

Small company behaviour in period of global crisis

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VALACH, J. a kol. Finanční řízení podniku. 1. vyd. Praha: Ekopress, 1997. 247 s. ISBN 809019916X.

HIGGINS, R. C. Analýza pro finanční management. 1. vyd. Praha: Grada Publishing, 1997. 399 s. ISBN 8071694045.

KOVANICOVÁ, D. Poklady skryté v účetnictví: Finanční analýza účetních výkazů. Díl 2. Praha: Polygon, 1995. 498 s. ISBN8090177840

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ABSTRAKT

Tato bakalářská práce se zabývá chováním malé společnosti v době ekonomické krize. Cílem práce je aplikováním metod užívaných finanční analýzou zhodnotit finanční situaci vybrané společnosti, dosažené výsledky porovnat s výsledky odvětví, ve kterém společnost působí, identifikovat problémy, které firmě ekonomická krize způsobila a uvést kroky, které v reakci na tyto problémy provedlo vedení společnosti.

Klíčová slova:

finanční analýza, rozvaha, výkaz zisku a ztráty, výkaz cash-flow, absolutní ukazatele, poměrové ukazatele, finanční výkazy

ABSTRACT

This bachelor thesis deals with the behavior of small company in period of economic crisis. The goal is to evaluate financial situation of the selected company using methods of financial analysis, to compare results with the results of the sector in which the company operates, to identify issues that economic crisis caused and to state precautions that company management took in response to these problems.

Keywords:

financial analysis, balance sheet, income statement, cash-flow statement, absolute indicators, ratio indexes, financial statements

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INTRODUCTION

Global economic crisis came from American financial markets to Europe as a plague, invisible disease with no smell or taste destroying people's dreams and way of life. Suddenly era of uncertainty came, everyone started to wiggle that anytime phone may ring and boss will say that there will be no job tomorrow. People started to think differently pride and self-respect gave way to execrable instinct to survive at any cost regardless to friends, colleagues or own family. But this wasn't the full impact of crisis. Not at all. Shortly after that the dying came. Companies and banking institutions started to fall one by one like house made of cards when wind blows. Every collapse of one single company affected another and increased uncertainty whether our company will be the next. Big American and western European companies pledged governments for financial support and they helped them. But what was the situation of companies operating in the Czech Republic? And more precisely, what was the situation of these thousands small and medium enterprises which names we don't even know and which employ the majority of population. How did they deal with the global economic crisis and how?

The goal of the bachelor thesis is to evaluate financial situation of a chosen company, to identify problems that global economic crisis caused to the company and how company management reacted to mitigate or stop negative events. Financial situation will be evaluated using methods of external financial analysis which works with financial statements contained in annual reports and available to wide sections of society such as balance sheet, income statement. This method analyses in detail assets and capital structure of the company and deals with main factors affecting the amount of earnings after tax. Furthermore it concentrates on analysis of differential and ratio indexes and comparison of company results with results achieved in the sector. Results of financial analysis will allow to determine problems that company has been facing during period of global crisis. Every problem found will be followed by explanation of its main causes and measures that company management made to deal with it.

Bachelor thesis is divided into two independent parts. Theoretical part processes methodology of financial analysis. It deals with main sources of information which are used for its completion and describes absolute and ratio indicators, their meanings and formulas. The analysis part applies this method on chosen company.

For the analysis has been chosen Czech company Granitol a.s. Company was found in the late 19th century and produces plastic products such as plastic bags and various types of foils. Its products are sold on home market as well as abroad.

I. THEORY

1 FINANCIAL ANALYSIS

Financial analysis is a systematic analysis of the obtained data, which are contained mainly in the financial statements.¹

In general terms, financial analysis can be described as a method of obtaining economic information, which serves as a basis for evaluation of the financial status of company, identification of strengths and weaknesses, opportunities and threats, for managerial decision making process and foresight.² For this purpose is used the formalized method of financial analysis, measuring the data collected among themselves and thereby extending its explanatory power and allowing it to reach conclusions about the overall economic and financial situation in the period.³

1.1 Users of financial analysis

*"Information about the financial situation is in concern of many subjects who are in contact with the company. Data obtained from the financial analysis are important for shareholders, creditors, banks and other external users, as well as for corporate managers. Each of these groups pursues its specific interest, connected with certain type of economic decision-making task, but they all need information to manage."*⁴ [Translated by the author]

1.1.1 Investors

Investors use information about the company from two perspectives – the investment and control. Investment perspective represents the use of information gathered for decision on future investments, thus the selection of portfolio securities, meeting the requirements of the investor's risk, capital appreciation, dividend yield, liquidity, etc. The main interest of shareholders focuses on the level of risk and return on capital to make sure that money is well kept and the company is managed in accordance with the interests of its shareholders.

¹ Růčková, Petra, Finanční analýza (PRAHA: GRADA Publishing, 2007), 9.

² Kolář, Pavel, Mrkvička, Josef, Finanční analýza (PRAHA: ASPI, 2006), 14.

³ Grunwald, Rolf, Holečková, Jaroslava, Finanční analýza a plánování podniku (PRAHA: Ekopress, 2007), 19.

⁴ Holečková, Jaroslava, Finanční analýza firmy (PRAHA: ASPI: Wolters-Kluwer, 2008), 13.

The control aspect is applied towards investment managers of the company. They are primarily interested in stability and liquidity of the company as well as in the disposable income and the adequate amount of dividends and as to whether the decisions of managers ensure continuity and development of the company. For this reason, shareholders need regular information about the company's financial condition, which are administered to them through annual reports. Holders of debt securities (bonds, debentures, etc.) are interested in whether the agreed amount of interest and repayments of securities will be paid on time and whether the financial stability of the company and the debt is covered by the property.⁵

1.1.2 Managers

Managers use the information provided by financial analysis for long-term and operational management. Knowledge of their financial situation allows them to adequately decide (the issue of obtaining financial resources, ensuring optimal capital structure, allocation of funds etc.), take the right business plans, properly formulate goals and strategies, etc. Managers are typically users of other company's financial analysis as well (competitors, business partners).⁶

1.1.3 Business partners

Suppliers are primarily interested in whether the company is able to pay for merchandise, since the proportion of trade credit on foreign sources of an enterprise often reaches a considerable amount. Long-term suppliers focus on maintaining lasting business contracts to ensure their sales. Suppliers are interested in understanding of the financial situation of their supplier especially in long-lasting business relationship, as in the case of bankruptcy of its suppliers they would have great difficulties in ensuring their own production.⁷

⁵ Holečková, Jaroslava, Finanční analýza firmy (PRAHA: ASPI: Wolters-Kluwer, 2008), 14-15.

⁶ Ibid., 16.

⁷ Ibid., 16.

1.1.4 Employees

Employees working in the business are most of all interested in job preservation as well as wage conditions, therefore it is important for them to ensure prosperity and stability of the venture. For this reason, they monitor profit and use the unions to enforce their influence over the management of the company.⁸

1.1.5 Banks and other creditors

Banks and other lenders need relevant information about the company's financial condition, so they can decide whether to grant or withhold credit and how to set the conditions for its grant and loan repayment. These conditions may vary depending on the financial situation, such as if venture debt exceeds a certain limit or if bank bounds loan repayment to value of certain indicator e.g. debt to equity ratio. Not only banks but also bondholders and other creditors are interested in company's financial stability and liquidity.⁹

1.1.6 State authorities

State authorities use financial information about the company especially for reasons connected with control of taxes, for the purposes of administering the state shares in companies, where the state is a significant owner of the shares, to make good decisions about the allocation of financial assistance to enterprises or to obtain an overview of the financial status of companies working on government contracts. Information about companies serves the state also in the process of shaping its economic policy.¹⁰

1.1.7 Other users

Not only the subjects mentioned above are interested in the company's financial situation, other users can use the information provided to their advantage as well. This group includes for example analysts, tax consultants, brokers, trade unions, universities, journalists and the public.¹¹

⁸ Holečková, Jaroslava, Finanční analýza firmy (PRAHA: ASPI: Wolters-Kluwer, 2008), 17.

⁹ Ibid., 15.

¹⁰ Ibid., 17.

¹¹ Ibid., 17.

1.2 Main sources of information for financial analysis

Quality of financial analysis depends largely on the resources that are used to process, these need to be good and complex.¹² Image of financial health of the business can be created on the basis of the information contained in financial statements of the enterprise. The financial statements comprise the balance sheet, income statement and cash flow statement.¹³

1.2.1 Balance Sheet

The balance sheet is an accounting statement showing in a sheet form the state of tangible and intangible assets (assets) and sources of its funding (liabilities) to a certain date.¹⁴

Assets are embedded resources that emerged based on decisions made in the past and from which it is expected to bring the company some economic effect. Liabilities are company's debts incurred in the past and the future economic effect of contrast will decrease. Equity is the difference between total assets and liabilities.

Tab. 1. Balance sheet

TOTAL ASSETS	TOTAL LIABILITIES & EQUITY
Fixed assets	Equity
- Tangible fixed assets	- Share capital
- Intangible fixed assets	- Capital funds
- Non-current financial assets	- Statutory funds
Current assets	- Retained earnings
- Inventories	- Profit or loss for the current period
- Short-term receivables	Liabilities
- Long-term receivables	- Provisions
- Current financial assets	- Long-term liabilities
	- Short-term liabilities
	- Bank loans and borrowings
Other assets	Other liabilities

¹² Růčková, Petra, *Finanční analýza* (PRAHA: GRADA Publishing, 2007), 21.

¹³ Holečková, Jaroslava, *Finanční analýza firmy* (PRAHA: ASPI: Wolters-Kluwer, 2008), 21-22.

¹⁴ Růčková, Petra, *Finanční analýza* (PRAHA: GRADA Publishing, 2007), 22.

Distribution of assets into fixed assets and current assets respects their position in the enterprise's reproductive process. Tangible property retains its original form over several years, is amortized and its value is gradually transferred into the production value. Current assets change its form several times during one financial year and are transferred into consumption (the production value) at once.

Total liabilities & equity represent source, by which company's property (assets) is funded. They are divided according to their origin into the internal (resources derived by own activities) and external (resources obtained from sources outside the company), according to the nature of the commitment into equity and liabilities, from the temporal aspect into long-term and short-term liabilities.

1.2.2 Profit and Loss account

Profit and loss account is a written statement of revenues, expenses and profit over a certain period. It is compiled by applying the accrual principle which means that all transactions are transcribed and reported in the period when were realized irrespective of whether or not were paid-up.¹⁵

1.2.3 Cash flow statement

Statement of cash flow provides information about cash flows during the reporting period. By cash flows we understand additions (revenues) and disposals (expenses) in cash (money, valuables and cash in transit) and its equivalents (short-term assets, short-term securities). Statement of cash flows is divided into three groups according to activity: operating, financial and investment. The most important part is the one related to operating activities. This can help determine the extent to which net income reflects the actual money earned and how its production is influenced by changes in working capital and its components.

¹⁵ Holečková, Jaroslava, Finanční analýza firmy (PRAHA: ASPI: Wolters-Kluwer, 2008), 31.

1.2.4 Other sources

When processing a financial analysis, information from annual reports can be used as well. Its content includes: basic identification of the company, the company's history, statutory and other bodies of the organizational chart, data from financial statements, the interpretation of the significant events of past developments and the outlook for the next year. It is generally recommended to less notice what the annual report mentions, and to more explore what the report avoids.¹⁶

¹⁶ Růčková, Petra, Finanční analýza (PRAHA: GRADA Publishing, 2007), 34.

