**Determinants of corporate financial performance** 

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Introduction

The analysis of corporate financial performance has a special significance for the

management, in their attempt to maintain the company's stability and to increase its market

share. Effectiveness of company managers and resource efficiency affect directly the

development of the state in which they operate, by obtaining positive financial results. The main

objective became establishing the key factors that determine corporate performance, in order to

remove negative influences and to enhance those with positive impact on business.

Through the current paper I tried to analyse the impact that certain factors have on

financial performance, testing on a database with companies listed in Category I at the Bucharest

Stock Exchange. The data set includes the financial results on the last seven years (2005-2011).

Points of interest in financial performance

For a long time, financial performance has been perceived only through its ability to

obtain profits. This changed over time, today the concept of performance having different

meanings depending on the user perspective of financial information. A company can be

categorized as global performance if it can satisfy the interests of all stakeholders: managers are

interested in the welfare and to obtain profit, because their work is appreciated accordingly;

**owners** want to maximize their wealth by increasing the company's market value (this objective

can only be based on profit); current and potential shareholders perceive performance as the

company's ability to distribute dividends for capital investment, given the risks they take;

commercial partners look for the solvency and stability of the company; credit institutions

want to be sure that the company has the necessary capacity to repay loans on time (solvency);

employees want a stable job and to obtain high material benefits; the state seeks a company to

be efficient, to pay its taxes, to help creating new jobs, etc.

[Table 1]

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## **Indicators of corporate performance measurement**

Companies' management use financial indicators to measure, report and improve its performance. It has been proved that in order to obtain a global situation of an economic entity at a specific moment it's necessary that the evaluation to be based on a balanced multidimensional system which includes both financial ratios and non-financial indicators.

Scientific literature classifies the economical results of a company into classic and modern indicators of financial performance.

The disadvantage of using classic indicators is that their use provides information regarding the performance of the company from the past. These indicators do not take into account the cost of capital, showing only the results of using capital. Therefore, by using only this type of indicators we can find companies that obtain performance by using the existing value, but do not create extra value. Classic indicators include the rates of return (ROA, ROE, ROI), gross profit margin, net profit margin, debt ratio, current ratio, acid test ratio.

Modern indicators are related to the concept of creating value and for this reason are regarded as more relevant than classical indicators. Through this type of indicators the performance can be expressed more easily in terms of shareholders, but the obtained results are not very relevant for other partners of the company.

Stern Stewart consulting company proposed new performance indicators, based on value added: economic value added (EVA) and market value added (MVA). Boston Consulting Group and HOLT Value Associates in Chicago promoted as efficiency indicators TSR (Total Shareholder Return) and rate of return on cash flow - CFROI (Cash Flow Return on Investment). Applied Finance Group proposed economic margins - EM (eng. Economic Margin) as a means of measuring performance. Other modern financial ratios used for the evaluation of corporate financial performances are: profit per share (EPS), price / income (PER), the market value ratio (MBR), dividend yield.

A growing concern in recent studies has been observed, in finding non-financial means to measure the financial performance. This type of measurement is considered to be a more efficient way to define enterprise performance, putting together more important parts of the organization (such as quality management, quality of intellectual capital).

The report of FASB (Financial Accounting Standards Board) used in 2001 new non-financial indicators to measure performance.

[Table 2]

#### **Determinants of corporate performance**

Analysis of the determinants of corporate financial performance is essential for all the stakeholders, but especially for investors.

The Anglo-Saxon corporate governance focus on maximizing shareholder value. This principle provides a conceptual and operational framework for evaluating business performance. The value of shareholders, defined as market value of a company is dependent on several factors: the current profitability of the company, its risks, its economic growth essential for future company earnings<sup>1</sup>. All of these are major factors influencing the market value of a company. Other studies (Brief & Lawson, 1992<sup>2</sup>; and Peasnell, 1996<sup>3</sup>) argue the opposite, that financial indicators based on accounting information are sufficient in order to determine the value for shareholders.

A company's financial performance is directly influenced by its market position. Profitability can be decomposed into its main components: net turnover and net profit margin. Ross et al.<sup>4</sup> (1996) argues that both can influence the profitability of a company one time. If a high turnover means better use of assets owned by the company and therefore better efficiency, a higher profit margin means that the entity has substantial market power.

Risk and growth are two other important factors influencing a firm's financial performance. Since market value is conditioned by the company's results, the level of risk exposure can cause changes in its market value<sup>5</sup>. Economic growth is another component that helps to achieve a better position on the financial markets, because market value also takes into consideration expected future profits<sup>6</sup>.

