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USING FINANCIAL ANALYSIS AS A MANAGEMENT TOOL: AN EMPIRICAL STUDY OF BULGARIAN FIRMS

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Marcellin Yovogan. USING FINANCIAL ANALYSIS AS A MANAGEMENT TOOL: AN EMPIRICAL STUDY OF BULGARIAN FIRMS

This article aims at studying financial analysis as a key management tool and how it is used in the valuation of business performance. For this objective, the financial statements and financial reporting published by the firms on their websites were reviewed for information and data. Publications from the trade register and the Bulgarian stock exchange also served as sources of data for this article.

Four main groups of financial analysis were provided: comparative, common-size, trend and ratios analyses. The study covers different periods, based on the availability of reliable information. For some firms the analysis was prepared on a quarterly basis, in order to highlight the performance valuation based on a short time period.

Some of the firms are listed on Bulgarian stock exchange while others were not. Based on the official Bulgarian classification, some of the firms are very large while others are small. The firms operate in different industries, such as telecommunication, chemicals, tourism and manufacture.

The variety of the business types leads to the conclusion, that whatever the size or environment, financial analysis is an important managerial tool, which could facilitate the understanding of the financial state of Bulgarian firms. As a financial management method, using financial analysis might be of help to shareholders, stakeholders and potential investors assessing the performance of Bulgarian firms and in making strategic and operational decisions.

Key words: financial analysis, management tool, ratio analysis, business performance.
JEL: G32; M41.

INTRODUCTION

The term finance may be defined as "any transaction in which money or moneylike instrument is exchanged for money or moneylike instrument" (*Adelman*, *Marks*, 1998). This statement implies that money is in the heart of the concept of financial management, which is mainly concerned with the maintenance and creation of economic value or wealth (*Keown et al*., 2005).

In this paper, I studied financial analysis as a key management tool, and how it is used in the valuation of business performance. For this purpose, the financial statements and reporting published by the firms on their websites were used. Publications from the trade register and the Bulgarian stock exchange also served as sources of data. Four main groups of financial analysis were provided: comparative, common-size, trend and ratios.

The research covers different periods and some of the firms had their analysis prepared on a quarterly basis, in order to highlight the performance valuation on a short time period.

Most of the firms are listed on Bulgarian stock exchange, but the sample used, also included firms which were not traded on the Stock Exchange. The official classification of enterprises adopted in Bulgaria under the EU directives was used to classify the studied firms which are operating in different industries.

The study resulted in the following findings:

- whatever the size or environment, financial analysis is an important managerial tool;
- financial analysis could facilitate the understanding of the financial state of Bulgarian firms;
- As a financial management method, financial analysis could be of help to shareholders, stakeholders and potential investors assessing Bulgarian firm performance and in making strategic and operational decisions.

METHODS OF FINANCIAL ANALYSIS

In their book "financial management…"[1], A. J. Keown & al., 2005, define ten principles that form the basics of financial manaement:

- *The risk-return trade off* – We won't take on additional risk unless we expect to be compensated with additional return
- *The time value of money* – A dollar received today is worth more than a dollar received in the future
- *Cash-not profits-is king* – In measuring wealth or value, cash flows are used not accounting profits

[1] *Keown et al.* Financial Management: Principles and Applications. Pearson Prentice Hall, 2005.

- *Incremental cash flows* – It's only what changes that counts
- *The course of competitive markets* – Why it's hard to find exceptionally profitable projects
- *Efficient capital markets* – The markets are quick and the prices are right
- *The agency problem* – Managers won't work for owners unless it's in their best interest
- *Taxes bias business decisions*
- *All risk is not equal* – Some risk can be diversified away, and some cannot
- *Ethical behavior* is doing the right thing, and ethical dilemmas are everywhere in finance.

In the same line with A. J. Keown et al., (2005), it is possible to state that the analysis of business performance requires the implementation of methods. Financial analysis may be concentrated on the analysis of the financial statements published or provided by the firm. The users of financial information have a variety of tools available from which to select those that are best for their specific needs. The most common tools of financial analysis are: comparative financial statement analysis, common-size financial statement analysis and ratios analysis.

COMPARATIVE FINANCIAL ANALYSIS

Users of financial statements conduct comparative financial analysis by setting consecutive balance sheets, income statements or statements of cash flows side by side and reviewing changes in individual categories on a year-to-year or multiyear basis. The most important item revealed by comparative financial statement analysis is trend. A comparison of statements over several years reveals direction, speed and extent of trend. Analysis also compares trends in related items. Two techniques of comparative statement analysis are especially popular : year-to-year change analysis and index-number trend series analysis.

Comparing financial statements over relatively short time periods – two to three years, is performed with analysis of year-to-year changes in line items. This type of analysis for short time periods is manageable and understandable. It has the advantage of presenting changes in absolute currency amounts as well as in percentages. Horizontal financial analysis typically reports both the cumulative total for the period under investigation and the average for that same period.

An excellent procedure to effect longer-term trend comparisons is index-number trend series analysis. Analyzing data using this type of analysis requires choosing a base year for all items with a preselected index number usually set to 100. Since a base year represents a frame of reference for all comparisons it is best to choose a normal year with regard to business conditions. When conducting index-number trend analysis, users do not need to analyze every item in financial

statements. They should attempt to eliminate insignificant items. Users should also exercise care in using index-number trend comparisons because of certain weaknesses attributed to changes in company and industry factors. In assessing changes in current financial condition, comparative statements of cash flows are often useful. This type of analysis is also useful in comparing changes in the composition of working capital items over years.

Interpretation of percent changes, including those using index-number trend series analysis, must be made with an awareness of potentially inconsistent applications of accounting principles over time. Also, the longer the time period for comparison, the more distortive are effects of price-level changes. The more diverse the economic environments comprising the periods of analysis, the better picture of how a company deals with adversity and takes advantage of opportunities.

COMMON-SIZE FINANCIAL STATEMENT ANALYSIS

The benefits of financial statement analysis results from knowing the proportion of a total

group or subgroup an item represents. In analyzing a balance sheet, it is common to express total assets, liabilities and capital each as 100 percent and individual items within these categories as a percent of their respective total. In analyzing an income statement, net revenues is commonly set at 100 percent with other income statement items expressed as a percent of net revenues. Since the sum of those individual items totals 100 percent, this analysis technique is said to yield common-size financial statements. This technique is also referred to as *vertical analysis.* Common-size financial statement analysis is an inquiry into the internal structure of financial statements. In analyzing a balance sheet, a vertical analysis focuses on two elements:

- source of financing, including the distribution of financing among current liabilities, noncurrent liabilities and equity.
- Composition of investments, including current and noncurrent assets.

Common-size balance sheet analysis is often extended to examine the proportions comprising particular subgroups. For example, in assessing liquidity of currents assets, it is often important to know what proportion of current assets is comprised of inventories and not simply what proportion inventories are of total assets. Common-size income statement analysis is often of even greater importance. An income statement readily lends itself to a common-size analysis, where each item is related to a key quantity. To varying degrees, sales level affects each expense, and it is instructive for the analysis to know what proportion of sales is absorbed by various expense items. An exception is income tax expense, which is related to pre-tax income and not sales.

Temporal comparisons of common-size statements of a company are valuable in showing changing proportions of components within groups of assets, liabilities, expenses and other financial statement categories. Nevertheless a care should be exercised in interpreting changes and trends.

Common-size statements are especially useful for intercompany comparisons because financial statements of different companies are recast in common-size format. Comparison of a company's common-size statements with competitors' or industry common-size statistics alerts analysts' attention to differences in account structure or distribution. Yet common-size statements fail to reflect the relative sizes of companies under analysis.

RATIOS ANALYSIS

Ratios are among the most popular and widely used tools of financial analysis. Yet, their function is often misunderstood and, consequently, their significance often overrated. A ratio expresses a mathematical relation between two quantities. While computation of a ratio is a simple arithmetic operation, its interpretation is far more complex. To be meaningful, a ratio must refer to an economically important relation. For example, there is a direct and crucial relation between an item's sales price and its cost. Accordingly, the ratio of cost of goods sold to sales is a significant one. In contrast there is no obvious relation between freight costs and the balance of marketable securities (D., Nissim and S. H. Penman, 1999).