2 INDICATORS USED IN FINANCIAL ANALYSIS

"Financial Analysis works with indicators, which are either items of financial statements and data from other sources, or numbers derived from both. It's important to realize that in financial analysis the time perspective plays an important role. Therefore it is important to distinguish between temporal and flow magnitudes. State magnitudes are variables related to a specific point in time (data in the balance sheet), then flow magnitudes are related to a specific time interval (data in the profit and loss). From an analytical point of view, it is also important to create time series, because only well-conducted time series or an evaluation based on this series can give objective results. The shorter time for the firm's examination and the less information we have, the more inaccuracies can arise in the interpretation of the results. "¹⁷

This financial analysis uses the basic standard absolute and relative indicators.

2.1 Absolute indicators

"Absolute indicators are mainly used to analyze trends - horizontal analysis and analysis of the components - vertical analysis. Horizontal and vertical analyses are the starting point for analysis of financial statements; these should help us to facilitate access to the records. Both procedures allow seeing the original absolute data from financial statements in certain contexts. Constitute an essential basis of analysis of financial statements and serve us in our primary focus on business management. Highlight the problem areas that need to be subjected to detailed examination. "¹⁸ (Translated by the author)

2.1.1 Horizontal analysis

Horizontal analysis examines changes of absolute indicators in time, represents changes of an item in percentage or by index. Comparison of individual items in time is performed line by line, thus horizontally. The main goal of horizontal analysis is to identify changes in individual items of the balance sheet or profit and loss account over the financial year. Already at this point it is possible to detect that development of the two corresponding

¹⁷ Růčková, Petra, Finanční analýza (PRAHA: GRADA Publishing, 2007), 41.

¹⁸ Holečková, Jaroslava, Finanční analýza firmy (PRAHA: ASPI: Wolters-Kluwer, 2008), 42.

items contrasts with some of the financial rules, such as debt development index is not in accordance with the index of economic development.¹⁹

$$\mathbf{absolute\ change} = index_t - index_{t-1} \quad (1)$$

$$\% \mathbf{change} = \frac{\mathbf{absolute\ change} * 100}{index_{t-1}} \quad (2)$$

Where:

t..... reference period

(t-1).....previous period

2.1.2 Vertical Analysis

Vertical analysis examines the size ratio of the individual items of the balance sheet on total balance amount. This allows determining the relative structure of assets and liabilities and the role of particular factors on profit creation. If data for several years are available, this method can identify trends or major temporal changes in the components.²⁰

Data derived from the vertical analysis facilitate analysis of capital (liabilities) and property (assets) structure of the company. Capital structure predicates of resources used to finance the company's assets. The total size of financial resources depends on company size, level of technology used, capital turnover rate, or sales organization. In case of inadequate funding, two extremes may occur, overcapitalization and undercapitalization of the company. Overcapitalized company uses its equity inefficiently and covers part of its current assets by long-term liabilities, making production more expensive. On the other hand undercapitalized company lacks funds to cover common activities and may face insolvency.²¹

¹⁹ Holečková, Jaroslava, Finanční analýza firmy (PRAHA: ASPI: Wolters-Kluwer, 2008), 42.

²⁰ Ibid., 44.

²¹ Růčková, Petra, Finanční analýza (PRAHA: GRADA Publishing, 2007), 85.

2.1.3 Working Capital

Working capital, also known as operating capital, is the most frequently used differential indicator. It contains current assets purged from short-term liabilities. In other words it is a part of current assets, which is covered by long-term resources.

Size of net working capital is an important indicator of the company's solvency. The higher working capital is, the greater is the company's ability to pay its liabilities but only in case that sufficient liquidity of its components is ensured. Of course that the sheer size of the net working capital doesn't guarantee the liquidity, because it may contain less liquid or even illiquid items like obsolete unsalable supplies or goods etc.²²

2.2 Ratio indexes

Ratio indexes reflect the relationship of two or more absolute indicators. These indexes are calculated as its reciprocal proportion, expressing either the proportion, where the unit and its part are in proportion (e.g. equity and total liabilities), or a relationship of two independent variables (e.g. profit to total assets ratio).²³

Within the frame of the financial analysis, ratios are probably the most widely used and popular method of evaluation of the company's financial situation. It's advantage is that these indicators can adjust the raw data differing in each firm (e.g. it is not possible to compare the absolute ratios of different sized firms) so that they can be mutually compared. Usage of financial ratios is the most sensible way how to compare the current financial situation with historical data or with rival companies (or even with the whole industry).²⁴

Among the ratio indexes belong the following groups:

Profitability: indicators of this type measure income with other variables to evaluate success in achieving business goals.

²² Holečková, Jaroslava, Finanční analýza firmy (PRAHA: ASPI: Wolters-Kluwer, 2008), 45-47.

²³ Sedláček, Josef, Hamplová, Eva, Úředníček, Vladimír, Finanční analýza (BRNO: Masarykova univerzita, 1998), 68.

²⁴ Blaha, Zdenek Sid, Jindřichovská, Irena, Jak posoudit finanční zdraví firmy (PRAHA: Management Press, 2006), 52.

Activity: measures the effectiveness of business activities and usage of resources according to the turnover rate of selected balance sheet items.

Indebtedness: judges the financial structure of firms from the long-term perspective. The indicators used here serve as indicators of risk that the company undergoes with given structure of equity and liabilities, but also as a specifying rate of the company's ability to multiply its profits by using liabilities.

Liquidity: estimates the firm's ability to repay its short-term liabilities.²⁵

2.2.1 Indicators of profitability

Profitability or return on capital is a measure of an enterprise's ability to generate new resources and make profit using the invested capital. It is instrumental to assess the overall effectiveness of the given activity.²⁶

Profitability indicators are constructed as the ratio of profit and contributed capital. In the time series the indicators should show growing trend.

2.2.1.1 Return on assets (ROA)

This indicator is considered to be the key measure of profitability, because it measures the profit with the total assets invested into business, regardless of the funding sources. For this reason, it is well applicable in interfirm comparison. ROA is used for a complex judgement of the enterprise's earning ability as well as for the performance evaluation of the particular intradepartmentals.²⁷

$$ROA = \frac{EBIT}{Total\ assets} \quad (3)$$

²⁵ Kovanicová, Dana, Kovanic, Pavel, Poklady skryté v účetnictví: Finanční analýza účetních výkazů (PRAHA: Polygon, 1997), 275-276.

²⁶ Valach, Josef, Finanční analýza podniku (BRNO: Masarykova univerzita, 1999), 94.

²⁷ Kovanicová, Dana, Kovanic, Pavel, Poklady skryté v účetnictví: Finanční analýza účetních výkazů (PRAHA: Polygon, 1997), 278.

2.2.1.2 Return on equity (ROE)

This indicator is constructed as the ratio of profit and equity, which is that part of the capital, that was inserted into the company by shareholders, owners, association members, etc. (depending on the type of the company)

Return on equity is an indicator by which shareholders can determine whether their capital is reproduced with the appropriate intensity corresponding to the risk of investment. Growth of this indicator may signify increase of profit or reduction of equity. Generally, this indicator should be higher than the interest rate of risk-free securities.²⁸

$$ROE = \frac{EAT}{Equity} \quad (4)$$

2.2.1.3 Return on sales (ROS)

Return on sales indicator reflects the firm's ability to make a profit at a given level of sales, measures a portion of net profit created out of 1 crown of sales. Revenues in the denominator represent the market valuation of the company's performance in a given period of time. Reflects the firm's ability to produce the product or service with a relatively low cost or sell it for a relatively high price. This indicator is suitable for intercompany comparison.²⁹

$$ROS = \frac{EAT}{Total\ sales} \quad (5)$$

2.2.2 Indicators of activity

Activity indicators measure the company's ability to use the deposited funds by showing its turnover rate, or rate of turnover of individual components and evaluate the capital fixture in various forms of assets. Activity indicators show how many times, in a specified period (usually one year), the certain kind of assets turns-over. These indicators also measure the

²⁸ Růčková, Petra, Finanční analýza (PRAHA: GRADA Publishing, 2007), 54.

²⁹ Holečková, Jaroslava, Finanční analýza firmy (PRAHA: ASPI: Wolters-Kluwer, 2008), 71.

turnover time of particular assets, thus how long does it take the assets to execute one turn. The value of these parameters is expressed in units of time.³⁰

2.2.2.1 Average inventory period

Average inventory period indicates for how long the current assets are tied in the form of inventories, or in other words how many days will pass from the purchase of inventories to its sale (in the case of products), or to its consumption (in the case of raw material). For products, this indicator is also an indicator of liquidity because it indicates the number of days after which the product is converted into cash or debt.

Storage of higher amount of inventories than is necessary to maintain production is very expensive mainly due to the high cost of storage. Therefore, it is important to keep inventories at minimum levels, which still keeps the company running.³¹

$$\text{Average inventory period} = \frac{\text{Inventories}}{\text{Total sales}} * 360 \quad (6)$$

2.2.2.2 Account receivable turnover

This indicator shows in the number of rotations, how quickly claims are converted into cash.

$$\text{Account receivable turnover} = \frac{\text{Total sales}}{\text{Receivables}} \quad (7)$$

2.2.2.3 Average collection period

The aim of this indicator is to determine the average number of days for which customers use trade credit. It is therefore an expression of average time that elapses between the sale of goods or services, and receive of the payment. Sales on trade credit are relatively

³⁰ Kovanicová, Dana, Kovanic, Pavel, Poklady skryté v účetnictví: Finanční analýza účetních výkazů (PRAHA: Polygon, 1997), 67.

³¹ Kovanicová, Dana, Kovanic, Pavel, Poklady skryté v účetnictví: Finanční analýza účetních výkazů (PRAHA: Polygon, 1997), 283.

expensive (because the provider does not receive interest on the credit granted) but in most situations inevitable. Average collection period is usually set by enterprise bargaining strength and debt management policies, which the company applies towards its business partners (e.g. lower values are likely to be reached by firms that will offer a discount for early repayment of debt).

$$\text{Average collection period} = \frac{\text{Receivables}}{\text{Total sales}} * 360 \quad (8)$$

The recommended value of this indicator is equal to term of expiration of invoices. If it's longer, it means violation of trade-credit policy.³²

2.2.2.4 Total assets turnover

Total assets turnover is one of the key indicators of effectiveness. It is a measure of total assets utilization. This indicator denotes how many times the company's property will turn-over into sales in a 1 year period. Minimal recommended value should be 1, but for objective evaluation of this indicator it is appropriate to compare the company's result with the results of enterprises operating in the same sector.³³

$$\text{Total assets turnover} = \frac{\text{Total sales}}{\text{Total assets}} \quad (9)$$

2.2.2.5 Average payable period

This indicator specifies the time in days that passes between purchase of stock on trade credit and its refund. Trade credit is a temporary source of financing and company seeks to ensure that the average payable period is as long as possible, but must be careful not to damage business relationships by unnecessary stall of payments to suppliers.³⁴

³² Růčková, Petra, Finanční analýza (PRAHA: GRADA Publishing, 2007), 60.

³³ Holečková, Jaroslava, Finanční analýza firmy (PRAHA: ASPI: Wolters-Kluwer, 2008), 82.

