>	<b>99,34%</b>
<b>Current liabilities</b>						
Payables - suppliers	27 500,00	2 750,00	1 500,00	0,70%	0,07%	0,04%
Accrued liabilities - VAT	17 148,76	11 220,38	25 287,11	0,43%	0,28%	0,62%
<b>Total liabilities</b>	<b>44 648,76</b>	<b>13 970,38</b>	<b>26 787,11</b>	<b>1,13%</b>	<b>0,35%</b>	<b>0,66%</b>
<b>Total Equity + Liabilities</b>	<b>3 949 501,85</b>	<b>3 941 427,26</b>	<b>4 074 697,26</b>	<b>100,00%</b>	<b>200,00%</b>	<b>300,00%</b>

Source: Own calculation based on the company's internal accounting data

For balance sheet analysis, the amount of the total assets (respectively total liabilities and equity) is taken as a base 100%. The structure of business's assets corresponds to its purpose of operations, where there is a high portion, almost 3/4 of non-current assets, mainly the long-term tangible assets and lower portion – 1/4 of current assets, which has very slow trend of slightly increasing over the time. Inventory remains without any major changes, there are only slight decreases, where on the other hand cash, as another item of current assets, shows significant steady increase by 5% each year. So in the year 2011 it represents the largest portion of current assets and that is 15% from total assets. Once we would add together cash and bank account we would see that the business is at all three years above 10% of total assets, which is considered as an indicator of financial health of the business. Receivables in case of Bedřichov point represents only insignificant portion of assets. The structure of equity versus liabilities is also very promising for the business as financing is almost by 100% carried out by equity and liabilities represents only about 1% of total financing.

## 4.5. Analysis of financial resources funds

### 4.5.1. Analysis of net working capital

Net working capital is calculated as difference between the value of total current assets, which in case of Bedřichov point contains Inventory, Receivables, Bank account and Cash, and total current liabilities, containing only payables for services and VAT payable. As we may see in the table below the results of Net working capital for Bedřichov point are not only positive, but also very high and constantly increasing. It is an indicator business solvency - the higher the value the better chance for the business to pay its financial obligations.

**Table 4.12 - Results of Net working capital ratio**

	2009	2010	2011
<b>Current assets</b>	1 018 774,00	1 112 665,41	1 345 820,41
<b>Current liabilities</b>	44 648,76	13 970,38	26 787,11
<b>NWC</b>	974 125,24	1 098 695,03	1 319 033,30



#### 4.5.2. Analysis of net quick assets

Compare to net working capital, net quick assets ratio is stricter, because it excludes inventory from Current assets. A large amount of net quick assets often characterizes a conservative firm with a very liquid financial position, which is also a case of Bedřichov point, as its results are fairly high, as visible in following table:<sup>39</sup>

**Table 4.13 - Results of Net working assets ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Available funds</b>	451 045,74	585 432,08	878 776,14
<b>Current liabilities</b>	44 648,76	13 970,38	26 787,11
<b>NQA</b>	<b>406 396,98</b>	<b>571 461,70</b>	<b>851 989,03</b>

#### 4.6. Analysis of financial ratios

This chapter will contain analysis of individual ratios divided into categories according to their purposes, as divided in the theoretical part of the thesis. In each category there will be applied only the ratios which are relevant to the purpose of financial analysis of given business. Very interesting would be to compare the business results of ratios to the industry, but as there are no industry data available I am not able to do so.

##### 4.6.1. Analysis of profitability

Profitability ratios are generally used financial indicators for evaluating the effectiveness of the business. Therefore I will also, due to the aim of my thesis, pay appropriate portion of my attention to these indicators. The analysis of profitability ratios will be followed by further financial ratios analysis and then the focus will return to the profitability ratios analysis in the pyramid decomposition models of profitability. As the most general form of profitability ratios is Profit over invested capital, analyst may choose what exact item to place into nominator and denominator. In case of Bedřichov point the nominator will be represented by Net Income. As due to the fact that analysed business does not pay any interest, but only receives interest from bank account which is never higher than CZK 270, which makes basically no difference between EBIT and EBT. Also

---

<sup>39</sup> The calculation of Net Monetary receivables funds is not necessary, due to the fact that the results would be in case of Bedřichov point the same as Net Quit assets

the business did not have such a high EBT to be obligate to pay income tax in any of the three analysed years and therefore the results of EAT and Net Income are the same values.

- **Return on Equity (ROE)**

This ratio measures how much the owner earned for his/her investment into the business, by comparing its net income to its equity. As the value of total equity is up to curtain date, which may cause inaccurate result, it is recommended to calculate average. In case of analysed business the differences in equity values from year to year are inconsiderable and therefore I will not calculate the averages. The higher the ratio percentage, the more efficient management is in utilizing its equity and the better return is to investors. In the table below we may see the results and they are not satisfying at all. In the year 2010 ROE even decreased to 0,58%. The results basically tell us that there are no earnings created by original investment into the business. In the year 2011 the ROE had increased to almost 3% and it can be expected to grow in future years, based on the fact that there are no expectations of further investment needed and that the sales are still increasing rapidly. The industry data for years 2009, 2010 and 2011 are not available, however the results for ROE in the industry (according to OKEČ-55) in between years 2000 till 2007, were in average 11,5%, but in years 2006 and 2007 there was large decline to even 7,5%. It is still a lot higher percentage than in case of Bedřichov point, but once we take into consideration that equity represents almost 100% of its total assets, and in the industry it is around 33%, the results are incomparable.

**Table 4.14 - Results of Return of equity ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Net income</b>	76 736,62	22 603,79	120 453,27
<b>Total Equity</b>	3 904 853,09	3 927 456,88	4 047 910,15
<b>ROE</b>	<b>1,97%</b>	<b>0,58%</b>	<b>2,98%</b>

- **Return on Assets (ROA)**

Similar to return on equity, return on assets is another important profitability ratio that owner can utilize. ROA represents how much profit a company generated for each CZK 1 in assets. Once again I have used Net income in nominator, as it would make no difference if I would use EBIT. The results of ROA, stated in the table below are almost corresponding with the results of ROE, which is caused by the fact that equity represents

roughly 99% of total external sources. The industry data for years 2009, 2010 and 2011 are not available, however the results for ROA in the industry (according to OKEČ-55) in between years 2000 till 2007, were in average 3,7%. It is higher than results of Bedřichov point, but not too far apart and if the trend would continue in increasing it could be expected that in next year the ROA result would be already above industry average.<sup>40</sup>

**Table 4.15 - Results of Return on assets ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Net income</b>	76 736,62	22 603,79	120 453,27
<b>Total assets</b>	3 949 501,85	3 941 427,26	4 074 697,26
<b>ROA</b>	<b>1,94%</b>	<b>0,57%</b>	<b>2,96%</b>

- **Return on Capital Employed (ROCE)**

For calculation of ROCE I had used in nominator once again the Net income and in denominator the capital employed, which is calculated by Total assets minus current liabilities. The results are once again basically the same as in the two previous ratios.

**Table 4.16 - Results of Return on capital employed ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Net income</b>	76 736,62	22 603,79	120 453,27
<b>Capital employed</b>	3 904 853,09	3 927 456,88	4 047 910,15
<b>ROCE</b>	<b>1,97%</b>	<b>0,58%</b>	<b>2,98%</b>

- **Profit Margin on Sales (PMOS)**

Results of these ratios show how much profit is generated from every CZK of sales. Usually, the profit margins are calculated in three levels of income statement gross, operating and net. But in case of Bedřichov point as it provides services there are not costs of goods sold and therefore there is no gross margin and so not gross PMOS. In case of operating profit margin, I have used the EBIT in the nominator, even thou it usually consists of operating profit, but in case of the analysed business the values are the same. As we may see in the table below both operating and net PM have almost the same results, which is caused once again by only little difference between EBIT and net income. The

---

<sup>40</sup> Return on investment, which is basically the net ROA will not be calculated as it would not be relevant for analysed business. Also the Return on sales ratio will not be calculated as once again it would be irrelevant.

results are quiet satisfying in the years 2009 and 2011, where they are close to 20%, on the other hand in the year 2010 we may see strong decline.