Ratios are tools which provide the user with clues and symptoms of underlying conditions. Ratios that are properly interpreted, identify areas requiring further investigations. Analysis of a ratio reveals important relations and acts as a basis of comparison in uncovering conditions and trends which might be difficult to detect when inspecting individual components of the ratio. Ratios, like other analysis tools, are future oriented and users must adjust the factors affecting a ratio for their probable future trend and magnitude. Analysts must also assess factors potentially influencing future ratios. Consequently, the usefulness of ratios depends on users' interpretation and is the most challenging aspect of ratio analysis.

FACTORS AFFECTING RATIOS

Beyond the internal operating conditions affecting a company's ratios, analysts must be aware of the effects of economic events, industry factors management policies, and accounting methods. Any weakness in accounting measurements impacts the effectiveness of ratios. For instance, historical cost values are sometimes less relevant to a decision than current market values.

Prior to computing ratios, or similar measures like trend indices or percent relations, users must confirm that the numbers underlying their computation are

valid and consistent. For example, when inventories are valued using LIFO and prices are increasing, the current ratio is understated because LIFO inventories are understated. Analysts often recognize that when an adjustment is made for one ratio, consistency is required for other ratios. Users need also to remember that the usefulness of ratios depends on the quality of the number in their computation. When a company's internal accounting controls or other governance and monitoring mechanisms are unreliable in producing credible figures, the resulting ratios are equally unreliable.

RATIO INTERPRETATION

Ratios must be interpreted with care since factors affecting the numerator can correlate with those affecting the denominator. For instance companies can improve the ratio of operating expenses to sales by reducing costs that stimulate sales. If this cost reduction ultimately yields long-term declines in sales or market share, a seemingly short-term improvement in profitability can significantly damage a company's future prospects and must be interpreted accordingly. It must be remembered that many ratios have important variables in common with other ratios. Consequently, it is not necessary to compute all possible ratios, to analyze a situation. Ratios, like most techniques in financial analysis, are not significant in themselves and are interpretable only in comparison with prior ratios, predetermined standards or competitors. The variability of a ratio over time is often as important as its trend.

LIMITATIONS OF RATIOS

Ratios are not perfect. They may be distorted by inflation or an unusual business climate. Other reason for distortion of ratios may be the purposes for which the financial statements are prepared. For example, analysts must have in mind whether a report is prepared for the owners, banks, legal authorities or other external users. The application of ratio analysis requires comparable results between the standard and the ratio itself in order for the information to be useful. Different ratios might be applied to companies like: manufacturers, wholesalers, retailers and service companies, other ratios might be applied to banks, finance and insurance companies. Different asset quality and capital structure make it necessary to investigate and analyze different ratios. Some companies window-dress their financial statements to make them look better for different analysts. Lack of quality and availability of information also decreases the usefulness of ratios.

Distortion of ratios may come also from the accounting data. This data depends on the two main methods/standards: International Accounting Standards (IAS) and Generally Accepted Accounting Principles (GAAP). Therefore a varied

interpretation of ratios is possible and analysts consider the impact of applying these methods for the following conditions:

- Revenue recognition
- Inventory valuation
- Depreciation/Amortization
- Bad debts
- Capitalization of costs
- Cost versus equity accounting for investments
- Seasonality and different fiscal years
- Mergers and acquisitions

EMPIRICAL STUDY OF THE FINANCIAL ANALYSIS OF BULGARIAN FIRMS

CLASSIFICATION OF THE FIRMS

The Recommendation 96/280/EC adopted by EU Commission regarding the SME definition as from 1 January 2005 has been used to classify the busness. According to this recommendation, the size of the enterprise could be presented as shown below in Table 1:

Table 1. Size classification of business

Enterprise category	Headcount (number)	Turnover (EUR)		Balance sheet total (EUR)
Micro	Less than 10	≤ 2 millions	or	≤ 2 millions
Small	Less than 50	≤ 10 millions	or	≤ 10 millions
Medium-sized	Less than 250	≤ 50 millions	or	≤ 43 millions
Large	≥ 250	> 50 millions	or	> 43 millions

Source: EU Recommendation 2003/361/EC.

COMPANY 1 – BBM

BBM Ltd. is a limited liability company registered on 18 January 2006 in the department for companies in the appellate court of Sofia. Its main business activity is the wholesale of medical and pharmaceutical products, surgical instrument, implants, medical devices and equipment, medical supplies, disinfecting solutions. The company is managed by two managers, who have equal power of decision.

The company is the subsidiary of a German based company, which operates in over 120 countries worldwide and its competitors are all firms operating in the same industry. Considering the total annual revenue of the business, which is less than 10 millions Euros, the company may be classified as a small company.

The analysis of the industry is important in order to determine the market in share of the business in the local market, but such analysis was not performed, therefore future research will address the industry analysis.

For the financial analysis of the firm, four types of approaches were followed: the comparative, common size, trend, and ratios analysis. This is a basic analysis, but it will serve as an example for financial analysts, scholars and academics, which would like to have a fast and relatively simple overview on the financial state of a small business. An in-depth analysis is however necessary to get a profound understanding of the financial situation of a business.

The objective is to measure the firm's performance through the use of financial metrics. Other measurements could be applied for the assessment of the financial state of a company but, the motivation of using financial metrics is the consideration that financial indicators would be more accurate. Financial indicators are supposed to give strong basis for decisions related to the future of the business and its competitive sustainability in Bulgarian's small market.

For the purpose of the analysis, the financial statements for the last four years from 2007 to 2010 have been used as sources of data.

The horizontal analysis

The balance sheet or statement of financial position (IAS 1, 2009) – measuring a firm's book value.

- The balance sheet provides a firm's financial position at a specific point in time.
- It provides financial information on items owned by the firm, its debts and the owner's equity; i.e: Assets, Liabilities and Owner's equity

ANALYSIS OF THE NON-CURRENT ASSETS

Table 2. Non-current assets, %

Non current assets	2010	2009	2008	2007
Tangible assets	–22	–10	30	100
Intangible assets	–50	–32	–25	100
Deferred taxes	30	N/A	N/A	N/A
Trade receivables	–50	N/A	N/A	N/A
Total Non current assets	–37	–20	–18	100

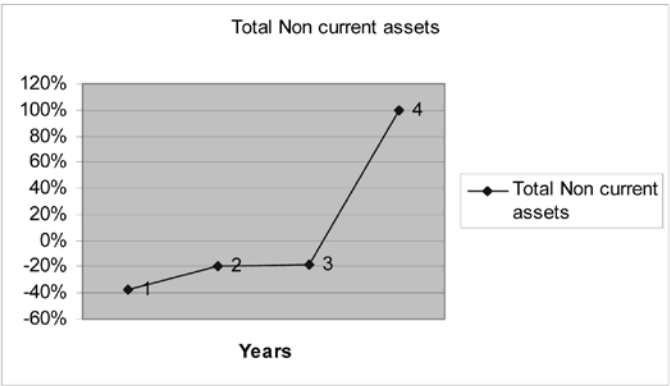

Fig. 1. Non-current assets

The non-current assets have decreased steadily over the period of study: –18 % between 2007 and 2008 and –20 % in 2009 compared to 2008. The significant fall is observed between 2009 and 2010, –37 %. This is understandable, since the main activity of the business does not required large amount of fixed capacity. Most of the motor vehicles are acquired through operating leasing and are not included in the property of the business.

The tangible assets are composed merely of equipments.

The decrease in intangible might not show a good financial sign, and would be explained by the lack of development of intellectual capital and knowledge-based management, which might be vital for a business. However, since the firm is a subsidiary, it understandable, that the parent company is developing intangible assets, which are not recorded by the local accounting. Moreover, the current decrease in tangible assets is the write-off of these assets from the buyout of an agreement previously concluded with another firm during the year 2007.