<sup>&</sup>lt;sup>1</sup> Branch, B., Gale, B. – "Linking corporate stock price performance to strategy formulation", 1983

<sup>&</sup>lt;sup>2</sup> Brief, R., Lawson, R. - "The role of the accounting rate of return in financial statement analysis", 1992

<sup>&</sup>lt;sup>3</sup> Peasnell, K. V. – "Using accounting data to measure the economic performance of firms", Journal of Accounting and Public Policy, 1996

<sup>&</sup>lt;sup>4</sup> Ross, S.A., Westerfield, R.W., Jaffe, J. - ,, Corporate Finance", 1996

<sup>&</sup>lt;sup>5</sup> Fruhan W. E. Jr. - "Financial Strategy in the Creation, Transfer and Destruction of Shareholder Value", 1979

<sup>&</sup>lt;sup>6</sup> Varaiva, N. Kerin, R., Weeks, R. - , The Relationship between Growth, Profitability, and Company Value", 1987

In the scientific literature I found besides the above mentioned factors, a number of other variables that have a greater or less influence on corporate performance. Some of them were used in my case study.

The size of the company can have a positive effect on financial performance because larger firms can use this advantage to get some financial benefits in business relations<sup>7</sup>. Large companies have easier access to the most important factors of production, including human resources. Also, large organizations often get cheaper funding.

In the classical theory, capital structure is irrelevant for measuring company performance, considering that in a perfectly competitive world performance is influenced only by real factors. Recent studies contradict this theory, arguing that capital structure play an important role in determining corporate performance<sup>8</sup>. Barton & Gordon (1988) suggest that entities with higher profit rates will remain low leveraged because of their ability to finance their own sources. On the other hand, a high degree of leverage increases the risk of bankruptcy of companies.

Total assets is considered to positively influence the company's financial performance, assets greater meaning less risk<sup>9</sup>.

A large volume of sales (turnover) is not necessarily correlated with improved performance. Studies that have examined the relationship between turnover and corporate performance were inconclusive.

The main objective of the company has evolved over time, the need for short term profit is replaced by the need for long-term growth of the company (sustainable growth). Therefore, a sustainable growth rate higher than 1 would have a positive impact on performance.

For the companies listed at the stock exchange, its ability to distribute dividends is a proof of stability. However, until now there was no proof of a link between this factor and profitability, since profits can be used for purposes other than to distribute dividends.

<sup>8</sup> Kakani, R., Biswatosh, S., Reddy, V. - "Determinants of financial performance of indian corporate sector in the post-liberalization era: an exploratory study", 2001

<sup>&</sup>lt;sup>7</sup> Mathur, S. S., Kenyon, A. – "Creating Value: Shaping Tomorrow's Business", 1997

<sup>&</sup>lt;sup>9</sup> Beaver, Ketller, Scholes, "The association between market determined and accounting determined risk measures"

#### Case study

The present research is mainly focused on identifying factors that determine the company's financial performance and the way and extent to which they influence it.

#### **Database description**

Tests were made based on collected financial information for companies listed on Bucharest Stock Exchange trading in securities class I. I have removed from the database the financial institutions and the Property Fund, in order not to deteriorate the results. For the 16 companies listed on BSE selected for the analysis I followed the financial statements for a period of 7 years: 2005-2011. Source data were companies' financial reports found on the website www.bvb.ro, performance indicators and information on the dividends offered by www.ktd.ro site, www.kmarket.ro and companies' own sites, for more information.

Using the collected data I could calculate the indicators used in the tests. I chose to use mainly classic indicators which could be determined using the database. Indicators were defined and calculated similarly for all companies. As dependent variables I considered three performance indicators: ROA (return on assets), net profit margin and Q-Tobin ratio. The independent variables for which I tested the impact on the dependent variables are: change in turnover (%), change in fixed assets (%), change in net current assets (%), ROE (return on equity), EPS (earnings per share), financial leverage, dividend yield, PER (price earnings ratio), sustainable growth rate, company size (calculated based on total assets).

#### Statistical description of data

Using the EViews software I tried to formulate and test hypotheses about the determinants of firm financial performance, using data collected from the database created in Excel. Thus, I created a series of data in EViews for each indicator presented above.

I chose to create the object as Panel Data, because the available information hat to be treated individually, for each company observing the development of indicators in the analyzed period. So, my data series include seven years for each of the 16 companies, obtaining a total of 112 observations.

For each series introduced, I analyzed the graphical representation of data (by option View → Graph), to determine stationary, then I tested stationarity using specific tests (Levin, Lin, Chu Test, Fisher ADF Test, Fisher PP Test).

