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## **THE VALUE RELEVANCE OF FINANCIAL REPORTING IN ROMANIA**

***Abstract.** This study examines empirically whether investors in the Romanian stock market perceive accounting information based on domestic GAAP to be value relevant. The study is motivated by the value-relevance literature in the emerging stock markets in which Romania is also included. Using a sample of all productive listed companies in the Bucharest Stock Exchange from 2005 to 2008 with available data, we obtain evidence of value relevance of accounting information in Romania based on the return and price models. The results of this study are the following: accounting information is value relevant to investors in the emerging stock markets despite the young age of the market; the improvement of the accounting rules leads to increase the relevance of accounting information; the value relevance of accounting information is greater for the companies which: has positive earnings, are large, recorded a decrease of turnover; and/or are high indebted.*

***Key words:** Value relevance, emerging market, earnings, book value of equity, return, price.*

**JEL Classification: M48, G14**

### **1. Introduction**

The objective of financial reporting is to provide information to investors, lenders and other creditors. The manner in which these perceive this information depend on their assessment of the amount, timing and uncertainty of, or the prospects for future net cash inflows to the company. This serves as a major motivation for researchers to use correlation with share returns as a criterion for evaluating alternative accounting methods and performance measures (Kothari, 2001).

Given the importance of accounting information for making decision by investors, this study investigates systematic changes in the value relevance of earnings and book value of equity over time in Romania who is characterised by an emerging market. Emerging markets offer potential for new investors seeking

portfolio diversification. It is very important that accounting information to be relevant because otherwise emerging stock markets will not tend to become mature stock markets.

There are only few studies regarding value relevance of accounting information on the emerging markets, the results of these studies being divergent in the most cases. For example, in Czech Republic, Hellstrom (2006) demonstrates that the value relevance increases over time as a result of the progress in transition. However in Poland, no improvement occurred after the year 2000, when new accounting regulation was introduced (Dobija and Klimczak, 2010). Given these contradictory results and the fact that the value relevance depends on the country institutional framework, the central question of this study is the following: Did the changes in accounting regulatory system in Romania increase the relevance of accounting information? In order to answer to this question, we document if the accounting information is value-relevant in the Romanian market according to both the pooled cross-section and time-series regressions or the year-by-year regressions. We analyse both the relative and the incremental explanatory power of these variables.

Romanian capital market was not recently analysed to reflect the relevance of accounting information. The only study in this area is of the authors Filip and Raffourier (2010), but the analysis is based on data from the period 1997-2004, and only the influence of earnings on share return is analysed. This study extends the analysis, first, by using recent data for the period 2005-2008, second, by analysing the value relevance of earnings and book value of equity on share return and share price and, third, by analysis the value-relevance of accounting information in a predictable manner with respect to five factors: positive versus negative earnings, large versus small firms, dividends versus non dividends distributions, company's growth versus company's decline, and degree of leverage. Because the value relevance of accounting information is a function of country-specific factors and given that there are very few studies that have examined this issue for Romania, we consider this study as very important for potential foreign investors, standard setting and accounting literature on value relevance of accounting information.

In this study, we report three primary findings. First, we find that accounting information is value-relevant to investors in the Romanian stock market despite the young age of the market. Second, the results of this study confirmed that improving accounting rules lead to increase the relevance of accounting information. Finally, the value relevance of accounting information is grater for the Romanian companies which: has positive earnings, are large, recorded a decrease of turnover; and/or are high indebted.

This study contributes to the academic literature in three specific ways. First, we extend the literature regarding value relevance from two points of view: developed capital markets and emerging capital markets. Second, the results of this study have implications for standard setting informing the current debate over international accounting standards and practices. Third, the results brings benefits

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to Romanian regulators and managers in the process of making decisions regarding disclosure policies as well as to investors in evaluation process of the Romanian companies' performance.

The study proceeds as follows. Section 2 covers literature review of value relevance of accounting information from two points of view: developed markets, on the one hand, and emerging market, on the other hand; Section 3 presents research design; Section 4 discusses the descriptive statistics and the results; and Section 5 concludes.

### **2. Literature review**

Accounting information is relevant if it is capable of making a difference in users' decisions. For this reason, the accounting information must to have predictive value, confirmatory value, and to be material. An accounting amount is considered to be value relevant if it has a predicted association with equity market values. During the 90's, on the most stock markets have been recorded high market-to-book ratios which could be translated into a reduction of the value relevance of accounting information presented in the financial statement. But this is consistent with greater stock return volatility without a change in the properties of accounting information (Francis and Schipper, 1999).