**Table 4.17 - Results of Profit margin on sales ratios**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>EBIT</b>	76 478,19	22 481,22	120 248,66
<b>Sales</b>	441 053,60	523 681,22	652 735,06
<b>Operating PMOS</b>	<b>17,34%</b>	<b>4,29%</b>	<b>18,42%</b>
<b>Net income</b>	76 736,62	22 603,79	120 453,27
<b>Sales</b>	441 053,60	523 681,22	652 735,06
<b>Net PMOS</b>	<b>17,40%</b>	<b>4,32%</b>	<b>18,45%</b>

#### 4.6.2. Analysis of liquidity

Liquidity ratios show the business's ability to convert its assets to funds, used to pay its obligations. Formulas contain in the numerator by what is the business able to pay, while in denominator is what must be paid.

- **Current ratio**

Current ratio measures company's ability to pay its short-term obligations. The results in following table show how many times current liabilities, which in case of the analysed business means only payables, are covered by short-term assets (cash and its equivalents, inventory, receivables). The results are very promising, as we may see that they are very high, even thou there are varying a lot. But as the business has no debt and only very low payables it could be expected, however the business may be considered very liquid.

**Table 4.18 - Results of Current ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Current assets</b>	1 018 774,00	1 112 665,41	1 345 820,41
<b>Current liabilities</b>	44 648,76	13 970,38	26 787,11
<b>Current ratio</b>	<b>22,82</b>	<b>79,64</b>	<b>50,24</b>

- **Quick ratio**

In comparison with current ratio the quick ratio is more conservative and more likely used liquidity measure because of exclusion of inventory from current assets. The results declined roughly by 50%, but even after exclusion of inventory, the results still prove the business to be liquid.

**Table 4.19 - Results of Quick ratio**

	2009	2010	2011
<b>Current assets - Inventory</b>	451 045,74	585 432,08	878 776,14
<b>Current liabilities</b>	44 648,76	13 970,38	26 787,11
<b>Quick ratio</b>	<b>10,10</b>	<b>41,91</b>	<b>32,81</b>

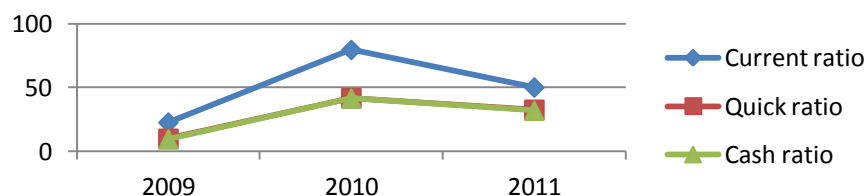
- **Cash ratio**

Cash ratio is even more precise than both ratios mentioned above as it represents the ability of the business to pay its current liabilities only by cash or cash equivalents. As Bedřichov point had only low value of receivables as a difference to previous ratio, the change in results is not as dramatic and once again cash ratio results prove the business to be liquid.

**Table 4.20 - Results of Cash ratio**

	2009	2010	2011
<b>Cash and Cash equivalents</b>	433 485,74	581 682,08	858 901,14
<b>Current liabilities</b>	44 648,76	13 970,38	26 787,11
<b>Cash ratio</b>	<b>9,71</b>	<b>41,64</b>	<b>32,06</b>

**Graph 4.7 - Development of Liquidity ratios over time**



Source: Own construction based on the company's internal accounting data

#### 4.6.3. Analysis of financial stability

Ratios of financial stability provide a general idea of the business's overall debt load as well as its mix of equity and debt. As in case of Bedřichov point there are no other debts, than payables. Debt ratios may be used to determine the overall level of financial risk which the business is facing. In case of Bedřichov point, the financing goes entirely from internal sources, which is supported by the calculation of Debt and Equity ratio, so there is no need to calculate Debt-Equity ratio as the result would tell us the same information.

Times interest earned ratio is also inadequate to be calculated in case of Bedřichov point as there is no debt on which would be calculated any interest.

- **Debt Ratio**

It is a ratio that indicates the proportion of business's liabilities relative to its assets. The measure gives an idea of the business leverage and it also provides the information about potential risks the business might be facing in terms of its debt amount. The results in following table clearly state that there is basically no risk undertaken by the business, which is expected due to the fact that the business has no loans or any other similar debt, they would have to be taking care of.

**Table 4.21 - Results of Debt ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Total liabilities</b>	44 648,76	13 970,38	26 787,11
<b>Total asset</b>	3 949 501,85	3 941 427,26	4 074 697,26
<b>Debt ratio</b>	<b>1,13%</b>	<b>0,35%</b>	<b>0,66%</b>

- **Equity Ratio**

This is a complementary ratio to the debt ratio mentioned above and their sum is equal to 100%. The Equity ratio measures the proportion of the total assets that are financed from internal sources. The results show that almost 100% of total assets are financed from internal sources. If we exchange nominator with denominator we will get the results of another useful indicator, so called financial leverage multiplier. We may see that the FLM of Bedřichov point is almost equal to nothing, so there is basically no debt used to purchase assets. FLM will be used once again in Du Pont system of ratios.

**Table 4.22 - Results of Equity ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Total equity</b>	3 904 853,09	3 927 456,88	4 047 910,15
<b>Total asset</b>	3 949 501,85	3 941 427,26	4 074 697,26
<b>Equity ratio</b>	<b>98,87%</b>	<b>99,65%</b>	<b>99,34%</b>
<b>FLM</b>	<b>1,011</b>	<b>1,004</b>	<b>1,007</b>

#### 4.6.4. Analysis of activity

Analysis of activity is performed based on activity ratios, which are exploring the relationship of assets and their components in proportion to sales. Relations take the form of the correlation, possibly in the form of turnover times, where days are the unit. Such

kind of ratios is frequently used to compare the business to other in the industry; unfortunately data for industry are not available.

- **Asset Turnover**

This ratio measures a business's efficiency at using its assets for generating sales. The results clearly show that in case of Bedřichov point, the business is not using its assets to generate sales almost at all. But in regard to its purpose of business it is not to come as a surprise. Even thou the results are very low we can still see that the trend is constantly increasing in studied periods of time and would be expected to still increase in the future.

**Table 4.23 - Results of Asset turnover ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Sales</b>	441 053,60	523 681,22	652 735,06
<b>Total asset</b>	3 949 501,85	3 941 427,26	4 074 697,26
<b>AT</b>	<b>0,11</b>	<b>0,13</b>	<b>0,16</b>

- **Inventory Turnover**

The ratio represents how many times, in curtain period, the inventories are transformed into different forms of assets until service sold. The index may also be expressed by period of time, usually in amount of days, which is calculated as 365 over inventory turnover. Bedřichov point's inventory represents such items as furniture, kitchen equipment and so on, and is not used and replaced as often as it might by in other industries such as manufacturing. Therefore we may see in the table of results that inventory turnover period is quiet long. In the first year the period was the longest, of 470 days, as most of the inventory items were bought at the beginning of operations, and yet there was no need of using – replacing them. In following years the period is declining to 367 days in 2010 and even further more to 261 days in 2011. This is caused by the fact that some of the inventories had been already discarded, but there was no need yet to replace them all.