³⁴ Růčková, Petra, Finanční analýza (PRAHA: GRADA Publishing, 2007), 61.

Indicator should reach at least value of the average collection period indicator; ideal situation is when these two indicators are in balance.

$$\text{Average payable period} = \frac{\text{short - term payables}}{\text{Total sales}} * 360 \quad (10)$$

2.2.3 Indicators of liquidity

In order to exist in the long term, company must be able not only to make profit, but also pay its liabilities. Ability to pay on time and the required amount of its liabilities is called solvency. If a firm wants to remain solvent it must hold sufficient amount of cashable assets, which are assets that can be quickly converted into cash.³⁵

When calculating the indicators of liquidity, various components of current assets, having a different degree of liquidity, are put into relation.³⁶

2.2.3.1 Current ratio

Current ratio shows the how many times the current assets cover short-term debts of the company or how many times the company is able to satisfy its creditors, if it turned all of its current assets into cash right now. The purpose of this indicator lies in the fact that for a successful business operation it is essential, if the enterprise is able to pay debts from assets designated for this and was not forced to sell its fixed assets. Indicator is particularly important for short-term creditors, who can ensure themselves that their investments are covered by asset value.³⁷

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{short - term payables}} \quad (11)$$

The recommended value of the indicator is 1.5 - 2.5

³⁵ Kislingerová, Eva, Manažerské finance (PRAHA: C.H. Beck, 2004), 77.

³⁶ Ibid., 77 – 81.

³⁷ Kovanicová, Dana, Kovanic, Pavel, Poklady skryté v účetnictví: Finanční analýza účetních výkazů (PRAHA: Polygon, 1997), 293.

2.2.3.2 *Quick asset ratio*

Quick asset ratio indicator is constructed as the previous one except that the current assets no longer contain their least liquid item - stocks. Higher value of this indicator is good news for creditors, but less favourable for shareholders and owners of the company. It means that the firm bonds too much of the current assets in the form of cash flow, that lies in the company, and yield none or very low interest. That of course reduces the rate of profit.

$$\text{Quick asset ratio} = \frac{(\text{current assets} - \text{inventories})}{\text{short} - \text{term payables}} \quad (12)$$

The recommended value is 1-1.5; the risk value is 0.4-0.7

2.2.3.3 *Cash-position ratio*

Cash-position ratio measures the firm's ability to pay short-term liabilities by money or their equivalents, being freely negotiable securities and checks. It is generally not recommended for the company to have more cash than state recommended values, because this would mean inefficient possession of money that could be better valorised, for example by investing in securities or the purchase of shares in other companies. Lower than the recommended value implies potential problems with liquidity because it may lead to delays in payment of debt and thus the disruption of supply chains.³⁸

$$\text{Cash} - \text{postion ratio} = \frac{(\text{cash in bank} + \text{cash in hand})}{\text{short} - \text{term payables}} \quad (13)$$

The recommended value is from 0.9 to 1.1, the minimum value is set to 0.2

³⁸ Holečková, Jaroslava, *Finanční analýza firmy* (PRAHA: ASPI: Wolters-Kluwer, 2008), 120.

2.2.4 Debt indicators

*"Debt indicators represent the relationship between liabilities on the one side and equity resources on the other. The more indebted the company is the higher is the financial leverage (as well as index). But indebtedness itself is not always negative feature of the company. In a healthy, financially stable company indebtedness may contribute to increase of its overall profitability, and thus the market value of the company. There is no direct link between debt and insolvency: the higher indebtedness doesn't inevitably bring venture into payment difficulties. Into those troubles may get also companies with a significantly lower of indebtedness."*³⁹ (Translated by the author)

2.2.4.1 Debt ratio

Debt ratio is a key indicator of the company's debt. It serves primarily as an indicator of risk for lenders, who provide the company their money either through bank loans or trade credits. High value of this indicator denotes a high indebtedness of the company and therefore an increased risk of insolvency, but it also allows the company to increase the return on equity if the return is higher than the interest paid on borrowings.⁴⁰

The recommended value of this indicator is 30 to 60% depending on sector.

$$\text{Debt ratio} = \frac{\text{Liabilities}}{\text{Total assets}} \quad (14)$$

2.2.4.2 Debt-equity ratio

This indicator measures liabilities to equity. It is widely used by banks for evaluation riskiness of loan applications. It indicates to banks and other creditors the extent to which they risk losing their investment.⁴¹

³⁹ Kovanicová, Dana, Kovanic, Pavel, Poklady skryté v účetnictví: Finanční analýza účetních výkazů (PRAHA: Polygon, 1997), 284.

⁴⁰ Růčková, Petra, Finanční analýza (PRAHA: GRADA Publishing, 2007), 58.

⁴¹ Pavelková, Drahomíra, Knápková, Adriana, Podnikové finance (ZLÍN: Univerzita Tomáše Bati ve Zlíně, 2008), 70.

$$\text{Debt equity ratio} = \frac{\text{Liabilities}}{\text{Equity}} \quad (15)$$

2.2.4.3 Interest coverage

Interest coverage informs about the extent to which the interest is covered by corporate profits. In other words, how many times the profit exceeds the interest paid. If the index equals 1, then the entire profit of the company is used to pay the interest. And there's nothing left for shareholders (dividends are paid from profits). It is generally recommended that profit should be as high to cover interest at least three times.⁴²

$$\text{Interest coverage} = \frac{\text{EBIT}}{\text{interest expenses}} \quad (16)$$

2.2.5 System of indicators

These indexes serve as warning signals of impending crisis, and are based on the finding that significant variations arise in the development of these indicators, relatively long time before bankruptcy.

2.2.5.1 Altman's index (Z-score)

This model is used to identify bankruptcy and is one of the most famous and most used models. Using complex number (z-score) calculated from several financial indicators, is trying to evaluate the health of the firm.

Model for companies not traded (not listed) on the stock market

$$Z_i = 0.717 X_{1i} + 0.847 X_{2i} + 3.107 X_{3i} + 0.42 X_{4i} + 0.998 X_{5i} \quad (17)$$

⁴² Kovanicová, Dana, Kovanic, Pavel, Poklady skryté v účetnictví: Finanční analýza účetních výkazů (PRAHA: Polygon, 1997), 292.

Where:

$$X_{1i} = \frac{\text{Net working capital}}{\text{Total assets}}$$

$$X_{2i} = \frac{\text{EAT}}{\text{Total assets}}$$

$$X_{3i} = \frac{\text{EBIT}}{\text{Total assets}}$$

$$X_{4i} = \frac{\text{Equity}}{\text{Liabilities}}$$

$$X_{5i} = \frac{\text{Total sales}}{\text{Total assets}}$$

Altman's analysis is one of the options how to evaluate the overall health of the company through a single-digit figure. Altman's Z-score includes all the essential components of financial health like, profitability, liquidity, indebtedness and capital structure.

Businesses with score under 1.2 are vulnerable to bankruptcy, with a score from 2.9 and higher with the highest probability won't face the bankruptcy in the coming years. In the range from 1.2 to 2.9 it is impossible to determine whether the company can go bankrupt or not. This range is usually called the grey zone of uncertainty.

2.2.5.2 Index IN 05

*"Unreliability of Altman's model in the Czech environment is attributed not only to the choice of indicators, but also to different market conditions, which makes scales stationary in time and space. Therefore, in the Czech economy environment, a modified bankruptcy model called INDEX 05 (IN95) is used."*⁴³

$$IN05 = 0.13 I_1 + 0.04 I_2 + 3.97 I_3 + 0.21 I_4 + 0.09 I_5 \quad (18)$$

Where:

$$I_1 = \frac{\text{Total assets}}{\text{Liabilities}}$$

⁴³ Holečková, Jaroslava, *Finanční analýza firmy* (PRAHA: ASPI: Wolters-Kluwer, 2008), 75-76.

$$I_2 = \frac{EBIT}{Interest\ expenses}$$

$$I_3 = \frac{EBIT}{Total\ assets}$$

$$I_4 = \frac{Total\ income}{Total\ assets}$$

$$I_5 = \frac{Current\ assets}{(Short - term\ liabilities + Short - term\ bank\ loans)}$$

"Firms with the IN05 index value higher than 1.6 have the ability to easily pay its liabilities. For companies that had not reached the value 0.9, there are problems already - companies do not have sufficient capacity to meet its commitments. The grey zone of index IN95 can be found within the range from 0.9 to 1.6. Firms operating in this zone are in danger and could get into trouble with the payment of its obligations."⁴⁴ (translated by the author)

⁴⁴ Holečková, Jaroslava, Finanční analýza firmy (PRAHA: ASPI: Wolters-Kluwer, 2008), 75-76.

II. ANALYSIS

3 GRANITOL A.S. FINANCIAL ANALYSIS

3.1 Company profile

3.1.1 Basic company information⁴⁵

- Company name: Granitol a.s.
- Seat: Moravský Beroun, Partyzánská 464, district Olomouc, PSČ 79305
- Identification number: 00012114
- Legal form: Joint-stock company
- Share capital: 296 473 000,- CZK
- Date of the registration: 29.12.1990

3.1.2 History

Granitol a.s. is a company producing degradable (biodegradable, oxodegradable) foils, promotional carrier bags and sheets made of foil. The company was found in the late 19 century under the name of Moravian mechanical weaving, founded by Moritz Hänsel. At that time the company produced nitrocellulose coatings based on leather imitation. In 1910 from the originally family company arose company Granitol, which was principally engaged in the manufacture of waxed cloth, artificial leather, pipes and hoses for vacuum cleaners. In 1964 production of PE foils was started. In 1990 the company was privatized and Granitol Union became the major owner. In 1995 SLOVINTEGRA became the major owner of the company. In 2004 the same investor bought the rest of the shares becoming 100% owner and launched extensive investment program.

3.1.3 Products and customers

The company produces a wide number of plastic products for the need of food, construction, agriculture and advertising purposes. Among the most important products may be included bags, shirts, lashing straps, promotional bags, construction foils, canvas and shrink-wraps. Company products are well known as evidenced by export into over 30 European countries. Main customers are: Pepsi Americas, Rockwool, Laufen, Unilever, Tondach, Marila, Kofola, Poděbradka and Podravka-Lagris.

⁴⁵ Obchodní rejstřík

3.1.4 Industry and sector

The analysed company belongs into manufacturing industry, sector manufacture of rubber and plastic products (OKEČ 25, NACE 22). OKEČ and from 2009 NACE are officially used classifications of manufacturing industry according to methodology of The Czech Ministry of Industry and Trade. All comparisons of company and sector will use data from either OKEČ 25 or NACE 22.

The business sector is characterised as very dynamic, thanks to high demand of its customers mainly building and automotive industry. Until 2008 sector had 7% revenue share on whole industry. In late 2008, revenue share declined to 6.4%, due to problems in automotive, electrical, packaging and building industry. The sector itself employs 7.2% of people working in manufacturing industry. Very important role in the sector belongs to small and medium companies, which together have a 45% portion on total sales and employ 55% of workers. The company No.1 in the sector is Candence Innovation (total sales of 7.7 billion CZK) followed by Mitas a.s. (total sales of 7.5 billion CZK).⁴⁶

⁴⁶ “Ministerstvo průmyslu a obchodu, “ Panorama českého průmyslu 2009, <http://www.mpo.cz/cz/prumysl-a-stavebnictvi/prumyslova-odvetvi/#category85> (accessed March 14, 2010).