#### [Figure 1]

Financial series do not usually follow a normal distribution. Series are usually leptokurtotics (extreme values have a large deviation from the average). Kurtosis normal value index is 3. In the example shown, there is a much higher value of this index, which indicates a wide gap between extreme and average values. Another indicator that shows symmetry or asymmetry of a series is Skewness. For a series to be symmetric, asymmetric Skewness coefficient must be set to 0. In my example, this index is different from 0, which shows an asymmetry of the series.

Following the Jarque-Bera test results it can be stated that the data analyzed do not show a normal distribution (associated probability value is 0, the null hypothesis is rejected, so the series are not normally distributed).

#### **Correlation matrix**

Using several independent variables to examine their contribution using regression models can lead to a problem of multicolinearity between these variables.

## [Figure 2]

Next I will present the main correlations emerged between the selected indicators:

- company size: presents positive correlation with growth rate of fixed assets (90.96%) and growth rate of turnover (66.97%);
- growth rate of fixed assets: is positively correlated at a rate of 64.37% with the growth rate in turnover;
- sustainable growth rate: the rate is positively correlated with ROE (99.91%). Strong correlation between the rate of sustainable growth and ROE comes from g\_teoretic's formula;
- net profit margin: is positively correlated with ROA (60.01%) and dividend yield (30.50%);

I used the "rule of thumb"<sup>10</sup> which considers that the positive and negative correlations above 70% between variables indicate a potential problem. In this case, there are two strong connections that I took into consideration when I analyzed the dependence of indicators using regression. Strong correlations were noticed between pairs of indicators: d\_log\_marime - g\_act\_imob (90.96%), g\_teoretic - ROE (99.91%).

#### Analysis based on regressions

Multiple linear regression model is used to describe the relationship between a dependent variable (explained) and several independent variables (explanatory).

The general form of multiple regression equation is:

$$Y_t = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + ... + \beta_k X_{kt} + \epsilon_t$$

## The regression for net profit margin

To increase the power of the test, I used the method Fixed effects, which allows free coefficients to vary cross-section by generating a dummy variable for each section.

As a result of testing the correlation between variables, I defined the net profit margin (marja\_pn) as a function depending on change in turnover (%), change in fixed assets (%), company size (calculated based on total assets), dividend yield, PER (price earnings ratio), as variables statistically significant. The dependent variable does not present a strong correlation with any of the other indicators, therefore regression does not contain redundant information.

Therefore, net profit margin estimated equation takes the form:  $MARJA\_PN = C(1) + C(2)*G\_CA + C(3)*G\_ACT\_IMOB + C(4)*D\_LOG\_MARIME + C(5)*Y RAND DIV + C(6)*PER + <math>\lceil CX = F, PER = F \rceil$ 

[Figure 3]

Using the coefficient values that have emerged in the output, the equation becomes:

 $MARJA\_PN = -0.0600350788221 + 0.155700311138*G\_CA - 0.173634442406*$   $G\_ACT\_IMOB + 0.360462181443*D\_LOG\_MARIME + 0.0258109314502*Y\_RAND\_DIV +$ 0.000463557308703\*PER + [CX=F, PER=F]

For the analysed regression, R<sup>2</sup> has a value of 0.532955, indicating that the selected independent variables are significantly relevant for net profit margin (dependent variable), the

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<sup>&</sup>lt;sup>10</sup> Suggested by Anderson et. al (1990)

change of the explained variable being influenced in proportion of 53.2955% by the explanatory variables.

The performance indicator is in this case in a positive correlation with the change in turnover, company size, dividend yield and PER, and negative correlated with the change in fixed assets.

#### The regression for ROA

Using the same data set as for the previous model, I defined the rate of return on total assets (ROA) as dependent variable depending on company size (calculated based on total assets) and net profit margin.

Estimated equation for the rate of return on assets is in the form:

$$ROA = C(1) + C(2)*D\_LOG\_MARIME + C(3)*MARJA\_PN + [CX=F, PER=F]$$
[Figure 4]

By entering the coefficients into the equation, it becomes:

$$ROA = 0.0284564331712 + 0.0933983376983*D\_LOG\_MARIME + 0.137156616922*$$
  
 $MARJA\_PN + [CX=F, PER=F]$ 

From an economical point of view, it appears that there is a positive relationship between independent variables and explained variable (coefficients are positive), which means that increasing the size of companies with a unit value would cause an increase in ROA of 0.093398, under the condition that the other independent variables remain unchanged. Similarly, net profit margin increased by one unit would lead to an increase in the rate of return on assets by 0.137157.

The output shows a higher R<sup>2</sup> value than in the first regression, which means that the total variance in ROA is explained better through the independent variables marja\_pn and d\_log\_marime (ROA regression is more robust). Value of 0.740320 indicates that the selected independent variables (d\_log\_marime, marja\_pn constant) are relevant for the return on assets (dependent variable), the change of the explained variable being influenced in proportion of 74.0320% by the explanatory variables.