**Table 4.24 - Results of Inventory turnover ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Sales</b>	441 053,60	523 681,22	652 735,06
<b>Inventory</b>	567 728,26	527 233,33	467 044,27
<b>IT</b>	<b>0,78</b>	<b>0,99</b>	<b>1,40</b>
<b>IT period</b>	<b>470</b>	<b>367</b>	<b>261</b>

- **Account Receivables Turnover**

Once again this ratio represents in how long the account receivables are transformed into cash. It can be expressed in many forms including accounts receivable turnover in days which would be calculated analogically as Inventory Turnover period. Account receivables are in case of Bedřichov point very low and therefore it is not very difficult to turn them into cash. As we may see from the table below the receivable turnover period is only few days. The longest period, 14 days, is in the year 2009 and on the other hand the shortest period of two and half days is in 2010, we may see that the results mainly depend on the change in the value of receivables.<sup>41</sup>

**Table 4.25 - Results of Account receivables turnover ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Sales</b>	441 053,60	523 681,22	652 735,06
<b>Receivables</b>	17 560,00	3 750,00	19 875,00
<b>ART</b>	<b>25,12</b>	<b>139,65</b>	<b>32,84</b>
<b>ART period</b>	<b>14,53</b>	<b>2,61</b>	<b>11,11</b>

#### 4.6.5. Cash flow analysis

Cash flow analysis does not work, as in case of Income statement, with incomes and expenses, but with actual cash receipts and cash payments in curtain period of the business. These are presented in following table:

**Table 4.26 - Cash flow statement over time**

<b>Cash Flow</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Opening balance</b>	<b>295 647,23</b>	<b>433 485,74</b>	<b>581 682,08</b>
Net Income	76 736,62	22 603,79	120 453,27
Depreciation	52 024,00	101 966,00	99 885,00
Changes in receivables	-17 560,00	13 810,00	-16 125,00
Change in payables	44 648,76	-30 678,38	12 816,73
Changes in inventory	-18 010,87	40 494,93	60 189,06
<b>Cash Flow</b>	<b>137 838,51</b>	<b>148 196,34</b>	<b>277 219,06</b>
<b>closing balance</b>	<b>433 485,74</b>	<b>581 682,08</b>	<b>858 901,14</b>

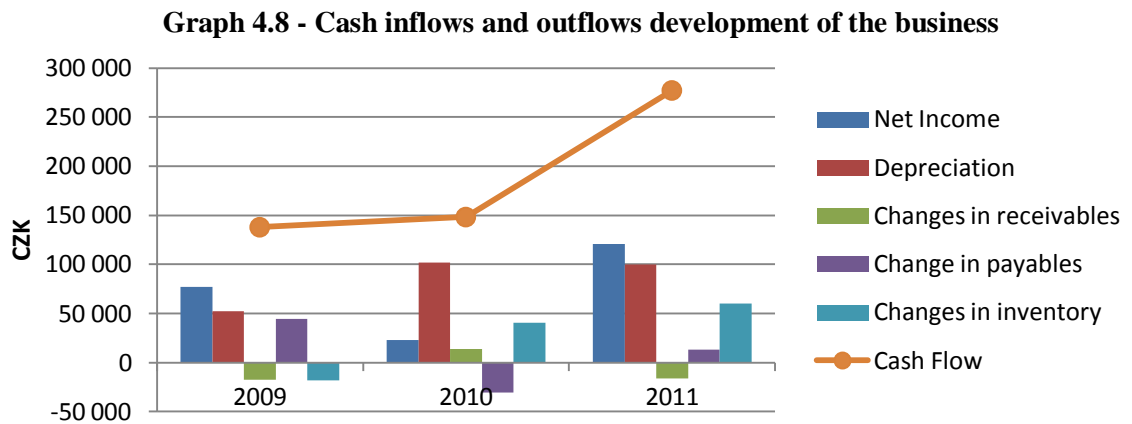
Source: Own calculation based on the company's internal accounting data

Numerical statement of cash flows is for better orientation supplemented by graphical presentation of results in three analysed periods of business activity. At first sight it is clear

<sup>41</sup> I did not calculate the Account payable turnover as payables in all free years are as of such a low value and could be paid a many time from cash or bank account.



that the increase in net financial sources deferrers rapidly from the results of Income statement. Two of the cash flow ratios mentioned in the theoretical part, Cash flow level of self-financing investment and Cash flow interest expenses coverage, are not going to be calculated, as they would be irrelevant in case of Bedřichov point.



Source: Own construction based on the company's internal accounting data

- **Cash flow solvency ratio**

This ratio is as an alternative to a common liquidity ratio and represents the ability of the business to pay its Current liabilities from the cash flow in given period of time. As mentioned in the theoretical part there are two ways of calculating Cash flow solvency and the difference between them two is in denominator, where in one case there are only Current liabilities and in the other there are Total liabilities. In case of Bedřichov point these two items represent the same result, as there are no Long-term liabilities. As we may see in the table below, the results of Cash flow solvency ratio for analysed business are for all three years very high, which indicates that the company has plenty of cash flow to settle obligations. In year 2009 is the result slightly lower than in case of the following two years, but still it was a very satisfying result.

**Table 4.27 - Results of Cash flow solvency ratio**

	2009	2010	2011
<b>Cash flow</b>	137 838,51	148 196,34	277 219,06
<b>Current liabilities</b>	44 648,76	13 970,38	26 787,11
<b>CFSR</b>	<b>3,09</b>	<b>10,61</b>	<b>10,35</b>

- **Operating cash flow margin**

The operating cash margin ratio is somewhat similar to a traditional profit margin ratio except for the use of CFO in place of net income as the numerator over sales. As we may see in the following table with the results of the ratio, in case of Bedřichov point the results are in all three years positive and quite high. A high operating cash margin is indicating that the business is efficient at converting sales to cash. So in the year 2011 the business had about 42% of cash available from the sales, where in the previous periods the percentages were a little lower.

**Table 4.28 - Results of Operating cash flow margin ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Cash flow</b>	137 838,51	148 196,34	277 219,06
<b>Sales</b>	441 053,60	523 681,22	652 735,06
<b>OCFM</b>	<b>31,25%</b>	<b>28,30%</b>	<b>42,47%</b>

- **Cash flow profitability of total asset**

This ratio compares in the numerator cash flow from operations to the value of total asset in the denominator and it indicates how well the assets of a company are utilized to generate a cash flow return. As in case of Bedřichov point there is almost no investment into assets necessary, as it would be for example in manufacturing and therefore quite low percentage results are not as much of a bad news.

**Table 4.29 - Results of Cash flow profitability of total asset ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Cash flow</b>	137 838,51	148 196,34	277 219,06
<b>Total assets</b>	3 949 501,85	3 941 427,26	4 074 697,26
<b>CRA</b>	<b>3,49%</b>	<b>3,76%</b>	<b>6,80%</b>

- **Cash flow profitability of Equity**

Ratio indicates how much cash flow is relevant to 1CZK of invested capital. The ratio contains the cash flow from operations over Equity, so there is no influence of depreciation. Results in following table are strongly influenced by the fact that Bedřichov point's business activities are financed from internal sources by almost 100%.

**Table 4.30 - Results of Cash flow profitability of equity ratio**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Cash flow</b>	137 838,51	148 196,34	277 219,06
<b>Total Equity</b>	3 904 853,09	3 927 456,88	4 047 910,15
<b>CFPE</b>	<b>3,53%</b>	<b>3,77%</b>	<b>6,85%</b>