3.2 Analysis of financial statements

3.2.1 Balance sheet analysis

For the purpose of balance sheet analysis methods of horizontal and vertical analysis were used. The horizontal analysis examines changes in particular entries through the years. This method allows to determine increase or decrease of items and to identify reasons of changes. Second method, the vertical analysis, examines portion of each entry on total sum of assets or total liabilities & equity. This method is vital for characterization of property and capital structure. It allows comparing company structure with average structure in sector in which company belongs. Following analysis works with data from Granitol a.s. annual reports and data of the sector in which the company belongs to. Data from the sector were provided by Ministry of Industry and Trade.

Tab. 2. Horizontal analysis of assets – Granitol a.s.

(in thousand CZK)	2007	2008	08/07	2009	09/08
TOTAL ASSETS	573 367	527 083	-8%	513 636	-3%
Fixed assets	186 827	201 154	8%	185 226	-8%
Intangible fixed assets	1 240	1 114	-10%	575	-48%
Tangible fixed assets	185 587	200 040	8%	184 651	-8%
Non-current financial assets	0	0	x	0	x
Current assets	384 289	324 346	-16%	327 543	1%
Inventories	145 893	104 121	-29%	131 884	27%
Long-term receivables	0	0	x	0	x
Short-term receivables	228 803	199 354	-13%	161 942	-19%
Current financial assets	9 593	20 871	118%	33 176	59%
Other assets	2 251	1 583	-30%	867	-45%

Source: Granitol annual report 2009

Tab. 3. Horizontal analysis of assets – Sector

(in mil. CZK)	2007	3. Q. 2008	2008	08/07	3. Q. 2009	3Q2009/3Q2008
TOTAL ASSETS	112 021	94 717	85 090	-24%	78 771	-17%
Fixed assets	75 339	53 663	52 604	-30%	38 663	-28%
Intangible + Tangible fixed assets	37 685	37 735	37 478	-1%	35 946	-5%
Non-current financial assets	37 653	15 927	15 125	-60%	2 717	-83%
Current assets	35 695	40 400	31 774	-11%	38 854	-4%
Inventories	10 704	11 206	10 228	-4%	8 762	-22%
Receivables	19 878	25 159	18 059	-9%	24 121	-4%
Current financial assets	5 113	4 034	3 426	-33%	5 970	48%
Other assets	988	653	712	-28%	1 253	92%

Source: Financial analysis of corporate sector for 3Q.2009

Horizontal analysis of assets showed that total assets of company gradually decrease. In 2008 Granitol invested 32 million crowns to buy a new production line which is clearly visible in growth of tangible fixed assets.⁴⁷ Decline in fixed assets between years 2008 and 2009 was due to decrease of price level caused by economic crisis. Current assets of company have cyclic development. In 2008 amount of inventories fell by 29% implying that in this period the company had no major problems with sales, but year later amount of inventories raised by 27%, this was mainly due to decision of management to frontload before expected raise of price level.⁴⁸ Amount of short-term receivables showed continuous decrease caused in 2008 by increased effort of company to recover debts and in 2009 by previously mentioned decrease of price level. Higher amount of recovered receivables positively affected current financial assets.

Data of the sector also showed decrease in amount of total assets. In whole reported period it was about 40%. Size of fixed assets fell by 28% between third quarter of 2008 and 2009. Intangible and tangible assets showed only minimal decrease in value, most likely caused by change in price level. Fall of inventories and rise in current financial assets, means that companies reduced production and started to save money.

⁴⁷ “GRANITOL a.s. ,“ Výroční zpráva 2008, 7.

⁴⁸ Granitol a.s., Výroční zpráva 2009; (Moravský Beroun: Granitol a.s., 2009), 10

Tab. 4. Horizontal analysis of total liabilities & equity – Granitol a.s

(in thousand CZK)	2007	2008	08/07	2009	09/08
TOTAL LIABILITIES & EQUITY	573 367	527 083	-8%	513 636	-3%
Equity	371 059	370 928	0%	359 070	-3%
Share capital	296 473	296 473	0%	296 473	0%
Capital funds	0	0	x	0	x
Statutory funds	11 711	14 291	22%	16 626	16%
Retained earnings	11 296	14 296	27%	11 771	-18%
Profit of loss for the current period	51 579	45 868	-11%	34 200	-25%
Liabilities	196 236	152 042	-23%	154 380	2%
Provisions	21 501	5 367	-75%	7 231	35%
Long-term liabilities	5 894	6 377	8%	9 392	47%
Short-term liabilities	61 938	48 397	-22%	80 340	66%
Bank loans and borrowings	106 903	91 901	-14%	57 417	-38%
short-term bank loans	42 846	58 955	38%	48 885	-17%
long-term bank loans	64 057	32 946	-49%	8 532	-74%
Other liabilities	6 072	4 113	-32%	186	-95%

Source: Granitol annual report 2009

Tab. 5. Horizontal analysis of total liabilities & equity - Sector

(in mil. CZK)	2007	3.Q.2008	2008	08/07	3.Q.2009	3Q.09/3Q.08
TOTAL LIABILITIES & EQUITY	112 021	94 717	85 090	-24%	78 771	-17%
Equity	61 641	52 469	49 951	-19%	44 467	-15%
Share capital	15 954	14 563	14 575	-9%	15 288	5%
Retained earnings + other funds	36 579	29 883	29 883	-18%	23 144	-23%
Profit or loss for the current period	8 338	8 021	8 911	7%	6 034	-25%
Liabilities	50 771	42 170	35 082	-31%	33 544	-20%
Provisions	1 810	1 177	1 109	-39%	1 007	-14%
Long-term liabilities	4 294	3 902	3 562	-17%	5 398	38%
Short-term liabilities	16 365	17 084	14 310	-13%	14 638	-14%
Bank loans and borrowings	28 301	20 006	16 099	-43%	12 499	-38%
- Long-term bank loans	9 152	10 601	8 906	-3%	7 037	-34%
- Short-term bank loans	19 149	9 404	7 192	-62%	5 462	-42%
Other liabilities	-391	78	56	-114%	760	874%

Source: Financial analysis of corporate sector for 3Q.2009

Financial structure of the company's equity shows stable amount of share capital and increase of statutory funds and retained earnings in period between 2007 and 2008 which shows that company generated profit. In 2008 and 2009 we may see continuous decrease in profit, which was caused by economic crisis. Structure of liabilities showed decrease in bank loans and borrowings as well as in short-term liabilities in period of 2007 and 2008, this indicates decrease of indebtedness level and effort of the company to pay up its debts. In 2009 there was a considerable growth by 66% in short-term liabilities, which may mean problems with liquidity and requires further examination. Change in portion of short-term bank loans and long-term bank loans shows that the company preferred short-term form of financing its activities. Long-term bank loans have decreased by 74% between years 2008 and 2009 which shows effort to pay long-term liabilities caused by decision of banks to withdraw their investments.

Comparison of the sector and company data in period of 2008 and 2009 showed that economic crisis influenced the company in the same way as the whole industry. Profit and loss of the company and the sector in the reported period fell by 25. Long-term liabilities grew, in case of the company by 47% and in case of sector by 51%.

The main difference regarding financial structure is that company preferred to finance its activities by short-term bank loans thus sector in average preferred to finance its activities by long-term bank loans.

Tab. 6. Vertical analysis of assets – Granitol a.s.

(in thousand CZK)	2007		2008		2009	
TOTAL ASSETS	573 367	100%	527 083	100%	513 636	100%
Fixed assets	186 827	33%	201 154	38%	185 226	36%
Intangible fixed assets	1 240	0%	1 114	0%	575	0%
Tangible fixed assets	185 587	32%	200 040	38%	184 651	36%
Non-current financial assets	0	0%	0	0%	0	0%
Current assets	384 289	67%	324 346	62%	327 543	64%
Inventories	145 893	25%	104 121	20%	131 884	26%
Long-term receivables	0	0%	0	0%	0	0%
Short-term receivables	228 803	40%	199 354	38%	161 942	32%
Current financial assets	9 593	2%	20 871	4%	33 176	6%
Other assets	2 251	0%	1 583	0%	867	0%

Source: Granitol annual report 2009

Tab. 7. Vertical analysis of assets - Sector

(in mil. CZK)	2007		3.Q. 2008		2008		3.Q.2009	
TOTAL ASSETS	112 021	100%	94 717	100%	85 090	100%	78 771	100%
Fixed assets	75 339	67%	53 663	57%	52 604	62%	38 663	49%
Intangible + Tangible fixed assets	37 685	34%	37 735	40%	37 478	44%	35 946	46%
Non-current financial assets	37 653	34%	15 927	17%	15 125	18%	2 717	3%
Current assets	35 695	32%	40 400	43%	31 774	37%	38 854	49%
Inventories	10 704	10%	11 206	12%	10 228	12%	8 762	11%
Receivables	19 878	18%	25 159	27%	18 059	21%	24 121	31%
Current financial assets	5 113	5%	4 034	4%	3 426	4%	5 970	8%
Other assets	988	1%	653	1%	712	1%	1 253	2%

Source: Financial analysis of corporate sector for 3Q.2009

Vertical analysis of company's assets shows that in period of 2007 and 2008 the portion of fixed assets on total assets gradually grew to the expense of current assets. In 2007 the portion of fixed assets on total assets was 33% thus in industry it was 67%. By increasing the portion of fixed assets on total assets to 38% and decreasing current assets by 5% in 2008, company slowly tried to achieve similar property structure as was usual in the sector. But development in year 2009 shows that trend has changed and fixed assets in sector are in decline while portion of current assets grows. The main reason for that is decrease of tangible fixed assets in both tables, which is connected with lower price level, amortization and decrease in investments. On the other side growth in inventories is due to accumulation of products that companies were not able to sell.

Tab. 8. Vertical analysis of total liabilities & equity – Granitol a.s.

(in thousand CZK)	2007		2008		2009	
TOTAL LIABILITIES & EQUITY	573 367	100%	527 083	100%	513 636	100%
Equity	371 059	65%	370 928	70%	359 070	70%
Share capital	296 473	52%	296 473	56%	296 473	58%
Capital funds	0	0%	0	0%	0	0%
Statutory funds	11 711	2%	14 291	3%	16 626	3%
Retained earnings	11 296	2%	14 296	3%	11 771	2%
Profit of loss for the current period	51 579	9%	45 868	9%	34 200	7%
Liabilities	196 236	34%	152 042	29%	154 380	30%
Provisions	21 501	4%	5 367	1%	7 231	1%
Long-term liabilities	5 894	1%	6 377	1%	9 392	2%
Short-term liabilities	61 938	11%	48 397	9%	80 340	16%
Bank loans and borrowings	106 903	19%	91 901	17%	57 417	11%
short-term bank loans	42 846	7%	58 955	11%	48 885	10%
long-term bank loans	64 057	11%	32 946	6%	8 532	2%
Other liabilities	6 072	1%	4 113	1%	186	0%

Source: Granitol annual report 2009

Tab. 9. Vertical analysis of total liabilities & equity - Sector

(in mil. CZK)	2007		3.Q. 2008		2008		3.Q.2009	
TOTAL LIABILITIES & EQUITY	112 021	100%	94 717	100%	85 090	100%	78 771	100%
Equity	61 641	55%	52 469	55%	49 951	59%	44 467	56%
Share capital	15 954	14%	14 563	15%	14 575	17%	15 288	19%
Retained earnings + other funds	36 579	33%	29 883	32%	29 883	35%	23 144	29%
Profit or loss for the current period	8 338	7%	8 021	8%	8 911	10%	6 034	8%
Liabilities	50 771	45%	42 170	45%	35 082	41%	33 544	43%
Provisions	1 810	2%	1 177	1%	1 109	1%	1 007	1%
Long-term liabilities	4 294	4%	3 902	4%	3 562	4%	5 398	7%
Short-term liabilities	16 365	15%	17 084	18%	14 310	17%	14 638	19%
Bank loans and borrowings	28 301	25%	20 006	21%	16 099	19%	12 499	16%
- short-term bank loans	9 152	8%	10 601	11%	8 906	10%	7 037	9%
- long-term bank loans	19 149	17%	9 404	10%	7 192	8%	5 462	7%
Other liabilities	-391	0%	78	0%	56	0%	760	1%

Source: Financial analysis of corporate sector for 3Q.2009

Capital structures of the company and sector show relatively stable portion of equity and liabilities. In case of Granitol the portion of 70% of equity and 30% of liabilities on total liabilities & equity show that company preferred to finance its activities by its own sources, which is considered by many textbooks of finance to be safe way of funding. Sector uses similar way only with higher portion of liabilities, which increases profitability.