ANALYSIS OF THE CURRENT ASSETS

Table 3. Current assets, %

Current assets	2010	2009	2008	2007
Stocks	–18	–39	5	100
Trade receivables	16	36	19	100
Cash and cash equivalent	72	–30	–30	100
Prepayments	75	17	60	100
Total current assets	16	10	6	100

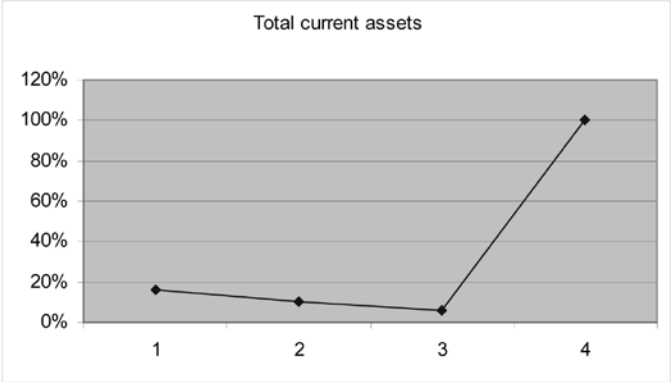

Fig. 2. Current assets

As a whole, the current assets are increased from 2006 to 2010. While, the stocks were decreasing, the trade receivables were increasing. This is as a result of a raise in sales on credit, which however, did not increase the doubtful accounts because the firm had recorded a very small uncollectables. Cash and cash equivalents have also decreased in 2007 and 2009 (respectively –30 %) before the amazing improvement of 70 % in 2010 compared to 2009.

ANALYSIS OF THE LONG-TERM DEBTS

Table 4. Long term debts, %

Long-term debts	2010	2009	2008	2007
Povisions for pension	32	57	17	100
Total long-term debts	32	57	17	100

The business has non-significant long-term debts, which are composed essentially of retirement provisions. Even though, it increased to 57 % in 2009, and then 32 % compared respectively to 2008 and 2010, its absolute value is relative less important for a detailed analysis (12,000 in 2007 and 29,000 in 2010). Nevertheless, it would be advisable to understand, why the amount is permanently increasing. One of the raisons is the stable number of the employees approaching the age retirement. An increase in the number of employees also could lead to an increase of the provision of pension fund.

Table 5. Current liabilities, %

Current liabilities	2010	2009	2008	2007
Bank loans	–17	–3	4	100
Trade payables	–3	–22	–31	100
Total current liabilities	–11	–11	–15	100

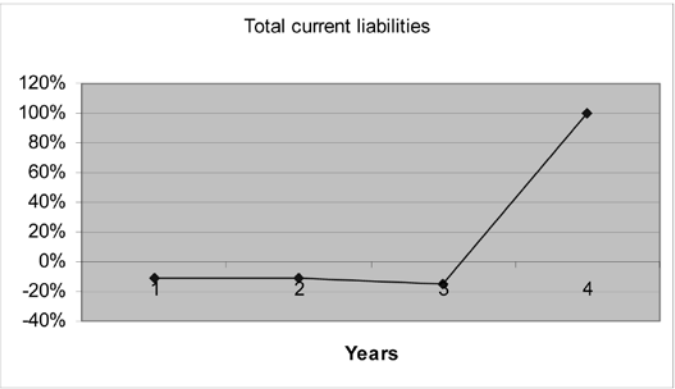

Fig. 3. Total current liabilities

The current liabilities are decreasing due to the improvement in the management of the trades payable and bank loans. It important to emphasize, that If the trades payable have decreased at a higher rate between 2007 and 2009 (–31 % and –22 %), then it could have been slow in 2010 (–3 %). In contrast, the bank loans have decreased slowly in the beginning of the period (–3 %), but faster in 2010 (–17 %).

An increase in trades payable could explain liquidity issues, which will be well highlighted with the liquidity ratio.

ANALYSIS OF THE EQUITY

Table 6. Analysis of the capital, %

	2010	2009	2008	2007
Registered capital	0	35	2445	100
Reserves		–100	0	100
Retained earnings	247	–207	–40	100
Total equity	74	139	–258	100

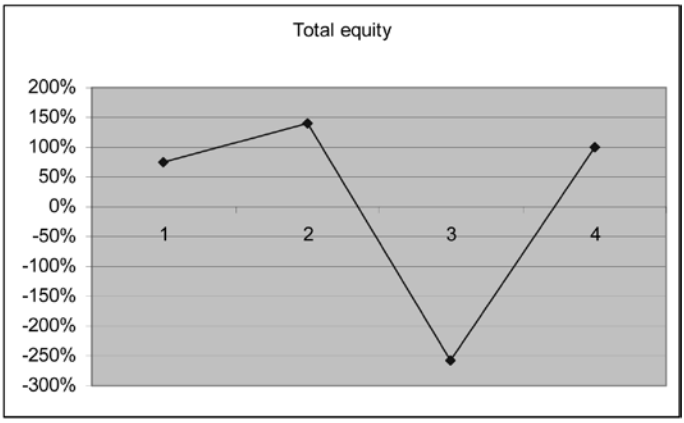

Fig. 4. Equity

The registered capital has been raised in 2008 with 2445 % compared to 2007, to enforce the commercial capacity of the firm and to increase its financial autonomy. Another increase of 35 % is done in 2009. The registered capital is stabilized in 2010.

After successive years of deterioration, 2007–2009, the retained earnings have improved significantly in 2010. In general, the owner's capital has improved between 2008 and 2010.

ANALYSIS OF THE INCOME STATEMENT OR PROFIT AND LOSS ACCOUNT: MEASURING A COMPANY'S PROFITS

An income statement or a **profit and loss statement** or according to IAS 1(2009) a **statement of comprehensive income:** measures the amount of profit generated by the firm over a given period of time. It reports financial information related to five broad areas of business activity:

- Revenue
- Cost of sales
- Operating expenses
- Financing costs of doing business
- Tax expenses.

Table 7. Horizontal analysis of the income statement, %

	2010	2009	2008	2007	2010/2007
Turnover	–2	25	32	100	63
Cost of goods sold	–4	22	16	100	35
Gross profit	2	–100	68	100	–100
Distribution costs	–3	11	20	100	29
Adiministrative and general	4	30	26	100	71
Total operating expenses	–2	15	21	100	36
Other operating income/(expenses)	3600	–78	–78	100	80
Operating profit/ (loss)	24	127	–223	100	–445

The total turnover has increased from 2007 to 2009 before declining slightly in 2010 with 2 %. The overall rise of the turnover for the period 2007 to 2010 is 63 %. This is an important growth of activity of the firm. In spite of the crisis, the business has succeeded in maintaining a remarkable level of activity. The cost of goods sold has also followed the trend of the sales, but at a slower rate, which is due to the improvement of cost of goods sold and also the sign of a more pertinent commercial policy.

In 2010, with a total turnover, which has decreased by 2 %, the cost of goods sold has been decreased by 4 %, and that leads to an improvement in the gross profit of 2 %.

In fact, the sales of own products of BBM have continued to increase, in spite of the restructuring of its commercial activities and the closing of its business unit in the Amgen group during 2010. The net sales in 2010 amounted to 13 509 thousands of BGN compared to 13 739 thousands in the previous year. The turnover of "own" products with trademarks "B. Braun" and "Esculap" has grown by 11.78 % as compared to 2009 or from 12 044 thousands in 2009 to 13 463 thousands BGN in 2010.

The distribution costs have decrease by 3%, but there is an increase in administrative expenses by 4%. Finally, the operating expenses have been reduced by 2%, which is the exact level reduction in total turnover, showing a coherent managerial approach.

Table 8. Analysis of finance costs and net Profit, %

	2010	2009	2008	2007
Interest expense	–45	–69	28	100
Net finance (cost)/profit	–45	–69	28	100
Profit before taxation	28	260	153	100
Net current profit (loss)	28	410	158	100
Net comprhensive profit (loss) for the year	28	410	158	100

Interest expenses have been reduced in 2009 and 2010, but have increased in 2008.

The net profit significantly increased in 2009 more than 4 times compared to the previous year. The improvement of the management of the activity continued in 2010 with an increase in net profit of 28 %.