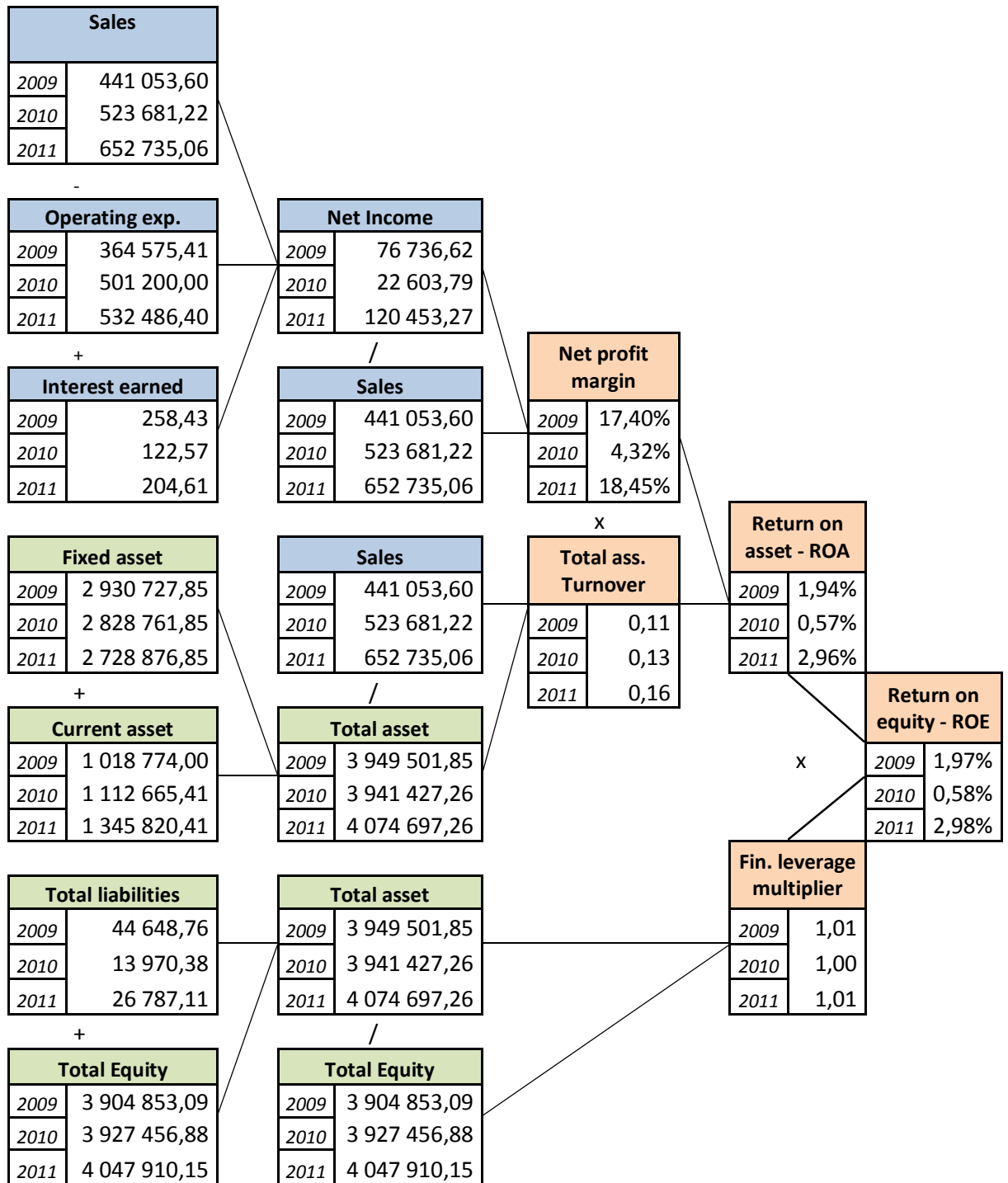
#### **4.7.Du Pont system**

Ratios calculated in previous chapters have many elements in common and are interrelated, as they are derived from key components of the same financial statements, and therefore they may be viewed as a system. Such a system turns a series of ratios into a dynamic display highlighting the elements that are the most important.

I will be using the most commonly used Du Pont pyramid diagram. By Du Pont system of analysis will be dissected the business's financial statements and assessed its financial condition. It merges the income statement, which in the diagram is represented by blue colour, and balance sheet, which's items are in the diagram represented by green colour, into two summary measures of profitability ROA and ROE. In case of Bedřichov point the diagram will be based on Net income, as due to the fact that the business is not obliged to pay income tax in any of the three analysed years of operations. I will be constructing the modified DuPont Formula which relates the business's ROA to its ROE using the financial leverage multiplier (FLM), the ratio of total assets over total equity, in case of Bedřichov point, instead of common stock equity. Converting ROA into ROE by use of the FLM takes into consideration the impact of financial leverage on the owner's return, but clearly in this case there is almost no impact of FLM in any of the three years analysed, because not only there is no change in the results over the years but also, and most importantly, the values are so low, that level of ROE is mainly influenced by the changes in ROA, but would need the FLM to be at least 2,5 to reach the level of industry performance in previous years. Once again the reason is that the business uses basically no debt to purchase assets. Return on asset values are quiet low, but luckily in the year 2011, the value had increased up to almost 3% which is a promising result for the future development. The Du Pont system calculates the ROA by multiplying Net profit margin and Total asset turnover. Net profit margin measures the firm's profitability on sales and that in case of analysed business had very satisfying results of around 18% in years 2009 and 1011, however there was a rapid decline in year 2010 all the way to 4,3%, which also

results in significant decline of ROA in year 2010. On the other hand, Total asset turnover, which indicates how efficiently the business has used its assets to generate sales, had very low values of not even 0,2 which had the main impact on the general lower level of ROA. The main reason for such a low total asset turnover results is the disparity between sales and total assets. This problem is related to the industry as well as to the business performance itself. Accommodation business activity of such a standard requires large portion of investment before the start of operating and at then there is no need for continues investments and purchases for few years from the opening. The other reason is that the analysis are conducted on the first three years of the business operating and that is the most unstable period of any business. Therefore the sales are not as high as they probably will be, once the business stabilises.

**Scheme 4.1 - DuPont pyramid diagram containing results**



Source: Own calculation based on the company's internal accounting data

## **5. Results and discussion**

The practical part of the thesis contained construction of financial statements which were most suitable for the business and its specifications. Based on the statements I had conducted the financial analysis of chosen business, from which I had gained several results. This chapter will contain not only discussion of financial statements construction problematic, summary and discussion of financial analysis results, but also prove or disprove of the hypotheses stated by the owner and also evaluation of applied suggestions from my bachelor thesis. Application of these suggestions plays important role in the financial results of the business and not only on the side of sales but also expenses. As in the conclusion I will be proposing further suggestions for increase in the business profit, the previous suggestions and its application will strongly influence it.

### **5.1. Discussion of Financial statements construction**

Another objective, based on which the main objective can be fulfilled, is to compose financial statements, most suitable for the purpose of chosen business financial analysis. As the owner has two business activities, but is a natural person with one identification number of natural person (IČO), he/she has combined accounting for both of mentioned activities. The accommodation facility business activity needs to be separated from the main activity to clearly analyse the financial activities of the analysed activity only, as it is not as transparent while combined with the main activity.

As quality data base is the most important factor of precise and solid financial analysis I had conducted financial statements for Bedřichov point from primary documents. The most problematic construction of financial statement appears with income statement, which can be constructed in many ways. For the purpose of financial analysis of Bedřichov point, as a small business, I had constructed the single step income statement according to IFRS in the form by nature. The main reason is that Czech income statement does not include categories of profit such as EBIT. Unfortunately even the fact that I had followed international standard did not provide me with the certainty of which items belong to which section of income statement. Different sources do not agree on placement of items such as bank account fees or earned interest from bank account into the income statement.

Such differentiations make it very difficult for the forms of profit such as EBIT to be comparable. What is also important to mention is that income statement in case of services business has slightly different structure than in case of goods producing business and the main difference is in exclusion of Cost of goods sold, which cannot be calculated exactly, especially in case of small accommodation facility such as Bedřichov point. Therefore the gross profit can not to be calculated and as there are no other non-operating incomes the operating profit is equal to EBIT. As already mentioned, the business had not undertake any kind of borrowing and therefore there is no interest to be paid, but there is an interest earned from the bank account. It represents only very small portion of revenues, but it still needs to be included in the income statement, which makes just slight difference between EBIT and EBT. Concerning the income tax, once we exclude the other business activity and calculate the tax base minus the discounts on tax, the result is as low that the business is not obligate to pay income tax in any of the three analysed years and therefore the results of EAT and Net Income are of the same values.

## **5.2. Results of financial analysis**

From the analysis of financial resources funds is clear that Bedřichov point is very solvent and with very liquid financial position. The results of both Net working capital quick assets ratios are very high and tend to increase from year to year.

Profitability analysis did not present clear results, which is due to the structure and allocation of individual costs to its purpose. If we take the ROA for instance the results were lower than industry results in previous years, but if the insulation of apartment No.1 in year 2010, worth around CZK 90 000, would be considered as technical appreciation of fixed asset rather than as an expense, than it would increase the value of assets. So the net income and total assets would be higher by CZK 90 000 and the results of ROA for the year 2010 would increase from 0,57% to 2,79%. Therefore the lower value of ROA in that year is only due to the expenses accounting approach of the reconstruction and modernization of the facility.

Financial leverage shows a positive result by very low numbers. It is indicating that it would be beneficial for the business to use external capital, which would increase its overall profitability of capital. As the level of equity would be lowered the ROE would

increase to similar level as the industry had in previous periods, however the result would only relatively look better. At the moment ROE is at very low percentage.

The results of all three liquidity ratios resulted with very high values which presented the business to be extremely liquid, which is due to the fact that it has no loan or any other form of external financing. For the accommodation facility purpose of business it would be more favourable to have lower values, because the extensive amount of available money results in losing revenues. To lower the values with the results of increased revenues the business might either invest or place the money to saving account. The current situation is that for CZK 1 of liabilities there is CZK 10,1 in cash in 2009 and CZK 41,9 in 2010. Such results also occur due to the fact that many sales in the business are in cash and short-term liabilities are of low value.