#### The regression for Q-Tobin rate

For this model, I defined the dependent variable Q Tobin's as being influenced by the independent variables: change in fixed assets (g\_act\_imob), average price per share compared to net income per share (PER) and company size (calculated based on total assets d log marime).

The estimated equation for the Q-Tobin rate is:

$$Q\_TOB = C(1) + C(2)*G\_ACT\_IMOB + C(3)*PER + C(4)*D\_LOG\_MARIME + [CX=F, PER=F]$$
[Figure 5]

After entering the obtained coefficients into the equation, it becomes:

$$Q\_TOB = 0.782168056587 - 0.694429346003*G\_ACT\_IMOB - 0.00103427605828*PER + 1.39850227315*D\_LOG\_MARIME + [CX=F, PER=F]$$

The Q-Tobin rate presents a negative correlation with 2 of the selected independent variable. An increase of the change in fixed assets or price earnings ratio involves a decrease of the Q-Tobin rate. We can observe a direct dependency between the explained variable and the size of the company.

R<sup>2</sup> for this regression has the value of 0.476927, indicating that the selected independent variables are significantly relevant to the Tobin q ratio, explaining the change of the dependant variable in proportion of 47.6927%.

In the table below I will try to summarize the results for the three regressions in order to identify the factors affecting financial performance:

Explained variable	Explanatory variable	Coefficient	Correlation	$\mathbb{R}^2$
marja_pn	c	-0,060035**	negative	0,532955
	g_ca	0,155700**	positive	
	g_act_imob	-0,173634**	negative	
	d_log_marime	0,360462**	positive	-
	y_rand_div	0,025811*	positive	
	PER	0,000464*	positive	
ROA	c	0,028456*	positive	0,740320
	d_log_marime	0,093398*	positive	
	marja_pn	0,137157*	positive	
q_tobin	c	0,782168*	positive	0,476927
	g_act_imob	-0,694429*	negative	
	per	-0,001034**	negative	
	d_log_marime	1,398502*	positive	7

<sup>\*</sup> Coefficient relevant for a relevance level of 5%

<sup>\*\*</sup> Coefficient relevant for a relevance level of 10%

#### **Conclusions**

Corporate financial performance is influenced by a variety of factors, but in practice we can take into account only some of them, for which researchers attempted to determine the extent to which these variables explain the change of performance indicators. Selecting the most important factors that are in connection with corporate profitability has always been a point of interest in the scientific literature.

Understanding the elements that influence performance company is a priority objective for the company's management, in order to remove those factors that influence it negatively and to strengthen those who have a beneficial impact on business.

The results of the study undertaken in this paper come to support empirical studies conducted in the past. Thus, company size positively affects performance measured by ROA, which proves to be a direct link with another indicator of financial performance, net profit margin.

Change in current assets seems to have a negative impact on net profit margin, which is contrary to the theory that an increase in fixed assets would lead to increased profitability of the company. Regression results show a positive correlation between net profit margin and the following factors: the change in turnover, company size, dividend yield and price-to earnings ratio. According to these observations, for the observed data set, management companies should choose a policy of increasing dividends and total assets. Also, net sales growth appears to have a positive effect on financial results.

For Tobin's Q ratio I observed a negative correlation with the change in fixed assets and a positive relation with the size of the company. Unlike net profit margin, between Tobin's Q ratio and price-to earnings ratio I observed a negative relationship.

Contrary to previous studies that found no notable link between company size and financial performance, for the current study, all three dependent variables used to measure performance proved sensitive to changes in size, calculated based on total assets.