THE VERTICAL ANALYSIS

Vertical analysis of the statement of financial position / balance sheet

Table 9. Analysis of non-current assets, %

Non current assets	2010	2009	2008	2007
Tangible assets	2	3	4	3
Intangible assets	4	9	14	19
Deferred taxes	1	1	0	0
Trade receivables	0	0	0	0
Total non-current assets	8	13	18	22

The proportion of non-current assets in total assets is still weak, as already remarked above. This proportion is falling, from 22 % in 2007 to 8 % in 2010.

Table 10. Analysis of current assets, %

Current assets	2010	2009	2008	2007
Stocks	9	11	19	19
Trade receivables	72	68	52	44
Cash and cash equivalent	12	7	11	16
Prepayments	1	0	0	0
Total current assets	92	87	82	78
Total assets	100	100	100	100

Current assets are the most important assets of the business and outline the normal structure of the assets in view of a commercial business. The weight of receivables is very high and shows an increase from 44 % in 2007 to 72 % in 2010. The level of stocks is acceptable 19 % in 2007 to 9 % in 2010. Some actions have taken in order to fasten the collection of receivables.

ANALYSIS OF THE STATEMENT OF CASH FLOW: MEASURING FIRM'S ABILITY TO GENERATE CASH

The analysis of the cash flow statement was not covered in this article. This will be done in a future paper. Performing the analysis of the cash flow statement would require the computation of:

- A free cash flows (FCF), viewed from an asset perspective, are the after-tax flows generated from operating the business less the firm's investments in assets; i.e:
- FCF = After-tax operating cash flows – Investments in assets.

3 steps are required in computing the FCF on an asset basis:

- Compute after-tax cash flows from operations
- Calculate the investments in net working capital
- Compute investments made in fixed assets and other assets (investment activities).

RATIOS ANALYSIS

Different ratios have been used to appreciate the financial state of the business.

Table 11. Liquidity ratios

Liquidity Ratios				
	2010	2009	2008	2007
Current CA / CL	1,49	1,14	0,92	0,74
NWC1 – Bottom BS	2766,00	878,00	–561,00	–2214,00
Accid test ratio	1,35	0,99	0,71	0,56
Cash Ratio – Current liabilities	0,19	0,10	0,12	0,15
Cash Ratio – Current assets	0,12	0,08	0,13	0,20
Op Cash flow / Sales	8,40%	–0,04%	-9,84%	3,81%
Cash yield Cash opex / EBIT	0,68	0,00	-1,82	-0,65
Cash Opex to Assets	0,12	0,00	-0,14	0,04

The liquidity ratios have improved from 2007 to 2010. The current ratio is getting better from 0.74 in 2007 to 1.49 in 2010. The same is observed on the acid-test ratio, because the level of stock is relatively low. The cash ratio is weak. The cash to current liabilities is improving but still weak (0.12 in 2007 and 0.19 in 2010). This implies that in case of non-planned requirements of short-term debts by creditors, the business will be in lack of funds. However, the firm has sufficient resources in receivables to face any short-run liquidity issues.

In fact, the operating cash generated by the use of assets has also improved, from a negative value to 0.12 showing a better effectiveness of invested resources.

Table 12. Activity performance

Activity Ratios	2010	2009	2008	2007
EBITDA	2130	1813	1077	–3
EBIT	1672	1351	595	(485)
EBT(operating profit)	1631	1277	355	–672
Net Profit	1466	1147	370	–636

From a negative EBITDA (Earnings before interest, taxes, depreciation and amortization) of (3,000) in 2007, the business has doubled its performance between 2008 and 2010. The EBITDA is an indicator, which facilitates comparability of financial performance between firms, as it doesn't take into account the depreciation policy and interest costs. The EBIT increased also three times between 2008 and 2010 amounting 1672 thousands of BGN, showing the ability of the management to handle sales as well as other operating expenses. The financial expenses are very low thus leading to a high net profit.

Table 13. Activity ratios (continue)

	2010	2009	2008	2007
Average days in receivables	176,30	149,94	137,95	152,93
Average days in payables	116,78	115,66	179,71	299,62
Average collection and disbursement period spread	–59,52	–34,29	41,76	146,69
Total assets turnover	1,48	1,65	1,37	1,05

The average collection and disbursement period shows negative spreads in 2009 and 2010, which means that the business is collecting 34 and 60 days later, than it pays its suppliers. This has been underlined with the level of receivables, which is still increasing. In 2007 and 2008, this ratio has been in favor of the business.

The difficulties encountering by clients explain this situation. It might be expected that this situation would change in a foreseen future, because we're trying to improve the collection of the receivables.

The efficiency of the use of the business assets, which was 1.05 in 2007 reached 1.48 in 2010 and is at a satisfactory level, but need to recover to the level on 2009.

Table 14. Leverage ratios

Leverage	2010	2009	2008	2007
Debt-to equity	1,65	3,23	8,69	–16,17
Financial autonomy – Equity to debt	0,61	0,31	0,12	–0,06
Debt – to assets	0,62	0,76	0,90	1,07
Equity – to assets	0,38	0,24	0,10	–0,07
EBITDA – to interest	51,95	24,50	4,49	–0,02
EBIT – to interest	40,78	18,26	2,48	–2,59

The financial leverage of the firm is still high. The debt to equity ratio is improving, but remained at a risky level. The financial independence is less than 1 but improved from –0.06 in 2007 to 0.62 in 2010. The part of debts in total assets is also important but improving, from 1.07 in 2007 to 0.62 in 2010.

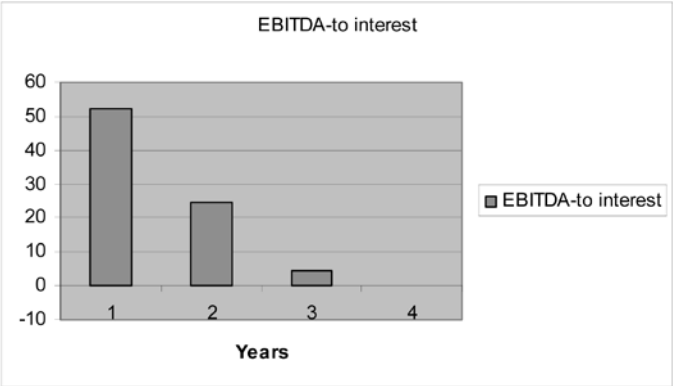

Fig. 6. Interest coverage ratio

The interest coverage ratios are however at a very good level, respectively 52 times in 2010 for the EBITDA coverage and 41 times for the EBIT coverage. This implies that the operating activity of the business is generating enough resources to support the interest expenses. At such level, the business could contract additional debts, and will have sufficient resources to support its service.

Table 15. Invested capital

Profitability	2010	2009	2008	2007
Invested capital (IC)	6678	5842	4806	3311

The invested capital is determined used the equity, the long term financing and the interest bearing resources. The investments potential of the business has doubled from 2007 and 2010. This is due to the increase in the equity through additional capital introduced and also through the profit which was generated and not distributed in dividends.

Table 16. Profitability ratios, %

Profitability	2010	2009	2008	2007
ROIC	22	20	8	–19
ROA	16	14	5	–8
ROE	43	58	45	N/A
Gross profit margin	44	57	41	32
Net profit margin	11	8	3	–8
EBITDA/Sales	16	13	10	0
EBIT/Sales	12	10	5	–6
Opex/sales	33	33	36	39
EBITDA/Assets	23	22	13	0
DUPONT's ratio	43	58	45	122
Tax rate	10	10	10	10
NOPAT	1504,8	1215,9	535,5	–436,5

The return on investment (ROIC) has significantly increased from –19% in 2007 to 22 % in 2010. The ROA (return on assets) has reached 16 % in 2009, while the return on equity has slightly decreased in 2010 stabilizing at 43 %, after a 58 % in 2009. The decrease in the ROE is due to the increase in equity by the incorporation of the retained earnings to equity, which means that in fact, the real increase is much more than 43 %.