Results of asset turnover ratio are in general recommended to be 1.6 – 3, but in case of accommodation industry the total assets turnover is generally lower due to the building and land owned, in previous periods the values in industry were around 0,8. Results of Bedřichov point were of very low values not even 0,2 which had the main impact on the general lower level of ROA. The main reason for such a low total asset turnover results is the disparity between sales and total assets. This problem is related to the industry as well as to the business performance itself. Accommodation business activity of such a standard requires large portion of investment before the start of operating and at then there is no need for continues investments and purchases for few years from the opening. The other reason is that the analysis are conducted on the first three years of the business operating and that is the most unstable period of any business. Once again the values of account receivables turnover are strongly influenced by the industry. As in accommodation industry, the payments for services are done mainly by cash or by credit card in immediate period of time to the stay, therefore the receivables are of low level and the turnover period is very short.

The great difference between net income and cash flows, which where both in positive values, is due to the depreciation, as it is an expense, but it is not dispensing money.



### **5.3. Prove or disprove of hypotheses**

There were two hypotheses, stated by the owner, to be proved or disproved. First one of them was concerning the sales and the expectation was, for the first calendar year of operating, to reach level of CZK 500 000 and to be increasing by 20% from year to year during first 3 years of operating, before stabilisation. In the *table 5.1 - Development of expenses and sales from year to year regarding to hypotheses* we may see the differences between expected and actual values of sales in analysed three years of operating. Unfortunately the level of sales was lower than expected in all three years. In the table we may also see the percentage difference between the expected and actual values which are lower than expected, but the percentages by which they increase from year to year are even better than expected. Expected percentage change was to be 20% from year to year and in reality the change from year 2009 to 2010 was by 19% and from 2010 to 2011 it was even by 25%. It can be expected that change into next period will be also greater, just probably by not as high percentage.

The second hypothesis is concerning the development of operating costs, excluding extraordinary items such as repairs or purchases/discarding of any inventory. It was expected, that in the first calendar year of operating the amount would be CZK 200 000 and to be increasing by 10% from year to year during first 3 years of operating, before stabilisation. Constant expenses include building insurance and municipally fee. As we may see from the *Table 5.1 - Development of expenses and sales from year to year regarding to hypotheses* the actual values of operating costs in total are in years 2009 and 2010 lower than expected and in year 2011 they are higher by 9%. Such an increase was caused by dramatic increase in propagation material, where in year 2011, there was a large investment into several items for propagation. From the percentage change we may see that there was no item listed which would have the expected development of increasing by 10% from year to year, but in total the change from year 2009 to 2010 the change was 12% which is almost equal to expectations. However the owner did not count with other expenses which might be included as well.

**Table 5.2 - Development of expenses and sales from year to year based on hypotheses**

Expenses	Expected			Actual			% difference			% change	
	2009	2010	2011	2009	2010	2011	2009	2010	2011	09/10	10/11
Energy	66 000	72 600	79 860	87 650	66 669	76 708	33%	-8%	-4%	-24%	15%
Wages	50 000	55 000	60 500	28 420	47 240	43 360	-43%	-14%	-28%	66%	-8%
Laundry	17 000	18 700	20 570	13 880	22 069	20 362	-18%	18%	-1%	59%	-8%
Travel expenses	24 000	26 400	29 040	23 021	26 082	32 877	-4%	-1%	13%	13%	26%
Web presentations	10 000	11 000	12 100	5 627	14 723	10 773	-44%	34%	-11%	162%	-27%
Propagation material	10 000	11 000	12 100	750	3 600	71 104	-93%	-67%	488%	380%	1875%
Communication	20 000	22 000	24 200	4 200	6 747	8 722	-79%	-69%	-64%	61%	29%
Material consumption	5 000	5 500	6 050	8 685	7 552	4 692	74%	37%	-22%	-13%	-38%
Constant expenses	23 000	23 000	23 000	22 196	22 196	22 196	-3%	-3%	-3%	0%	0%
<b>TOTAL EXPENSES</b>	<b>225 000</b>	<b>245 200</b>	<b>267 420</b>	<b>194 429</b>	<b>216 879</b>	<b>290 794</b>	<b>-14%</b>	<b>-12%</b>	<b>9%</b>	<b>12%</b>	<b>34%</b>
<b>SALES</b>	<b>500 000</b>	<b>600 000</b>	<b>720 000</b>	<b>441 054</b>	<b>523 681</b>	<b>652 735</b>	<b>-12%</b>	<b>-13%</b>	<b>-9%</b>	<b>19%</b>	<b>25%</b>

## 5.4. Evaluation of applied suggestions from BT

Based on the results of my bachelor thesis, I proposed suggestions how to increase Bedřichov point's profits to have better financial results. The proposals were mainly in three areas of improving marketing, attracting more of foreign guests and change of apartment's disposition.

### 5.4.1. Marketing improvement

Marketing of Bedřichov point is lacking compare to competitors from the same area. To improve it I suggested three main points which might help to improve the business's marketing. First of all it was to address potential guest groups, for instance school groups, sport clubs, companies or cooperation. After deeper consideration the business had decided to address wedding organizers, kindergartens from Liberec region and also the benefit program organization.

The first target group addressed was kindergartens, but only from the Liberec region, due to the fact that the business had obtained the contact for these 131 facilities, but did not spent an effort to contact kindergartens from the whole Czech Republic. In September 2010 the facilities were addressed and there were eight replies, out of which one facility started visiting the Bedřichov point, for five days, twice a year till now. Yearly profit from it is CZK 67 890.

In November 2010 the business had decided to use the potential of Christmas parties and started its cooperation with Benefit a.s., who provides employees benefits. Once an employee orders stay in Bedřichov point, points are deducted from their benefit account.

At the end of the month Benefit a.s. sums all the points for sold stays and the accommodation facility bills adequate amount to them. The first event was a Christmas party of Pilsner Urquell employees in December 2010. In February 2011 the business had printed, for CZK 1 196, propagation postcards delivered to all businesses involved in Benefit a.s. program. Ever since the cooperation began, the profit from it was CZK 60 917 and the number of bookings are still increasing.

The facility is very suitable for small classy weddings in nature surroundings, so the business had spent CZK 3 424 on design and printing of fliers related to weddings and honeymoon stays, which were distributed on two wedding exhibits. Also the business addressed all 278 wedding organizing companies around the whole Czech Republic. The propagation started in March 2011 and since then, there were 15 replies from the organizations with interest in cooperation, four weddings organized with profit of CZK 47 880 and four honeymoon stays with profit of CZK 19 600.



Another suggestion was to improve the website presentation, as the look and architecture of the site was not very clear and easy work with, also the URL address was not corresponding with the name of facility which can be very misleading for potential guests. There had been an investment of CZK 23 450 into new website design for greater look and easier orientation among the site. The original URL address of the facility was in form [www.accommodation\\_bedrichov.cz](http://www.accommodation_bedrichov.cz) which can be very misleading, as it might be taken as a site for the area in general or as some provider site, not as the one representing concrete facility. Therefore the URL address was changed to [www.bedrichov\\_point.cz](http://www.bedrichov_point.cz)<sup>42</sup>,

---

<sup>42</sup> Please keep in mind that provided websites addresses are only illustrational, as the actual name of the business cannot be presented in this thesis.

which clearly states the name of the facility, so there cannot be confusion of the purpose of the site.

Last proposal regarding marketing was to advertise in capital city, as there might be large amount of potential guests. This proposal was not enforced, but instead the business invested CZK 28 214 into advertisement signs and billboards at both access points into the village and also at the cross-country skiing stadium and main parking lot, where most of the village visitors might exposed to the advertisement. Financial amount also includes two banners, which may be used at holiday expos or at any propagation event. Initial investment of CZK 15019 was into large outside touristic map with advertisement of Bedřichov point in front of the facility by the road and CZK 800 for business cards.

#### **5.4.2. Attract more of foreign guests**

In attempt to attract more of foreign guests I had proposed to first of all improve the language skills of the owner, who communicates with potential guests, which makes the first impression and second of all to register the facility on foreign servers, for the international guest to be able to even know about the facility.