#### **Bibliography**

- 1. Anghel, I. "Falimentul. Radiografie și predicție", Editura Economică, București, 2002
- **2. Azariadis C., B. Smith.** "Private information, money, and growth: Indeterminacy, fluctuations, and the Mundell- Tobin effect", Journal of Economic Growth, Vol.1: 309-332, 1996
- **3. Branch**, **B.**, **Gale**, **B.** "Linking corporate stock price performance to strategy formulation", The Journal of Business Strategy, Vol. 4, pag. 40-50, 1983
- **4. Brătian,** C. "Rolul diagnosticului organizațional în îmbunătățirea performanțelor firmei", Teză de doctorat, Cluj, 2010
- 5. Brief, R., Lawson, R. "The role of the accounting rate of return in financial statement analysis", 1992
- **6.** Capon, N., Farley, J., Hoenig, S. "Determinants of Financial Performance: A Meta-Analysis", Management Science, Vol. 36, No. 10, 1990
- 7. Ciobanu, A. "Analiza performanței întreprinderii, București, 2006
- 8. Codirlaşu, A., Chidesciuc "Econometrie aplicată utilizând EViews 5.1", București, 2008
- **9. Denison, Daniel R., Mishra, Aneil K.** "Toward a theory of organizational culture and effectiveness", Organization Science VI, 1995
- **10. Eccles, R.** "The performance measurement manifesto", Harvard Business Review, Vol. 69, Nr. 1, pag. 131-137, 1991
- **11. Fruhan W. E. Jr. -** "Financial Strategy in the Creation, Transfer and Destruction of Shareholder Value", R. D. Irwin, 1979
- **12. Gavrea, C., Ilieş, L.** "Determinants of organizational performance: the case of Romania", Management & Marketing Challenges for the Knowledge Society, Vol. 6, Nr. 2, pag. 285-300, 2011
- **13. Ghalayini, A. M., Noble, J. S. -** "The changing basis of performance measurement. International Journal of Operations and Production Management", 1996
- **14. Gruian, C.** "Modern factors that enhance company's financial performance", Universitatea de Vest din Timişoara, 2011
- **15. Johnson, H., Kaplan, R.** "Relevance lost: the rise and fall of management accounting", Boston, MA Harvard Business School Press, 1987
- **16. Kakani, R., Biswatosh, S., Reddy, V. -** "Determinants of financial performance of indian corporate sector in the post-liberalization era: an exploratory study", NSE Research Initiative Paper Nr.: 5, 2001
- **17. Kaplan, R.** "Measuring manufacturing performance: A new challenge for managerial accounting research", The Accounting Review, Vol. 58, Nr. 4, pag. 686-705, 1983
- **18.** Lynch, R., Cross, K. "Measure up! How to measure corporate performance", 1995
- 19. Mathur, S. S., Kenyon, A. "Creating Value: Shaping Tomorrow's Business", 1997
- **20.** Neely, A. "The performance measurement revolution: why now and what next", International Journal of Operations & Production Management, Vol. 19, Nr. 2, pag. 205-228, 1999
- **21. Padachi, K.** "Trends in working capital management and its impact on firm's performance: An analysis of Mauritan small manufacturing firms", Int. Rev. Bus. Res. Pap., 2: 45-56, 2006

- **22. Panwala, M.** "Dimensions of liquidity management- A case study of the Surat Textile's Traders Cooperative", 2009
- **23. Peasnell, K. V.** "Using accounting data to measure the economic performance of firms", Journal of Accounting and Public Policy, 1996
- **24. Robu, V., Sandu, R.** "Problematica analizei performanțelor o abordare critică în contextul teoriilor informației și guvernanței corporative", Simpozion Științific, 2009
- 25. Ross, S.A., Westerfield, R.W., Jaffe, J. ,, Corporate Finance". Boston, MA, Ediția 4, 1996
- **26. Sorensen, Jesper B**. , *The strength of corporate culture and the reliability of firm performance*", Working Paper, Massachusetts Institute of Technology, 2001
- 27. Stancu, I. "Finanțe ed.III" Ed. Economică, București, 2002
- **28.** Varaiya, N. Kerin, R., Weeks, R. ,, The Relationship between Growth, Profitability, and Company Value", Strategic Management Journal, 1987
- **29. Vasilescu,** L. "Evaluarea performanței firmei pe baza indicatorilor financiari", Universitatea Constantin Brâncuși din Târgu Jiu, 2011
- **30. Zuriekat, M.** "Performance measurement systems: an examination of the influence of the contextual factors and their impact on performance with a specific emphasis on the balanced scorecard approach", Teză de Doctorat, Universitatea din Huddersfield, 2005
- **31.** <u>www.bvb.ro</u> Bucharest Stock Exchange
- 32. www.ktd.ro Financial information
- **33.** www.kmarket.ro Financial information
- **34.** <u>www.ssrn.com</u> Financial studies

# Appendices

Table 1 – Stakeholders objectives

Stakeholder	Objective	Financial performance indicator
Managers	✓ obtain profit	rates of return (ROE, ROA, ROI), net
	✓ company's welfare	profit margin
	✓ sustainable development	
Owners	✓ maximize investment	Profit, EVA, MVA
	✓ sustainable development	
Shareholders	✓ dividends	TSR, dividend yield, price earnings
		ratio (PER), CFROI, MBV, Q-Tobin
Comercial partners	✓ stable commercial	solvency, stability
	relationships	
Credit institutions	✓ repayment of loans on time	solvency, Cash-flow
Employees	✓ workplace safety	stability
	✓ wages	
	✓ career opportunities	
The state	✓ payment of taxes	-