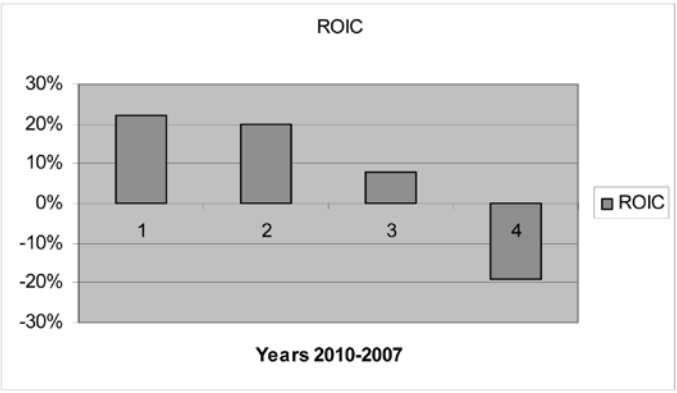

Fig. 7. Return on invested capital

Although, the gross profit has declined slightly, the net profit margin has improved to 11 % against 8 % in 2009; 3 % in 2008 and -8 % in 2007.

A flat corporate tax system permits to maintain a stable net operating profit after taxation. It would be interesting to determine the EVA (economic value added) to find out the wealth created by the business, but the available data did not allow precise calculations.

It may be emphasized that, in spite of the economic crisis faced by the market in which the business is operating, the management and all its employees are doing their best to sustain the efficient use of the business resources and to enhance the firm's value to all stakeholders.

COMPANY 2 – ORGAM, LISTED ON BULGARIAN STOCK EXCHANGE

Orgam is the largest producer of paints, lacquers, adhesives and resins, and the sole producer of phthalic anhydride in Bulgaria. The company owns 12 trade marks including Fassagen, Alutin, Balkyd, Ruviplast, Vinakol, Hamelekon, Protecta, Mefisto, Leko, Blago, Interin and Emanel.

The main markets for its production are Bulgaria, Turkey, Greece, Romania, Egypt, countries from Central Europe, the Near East and the former Soviet Republics.

Orgam has a significant share at the domestic market of paints and lacquers. Since the market of paints, lacquers and adhesives is extremely competitive and the preferences of the consumers are changeable, the flexibility of the company regarding the prompt reaction to changes is of vital importance for keeping and widening of the existing market share. These products are sold mainly on the ba-

sis of low price or high quality, but the created image and the trade mark, and the centralized distributor system are of importance too.

Orgam will continue carrying out the long-term marketing strategy and especially the vast advertising campaign. A priority will be given to investment in market research, monitoring of the way Orgachim's products are adopted by clients and the reaction of the competitors.

Table 17. Horizontal analysis, %

	Quarters			
	4	3	2	1
Sales	501	428	261	100
COGS	503	417	256	100
Gross profit	494	467	279	100
Other operating income	1455	658	542	100
Operating expenses	544	387	228	100
Operating profit (loss)	4	3057	2096	100
Finance costs – net	457	346	244	100
Profit before income tax	856	-2046	-1390	100
Income tax expense	-310	363	243	100
Profit (loss) for the year	1048	-2443	-1659	100

It is obvious, that all income statement items increased by more than 400% at the end of the period, compared with the quarter 1. Some more investigations are required to explain why "other operating income and other operation expenses" have increased by more than the other items.

Table 18. Vertical analysis of the profit and loss account, %

	Quarters			
	4	3	2	1
Sales	100,00	100,00	100,00	100,00
COGS	–78,22	–75,91	–76,42	–77,94
Gross profit	21,78	24,09	23,58	22,06
Other operating income	2,26	1,19	1,61	0,78
Operating expenses	–24,03	–20,01	–19,28	–22,10
Operating profit (loss)	0,01	5,27	5,91	0,74
Finance costs – net	–1,43	–1,27	–1,47	–1,57
Profit before income tax	–1,43	4,00	4,44	–0,84
Income tax expense	–0,07	0,10	0,11	0,12
Profit (loss) for the year	–1,50	4,10	4,55	–0,72

The major part of the company expenses consist of raw materials and hired services expenses (approximately 80 percent of the revenues). This could be nor-

mal because the business is a manufacturing company. On the other hand, the operating expenses decreased in relative terms in quarter 2 and quarter 3, which increased the profitability of the company and therefore the company realized profits for these periods.

Table 19. Horizontal analysis of Balance sheet, %

	Quarters			
Non current assets	4	3	2	1
Tangible assets	100	101	101	100
Intangible assets	35	61	84	100
Trade receivables	81	88	93	100
Investments	100	100	100	100
Deferred taxes recevables	113	72	92	100
Total Non current assets	100	100	101	100

Many items are constant during the period of analysis. Only the deferred taxes receivables increased slightly.

Table 20. Horizontal analysis of current assets, %

	Quarters			
Current assets	4	3	2	1
Stocks	108	118	120	100
Trade receivables	45	135	158	100
Cash and cash equivalent	363	155	100	100
Total current assets	84	126	136	100
Total assets	95	109	113	100

The analysis shows the decrease in intangible assets, financial lease receivables, trade and other receivables and borrowings and increase in Cash and cash equivalents.

The current assets have decreased significantly between the second and fourth quarters. Since, the analysis concerned one year within, this could explain a temporarly situation.

Table 21. Vertical analysis of liabilities, %

LIABILITIES	Quarters			
Non-current liabilities	4	3	2	1
Borrowings	86	92	96	100
Financial leasing	239	144	154	100
Provisions for pension	81	100	100	100
Deferred income tax liabilities	96	97	99	100
Total long-term debts	88	93	97	100
Current liabilities				
Short-term loans	88	94	97	100
Financial leasing	93	93	95	100
Trade payables	95	150	184	100
Total current liabilities	93	131	154	100
Total liabilities	90	112	125	100

Non-current liabilities show a decrease over the period of analysis. The significant reduction is observed in borrowing, which show the ability of the firm to payback its long term debts, but the financing leasing is increasing on the other hand.

Current liabilities have increased in the third and second quarters due to the increase in trade payables, but the short-term loans have also decreased.

Table 22. Horizontal analysis of the shareholders'equity, %

	Quarters			
Shareholders' equity	4	3	2	1
Ordinary shares	100	100	100	100
Legal and other reserves	147	147	100	100
Reserves on subsequent evaluation of assets and liabilities	100	100	100	100
Retained earnings	-29	68	149	100
Total shareholders' equity	98	107	105	100

The legal and other reserves have increased in the fourth and third quarters, the business generated a net loss in the fourth quarter.

Table 23. Vertical analysis of the balance sheet, %

	Quarters			
ASSETS	4	3	2	1
Non-current assets				
Property, plant and equipment	70,31	61,55	59,76	66,45
Intangible assets	0,04	0,06	0,08	0,11
Total non-current	71,08	62,30	60,54	67,37

	Quarters			
Current assets				
Inventories	21,01	19,90	19,58	18,40
Trade and other receivables	6,63	17,35	19,60	13,91
Cash and cash equivalents	1,22	0,45	0,28	0,32
Total current assets	28,85	37,70	39,46	32,63
Total assets	100,00	100,00	100,00	100,00
Shareholders' equity				
Ordinary shares	0,46	0,40	0,39	0,44
Legal and other reserves	19,46	16,97	11,13	12,52
Reserves on subsequent evaluation of assets and liabilities	44,53	38,83	37,49	42,19
Retained earnings	-1,76	3,58	7,60	5,76
Total shareholders' equity	62,70	59,78	56,62	60,91
LIABILITIES	4	3	2	1
Non-current liabilities				
Borrowings	15,05	14,08	14,21	16,58
Financial leasing	0,15	0,08	0,08	0,06
Provisions for obligations under plans for pension incomes	0,18	0,19	0,18	0,21
Deferred income tax liabilities	3,23	2,86	2,80	3,19
	18,61	17,21	17,28	20,04
Current liabilities				
Borrowings	5,75	5,33	5,32	6,16
Financial leasing	0,04	0,03	0,03	0,04
Trade payables	12,54	17,33	20,46	12,52
Total current liabilities	18,69	23,01	26,11	19,05
Total liabilities	37,30	40,22	43,38	39,09
Total equity and liabilities	100,00	100,00	100,00	100,00

From the vertical analysis we can see that the major part of the company sources was invested in property, plant and equipment consisting of approximately 70 percent and then followed by stocks and trade receivables. The structure of the shareholders'equity and liability was respectively 60 and 40 percent. This structure of capital is showing that the business is mainly financed by its own sources.