3.2.2 Income statement analysis

As well as the balance sheet, income statement will be analyzed using methods of horizontal and vertical analysis. Horizontal analysis is focused on year to year changes of individual entries, while vertical analysis is primarily interested in changes of structure, thus changes in portions of individual expenses or incomes on total output.

Tab. 10. Horizontal analysis of income statement - Granitol a.s.

(in thousand CZK)	2007	2008	08/07	2009	09/08
I. Sales of goods	1 687	2 026	20%	2 522	24%
A. Costs of goods sold	1 137	869	-24%	1 281	47%
Gross margin	550	1 157	110%	1 241	7%
II. Production	1 247 206	1 112 866	-11%	811 673	-27%
II.1. Sales of own products and services	1 244 265	1 119 045	-10%	814 976	-27%
B. Purchased consumables and services	1 052 942	927 862	-12%	639 364	-31%
Added value	194 814	186 161	-4%	173 550	-7%
C. Staff costs	114 321	114 574	0%	107 844	-6%
C.1. Payroll costs	81 173	81 374	0%	77 757	-4%
III. Sales of fixed assets and material	12 147	16 371	35%	50 465	208%
* Operating profit or loss	73 099	60 698	-17%	45 012	-26%
N. Interest expenses	5447	5630	3%	2027	-64%
* Financial profit or loss	-3 178	236	-107%	-2 374	-1106%
Q. Income tax on ordinary activities	18 342	15 066	-18%	8 437	-44%
** Profit or loss from ordinary activities	51 579	45 868	-11%	34 200	-25%
**EBIT	75 368	66 564	-12%	44 664	-33%
**** Profit or loss before tax	69 921	60 934	-13%	42 637	-30%

Source: Granitol annual report 2009

Horizontal analysis of the company shows some of impacts that economic crisis had on the company. Most important is decrease in sales of own products and services, due to decrease of demand by customers mainly automotive and building industry. In response to this fact, company management decided to lower production, increase flexibility in purchase and manufacture as well as activity in sales. Thanks to wide variety of products company increased export, this helped to lower fall of sales. Other important steps were made on the side of expenses. Lower demand caused smaller orders of different types of products which led to more frequent changes in type of produced products. It increased production costs. In order to reverse this negative development company started to increase

use of recycled manufacturing waste. Reduced production and effort to optimize manufacturing process led to release of 9 employees in 2008 and another 23 in 2009.⁴⁹

Tab. 11. Vertical analysis of income statement - Granitol a.s.

(in thousand CZK)	2007		2008		2009	
I. Sales of goods	1 687	0,1%	2 026	0,2%	2 522	0,3%
A. Costs of goods sold	1 137	0,1%	869	0,1%	1 281	0,2%
Gross margin	550	0,04%	1 157	0,1%	1 241	0,2%
II. Production	1 247 206	100%	1 112 866	100,0%	811 673	100,0%
II.1. Sales of own products and services	1 244 265	99,8%	1 119 045	100,6%	814 976	100,4%
B. Purchased consumables and services	1 052 942	84,4%	927 862	83,4%	639 364	78,8%
Added value	194 814	15,6%	186 161	16,7%	173 550	21,4%
C. Staff costs	114 321	9,2%	114 574	10,3%	107 844	13,3%
C.1. Payroll costs	81 173	6,5%	81 374	7,3%	77 757	9,6%
III. Sales of fixed assets and material	12 147	1,0%	16 371	1,5%	50 465	6,2%
* Operating profit or loss	73 099		60 698		45 012	
N. Interest expenses	5447	0,4%	5630	0,5%	2027	0,2%
* Financial profit or loss	-3 178		236		-2 374	
Q. Income tax on ordinary activities	18 342	1,5%	15 066	1,4%	8 437	1,0%
** Profit or loss from ordinary activities	51 579		45 868		34 200	
**EBIT	75 368		66 564		44 664	
**** Profit or loss before tax	69 921		60 934		42 637	

Source: Granitol annual report 2009

Vertical analysis of income statement shows that analyzed company has a manufacturing character because 99% of its income is created by sales of own production. Growing gross margin suggests that company is probably trying to sell goods on foreign market at higher price. Declining portion of purchased consumables and services denotes effort to minimize expenses and optimize manufacturing process. Growing portion of added value shows, that company prioritizes to produce products of higher quality.⁵⁰

⁴⁹ Granitol a.s., Výroční zpráva 2009; (Moravský Beroun: Granitol a.s., 2009), 10.

⁵⁰ "GRANITOL a.s.," Výroční zpráva 2008, 6.

Tab. 12. Profit development – Granitol a.s.

(in thousand CZK)	2007	2008	2009
Operating profit	73 099	60 698	45 012
Financial profit	-3 178	236	-2 374
Extraordinary profit	0	0	0
Profit from ordinary activities	51 579	45 868	34 200
Profit or loss before tax	69 921	60 934	42 637
EBIT	75 368	66 564	44 664
Interest expenses	5 447	5 630	2 027

Source: Granitol annual report 2009

Table 12 summarizes development of profit from ordinary activities. Operating profit in the reported period decreased almost by 50%, due to mainly lowered demand. Interest expenses have decreased by more than a half because in these uncertain times the company prefers to finance its activities by own sources instead of bank loans.⁵¹

Tab. 13. Profit development – sector

(in thousand CZK)	2007	3.Q. 2008	2008	3.Q.2009
Operating profit/loss	14 425 866	9 707 748	10 919 903	8 453 105
Financial profit/loss	-874 723	574 353	613 242	692 440
Profit or loss from ordinary activities	10 174 808	8 021 577	8 911 191	6 034 300
Profit or loss before tax	13 551 143	10 282 101	11 533 145	9 145 545
EBIT	14 667 792	11 274 532	12 834 060	10 856 340
Interest expenses	1 116 649	992 431	1 300 915	1 710 795

Source: Financial analysis of corporate sector for 3Q.2009

Situation in the sector is, as table (Tab. 13) shows, alike situation of the company. Operating profit also shows gradual decrease. In comparison with Granitol the whole sector in average is more effective on financial market as financial profit shows. Interest expenses are growing as well, which means that sector more and more uses bank loans to finance its activities.

⁵¹ Granitol a.s., Výroční zpráva 2009; (Moravský Beroun: Granitol a.s., 2009), 10.

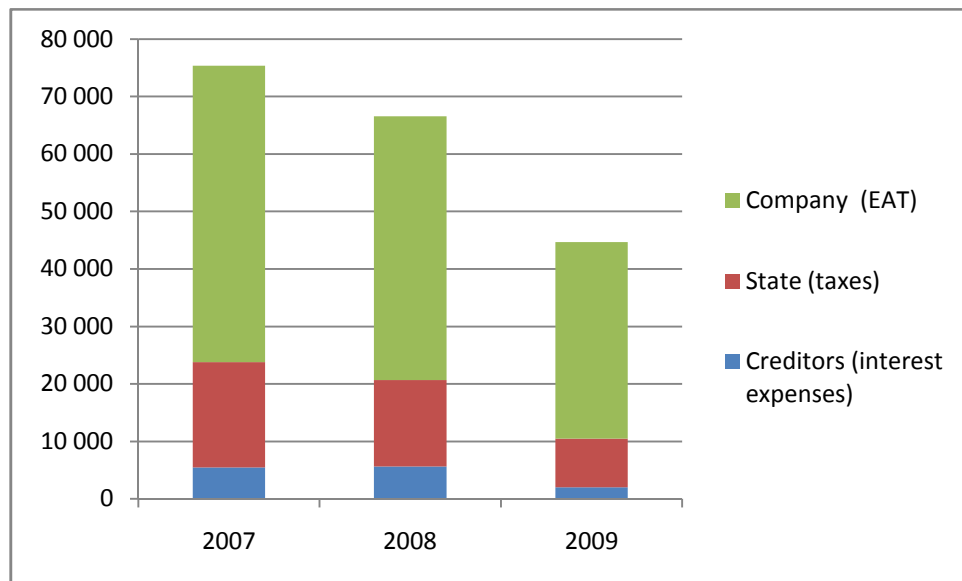


Fig. 1. Division of EBIT in 2007-2009 – Granitol a.s.

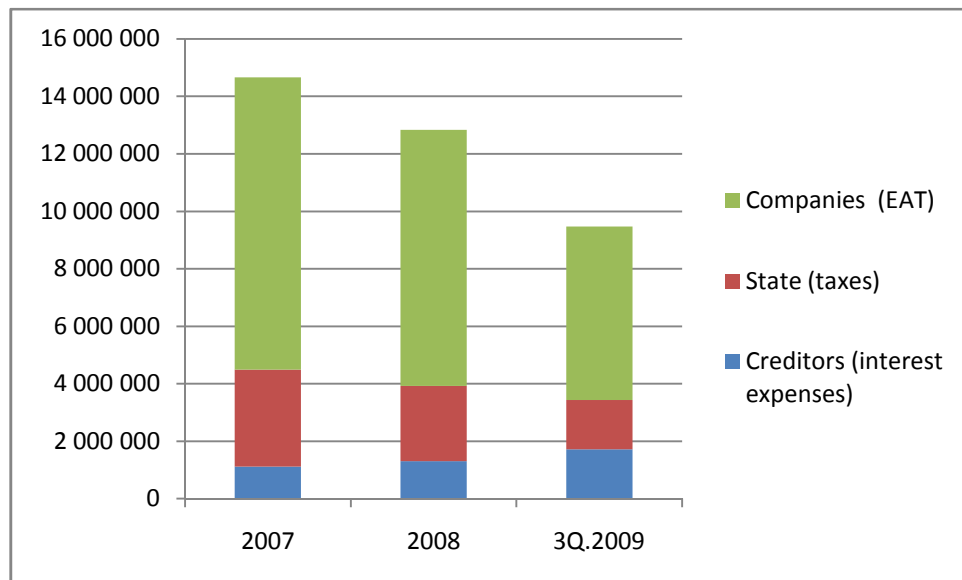


Fig. 2. Division of EBIT in 2007-3Q.2009 - sector

Graphs of EBIT division show how earnings before taxes are divided. In case of Granitol decrease in EAT indicates decrease in operating profit, which also caused decrease in amount of taxes paid. Interest expenses are lower due to lower use of bank loans. In the sector the situation is very similar, again lower operating profit had caused lower EAT and lower taxes, only difference here is that amount of EBIT paid to creditors increased in last period, this indicates that sector raised use of bank loans.