To improve the language skills, the owner started taking personal English lessons for two hours twice a week, which resulted in greater level of spoken and written English. The business added only one presentation on German server [www.feriwa.de](http://www.feriwa.de), for CZK 1 424 per year, to its previously cooperated servers. However neither one of the steps mentioned had any significant influence on the amount of international guests, the number remained basically the same in all three studied years.

#### **5.4.3. Change of apartment's disposition:**

As the utilization analysis in my bachelor theses revealed, the highest demand is for double rooms, however Bedřichov point can offer only one double room. Therefore I had proposed to take into consideration, whether it would be possible to change the disposition of larger apartments to divide them into smaller ones. However, from the disposition and construction point of view it is impossible to do. Due to that fact it would be the best to do as much as possible to attract target groups which consists of more than two guests.

## **6. Conclusion**

Objectives of this diploma thesis were to first of all compose financial statements, most suitable for the purpose of chosen business and to apply methods of financial analysis to determine the financial health of the business. Also to discover any weak points, which might be causing the business smaller or greater problems and on the other hand, to state businesses strengths, which might be the pillar for business's future activities.

At the beginning of the practical part I had characterised the business and situation on the small market of Bedřichov area, where development of beds utilisation is corresponding with the market. Thanks to the specifics of the business, such as low capacity, only accommodation provided and 98% of equity in comparison to 2% of liabilities, comparison to the industry would not be adequate.

The composition of precise financial statements is vital for significant results of the financial analysis. In order to that I had to separate the accommodation business activity initial accounting data from the main activity of the owner, as he/she is a natural person with one identification number of natural person (IČO) and has combined accounting for both of mentioned activities. Financial statements structure, for the purpose of financial analysis can be adjusted to the needs of analyst. Therefore I had decided to use the single step income statement according to IFRS in the form by nature, which is very suitable for small businesses. In case of service providing business the Cost of goods sold is excluded, as it cannot be calculated exactly. Therefore the gross profit can not to be calculated and as there are no other non-operating incomes the operating profit is equal to EBIT. The business had not undertaken any kind of borrowing and therefore there is no interest to be paid, but there is an interest earned from the bank account. It represents only very small portion of revenues, but it still needs to be included in the income statement, which makes just slight difference between EBIT and EBT. After precise calculations the business is not obligate to pay income tax in any of the three analysed years and therefore the results of EAT and Net Income are of the same values.

The proportion of assets, in case of analysed business, is corresponding to the industry average, where 74% are represented by fixed assets and current assets represent 26%, which is common in the accommodation industry and gastronomy, where the fixed assets

contain the building, land and equipment. In case of equity and liabilities structure, the business has very different composition compare to the industry, where equity represents 23%, while liabilities contain main portion of 77%. Bedřichov point's share of equity was up to 98%, which is in comparison to 2% amount of liabilities, containing only supplier's and VAT payables but no loans or any other form of borrowing, massive amount. Results showed that the business is extremely liquid, which is due to the fact that its obligations are negligible and also the amount of funds available to cover its obligations is high and rapidly increasing at all times. In the year 2009 CZK 10,1 of cash were available to cover CZK 1 of liabilities and CZK 41,9 in 2010. All values are above recommended, which is positive for the business in terms of their obligations payments, but on the other hand, there is unnecessary stagnation of funds in cash or in bank account. Therefore these funds are not generating any profit. Such situation occurs also because most of the sales in such industry are in cash and also short-term liabilities are of low values.

Profit margin on sales reaches its highest value in 2011, where 1 CZK of sales accounted for almost CZK 0,2 of profit, which is ten times higher than latest available result in the industry for year 2007. Concerning might be very low results of ROE, as the highest value of 3% was reached in 2011, while the industry result was 7,5% in 2007, however these two cannot be compared because the industry values are calculated assuming that the equity represents 33%, but in case of Bedřichov point it is represented by 98%. Low values of financial leverage show that the business is extremely conservative and it would be beneficial to use some external capital, which would increase its overall profitability of capital. As the level of equity would be lowered, ROE would increase to similar level as industry ROE, however the result would look better only relatively.

Total asset turnover and ROA have lower value than recommended, even after consideration of industry specifics, cause of such results is mainly because lower profits in unstable first years of operation and on the other hand very high value of fixed assets. Partial cause is also expenses accounting approach of the reconstruction and modernization, for instance in 2010 insulation of room worth around CZK 90 000, was considered as expense rather than technical appreciation of fixed asset, which would significantly change the results of ROA. Receivables turnover period is influenced by the

way of payment in the accommodation industry and gastronomy, where the payments for services are in cash or by credit card. Therefore, there is a low level of receivables and short period of their turnover.

Hypotheses were proved only partially. The first stated the expectation, that the sales would be CZK 500 000 in year 2009 and increasing by 20% from year to year during first 3 years of operating. Unfortunately the level of sales was lower than expected in all three years. However the percentage by which the sales were increasing was 19% in 09/10 and in 10/11 it was even by 25%, which partially proves the hypothesis. The second hypothesis was concerning the development of operating costs, excluding extraordinary items such as repairs or purchases/discarding of any inventory. In two out of three years the operating costs were even lower than expected, however in 2011 they were higher than expected by 9%, which was caused by dramatic increase in propagation material expenses. From the percentage change we may see that there was no item listed which would have the expected development of increasing by 10% from year to year, but in total the change from year 2009 to 2010 the change was 12% which is almost equal to expectations.

Based on the results of conducted financial analysis can be stated, that the business is very financially healthy and there were not indicated any financial problems which would need immediate attention. The business is strongly conservative and does not undertake any risk. As there is extensive amount of funds in cash and on bank account, which are unnecessarily stagnating without making any profit, I would recommend to utilise the funds for the purposes of the business evolvement. I believe the marketing is still lacking, so I would suggest investing into further propagation actions to attract target groups. As the owner is very occupied by his/her main business activity, I would suggest to hire part time help, to take over of the business marketing, as it is very time consuming and such personnel might have greater experience in such field. The facility itself has great potential and does not need to be invested in.

## 7. Bibliography

- 1) FOSTER George, *Financial statement analysis*, 2<sup>nd</sup> Edition, New Jersey 1986, Prentice Hall, ISBN-13: 978-0133163179
- 2) GITMAN Lawrence, *Principles of Managerial Finance*, 11<sup>th</sup> Edition, England, 2006 Pearson Education, ISBN 978-032-131-150-4
- 3) HELFERT Erich A., *Financial analysis tools and techniques, a guide for managers*, 1<sup>st</sup> Edition, New York 2001, McGraw-Hill, ISBN 978-007-137-834-5
- 4) KISLINGEROVÁ Eva, HNILICA Jiří, *Finanční analýza: krok za krokem*, 2. vydání, Praha 2008, C. H. Beck, ISBN 978-80-7179-713-5
- 5) KUČEROVÁ Martina, Investment analysis of a business plan, Bachelor thesis, Czech university of life science, Prague 2010
- 6) LÖRINCZOVÁ Enikő, *Cvičení z manažerského účetnictví*, Česká zemědělská univerzita v Praze, Provozně ekonomická fakulta, Praha 2010, ISBN 978-80-213-2055-0
- 7) MÁČE Miroslav, *Finanční analýza obchodních a státních organizací*, Praha 2006, Grada Publishing, a.s., ISBN 80-247-1558-9
- 8) MEIGS Robert F., WILLIAMS Jan R., HAKA Susan F., BETTNER Mark S., *Accounting, the basis for business decisions*, 11<sup>th</sup> Edition, New York 1999, McGraw-Hill, ISBN 0-07-289709-0
- 9) MRKVIČKA Josef, KOLÁŘ Pavel, *Finanční analýza*, 2. přepracované vydání, Edice „Vzdělávání účetních v ČR“, Praha 2006, ASPI a.s., ISBN 80-7357-219-2
- 10) O'CONNEL V., Financial management teaching block material
- 11) PIKE Richard, NEALE Bill, *Corporate finance and investment, Decisions and strategies*, 5<sup>th</sup> Edition, Financial Times/ Prentice Hall, Harlow 2006, ISBN 978-0-273-69561-5
- 12) SCOTT David L., *Wall street woeds, An A to Z Guide to Investment Terms for Today's Investor*, 3<sup>rd</sup> Edition, Houghton Mifflin Harcourt, 2003, ISBN 978-061-817-651-9
- 13) SEDLÁČEK Jaroslav, *Finanční analýza podniku*, 1. Vydání, Computer Press, Brno 2007, ISBN 978-80-251-1830-6
- 14) SŮVOVÁ Helena a kolektiv, *Finanční analýza v řízení podniku, v bance a na počítači*, 1. vydání, Praha: Bankovní institut, 1999, ISBN 80-7265-027-0 1