Table 24. Ratio analysis

	Quarters			
Financial ratio	4	3	2	1
Liquidity ratios				
Current ratio	1,54	1,64	1,51	1,71
Quick ratio	0,42	0,774	0,761	0,75
Cash ratio	0,07	0,02	0,01	0,02
Leverage ratios				
Debt-to-assets ratio	0,37	0,40	0,434	0,39
Debt-to-equity ratio	0,60	0,67	0,77	0,64
Interest coverage ratio	0,01	5,746	6,05	0,62
Market ratios				
Earnings per share	–3,79	8,84	6,00	–0,36
Book value per share	135,04	147,68	144,84	138,48

The current ratio has improved in the third quarter compared to the second and fourth quarters, but has deteriorated compared to the first quarter. The interest coverage ratio is low in the fourth quarter but much better in the second and third quarters.

The Current ratio decreased from 1.71 in quarter1 to 1.54 in quarter 4 which could mean that the liquidity of the company was reduced. Meanwhile for the same period the Cash ratio increased, which could mean that the problem for deteriorated liquidity could be the faster use of inventory with diminishing purchases. This was confirmed by the increased Working capital turnover which was 1.61 at the beginning of the period and 8.68 at the end.

Table 25. Activity ratios

	Quarters			
	4	3	2	1
Average collection of receivables (days)	10	19	28	51
Inventory turnover ratio	4,19	3,30	2,19	0,97
Averages days in inventory	22	27	41	93
Payables turnover ratio	5,55	3,42	2,70	1,65
Average days in trade payables	16	26	33	55
Collection and disbursement period spread (days)	6	7	5	4
Working capital turnover ratio	8,68	6,13	4,06	1,61
Fixed assets turnover ratio	1,65	1,40	0,86	0,33
Total asset turnover ratio	1,10	0,86	0,55	0,23

The receivables collection and payable disbursement period spread is positive in the periods of analysis implying that liquidity is well controlled, even if the

cash ratio is weak. The receivables turnover improved from 1.78 in the first quarter to 8.84 in the fourth quarter, thus reduced the days of sales outstanding from 51 days to 10 days at the end of the period. The inventory turnover also increased, where at the end of the period the inventory was hold 22 days, instead of 93 days. The payables turnover also increased which could mean that the company has paid to its suppliers and other debtors faster. On the other hand, the cash ratio has also increased for the same period, which was an indicator that the company received its receivables before it paid to suppliers. This meant that the working capital management significantly improved.

Table 26. Profitability ratios

	Quarters			
Profitability ratios	4	3	2	1
Gross profit margin	21,78%	24,09%	23,58%	22,06%
EBITDA margin	4,68%	9,29%	10,20%	6,20%
Pretax margin	–1,43%	4,00%	4,44%	–0,84%
Net profit margin	–1,50%	4,10%	4,55%	–0,72%
Operating return on assets	0,01%	4,52%	3,23%	0,17%
Return on assets	–1,64%	3,52%	2,48%	–0,16%
Return of equity	–2,68%	6,04%	4,24%	–0,26%
Return on investment	–2,08%	4,66%	3,22%	–0,20%
Tax burden	1,051	1,025	1,025	0,858
EBIT margin	0,01%	5,27%	5,91%	0,74%

The profit margins were more favorable in the second quarter and third quarter. In the first quarter and fourth quarter the ratios decreased and even became negative after including the non-operating expenses. This could be explained by the seasonality of the business activity. It could be concluded that the gross margin has decreased during the winter months and the fixed costs couldn't be covered by the entity's revenues. The return on investments ratios (ROA, ROE, and ROI) followed the same trend. The tax burden ratio increased from 0.86 in the first quarter to 1.051 in the fourth quarter. The EBIT margin improved in second quarter and third quarter, respectively this ratio were 5.91 % and 5.27 %, but has decreased impressively in the fourth quarter. The Financial leverage ratio was constant for the whole period. The total asset turnover ratio improved for the whole period. So it is possible to conclude that the major driver for ROE was the net profit margin. The last ratio increased significantly in the second and third quarter, when the return on equity reached its peak.

The debt-to-asset and debt-to-equity ratio decreased by few basis points at the end of the period. This shows that the company managed to pay off some part of its debt. The Interest coverage ratio decreased sharply in the first quarter and

fourth. This could be explained by the decreased in the profitability of the company in the same quarters.

Finally, the book value of the company was at high and stable levels for the whole 2008. In contract, the earnings per share were very volatile and in large contrast with the previous indicator. So, we could suppose that the company did not have many tradable assets with easy determinable market value.

In conclusion, it can be noted that the company has improved its efficiency, which increased its immediate cash liquidity. On the other hand, the seasonality of the business deteriorated the profitability in the winter months and increased the caution on the solvency ratios during these quarters.

COMPANY 3 PETROLIUM: A PRIVATE COMPANY, WHICH IS NOT LISTED ON BULGARIAN STOCK EXCHANGE

Petrolium has been one of the leading petrol companies since its arrival in the Bulgarian market during 1991. However, it has faced some difficulties in the last couple of years, possibly because of the competitive market. Regarding the financial ratios of the company in the last few years, we can point out that here is a significant growth of the non-current assets over total assets leading to the fall of the current asset to total asset ratio. This can easily be explained by the purchase of lots of new petrol stations. An almost stable and good proportion of equity to total assets, the long-term debts to total assets ratios during these five years are impressive. There is an excellent rise in the net working capital, the current ratio and the quick ratio in 2007, followed by a fall in the next two years that can be explained by the fluctuating amounts of current assets and the stable amounts of current liabilities in the financial statements. The accounts receivable turnover and their average collection period remain stable in the years 2005–2009. Net sales/fixed assets ratio was following a good trend from 2005 to 2008 and a fall in 2009 when the net sales covered only 6 times the amount of the fixed assets. These facts can be explained by a good growth in the sales and their fall maybe because of the intensive attacks by the competitors. The same trend can be seen in the total assets turnover ratio.The debt to total assets ratio shows almost a constant structure of debt and equity which finance the assets. In fact, Petrolium follows a good policy financing with equity, which is cheaper. The times interest earned ratio shows that the company has cut their interest expenses and covers them more than 16 times in 2009 with operating income.The gross profit margin ratio also shows a good trend and raises positive expectations for 2010. However, the company still has a lot of work in order to decrease the administrative expenses, which significantly lower the operating profit ratio. Despite the huge growth of the sales in 2008 Petrolium did not manage to increase those two ratios, in contrast to

their good amounts in 2007. From the ROE (return on equity) and EPS (earnings per share) ratios we can notice that 2007 was the best year for the shareholder. Unfortunately, these amounts fall in the next two years. Most of the ratios can be explained by the strong performance of the company and continuous growth from 2005 to 2007. After that they could not cope with the proactive competitors and lost market positions, especially in 2009. A possible solution for their problems can be a more adaptive policy. They should try to offer petrol at prices as cheaper as possible in order to gain positions on the market. However, they are maybe following the rules of the headquarters and it will not be easy to do so. Taking into account the characteristics of the business, they should and can also cut the administrative expenses, giving them the opportunity to come back to their best years and performance and respond to the competitors.