3.2.3 Cash flow analysis

Cash flow statement serves as a useful source of information about changes in cash. It records incomes and expenditures, thus money that were really paid or received by the company unlike the income statement which records revenues and expenses, which are money that will be paid or received in the near future (usually 30 days or so). For this reason cash flow offers more accurate picture of financial situation of the company. In financial analysis this statement is primarily used for evaluating company's capability to create cash surplus

Tab. 14. Cash flow analysis – Granitol a.s.

(in thousand CZK)	2007	2008	2009
Profit/ (Loss) before tax	51 579	45 868	34 200
Depreciation and amortisation	29 913	29 080	23 117
Movement on provisions	4 705	-16 134	1 864
Change in short-term payables	-30 269	609	17 316
Change in receivables	3 720	30 117	36 696
Change in inventories	-16 128	41 772	-27 763
Net cash from operating activities	43 520	131 312	85 430
Proceeds from disposals of non-current assets	534	638	701
Net cash used in investing activities	534	638	701
Change in long-term payables	314	483	3 015
Change in equity	30 431	-131	-13 447
Net cash used in financing activities	30 745	352	-10 432
Net increase/ (decrease) in cash and cash equivalents	74 799	132 302	75 699

Source: Granitol annual report 2009

Cash flow analysis shows that main income of the company throughout reported period are operating activities. In 2007 the main source of income was also retained earnings which increased the equity. Also it is important to mention that in the same year the company paid up a considerable amount of short-term liabilities, which reduced level of indebtedness and the company started to rely more on its own sources of financing. In 2008 company started to feel the impact of economic crisis which lead to effort to increase income. This was done by collecting claims and sale of unnecessary inventories, mostly material. In 2009 profit continued to decrease while amount of inventories grew. This was caused by combination and frontloading and lowered demand. The company maintained positive cash flow only due to another collection of claims and by holding payments to creditors. Generally Granitol is able to create surplus of cash but last year more than a half of that cash was created thanks to rapid increase of trade payables, which grew by 80%.

3.3 Net working capital analysis

Working capital represents part of current assets which are not covered by short-term liabilities. This part of current assets is widely considered to be a financial pillow, which is often used to pay up for unexpected liabilities. It is calculated as difference of current assets and short-term liabilities.

Tab. 15. Net working capital – Granitol a.s.

(in thousand CZK)	2006	2007	2008	2009
Net working capital	221 226	279 505	216 994	198 318

Source: Granitol annual report 2009

Size of networking capital is positive in whole reported period which means that part of company's current assets are covered by long-term resources. Although its size decreased in past 2 years it is still high enough to assure solvency of the company.

3.4 Indebtedness analysis

Indebtedness indicators help to determine level of risk that company undergoes with given capital structure. It analyses structure of funding itself as well as if expenses connected with use of liabilities are covered by company's profit. For correct evaluation of indexes it is necessary to compare company's indicators with the whole sector.

Tab. 16. Indebtedness indicators – Granitol a.s.

Granitol	2007	2008	2009
Debt ratio	34%	29%	30%
Debt-equity ratio	0,53	0,41	0,43
Interest coverage	13,8	11,8	22,0
Long-term liabilities/Liabilities	47%	29%	16%
Long-term liabilities/Long-term capital	20%	11%	7%
Equity/Fixed assets	2,0	1,8	1,9
Long-term capital/Fixed assets	2,5	2,1	2,1

Source: Granitol annual report 2009

Tab. 17. *Indebtedness indicators - sector*

Sector	2007	2008	3Q.2009
Debt ratio	45%	41%	43%
Debt-equity ratio	0,45	0,41	0,43
Interest coverage	13,1	9,9	5,5
Long-term liabilities/Liabilities	31%	39%	40%
Long-term liabilities/Long-term capital	20%	21%	23%
Equity/Fixed assets	0,8	0,9	1,2
Long-term capital/Fixed assets	1,0	1,2	1,5

Source: Financial analysis of corporate sector for 3Q.2009

Debt ratio of Granitol was lower in whole reported period than in sector and in limit of recommended value of 30-60%. This means that the company covered on average 30% of assets by liabilities, which indicates that company preferred stability from higher profitability. Debt equity ratio has decreased in 2008 thanks to lower amount of bank loans. With a value under 50%, the company would have no problem to gain bank loan if the situation requires to. High interest coverage means that the company has no problems on paying bank loan interests and yet made profit. Long-term liabilities/ Liabilities show that amount of short time liabilities mainly short-time bank loans and trade payables grew. Long-term liabilities / Long-term capital express as well as previous index that amount of long-term liabilities in decline in the expense of the short-one. Equity/Fixed assets is connected with property structure of the company, it shows that whole amount of fixed assets is covered by own funds. This fact highlights tendency to behave safely and not to risk stability of the company and possible need to sell equipment.

Overall debt situation of Granitol may be considered as good. The company doesn't use too much liabilities, is able pay bank interest very easily, would gain loan without any problems and yet there is no sign that should worry about their invested resources.

3.5 Liquidity analysis

Liquidity analysis deals with ability to reimburse short-term liabilities. Indexes measure different levels of current assets (according to level of liquidity) with short-term liabilities.

NWC to current assets or assets measures size of financial reserves company can use to cover unexpected expenditures.

Tab. 18. Liquidity - Granitol a.s.

Granitol	2007	2008	2009	Recommended value
Current ratio	3,7	3,0	2,5	1,5-2
Quick asset ratio	2,3	2,1	1,5	1
Cash-position ratio	0,09	0,19	0,26	0,2
NWC/Current assets	73%	67%	61%	30-50%
NWC/Assets	49%	41%	39%	

Source: Granitol annual report 2009

Tab. 19. Liquidity – sector

Sector	2007	2008	3.Q.2009	Recommended value
Current ration	1,4	1,4	1,8	1,5-2
Quick asset ratio	x	x	x	1
Cash-position ratio	0,20	0,15	0,28	0,2
NWC/ Current assets	29%	24%	43%	30-50%
NWC/Assets	9%	10%	22%	

Source: Financial analysis of corporate sector for 3Q.2009

Current ratio, which indicates how many times is company able to satisfy its creditors if all current assets were turned into cash, reaches in case of Granitol to 3 in 2008 and 2,5 in 2009. This shows that the company is able to satisfy its creditors, but indexes higher than recommended by Ministry of Industry and Trade and considerably higher than sector average point to the fact that company possesses too many inventories, which means increase of storage expenses, thereby lower profit and profitability of assets. As stated before in the thesis, higher amount of inventories is primarily caused by frontloading. Quick asset ratio excludes inventories and long-term receivables as the least liquid form of assets. In case of the sector this index is unavailable because sector data do not diversify long-term and short-term receivables. Granitol's quick asset ratio is again higher than recommended due to high amount of non-received receivables but positive fact is that its amount decreases each year. Cash-position ratio considers only cash as payment tool. This index value is nearly the same in case of the company and the sector and almost equals recommended values. Net working capital to current assets ratio indicates how many percent of current assets serves as reserve for unexpected expenses. Granitol's index show decrease as company tries to get rid of surplus material and products to lower storage expenses as well as for reasons mentioned later. In general company is able to pay its creditors, thus risk of insolvency is very low, although company management should consider decreasing its amount if price level will stabilize.

3.6 Profitability analysis

Profitability represents ability to generate profit from invested assets. Outcome of its analysis has a very important role for managers, who may terminate non profitable activities, or investors, who demand valorisation of their investment and if profitability is lower than interest rates offer by banks, they may decide to withdraw deposits.

Tab. 20. Profitability indexes – Granitol

Granitol	2007	2008	2009
ROA	13,14%	12,63%	8,70%
ROE	13,90%	12,37%	9,52%
ROS	4,1%	4,03%	3,94%
EBIT/interest capital	15,77%	14,38%	10,72%

Source: Granitol annual report 2009

Tab. 21. Profitability indexes – sector

Sector	2007	2008	3Q.2009
ROA	13,43%	15,08%	12,37%
ROE	16,91%	17,84%	13,57%
ROS	8,21%	7,46%	8,14%
EBIT/interest capital	18,48%	21,80%	18,91%

Source: *Financial analysis of corporate sector for 3Q.2009*

Profitability indexes show that the company despite of the economic crisis and lowered demand of customers, still generates profit. Granitol's ROA index, which symbolises ability to generate profit using available assets, has fallen by 5% over reported period, while in industry the average decrease was by 1%. Decrease of ROA is caused by significant decrease of EBIT and when crisis is over and production grows again it should rise again. Return on equity (ROE), representing valorisation of company's owners investments shows that company is able to offer its investors higher yield on deposit than banks, but lower than other companies in the sector. It is possible that some investors might leave the company and invest into one of the more profitable companies in sector. Comparison of ROS, return of sales shows, that profit margin of Granitol is half size the usual in the industry. One explanation of this feature is decrease of export into foreign countries which fall in 2009 by 25%.⁵² Last indicator shows ability to efficiently use liabilities to increase profit. In case of Granitol's index decreased by almost 5% in reported period and is getting close to interest rate paid to banks for provided loan, despite of decrease in amount interest capital (equity, bank loans) reason for that is again decrease in EBIT. Generally it is positive that company is still able to generate profit and quite efficiently use its resources, negative aspect is that company is not as efficient as its competitors.

⁵² Granitol a.s., Výroční zpráva 2009; (Moravský Beroun: Granitol a.s., 2009), 31.

3.7 Activity analysis

Activity indexes measure if company has efficient structure of resources, how successful is in negotiation with creditors and debtors or how long does it take until company receives receivables or pays payables.

Tab. 22. Activity indicators – Granitol a.s.

Granitol	2007	2008	2009
Total assets turnover	2,19	2,16	1,69
Average inventory period (in days)	39	40	49
Accounts receivable period (in days)	65	68	75
Accounts payable period (in days)	18	15	33
Accounts receivable turnover	5	6	5
Accounts payable turnover	20	24	11

Source: Granitol annual report 2009

Tab. 23. Activity indicators - sector

Sector	2007	2008	3Q.2009
Total assets turnover	1,14	1,40	0,94
Average inventory period (in days)	29	30	46
Accounts receivable period (in days)	61	57	102
Accounts payable period (in days)	46	43	71
Accounts receivable turnover	6	7	3
Accounts payable turnover	8	8	5

Source: Financial analysis of corporate sector for 3Q.2009

Total assets turnover of company shows decrease which means lower efficiency in assets usage. This fact is due to significant decrease in profit while total amount of assets remained at relatively stable level. The company should attempt to sell part of inventories, which primarily caused this situation. Same index in the sector fell under recommended value of 1, which means high inefficiency in assets management. Average inventory period counts number of days that passed between purchase of material and sale of product. It is obvious that Granitol as well as sector faced decrease in productivity. Accounts receivable period, which should be shorter or in balance with accounts payable period, are way bigger. It means that company has to wait 75 days until receivables are paid, while company pays its liabilities on average after 33 days. This disproportion causes need to use

own funds, loans or to sell part of current assets. This could be the reason for sale of material mentioned before. Same situation is in the sector. Account receivable turnover and account payable turnover shows in case of Granitol that all receivables are received 5 times a year and payables are paid 11 times a year. This could be the answer to question why in 2009 amount of short-term liabilities grew by 66% as was stated in Horizontal analysis of total liabilities & equity. The company simply tries to hold payments in order to decrease need of another bank loan or material sale.