 $Table\ 2-Non\text{-}financial\ performance\ indicators$ 

E	Examples of non-financi	al performance indicator	·s
Customers orientated	Human resources	Process orientated	Research and development
	orientated		orientated
Number of contracts  Number of clients	Number of full time employees	Number of contracts/employee	The percentage of new customers in 12 months (%)
Customer satisfaction index	Number of managers, of which women (%)	Employment rate measured as range (%)	Number of contracts/employee
Accessibility by phone (%) Savings per contract	Human capital index Rotation of employees	Percentage of IT employees in total employment(%)	Funds accessed via Telelink (%)
Number of individual policies Sales points	Costs of training / employee Mean age	Costs of computerization in total administrative expenditure	Percentage of insurance policy in newly launched products (%)
	Average number of employees	Operating result per square meter	Development costs in total administrative costs (%)
	Number of days of training sessions	Costs per square meter	Change and development
	Percentage of employees with secondary and higher education		Percentage of employees under the age of 40 years
	Percentage of employees with more than three years experience		

Source: FASB Report, 2001

Figure 1: Descriptive statistics – mean, median, minumum, maximum

	D_EPS	D_LOG_MA	G_ACN	G_ACT_IMOB	G_CA	G_TEORETIC	LEVIER_FIN	MARJA_PN	PER	Q_TOB	ROA	ROE	Y_RAND_DIV
Mean	0.195973	0.161746	0.234105	0.262021	0.104593	0.214288	-0.519257	0.026109	36.34594	0.788824	0.047144	0.243782	1.557604
Median	0.000000	0.091846	0.146359	0.067488	0.088099	0.054548	0.373426	0.052848	11.06000	0.699700	0.047134	0.088280	0.000000
Maximum	9.576120	1.567541	11.62267	2.975090	2.503076	13.53178	3.256728	0.292601	996.1800	4.186500	0.372511	13.53178	13.40000
Minimum	-3.887807	-0.269755	-16.06773	-0.305379	-0.642466	-0.334535	-93.95115	-1.644046	0.000000	-0.339800	-0.181427	-0.334535	0.000000
Std. Dev.	1.422638	0.267108	2.411684	0.551495	0.357716	1.382279	9.726969	0.227386	107.9346	0.637874	0.086342	1.379820	2.850962
Skewness	4.090928	2.463622	-1.934412	2.955109	3.101949	9.460211	-9.376947	-4.535793	7.560975	2.021107	0.037002	9.446950	2.235582
Kurtosis	27.04511	11.54192	28.91973	12.64559	22.72679	91.65124	90.55504	32.05560	66.70495	10.41987	4.922789	91.49174	7.817275
Jarque-Bera	2580.440	388.9687	2747.201	511.8726	1710.539	32868.10	32070.38	3706.087	17147.98	285.5758	14.81037	32751.07	172.7898
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000608	0.000000	0.000000
Sum	18.81345	15.52766	22.47407	25.15401	10.04091	20.57169	-49.84863	2.506494	3489.210	75.72711	4.525857	23.40306	149.5300
Sum Sq. Dev.	192.2704	6.777921	552.5411	28.89397	12.15626	181.5162	8988.323	4.911919	1106739.	38.65387	0.708222	180.8707	772.1585
Observations	96	96	96	96	96	96	96	96	96	96	96	96	96

Source: Output EViews

Figure 2: Correlation matrix

	Correlation												
	D_EPS	D_LOG_MA	G_ACN	G_ACT_IMOB	G_CA	G_TEORETIC	LEVIER_FIN	MARJA_PN	PER	Q_TOB	ROA	ROE	Y_RAND_DIV
D_EPS	1.000000	-0.067089	0.203463	-0.053616	0.049434	-0.012115	0.015091	0.166390	-0.055648	-0.025655	0.126861	-0.002096	0.111675
D_LOG_MA	-0.067089	1.000000	0.080259	0.909673	0.669797	-0.054200	0.017474	0.191449	-0.110039	-0.021220	0.328358	-0.056659	-0.144995
G_ACN	0.203463	0.080259	1.000000	0.089122	0.193217	0.023371	-0.006274	-0.031393	-0.019128	-0.049180	-0.013637	0.021420	-0.057776
G_ACT_IMOB	-0.053616	0.909673	0.089122	1.000000	0.643761	-0.014539	0.026297	0.097288	-0.118471	-0.074314	0.265248	-0.015759	-0.114311
G_CA	0.049434	0.669797	0.193217	0.643761	1.000000	0.039796	0.054209	0.288266	-0.239338	-0.073278	0.367095	0.040508	-0.042856
G_TEORETIC	-0.012115	-0.054200	0.023371	-0.014539	0.039796	1.000000	-0.044909	-0.038323	-0.045490	0.005168	-0.186697	0.999191	-0.070208
LEVIER_FIN	0.015091	0.017474	-0.006274	0.026297	0.054209	-0.044909	1.000000	0.043877	0.039827	0.003612	0.168841	-0.042947	0.051680
MARJA_PN	0.166390	0.191449	-0.031393	0.097288	0.288266	-0.038323	0.043877	1.000000	0.012776	0.193680	0.600102	-0.025258	0.305076
PER	-0.055648	-0.110039	-0.019128	-0.118471	-0.239338	-0.045490	0.039827	0.012776	1.000000	-0.133402	-0.082278	-0.050002	-0.092688
Q_TOB	-0.025655	-0.021220	-0.049180	-0.074314	-0.073278	0.005168	0.003612	0.193680	-0.133402	1.000000	0.134765	0.019563	0.250486
ROA	0.126861	0.328358	-0.013637	0.265248	0.367095	-0.186697	0.168841	0.600102	-0.082278	0.134765	1.000000	-0.171177	0.268081
ROE	-0.002096	-0.056659	0.021420	-0.015759	0.040508	0.999191	-0.042947	-0.025258	-0.050002	0.019563	-0.171177	1.000000	-0.039699
Y RAND DIV	0.111675	-0.144995	-0.057776	-0.114311	-0.042856	-0.070208	0.051680	0.305076	-0.092688	0.250486	0.268081	-0.039699	1.000000