COMPANY 4: "MOBILING", A PRIVATE COMPANY NOT LISTED ON BULGARIAN STOCK EXCHANGE

Table 27. Ratio analysis

	2009	2008	2007	2006	2005
Current Assets/TA	0,13	0,07	0,07	0,08	0,08
Non-current Assets/TA	0,87	0,93	0,93	0,92	0,92
Equity/TA	0,92	0,92	0,53	0,49	0,47
LT Debt/TA	0,03	0,02	0,37	0,39	0,40
ST Debt/TA	0,05	0,06	0,10	0,12	0,13
Net Working Capital	193311	47106	–97126	–161759	–182342
Current ratio	2,06	1,26	0,71	0,62	0,60
Quick ratio	1,90	1,03	0,61	0,56	0,51
Inventory Turnover	34,34	36,62	41,67	46,89	48,33
Accounts Receivable Turnover	8,11	9,02	9,03	8,59	8,41
Average collection period	45,01	40,47	40,42	42,49	43,40
Fixed Assets Turnover	0,44	0,44	0,40	0,35	0,33
Total Assets Turnover	0,38	0,41	0,38	0,33	0,30
Debt to Equity	0,09	0,09	0,89	1,05	1,13
Debt to Total Assets	0,08	0,08	0,47	0,51	0,53
Times Interest earned	533,84	12,24	6,19	6,79	5,91
Gross profit margin ratio	0,80	0,80	0,81	0,82	0,83
Operating profit ratio	0,24	0,30	0,32	0,34	0,35
Operating return on assets	0,09	0,12	0,12	0,11	0,10
ROA	0,08	0,10	0,09	0,10	0,10
ROE	0,09	0,11	0,18	0,20	0,21
EPS	20,99	26,03	24,90	27,03	28,14

Mobiling is one of mobile operators in Bulgaria. The company remains stable and growing despite the attacks of the competitors in the last years.

The ratios analysis shows that a remarkable part of the assets of the company are fixed. Realizing the amounts from 2005 to 2008, the company has possibly decided to decrease these amounts, resulting in a fixed assets to total assets less than 1 (0.87) in 2009.

Concerning the structure of the capital it can be seen that the equity to total assets ratio rises during the whole 5-year period. The company possibly follows a policy of financing the assets with equity.

The working capital follows an excellent trend. Despite the small amounts of current assets and current liabilities, Mobilling did its best to convert the negative amounts of working capital into positive in the last two years.

The same can be said for the current ratio and the quick ratio and the results in figures are shown in 2009 are equal to almost 4 times the 2005-amounts.

Inventory turnover is better in the last years than in the beginning of the previous periods of analysis. This can be seen from the inventory turnover ratio.

Unfortunately, Mobilling has a growing average collection period maybe due to the fact that most of the customers delay their invoice payments. A reason could be that the average client of the company is becoming poorer. Periodical reminders for paying the bills may keep the expansion of this collection period from growing.

Having in mind that a significant part of the assets are fixed, the growing amount of fixed assets turnover shows a good trend. The same can be underlined about the total assets turnover. The company should try to increase even more its revenue from this growth.

The debt to equity and the debt to total assets have a continuous fall during the period explained by the falling part of debt, financing the assets.

The times interest earned ratio is continuously growing which is due to the fact that the company has managed to lower the interest expenses, explained of course by the decreased debt.

When calculating the gross profit margin ratio, the connection and lines expenses were included in the cost of goods sold, in order to obtain a more precise value of the gross profit. The figures show that these costs are growing compared to the revenues. This may be due to the fact that Mobilling tries to ensure a good quality of the service.

The remarkable difference between gross profit margin ratio and operating profit margin ratio shows that the company still has a lot of administrative expenses. But it might be difficult to optimized those expenses, because as a leader the company has a great number of employees and offices in the whole country that costs a lot.

Unfortunately, the operating ROA (the operating return on assets), ROA (re-

turn on assets) and ROE, as well as the EPS are falling in 2009. In order to keep its shareholders, Mobilling should try to raise the net profit from the business. Even a more aggressive policy towards the competitors is the key here.

COMPANY 5: "COMMUNICATIONS", A LISTED COMPANY ON BULGARIAN STOCK EXCHANGE.

The Bulgarian telecom market was fully liberalized at the end of 2003 with the privatization of the Firm 5 in 2004. This marked the end of its monopoly. Since then a lot of smaller companies have entered the market and are competing with the company.

The most dynamically developing telecommunications segment in Bulgaria is the wireless, although at a much slower pace. The very high penetration rate is evidence for the significant number of replacements of fixed with wireless subscriptions and for the ownership of multiple SIMs by a considerable number of Bulgarians. The fixed-line market is expected to employ measures to preserve its otherwise diminishing customer base through bundled offers. This trend is observed also in the mobile segment, where the supply of non-voice services is on the rise, too. Price-wise, the authorities are trying to cut the tariffs much to the dismay of the cellular telecoms. The Bulgarian communications watchdog demands from the telecom operators to reduce the currently significant difference between on-net and off-net charges. The EC (European Union) is attacking the high roaming prices for voice and data services. On the landline segment, the market leader is also operating on the mobile, internet, TV and radio segments. Alternative operators have been complaining against the lack of access to its network. The broadband and digital TV segments are experiencing growth on their own or as part of the bundled service offers, used by the telecoms to lure customers.

Taking into consideration the current ratio, it becomes clear that the company had its peak in liquidity in 2007, i.e. the company had the possibility to pay its bills on time and converting the account receivables and inventories into cash was quicker compared to the forthcoming years 2008 and 2009. The company had 0.79 BGN in Current Assets for every 1 BGN in Debt for 2009, which was more than doubled, as of 2007. Thus, in the conditions of a financial crisis, the company has lost its liquidity throughout the years. The Quick Ratio also proves that even without the obligation to turn its inventories into cash, the company is still below the average peer-group firm. Thus, Communications has less liquid assets relative to its short-term debt, an indicator that the company has a smaller ability to meet its maturing obligations.

Table 28. Ratios analysis

Ratio Analysis of Communications AD	2009	2008	2007	2006	2005
Current Ratio	0,79	1,56	1,75	1,51	0,98
Acid Test Ratio	0,74	1,40	1,48	1,28	0,85
Fixed Assets Turnover	0,68	0,48	0,50	0,58	0,69
Total Assets Turnover	0,54	0,38	0,44	0,49	0,58
Debt-to-Equity Ratio	3,83	1,14	0,58	0,52	0,46
Debt-to-total assets Ratio	0,79	0,53	0,37	0,34	0,32
Gross profit margin	0,09	0,20	0,28	0,31	0,16
Operating profit ratio	9,34%	19,69%	28,32%	31,09%	16,19%
Net profit margin	8,38%	17,35%	25,39%	28,62%	13,69%
Net return on assets	0,05	0,07	0,11	0,14	0,08
Return-on-equity ratio	21,96%	14,08%	17,68%	21,39%	11,58%
Earnings per share	0,30	0,28	0,45	0,51	0,25

In terms of the Activity Ratios, the business' performance throughout the years varies, reaching its lowest point in 2008 which was the beginning of the financial crisis. The Total Asset Turnover Ratio shows us that the company generates about 0.54 BGN in sales per BGN of Assets, whereas the competition on average produces 1,15 BGN from every BGN in Assets, which means that Communications is using its assets in a far more inefficient way than the competition. The utilization of the fixed assets is also increasing comparing 2008 and 2009, but currently it is far below the average of the peer group.[2]

In terms of the Leverage Ratios, the firm's Debt-to-equity ratio has grown significantly in 2009. A high debt-to-equity ratio generally means that a company has been aggressive in financing its growth with debt. This can result in volatile earnings as a result of the additional interest expenses. If a lot of debt is used to finance increased operations (high debt to equity), the company could potentially generate more earnings than it would have without this outside financing. If this were to increase earnings by a greater amount than the debt cost (interest), then the shareholders benefit as more earnings are being spread among the same amount of shareholders. However, the cost of this debt financing may outweigh the return that the company generates on the debt through investment and business activities and become too much for the company to handle. But the debt-to-equity ratio varies for the different industries. Compared to the average of the peer group,

[2] http://www.infostock.bg/infostock/control/ratios/

the firm's debt-to-equity ratio is still too high. The Operating Profit Margin is extremely important variable in understanding the company's profitability. Taking into account the peer-group performance, it turns out that Communications is more than competitive when it comes to keeping costs and expenses in line relative to sales, as is reflected by the operating profit margin. The management of the operating expenses is good, but could be improved so that the ratio may become even lower from what they have achieved in the previous years.