## Internet:

- 1) ACCOUNTING EXPLAINED, *Income Statement by Nature of Expense* [on-line] [cit. 2012-01-13] [www.accountingexplained.com/financial/statements/income-statement-by-nature](http://www.accountingexplained.com/financial/statements/income-statement-by-nature)
- 2) BUSINESS DICTIONARY, *Profitability*, [on-line] [cit. 2011-10-14] <http://www.businessdictionary.com/definition/profitability.html>
- 3) INVESTOPEDIA, *Financial analysis*, [on-line] [cit. 2011-10-24] [www.investopedia.com/terms/f/financial-analysis.asp#axzz1gz0UPKz](http://www.investopedia.com/terms/f/financial-analysis.asp#axzz1gz0UPKz)
- 4) INVESTOPEDIA, *Inventory turnover*, [on-line] [cit. 2011-11-17] <http://www.investopedia.com/terms/i/inventoryturnover.asp#axzz1n1claeDx>
- 5) INVESTOPEDIA, *Profitability ratios*, [on-line] [cit. 2011-11-08] [www.investopedia.com/terms/p/profitabilityratios.asp#axzz1lnfocpNj](http://www.investopedia.com/terms/p/profitabilityratios.asp#axzz1lnfocpNj)
- 6) INVESTOPEDIA, *Return on equity*, [on-line] [cit. 2011-11-08] <http://www.investopedia.com/terms/r/returnonequity.asp#axzz1lnfocpNj>
- 7) MOFFATT M., *Definition of liquidity*, [on-line] [cit. 2011-10-14] <http://economics.about.com/cs/economicsglossary/g/liquidity.htm>
- 8) OFICIÁLNÍ JEDNOTNÁ KLASIFIKACE UBYTOVACÍCH ZAŘÍZENÍ ČESKÉ REPUBLIKY 2010-2012, Profesní sdružení: Asociace hotelů a restaurací České republiky o. s., UNIHOST Sdružení podnikatelů v pohostinství, stravovacích a ubytovacích službách, Ministerstvo pro místní rozvoj České republiky, Česká centrála cestovního ruchu – CzechTourism [on-line] [cit. 2011-12-16] <http://www.mmr.cz/CMSPages/GetFile.aspx?guid=998a01a7-d9e6-4420-aaad-0dcaae0c5275>
- 9) CZECH STATICAL OFFICE, *Návštěvnost hromadných ubytovacích zařízení podle kategorie ve vybraném území* [on-line] [cit. 2011-12-17] [http://vdb.czso.cz/vdbvo/tabdetail.jsp?druh\\_1\\_18=51&kapitola\\_id=654&potvrđ=Zobrazit+tabulku&go\\_zobraz=1&childsel0=8&childsel0=8&cislotab=CRU9010CU&pro\\_7\\_31=563536&voa=tabulka&str=tabdetail.jsp](http://vdb.czso.cz/vdbvo/tabdetail.jsp?druh_1_18=51&kapitola_id=654&potvrđ=Zobrazit+tabulku&go_zobraz=1&childsel0=8&childsel0=8&cislotab=CRU9010CU&pro_7_31=563536&voa=tabulka&str=tabdetail.jsp)
- 10) CZECH STATICAL OFFICE, *Klasifikace NACE – obchod, pohostinství, ubytování – časové řady* [on-line] [cit. 2011-12-17] [http://www.czso.cz/csu/redakce.nsf/i/bazicky\\_rok\\_2005\\_klasifikace\\_nace\\_rev\\_2\\_obchod\\_pohostinstvi\\_ubytovani\\_casove\\_rady](http://www.czso.cz/csu/redakce.nsf/i/bazicky_rok_2005_klasifikace_nace_rev_2_obchod_pohostinstvi_ubytovani_casove_rady)
- 11) CZECH STATISTICAL OFFICE, *Hromadná ubytovací zařízení podle kategorie a území* [on-line] [cit. 2011-12-17] [http://vdb.czso.cz/vdbvo/tabparam.jsp?childsel0=8&cislotab=CRU9030CU&kapitola\\_id=653&voa=tabulka&go\\_zobraz=1&childsel0=8&pro\\_6\\_37=563536&aktualizuj=Aktualizovat](http://vdb.czso.cz/vdbvo/tabparam.jsp?childsel0=8&cislotab=CRU9030CU&kapitola_id=653&voa=tabulka&go_zobraz=1&childsel0=8&pro_6_37=563536&aktualizuj=Aktualizovat)

### **List of schemes:**

Scheme 3.1 - Methods of technical financial analysis .....	15
Scheme 3.2 - DuPont system structure.....	27
Scheme 4.1 - DuPont pyramid diagram containing results .....	56

### **List of graphs:**

Graph 4.1 - Beds utilization.....	31
Graph 4.2 - Development of inventory over time.....	33
Graph 4.3 - Development of sales monthly .....	34
Graph 4.4 - Development of sales of the business in comparison with industry .....	38
Graph 4.5 - Development of Balance sheet total .....	40
Graph 4.6 - Vertical analysis, percentage shares of sales.....	42
Graph 4.7 - Development of Liquidity ratios over time .....	48
Graph 4.8 - Cash inflows and outflows development of the business .....	52

### **List of tables:**

Table 2.1 - Hypotheses of financial development.....	5
Table 4.1 - Amount of collective accommodation facilities in Bedřichov area by category of accommodation facility .....	31
Table 4.2 - Utilization of collective accommodation facilities in Bedřichov area .....	31
Table 4.3 - Development of Inventory over time.....	33
Table 4.4 - Development of depreciation over time.....	33
Table 4.5 - Development of receivables and payables over time .....	34
Table 4.6 - Operating expenses.....	35
Table 4.7 - Calculation of income tax .....	36
Table 4.8 - Horizontal analysis of Income statement.....	37
Table 4.9 - Horizontal analysis of Balance sheet.....	39
Table 4.10 - Vertical analysis of Income statement .....	41
Table 4.11 - Vertical analysis of Balance sheet .....	42
Table 4.12 - Results of Net working capital ratio .....	43
Table 4.13 - Results of Net working assets ratio .....	44
Table 4.14 - Results of Return of equity ratio .....	45
Table 4.15 - Results of Return on assets ratio .....	46
Table 4.16 - Results of Return on capital employed ratio .....	46
Table 4.17 - Results of Profit margin on sales ratios .....	47
Table 4.18 - Results of Current ratio.....	47
Table 4.19 - Results of Quick ratio .....	48
Table 4.20 - Results of Cash ratio .....	48
Table 4.21 - Results of Debt ratio .....	49
Table 4.22 - Results of Equity ratio .....	49
Table 4.23 - Results of Asset turnover ratio .....	50
Table 4.24 - Results of Inventory turnover ratio.....	50
Table 4.25 - Results of Account receivables turnover ratio .....	51
Table 4.26 - Cash flow statement over time .....	51
Table 4.27 - Results of Cash flow solvency ratio .....	52
Table 4.28 - Results of Operating cash flow margin ratio.....	53
Table 4.29 - Results of Cash flow profitability of total asset ratio .....	53
Table 4.30 - Results of Cash flow profitability of equity ratio.....	54
Table 5.1 - Development of expenses and sales from year to year based on hypotheses ...	61