Source: Output Eviews

Figure 3: Output – regression net profit margin

Dependent Variable: MA Method: Panel Least Sq Date: 05/20/12 Time: 1 Sample (adjusted): 20 Periods included: 6 Cross-sections include Total panel (balanced) of	uares 7:34 6 2011 d: 16	96		
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C G_CA G_ACT_IMOB D_LOG_MARIME Y_RAND_DIV PER	-0.060035 0.155700 -0.173634 0.360462 0.025811 0.000464 Effects Spe	0.030703 0.085922 0.094188 0.198953 0.012434 0.000205	-1.955359 1.812108 -1.843490 1.811795 2.075865 2.263042	0.0545 0.0743 0.0695 0.0743 0.0416 0.0267
Cross-section fixed (dur Period fixed (dummy var		)		
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.532955 0.366153 0.181032 2.294086 43.01455 3.195141 0.000070	Mean depende S.D. depende Akaike info cr Schwarz crite Hannan-Quin Durbin-Watso	ent var iterion rion in criter.	0.026109 0.227386 -0.354470 0.340041 -0.073737 1.590038

**Source:** own calculations, output Eviews

Figure 4: Output – regression ROA

Dependent Variable: ROA Method: Panel Least Squares Date: 05/20/12 Time: 17:32 Sample (adjusted): 2006 2011 Periods included: 6 Cross-sections included: 16 Total panel (balanced) observations: 96									
Variable	Coefficient	Std. Error	t-Statistic	Prob.					
C D_LOG_MARIME MARJA_PN	D_LOG_MARIME 0.093398 0.022355 4.177935 0.0001								
	Effects Spe	ecification							
Cross-section fixed (dummy variables) Period fixed (dummy variables)									
R-squared         0.740320         Mean dependent var         0.0471           Adjusted R-squared         0.662060         S.D. dependent var         0.0861           S.E. of regression         0.050193         Akaike info criterion         -2.9406           Sum squared resid         0.183911         Schwarz criterion         -2.3262           Log likelihood         164.1491         Hannan-Quinn criter.         -2.6922           F-statistic         9.459762         Durbin-Watson stat         1.4233           Prob(F-statistic)         0.000000									

Source: own calculations, output Eviews

Figure 5: Output – regression Q TOB

Dependent Variable: Q_TOB Method: Panel Least Squares Date: 05/20/12 Time: 17:29 Sample (adjusted): 2006 2011 Periods included: 6 Cross-sections included: 16 Total panel (balanced) observations: 96									
Variable	Coefficient	Std. Error	t-Statistic	Prob.					
C 0.782168 0.070450 11.10239 0.000 G_ACT_IMOB -0.694429 0.271332 -2.559337 0.012 PER -0.001034 0.000597 -1.732667 0.080 D_LOG_MARIME 1.398502 0.567827 2.462903 0.016  Effects Specification									
Cross-section fixed (dur Period fixed (dummy var		)							
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.476927 0.309834 0.529921 20.21880 -61.44681 2.854262 0.000375	Mean depend S.D. depende Akaike info cr Schwarz crite Hannan-Quin Durbin-Watso	ent var iterion rion in criter.	0.788824 0.637874 1.780142 2.421229 2.039280 1.841400					