The net profit margin gives us the information about how much profit the company has in every 1 BGN in sales. The best years in performance for this ratio of the firm are 2006 and 2007. The ratio has lowered more than 3 times up to 2009, which probably mean that due to the financial crisis, customers have been using mobile services less than the previous years.

Table 29. Horizontal analysis, %

	2009	2008	2007	2006	2005
Non-Current Assets	103	127	133	116	100
Current Assets	139	171	93	107	100
Total	108	134	127	114	100
Long-Term Liabilities	372	345	246	177	100
Short-Term Liabilities	174	108	52	69	100
Equity	33	92	117	110	100
Total	108	134	127	114	100

Having a look at the horizontal analysis of the company, we can notice some similar conclusions which are obvious from both ratio analysis and the horizontal analysis overview. The long-term liabilities significantly increase as compared to 2005, but the Equity decreases, which probably mean that the company has disposed of some property or tangible assets as a whole.

COMPANY 6 "HOSPITALITY" LISTED ON BULGARIAN STOCK EXCHANGE

The next industry is a very vulnerable one and the financial crisis during the last several years has impacted it in a significant way. Traveling expenses are the first people cut off in difficult times. We can notice that from the performance of the Hotel.

The five-star hotel is open year round and is situated in the heart of the oldest Bulgarian Resort St. St. Constantine and Helena, which is a well-known tourist

destination. The hotel is the most luxurious and stylish hotel on the Bulgarian seaside. It is situated 200 meters from the beach and offers 296 spacious rooms and 35 suites. All rooms are luxuriously furnished and equipped with satellite television, telephone, dial-up Internet access, air-conditioning, and mini-bar. Yet one more reason to choose the Hotel for your holiday is Varna Sport & Spa Center. It combines the healthy environment of mild climate, seawater, and hot mineral springs with modern physiotherapy and balneology, including sauna and solarium.

The relative proximity of Bulgaria to the major markets in Europe is a factor that provides some competitive advantage, as does the competitive price level (reasonable value for money). In recent years, there has been a degree of upgrading of existing tourist facilities and the building of new accommodation. Nevertheless, there remains a relatively low degree of development of areas that are potentially attractive for tourism, especially in rural areas.

The tourism industry in Bulgaria is highly competitive and the industry has experienced a slow down since the beginning of the Financial Crisis. The industry is part of the services which people primarily cut off at the beginning of a crisis.

Table 30. Horizontal analysis, %

Horizontal Analysis	2009	2008	2007	2006	2005
Non-Current Assets	86	87	94	96	100
Current Assets	70	74	47	43	100
Total	84	85	87	88	100
Long-Term Liabilities	92	102	113	128	100
Short-Term Liabilities	33	36	42	27	100
Equity	96	94	90	90	100
Total	84	85	87	88	100

From the horizontal analysis we could notice that the company has decreased its investments in terms of non-current assets compared to 2005. From the above horizontal analysis we could also notice that the company has decreased its long-term liabilities, which proves an operational excellence, performed by the top level financial management. But still the company needs to increase its sales in order to release higher profit.

Table 31. Ratio analysis

Ratio Analysis	2009	2008	2007	2006	2005
Current Assets	1,68	1,60	0,87	1,27	0,79
Acid Test Ratio	1,56	1,49	0,78	1,13	0,77
Fixed Assets Turnover	0,40	0,45	0,38	0,36	0,39
Total Assets Turnover	0,35	0,39	0,35	0,34	0,33
Debt-to-Equity Ratio	0,55	0,63	0,74	0,76	0,79
Debt-to-total assets Ratio	0,36	0,39	0,43	0,43	0,44
Gross profit margin ratio	n/a	0,09	0,00	0,00	0,02
Operating profit ratio, %	n/a	8,92	0,00	0,00	1,67
Net profit margin, %	5,96	7,42	0,00%	0,00	1,67
Net return on assets	0,02	0,03	0,00	0,00	0,01
Return-on-equity ratio, %	3,24	4,74	0,00	0,00	0,99
Earnings per share	0,15	0,21	0,00	0,00	0,05

Taking into consideration the Current Ratio, it becomes clear that the company had its peak in liquidity in 2009, i.e. the company had the possibility to pay its bills on time and converting the account receivables and inventories into cash was quicker compared to the period 2005–2008. The company has 1.68 BGN in Current Assets for every 1 BGN in Debt for 2009, which has doubled, compared to 2007. The Quick Ratio also proves that even without the obligation to turn its inventories into cash, the company is still below the average peer-group firm.[3] Thus, the company has less liquid assets relative to its short-term debt, an indicator that the company has a far smaller ability to meet its maturing obligations.

In terms of the Activity Ratios, the company's performance throughout the years varies, reaching its lowest point in 2006, considering Fixed Assets Turnover. The Total Asset Turnover Ratio shows us that the company generates about 0.35 BGN in sales per BGN of Assets in 2009, whereas the competition on average produces 0.19 BGN from every BGN in Assets, which means that company is using its assets in a more efficient way than the competition. The utilization of the Fixed Assets is decreasing comparing 2008 and 2009, but currently it is higher than the average of the peer group, which means that the return from fixed assets is relatively good compared to the one of the peer group.

In terms of the Leverage Ratios, Hospitality's debt-to-equity ratio has decreased significantly in 2009- which is a good sign to stimulate creditors more to invest. Taking into account the peer-group performance, it turns out that hospital-

[3] http://www.infostock.bg/infostock/control/ratios/GHVMP

ity is more than competitive when it comes to keeping costs and expenses in line relative to sales, as is reflected by the operating profit margin. Unfortunately, the operating margin is negative for 2010, but compared to the peer group the company is still considered performing better than its competitor.

The net profit margin gives us the information about how much profit the company has in every 1 BGN in sales and the company's net profit margin is high above the rest in the industry - the average for the industry is currently negative. The ratio has lowered comparing 2008 and 2009, which probably means that due to the financial crisis, customers have been travelling and spending their spare time more at a lower-cost places (for example 3* hotels and not 5* hotel) and a lot less at resorts.

CONCLUSION

This paper is an attempt to study the use of financial analysis to access the performance of the firm. Financial analysis as presented uses primarily financial statements and reports published by companies. The paper presented in the first part some approaches used in financial analysis. The second part studied the financial state of six companies operating in different economic branches and with different size and ownership.

The results confirmed, that whatever the size, activity, economic environment or ownership of the business, financial analysis remains a useful tool for accessing financial performance of the firm.

The study highlighted also, that, the financial analyst requires being aware of the quality of the information provided through financial statements and reports, which are still the main source of data.

Further research emphasizing specific aspects in the use of financial analysis, is currently conducted. It would give in-depth understanding of the benefit of financial analysis as a key managerial tool for managers, analysts, regulators and other users, that are attempting to access the accurate performance of Bulgarian firms.

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APPENDIX: TABLE OF SOME ABBREVIATIONS

IC	Invested capital = Equity+ interest bearing debts
ROIC	Return on invested capital = Net profit / Invested capital
ROA	Return on assets = Net profit / Total assets
ROE	Return on equity = Net profit / Equity
Gross profit margin	Gross profit / Net sales
Net profit margin	Net profit / Net sales
EBITDA/Sales	Earnings before interest, depreciation and amortization / Sales
EBIT/Sales	Earnings before interest / Sales
Opex/sales	Operating expenses / Sales
EBITDA/Assets:	Earnings before interest, depreciation and amortization / Total assets

DUPONT's ratio = measurement of return of equity = $\dfrac{\text{ROA}}{1 - (\text{total debts / total assets})}$

NOPAT	Net operating profit after taxes = EBIT (1-tax rate)
Current ratio	Current assets / Current liabilities
NWC1 - Bottom BS	Networking capital – from the Bottom of Balance sheet
Accid test ratio	(Current assets – inventories) / current liabilities
Cash Ratio - Current liabilities	Cash and cash equivalents / current liabilities
Cash Ratio - Current assets	Cash and cash equivalents / current assets
Cash flow opex / Sales	Net operating cash flows / Sales
Cash yield Cash opex / EBIT	Net operating cash flows / EBIT
Cash Opex to Assets	Net operating cash flows / Assets