3.8 Systems of indicators

Systems of indicators are complex models including several indexes together. Main advantage of these systems is that enable quick evaluation of company's overall status. In this chapter will be used Altman's Z-score model, the universal system applicable to companies all over the world and IN05 model, created especially for Czech companies.

Tab. 24. Altman's Z-score – Granitol a.s.

Altman's Z-score	2007	2008	2009
0,717 * NWC/Current assets	0,517	0,476	0,430
0,874 * Retained earnings/Total assets	0,017	0,024	0,019
3,107 * EBIT/Total assets	0,408	0,392	0,270
0,420 * Equity/Liabilities	0,794	1,025	0,977
0,998 * Sales/Total assets	2,190	2,154	1,686
Z-score	3,927	4,070	3,383

Source: Granitol annual report 2009

Tab. 25. Index IN05 – Granitol a.s.

Index IN 05	2007	2008	2009
0,13 * Total assets/Liabilities	0,38	0,45	0,43
0,04 * EBIT/Interest expenses	0,55	0,47	0,88
3,97* EBIT/Total assets	0,50	0,48	0,33
0,21* Revenues/Total assets	0,48	0,47	0,36
0,09* Current assets/Short-term liabilities	0,33	0,27	0,23
Index IN 05	2,24	2,14	2,24

Source: Granitol annual report 2009

According to division of Z-score value above 2,99 indicates healthy financial situation and very low risk of bankruptcy. Comparison of Z-scores shows that company was in best shape in 2008. In 2009 Z-score significantly decreased as well as risk of bankruptcy. Reasons which caused this development are mainly: decrease in sales and increase in current assets (typical impact of economic crisis), increase in liabilities (above all trade payables) and decrease in EBIT and total assets caused by lower demand and sales of material.

Index IN05 divides companies on the same basis as Z-score only here values above 1.6 represent healthy company. As may be seen Granitol, seems to be healthy even according to Czech standards. Increase in IN05 in 2009 was mainly due to lower amount of interest expenses paid from profit, which means that company avoids higher portion of long-term bank loans and prefers short ones. Other indicators were generally in decline. Reasons are the same as in case of Z-score: growth in liabilities, decrease in EBIT (lower income), decrease in revenues (lower sales) and higher amount of short-term liabilities.

Overall situation of Granitol is according to results of both indicators still positive and in near future company most likely will not bankrupt.

CONCLUSION

Results of the financial analysis revealed current financial situation of the company as well as few problems which the global economic crisis caused and which were resolved by the company management.

Balance sheet analyses showed that Granitol has a relatively stable portion of total assets and current assets with tendency to increase amount of current assets in expense of total assets to match assets division usual in the sector. Growth of inventories in 2009 is affected by company's decision to frontload material in period of low price level. According to division of equity and liabilities company prefers to finance activities by own sources which is considered to be safe way of funding even though on the expense of lower profit.

Income statement analysis revealed that economic crisis had negative effect on sales of own production. Its level decreased in reported period by 35%. Main reason for this fall was 30% decrease of demand on the market, mainly caused by serious problems of main subscribers of company, automotive and building industry. To improve sales situation company management decided to sell higher portion of products abroad, thanks to higher sales of products made on coextrusive production lines and higher selling activity company succeeded to at least lower decrease of sales. Continuous fall of amount and size of orders enforced company to lower production and products prices. In order to maintain profitability Granitol had to lower expenses, this led to release of 32 employees, higher use of recycled technological waste and cancel of planned investments.

Cash flow analysis proved that company was able to create surplus of cash which is very important to maintain ability to pay liabilities. Main source of income were operating activities which is typical for manufacture company.

Net working capital analysis indicated enough size of current assets covered by long-time resources, which in case of unexpected expenses may be turned into cash.

Overall indebtedness situation of Granitol may be considered as low. Company covers by liabilities only 30% of its assets. Interest coverage covers interest expenses 22 times. Continually decreases amount of long-term bank loans in expense of short-term which are cheaper. Risk for creditors is low and company would have no problems to gain a bank loan in the future.

Ability to pay up liabilities or liquidity is good, although the current ratio is slightly higher than recommended by the Ministry of Industry and Trade and considerably higher than in

industry, which denotes ineffective resource management. It would be wise to lower the amount of inventories, but considering the period of crisis this might be problematic.

Profitability of the company is affected by the decrease of profit, but it is important to mention that although in decline it still guarantees higher return than is offered by banks therefore investors should not be motivated to withdraw their funds. Return on assets is half the size than in sector which is due to higher amount of inventories because of the management decision to frontload as was mentioned before.

Activity analysis shows higher efficiency in assets management than in sector as total assets turnover indicates. Accounts payable period and accounts receivable period should be at least in balance or in ideal situation accounts payable should be higher than accounts receivable show, but present situation shows the exact opposite. It means that company is paying debts sooner than receiving payments. This disproportion causes need to use own funds, loans or to sell part of current assets. In order to maintain liquidity company management has to use short-term bank loans. This is a serious problem and I think that management should try to convince debtors to pay on time, for example by offering discount.

Results of Z-score as well as IN05 evaluate company as healthy, profitable and in no risk of bankruptcy in the forthcoming years. This in my opinion is a sign that company management consists of people who know their work and care about the company health.

Overall situation of the company may be considered as good. It is obvious that economic crisis caused many problems to the company, but measures that company management undertook ensured continuation of entrepreneurial activity and Granitol may further pursue its goals.

BIBLIOGRAPHY

PRIMARY SOURCES

GRANITOL a.s. „Výroční zpráva 2008.“ *Ministrestvo spravedlnosti České republiky*. 2010. <http://www.justice.cz/xqw/xervlet/insl/index?sysinf.@typ=sbirka&sysinf.@strana=documentList&vypisListin.@cEkSub=350011> (accessed March 14, 2010).

Granitol a.s. „Výroční zpráva 2009.“ Moravský Beroun: Granitol a.s., 21. Březen 2009.

Ministerstvo průmyslu a obchodu. „Panorama českého průmyslu 2009.“ *Ministerstvo průmyslu a obchodu: Panorama*. 2009. <http://www.mpo.cz/cz/prumysl-a-stavebnictvi/prumyslova-odvetvi/#category85> (accessed March 14, 2010).

Ministerstvo průmyslu a obchodu, sekce strategie a ekonomiky průmyslu, odbor ekonomických analýz. „Finanční analýza podnikové sféry za 3. čtvrtletí 2010.“ *Ministerstvo průmyslu a obchodu*. 20. Březen 2010. <http://www.mpo.cz/cz/ministr-a-ministerstvo/analyticke-materialy/#category238> (accessed April 15, 2010).

SECONDARY SOURCES

Blaha, Zdenek Sid, Jindřichovská, Irena. *Jak posoudit finanční zdraví firmy*. 3. rozšířené vydání. Praha: Management Press, 2006.

Granitol a.s. „Výroční zpráva 2009.“ Moravský Beroun: Granitol a.s., 21. Březen 2009.

Grunwald, Rolf, Holečková, Jaroslava. *Finanční analýza a plánování podniku*. 1. vydání. Praha: Ekopress, 2007.

Holečková, Jaroslava. *Finanční analýza firmy*. 1. vydání. Praha: ASPI-Wolters Kluwer, 2008.

Kislingerová, Eva. *Manažerské finance*. Praha: C.H. Beck.

Kislingerová, Eva, Hnilica, Jiří. *Finanční analýza: krok za krokem*. 2. vydání. Praha: C.H. Beck, 2009.

Kovanicová, Dana, Kovanic, Pavel. *Poklady skryté v účetnictví: Finanční analýza účetních výkazů: Díl 2*. Praha: Polygon, 1997.

Mrkvička, Josef, Kolář, Pavel. *Finanční analýza*. 2. přepracované vydání. Praha: ASPI, 2006.

Pavelková, Drahomíra, Knápková, Adriana. *Podnikové finance: Studijní pomůcka pro distanční studium*. 4. nezměněné. Zlín: Univerzita Tomáše Bati ve Zlíně, 2008.

Růčková, Petra. *Finanční analýza*. 2. aktualizované vydání. Praha: GRADA Publishing, 2008.

Sedláček, Jaroslav, Eva Hamplová, Úředníček, Vladimír. *Finanční analýza*. 1. vydání. Brno: Masarykova univerzita, 1998.

Valach, Josef. *Finanční řízení podniku*. 2. aktualizované a rozšířené vydání. Brno: Brno: Masarykova univerzita, 1998.

1. LIST OF ABBREVIATIONS

EAT	Earnings after Tax
EBIT	Earnings before Interest and Taxes
NWC	Net working capital
ROA	Return on Assets
ROE	Return on Equity
ROS	Return on Sales

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APPENDICES

APPENDIX P I: BALANCE SHEET - GRANITOL

	ASSETS b	row c	2009			2008	2007
			Gross 1	Adjustment 2	Net 3	Net 4	Net 5
	TOTAL ASSETS (r. 02 + 03 + 31 + 62)=r.66	001	1 018 219	-504 583	513 636	527 083	573 367
A.	Receivables from subscriptions	002					
B.	Fixed assets (r.04 + 13 + 23)	003	663 466	-478 240	185 226	201 154	186 827
B. I.	Intangible fixed assets (r. 05 to 12)	004	10 292	-9 717	575	1 114	1 240
B. I. 1.	1. Incorporation expenses	005					
	2. Research and development	006					
	3. Software	007	9 383	-8 882	501	1 059	1 185
	4. Valuable rights	008	150	-150			
	5. Goodwill (+/-)	009					
	6. Other intangible assets	010	685	-685			
	7. Intangible fixed assets under construction	011	74		74	55	55
	8. Advance payments for intangible fixed assets	012					
B. II.	Tangible fixed assets (r. 13 to 22)	013	653 174	-468 522	184 651	200 040	185 587
B. II. 1.	Lands	014	889		889	889	889
	2. Constructions	015	164 442	-82 387	82 055	86 517	86 021
	3. Equipment	016	485 192	-386 135	99 056	80 659	96 356
	4. Perennial corps	017					
	5. Breeding and draught animals	018					
	6. Other tangible fixed assets	019					
	7. Tangible fixed assets under construction	020				31 975	2 121
	8. Advance payments for tangible fixed assets	021	2 651		2 651		200
	9. Adjustment to acquired assets (+/-)	022					