**Source:** own calculations, output Eviews

## **Bibliografie**

- 35. Anghel, I. "Falimentul. Radiografie și predicție", Editura Economică, București, 2002
- **36. Azariadis C., B. Smith. -** "Private information, money, and growth: Indeterminacy, fluctuations, and the Mundell- Tobin effect", Journal of Economic Growth, Vol.1: 309-332, 1996
- **37. Branch, B., Gale, B.** "Linking corporate stock price performance to strategy formulation", The Journal of Business Strategy, Vol. 4, pag. 40-50, 1983
- **38. Brătian,** C. "Rolul diagnosticului organizațional în îmbunătățirea performanțelor firmei", Teză de doctorat, Cluj, 2010
- **39. Brief, R., Lawson, R. -** "The role of the accounting rate of return in financial statement analysis", 1992
- **40.** Capon, N., Farley, J., Hoenig, S. "Determinants of Financial Performance: A Meta-Analysis", Management Science, Vol. 36, No. 10, 1990
- 41. Ciobanu, A. "Analiza performanței întreprinderii, București, 2006
- 42. Codirlaşu, A., Chidesciuc "Econometrie aplicată utilizând EViews 5.1", București, 2008
- **43. Denison, Daniel R., Mishra, Aneil K.** "Toward a theory of organizational culture and effectiveness", Organization Science VI, 1995
- **44. Eccles, R.** , *The performance measurement manifesto*", Harvard Business Review, Vol. 69, Nr. 1, pag. 131-137, 1991
- **45. Fruhan W. E. Jr. -** "Financial Strategy in the Creation, Transfer and Destruction of Shareholder Value", R. D. Irwin, 1979

- **46. Gavrea, C., Ilieş, L.** "Determinants of organizational performance: the case of Romania", Management & Marketing Challenges for the Knowledge Society, Vol. 6, Nr. 2, pag. 285-300, 2011
- **47. Ghalayini, A. M., Noble, J. S. -** "The changing basis of performance measurement. International Journal of Operations and Production Management", 1996
- **48. Gruian,** C. "Modern factors that enhance company's financial performance", Universitatea de Vest din Timisoara, 2011
- **49. Johnson, H., Kaplan, R.** "Relevance lost: the rise and fall of management accounting", Boston, MA Harvard Business School Press, 1987
- **50.** Kakani, R., Biswatosh, S., Reddy, V. "Determinants of financial performance of indian corporate sector in the post-liberalization era: an exploratory study", NSE Research Initiative Paper Nr.: 5, 2001
- **51. Kaplan, R.** "Measuring manufacturing performance: A new challenge for managerial accounting research", The Accounting Review, Vol. 58, Nr. 4, pag. 686-705, 1983
- **52.** Lynch, R., Cross, K. ,, Measure up! How to measure corporate performance", 1995
- **53.** Mathur, S. S., Kenyon, A. "Creating Value: Shaping Tomorrow's Business", 1997
- **54.** Neely, A. "The performance measurement revolution: why now and what next", International Journal of Operations & Production Management, Vol. 19, Nr. 2, pag. 205-228, 1999
- **55. Padachi, K.** "Trends in working capital management and its impact on firm's performance: An analysis of Mauritan small manufacturing firms", Int. Rev. Bus. Res. Pap., 2: 45-56, 2006
- **56. Panwala, M.** "Dimensions of liquidity management- A case study of the Surat Textile's Traders Cooperative", 2009
- **57. Peasnell, K. V.** "Using accounting data to measure the economic performance of firms", Journal of Accounting and Public Policy, 1996
- **58. Robu, V., Sandu, R.** "Problematica analizei performanțelor o abordare critică în contextul teoriilor informației și guvernanței corporative", Simpozion Științific, 2009
- 59. Ross, S.A., Westerfield, R.W., Jaffe, J. ,, Corporate Finance". Boston, MA, Ediția 4, 1996
- **60. Sorensen, Jesper B**. "The strength of corporate culture and the reliability of firm performance", Working Paper, Massachusetts Institute of Technology, 2001
- 61. Stancu, I. "Finanțe ed.III" Ed. Economică, București, 2002
- **62.** Varaiya, N. Kerin, R., Weeks, R. "The Relationship between Growth, Profitability, and Company Value", Strategic Management Journal, 1987
- **63. Vasilescu, L.** "Evaluarea performanței firmei pe baza indicatorilor financiari", Universitatea Constantin Brâncuși din Târgu Jiu, 2011
- **64. Zuriekat, M.** "Performance measurement systems: an examination of the influence of the contextual factors and their impact on performance with a specific emphasis on the balanced scorecard approach", Teză de Doctorat, Universitatea din Huddersfield, 2005
- **65.** <u>www.bvb.ro</u> Bursa de Valori București
- 66. www.ktd.ro Informații financiare
- 67. www.kmarket.ro Informații financiare
- **68.** <u>www.ssrn.com</u> Studii de specialitate