## 8. Supplements

### Supplement 1 - Income statements

Income statement 2009		Income statement 2010		Income statement 2011	
<b>Sales</b>	441 053,60	<b>Sales</b>	523 681,22	<b>Sales</b>	652 735,06
<b>Expenses</b>		<b>Expenses</b>		<b>Expenses</b>	
Material consumption	7 530,01	Material consumption	51 783,58	Material consumption	129 010,04
Energy consumption	73 655,39	Energy consumption	55 785,68	Energy consumption	64 184,07
Services	47 765,27	Services	38 873,56	Services	37 157,69
Travel expenses	23 021,00	Travel expenses	26 082,00	Travel expenses	32 877,00
Repairs and maintenance	62 735,74	Repairs and maintenance	106 933,18	Repairs and maintenance	48 909,60
Fees	8 000,00	Fees	8 000,00	Fees	8 000,00
Wages	28 420,00	Wages	47 240,00	Wages	43 360,00
Social +Health care	41 100,00	Social +Health care	43 650,00	Social +Health care	48 020,00
Property insurance	14 196,00	Property insurance	14 196,00	Property insurance	14 196,00
Depreciation	52 024,00	Depreciation	101 966,00	Depreciation	99 885,00
Bank account charges	6 128,00	Bank account charges	6 690,00	Bank account charges	6 887,00
<b>Total operating exp</b>	<b>364 575,41</b>	<b>Total operating exp</b>	<b>501 200,00</b>	<b>Total operating exp</b>	<b>532 486,40</b>
<b>EBIT</b>	76 478,19	<b>EBIT</b>	22 481,22	<b>EBIT</b>	120 248,66
other inc. (bank ac. Interest)	258,43	other inc. (bank ac. Interest)	122,57	other inc. (bank ac. Interest)	204,61
<b>EBT</b>	76 736,62	<b>EBT</b>	22 603,79	<b>EBT</b>	120 453,27
<b>Income tax</b>		<b>Income tax</b>		<b>Income tax</b>	
<b>Net Income</b>	76 736,62	<b>Net Income</b>	22 603,79	<b>Net Income</b>	120 453,27

### Supplement 2 - Development of cash and bank account

Bank account	Transferred	Received	Released	Balance
<b>2009</b>	206 319,23	211 480,81	-186 503,50	231 296,54
<b>2010</b>	231 296,54	287 613,07	-355 087,19	163 822,42
<b>2011</b>	163 822,42	375 692,23	-319 214,17	220 300,48

Cash	Transferred	Received	Released	Balance
<b>2009</b>	89 328,00	254 155,20	-141 294,00	202 189,20
<b>2010</b>	202 189,20	301 422,49	-103 186,81	400 424,88
<b>2011</b>	400 424,88	323 713,00	-102 972,00	621 165,88

### Supplement 3 - Baance sheets

#### Opening Balance sheet at 1.1.2009

<b>Non-current assets</b>		<b>Equity</b>	
Property - Building	2 601 153,00	Capital	3 828 116,47
Property - Land	381 598,85	Retained earnings	
Accumulated depreciation			
<b>Total non-current Ass.</b>	<b>2 982 751,85</b>	<b>Total equity</b>	<b>3 828 116,47</b>
<b>Current assets</b>		<b>Liabilities</b>	
Inventory	549 717,39	Payables - suppliers	
Receivables	0	Payables - VAT	
Bank account	206 319,23		
Cash	89 328,00		
<b>Total current Assets</b>	<b>845 364,62</b>	<b>Total liabilities</b>	<b>0</b>
<b>Total assets</b>	<b>3 828 116,47</b>	<b>Total Equity +Liabilities</b>	<b>3 828 116,47</b>

#### Balance sheet at 31/12/2009

<b>Non-current assets</b>		<b>Equity</b>	
Property - Building	2 601 153,00	Capital	3 828 116,47
Property - Land	381 598,85	Retained earnings	76 736,62
Accumulated depreciation	-52 024,00		
<b>Total non- current Ass.</b>	<b>2 930 727,85</b>	<b>Total equity</b>	<b>3 904 853,09</b>
<b>Current assets</b>		<b>Liabilities</b>	
Inventory	567 728,26	Current liabilities	
Receivables	17 560,00	Payables - suppliers	27 500,00
Bank account	231 296,54	Payables - VAT	17 148,76
Cash	202 189,20		
<b>Total current Assets</b>	<b>1 018 774,00</b>	<b>Total liabilities</b>	<b>44 648,76</b>
<b>Total assets</b>	<b>3 949 501,85</b>	<b>Total Equity +Liabilities</b>	<b>3 949 501,85</b>

#### Balance sheet at 31/12/2010

<b>Non-current assets</b>		<b>Equity</b>	
Property - Building	2 601 153,00	Capital	3 828 116,47
Property - Land	381 598,85	Retained earnings	76 736,62
Accumulated depreciation	-153 990,00	Earnings	22 603,79
<b>Total non- current Ass.</b>	<b>2 828 761,85</b>	<b>Total equity</b>	<b>3 927 456,88</b>
<b>Current assets</b>		<b>Liabilities</b>	
Inventory	527 233,33	Current liabilities	
Receivables	3 750,00	Payables - suppliers	2 750,00
Bank account	181 257,20	Payables - VAT	11 220,38
Cash	400 424,88		
<b>Total current Assets</b>	<b>1 112 665,41</b>	<b>Total liabilities</b>	<b>13 970,38</b>
<b>Total assets</b>	<b>3 941 427,26</b>	<b>Total Equity +Liabilities</b>	<b>3 941 427,26</b>

#### Balance sheet at 31/12/2011

<b>Non-current assets</b>		<b>Equity</b>	
Property - Building	2 601 153,00	Capital	3 828 116,47
Property - Land	381 598,85	Retained earnings	99 340,41
Accumulated depreciation	-253 875,00	Earnings	120 453,27
<b>Total non- current Ass.</b>	<b>2 728 876,85</b>	<b>Total equity</b>	<b>4 047 910,15</b>
<b>Current assets</b>		<b>Liabilities</b>	
Inventory	467 044,27	Current liabilities	
Receivables	19 875,00	Payables - suppliers	1 500,00
Bank account	237 735,26	Payables - VAT	25 287,11
Cash	621 165,88		
<b>Total current Assets</b>	<b>1 345 820,41</b>	<b>Total liabilities</b>	<b>26 787,11</b>
<b>Total assets</b>	<b>4 074 697,26</b>	<b>Total Equity +Liabilities</b>	<b>4 074 697,26</b>

#### Suplement 4 - Cash flows

##### Cash Flow at 31/12/2009

<b>Opening balance</b>	<b>295 647,23</b>
Net Income	76 736,62
Depreciation	52 024,00
Changes in receivables	-17 560,00
Change in payables	44 648,76
Changes in inventory	-18 010,87
<b>Cash Flow</b>	<b>137 838,51</b>
<b>closing balance</b>	<b>433 485,74</b>

##### Cash Flow at 31/12/2010

<b>Opening balance</b>	<b>433 485,74</b>
Net Income	22 603,79
Depreciation	101 966,00
Changes in receivables	13 810,00
Change in payables	-30 678,38
Changes in inventory	40 494,93
<b>Cash Flow</b>	<b>148 196,34</b>
<b>closing balance</b>	<b>581 682,08</b>

##### Cash Flow at 31/12/2011

<b>Opening balance</b>	<b>581 682,08</b>
Net Income	120 453,27
Depreciation	99 885,00
Changes in receivables	-16 125,00
Change in payables	12 816,73
Changes in inventory	60 189,06
<b>Cash Flow</b>	<b>277 219,06</b>
<b>closing balance</b>	<b>858 901,14</b>

#### Suplement 5 - Utilization of accommodation facilities in Bedřichov

	Počet příjezdů hostů	z toho rezidenti	Počet přenocování	z toho rezidenti	Průměrný počet přenocování	Průměrná doba pobytu	Čisté využití lůžek (%)	Využití pokojů (%)
2000	18 090	12 497	78 233	55 562	4,3	5,3	42,2	45,7
2001	19 527	10 722	62 249	34 529	3,2	4,2	50,8	57,2
2002	25 091	16 013	88 579	55 629	3,5	4,5	43,1	48,7
2003	20 566	15 406	75 398	56 676	3,7	4,7	33,4	38,1
2004	18 267	13 285	63 700	46 065	3,5	4,5	30,2	35,2
2005	16 866	13 546	67 825	52 582	4	5	36	40,6
2006	16 718	12 643	56 638	43 027	3,4	4,4	27,4	31,1
2007	11 139	9 203	50 301	40 995	4,5	5,5	31,9	34,7
2008	11 302	9 650	38 314	33 617	3,4	4,4	26,8	29,5
2009	12 408	11 093	49 596	45 675	4	5	23,7	27,6
2010	14 502	13 076	60 090	55 153	4,1	5,1	26,7	28,4