B. III.	Long-term financial assets	(r. 24 to 30)	023					
B. III. 1.	Shares in controlled and managed organizations		024					
	2. Shares in accounting units with substantial influence		025					
	3. Other securities and shares		026					
	4. Loans to controlled and managed organizations and to accounting unit with substantial influence		027					
	5. Other financial investments		028					
	6. Financial investments acquired		029					
	7. Advance payments for long-term financial assets		030					
				2009			2008	2007
a	ASSETS		row	Gross	Adjustment	Net	Net	Net
	b		c	1	2	3	4	5
C.	Current assets	(r. 32+ 39 + 47 + 57)	031	353 886	-26 343	327 543	324 346	384 289
C. I.	Inventory	(r. 33 to 38)	032	138 119	-6 235	131 884	104 121	145 893
C. I. 1.	Materials		033	92 415	-4 230	88 185	58 070	89 117
	2. Work in progress and semi-products		034	13 263		13 263	13 744	16 582
	3. Finished products		035	32 175	-2 005	30 170	32 137	39 841
	4. Animals		036					
	5. Merchandise		037	266		266	170	353
	6. Advance payments for inventory		038					
C. II.	Long-term receivables	(r. 40 to 46)	039					
C. II. 1.	Trade receivables		040					
	2. Receivables from controlled and managed organizations		041					
	3. Receivables from accounting units with substantial influence		042					
	4. Receivables from partners, cooperative members and association members		043					
	5. Long-term deposits given		044					
	6. Other receivables		045					
	7. Deferred tax receivable		046					

C. III.	Short-term receivables	(r. 48 to 56)	047	182 051	-20 109	161 942	199 354	228 803
C. III. 1.	Trade receivables		048	163 011	-19 109	143 902	193 383	208 910
2.	Receivables from controlled and managed organizations		049					
3.	Receivables from accounting units with substantial influence		050					
4.	Receivables from partners, cooperative members and association members		051					
5.	Receivables from social security and health insurance		052					
6.	Due from state – tax receivable		053	12 846		12 846	3 236	16 937
7.	Short-term deposits given		054	5 139		5 139	1 925	2 284
8.	Estimated receivable		055	55		55	810	672
9.	Other receivables		056	1 000	-1 000			
C. VI.	Short-term financial assets	(r. 58 to 61)	057	33 716		33 716	20 871	9 593
C. IV. 1.	Cash		058	187		187	463	402
2.	Bank accounts		059	33 529		33 529	20 408	9 191
3.	Short-term securities and ownership interests		060					
4.	Short-term financial assets acquired		061					
D. I.	Accruals	(r. 63 to 65)	062	867		867	1 583	2 251
D. I. 1.	Deferred expenses		063	476		476	1 095	2 251
2.	Complex deferred costs		064					
3.	Deferred income		065	391		391	488	

a	LIABILITIES b	row c	2009 6	2008 7	2007 8
	TOTAL LIABILITIES (r. 67 + 84 + 117)=r.001	066	513 636	527 083	573 367
A.	Equity (r. 68 + 72 + 77 + 80 + 83)	067	359 070	370 928	371 059
A. I.	Share capital (r. 69+ 71)	068	296 473	296 473	296 473
A. I. 1.	Share capital	069	296 473	296 473	296 473
	2. Company's own shares and ownership interests (-)	070			
	3. Changes of share capital (+/-)	071			
A. II.	Capital funds (r. 73 to 76)	072			
A. II. 1.	Share premium	073			
	2. Other capital funds	074			
	3. Differences from evaluation of assets and liabilities (+/-)	075			
	4. Differences from transformation of companies (+/-)	076			
A. III.	Reserve funds, statutory reserve account for cooperatives, and other retained earnings (r.78 + 79)	077	16 626	14 291	11 711
A. III. 1.	Legal reserve fund / indivisible fond	078	16 581	14 288	11 709
	2. Statutory and other funds	079	45	3	2
A. IV.	Profit / loss – previous year (r. 81 + 82)	080	11 771	14 296	11 296
A. IV. 1.	Retained earnings from previous years	081	11 771	14 296	11 296
	2. Accumulated losses from previous years (-)	082			
A. V.	Profit / loss – current year (+/-)	083	34 200	45 868	51 579
B.	Other sources (l. 85+ 90 + 101 + 113)	084	154 380	152 042	196 236
B. I.	Reserves (r. 86 to 89)	085	7 231	5 367	21 501
B. I. 1.	Reserves under special statutory regulations	086			
	2. Reserves for pension and similar payables	087			
	2. Income tax reserves	088			17 788
	3. Other reserves	089	7 231	5 367	3 713

B. II.	Long-term payables	(r. 89 to 94)	090	9 392	6 377	5 894
B. II. 1.	Trade payables		091			
2.	Payables to controlled and managed organizations		092			
3.	Payables to accounting units with substantial influence		093			
4.	Payables from partners, cooperative members and association members		094			
5.	Long-term advances received		095			
6.	Issues bonds		096			
7.	Long-term notes payable		097			
8.	Estimated payables		098			
9.	Other payables		099			
10.	Deferred tax liability		100	9 392	6 377	5 894

a	LIABILITIES	row	2009	2008	2007	
	b	c	6	7	8	
B. III.	Short-term payables	(r. 102 to 112)	101	80 340	48 397	61 938
B. III. 1.	Trade payables		102	61 181	30 264	43 016
2.	Payables to controlled and managed organizations		103			
3.	Payables to accounting units with substantial influence		104			
4.	Payables from partners, cooperative members and association members		105		34	33
5.	Payroll		106	11 201	11 518	9 998
6.	Payables to social securities and health insurance		107	2 780	3 241	2 774
7.	Due from state – tax liabilities and subsidies		108	509	758	3 005
8.	Short-term deposits received		109	2 242	2 304	1 260
9.	Issues bonds		110			
10.	Estimated payables		111	2 427	278	1 852
11.	Other payables		112			

B. IV.	Bank loans and financial accommodations (r. 114 to 116)	113	57 417	91 901	106 903
B. IV. 1.	Long-term bank loans	114	8 532	32 946	64 057
2.	Short-term bank loans	115	48 885	58 955	42 846
3.	Short-term accommodations	116			
C. I.	Accruals (r. 118 to 119)	117	186	4 113	6 072
C. I. 1.	Accrued expenses	118	186	3 065	3 949
2.	Deferred revenues	119		1 048	2 123

APPENDIX P II: PROFIT / LOSS ACCOUNT - GRANITOL

a	Profit / loss account b	row	2009	2008	2007
			1	2	3
I.	Revenues from sold goods	01	2 522	2 026	1 687
A.	Expenses on sold goods	02	1 281	869	1 137
+	Sale margin (r.01 - 02)	03	1 241	1 157	550
II.	Production (r. 05 + 06 + 07)	04	811 673	1 112 866	1 247 206
II.1.	Revenues from own products and services	05	814 976	1 119 045	1 244 265
II.2.	Change in inventory of own products	06	-4 920	-9 148	-908
II.3.	Capitalization	07	1 617	2 969	3 849
B.	Production consumption (r. 09 + 10)	08	639 364	927 862	1 052 942
B.1.	Consumption of material and energy	09	591 632	875 263	997 210
B.2.	Services	10	47 732	52 599	55 732
+	Added value (r. 03 + 04 - 08)	11	173 550	186 161	194 814
C.	Personnel expenses (r. 13 to 16)	12	107 844	114 574	114 321
C.1.	Wages and salaries	13	77 757	81 374	81 173
C.2.	Remuneration of board members	14	1 380	1 360	1 320
C.3.	Social security expenses and health insurance	15	25 131	28 217	28 306
C.4.	Other social expenses	16	3 576	3 623	3 522
D.	Taxes and fees	17	312	-600	352
E.	Depreciations of intangible and tangible assets	18	23 117	29 080	29 913
III.	Revenues from disposals of fixed assets and materials (r.20+21)	19	50 465	16 371	12 147
III.1.	Revenues from disposals of fixed assets	20	701	638	534
III.2.	Revenues from disposals of materials	21	49 764	15 733	11 613
F.	Net book value of disposed fixed assets and materials (r.23+24)	22	50 669	18 456	13 410
F.1.	Net book value of sold fixed assets	23			187
F.2.	Net book value of sold material	24	50 669	18 456	13 223
G.	Change in operating reserves and adjustments and complex deferred costs (+/-)	25	984	-373	8 369
IV.	Other operating revenues	26	9 171	30 582	36 870
H.	Other operating expenses	27	5 248	11 279	4 367
V.	Transfer of operating revenues	28			
I.	Transfer of operating expenses	29			
*	Operating profit / loss (r.11-12-17-18+19-22-(+/-25)+26-27+(-28)-(-29))	30	45 012	60 698	73 099

APPENDIX P III: BALANCE SHEET - SECTOR

(in mil. CZK)	2007	3.Q.2008	2008	3.Q.2009
TOTAL ASSETS	112 021	94 717	85 090	78 771
Fixed assets	75 339	53 663	52 604	38 663
Intangible + Tangible fixed assets	37 685	37 735	37 478	35 946
Non-current financial assets	37 653	15 927	15 125	2 717
Current assets	35 695	40 400	31 774	38 854
Inventories	10 704	11 206	10 228	8 762
Receivables	19 878	25 159	18 059	24 121
Current financial assets	5 113	4 034	3 426	5 970
Other assets	988	653	712	1 253
(in mil. CZK)	2007	3.Q.2008	2008	3.Q.2009
TOTAL LIABILITIES & EQUITY	112 021	94 717	85 090	78 771
Equity	61 641	52 469	49 951	44 467
Share capital	15 954	14 563	14 575	15 288
Retained earnings + other funds	36 579	29 883	29 883	23 144
Profit or loss for the current period	8 338	8 021	8 911	6 034
Liabilities	50 771	42 170	35 082	33 544
Provisions	1 810	1 177	1 109	1 007
Long-term liabilities	4 294	3 902	3 562	5 398
Short-term liabilities	16 365	17 084	14 310	14 638
Bank loans and borrowings	28 301	20 006	16 099	12 499
- Long-term bank loans	9 152	10 601	8 906	7 037
- Short-term bank loans	19 149	9 404	7 192	5 462
Other liabilities	-391	78	56	760

APPENDIX P IV: PROFIT / LOSS ACCOUNT – SECTOR

(in thousand CZK)	2007	3.Q. 2008	2008	3.Q.2009
I. Sales of goods	19 479 304	15 598 205	19 214 665	11 027 802
A. Costs of goods sold	17 850 356	14 726 454	17 539 913	10 569 900
Gross margin	1 628 948	871 751	1 674 752	457 902
II. Production	127 111 179	98 929 993	124 786 472	74 527 573
II.1. Sales of own products and services	123 639 503	93 899 966	118 639 633	73 674 519
II.2. Change in internally produced inventory	428 673	1 437 560	1 313 762	91 049
II.3. Own work capitalised	3 043 003	3 592 467	4 833 077	762 005
B. Purchased consumables and services	93 431 704	71 101 170	90 549 129	53 338 689
Added value	35 308 423	28 700 574	35 912 095	21 646 786
C. Staff costs	11 647 681	9 542 201	12 657 649	8 480 501
C.1. Payroll costs	8 521 809	7 004 003	9 284 218	5 968 969
C.3. Social security and health insurance costs	2 982 633	2 451 401	3 249 476	2 286 673
O. Other financial expenses	143 239	86 797	123 955	224 860
* Operating profit or loss	14 425 866	9 707 748	10 919 903	8 453 105
N. Interest expenses	1 116 649	992 431	1 300 915	1 710 795
* Financial profit or loss	-874 723	574 353	613 242	-692 440
Q. Income tax on ordinary activities	3 376 335	2 260 525	2 621 954	1 726 365
** Profit or loss from ordinary activities	10 174 808	8 021 577	8 911 191	6 034 300
**EBIT	14 667 792	11 274 532	12 834 060	9 471 460
**** Profit or loss before tax	13 551 143	10 282 101	11 533 145	7 760 665