Earlier researches on the value relevance of accounting information were mainly carried out on the U.S. stock market. In the USA, the value relevance has decreased over time (Ryan and Zarowin, 2003), whereas in Europe, the value relevance of accounting information, either have remained unchanged over the period (Thinggaard and Damkier, 2008), either have increased (Gjerde et al., 2011).

King and Langli (1998) examining the explanatory power of earnings and book values of equity for three European countries: Germany, Norway, and the UK, find significant differences in the valuation power of the two variables across these countries, and they interpret some of the differences as consistent with diversity in accounting practices. However, this can be explained by the other factors, as differences between legal systems, market efficiency, different time periods that were the basis of the studies or changes in the accounting legislation, as our study shows. Regarding the legal system, the value relevance of accounting information is lower in code law countries where the State has an important role in accounting normalization then in common law countries where professional bodies are active in accounting normalization in order to provide useful information to investors (Ali and Hwang, 2000). Exploring the value relevance of book value of equity and earnings in a levels valuation model across eight European countries using data from 1990 to 1998, Arce and Mora (2002) find that earnings are more relevant than book value of equity in common law countries and vice versa for code law countries. Clarkson et al. (2011) considers that the deterioration in the linear model's explanatory power for common law countries is caused by an

increase in non-linearity of the relation between share prices and accounting information.

Kang (2003) find that the accounting numbers of U.K. firms, prepared under U.K. GAAP, are more value-relevant than those of Japanese firms, reported under Japanese GAAP. But not only the accounting referential is important in analysing value relevance but also the origin of the company. Thus studies of German capital market indicate that the value relevance of earnings and book value of equity German firms are greater than the US firms (Hung and Subramanyam, 2007). Recent studies have demonstrated that the involvement of the companies in research and development or their ability to pay dividends are essential for explaining the value relevance of accounting information (Jiang and Stark, 2013).

Accounting research on developed capital markets are considered to be not as important as those made in emerging markets. In this regard, Kothari (2001) provides several examples: choice between disclosure in footnotes and recognition in financial statements, switch from one accounting method to another without a direct cash flow effect, a signalling effect, or incentive consequences does not affect security prices in an efficient market. Although the most studies analysing the value relevance of accounting information are made on developed capital markets, there are a relatively small number of studies on emerging markets, whose significant results influenced the accounting theory and practice. Chen, Chen, and Su (2001) find that accounting information is value-relevant to investors in the Chinese market despite the perception of inadequate accounting and financial reporting in China. In six Asian countries as Indonesia, Korea, Malaysia, the Philippines, Taiwan, and Thailand accounting earnings has less explanatory power than book values (Graham and King, 2000). The studies conducted only on the domestic accounting referential were mainly based on the analysis of earnings value relevance, their results also being contradictory. There are studies which show that earnings are important in explaining share return (France, Cyprus) (Dumontier and Labelle, 1998), on the one hand, and other studies which show that accounting losses are not significantly related to stock returns (Finland) (Martikainen, Kallunki, and Perttunen, 1997), on the other hand. In such a context, this study is important because it examines the extent to which accounting regulations in Romania increased the relevance of accounting information.

### **3. Research methodology**

#### **3.1. Research hypotheses**

During 1948-1989, the Romanian economy functioned under the specific criteria of a centralized environment, the accounting in Romania being under the rigors imposed by the USSR. The period 1990-1993 was an interim period between the practice of a Soviet-style accounting system and the implementation of an accounting system of French inspiration. The French accounting system, introduced from 1 January 1994, was applied without great changes until 1999. Since 2000, Romanian regulators have opted for a joint accounting system, having

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both European and international influence and having its pillars on the Fourth Directive of the EEC, on the one hand, and on the IFRS, on the other hand. Romania didn't stagnate during the implementation of IFRS in the national accounting culture, but in the last ten years it has been subject to a continuous and complex process of changing the accounting rules for assimilation, even in part, of the international accounting culture.

In the analysed period 2005-2008, accounting in Romania has passed from an accounting connected to taxation to an accounting disconnected from taxation. Although the State was privileged user of accounting information, during this period were defined the other users of accounting information: investors, financial creditors, suppliers, customers, employees and the general public. Also since 2006, in the Romanian accounting regulation was introduced the substance over form. Thus, the accounting in Romania has become more investor-oriented financial reporting (Geambașu et al., 2014). This should translate into improvement of the value relevance of accounting information. This is why the present study has the aim to test the following research hypothesis:

*Hypothesis:* The changes in accounting regulation lead to improvement of the value relevance of accounting information

The Bucharest Stock Exchange (BSE) was reopened in 1995. From that time, there were more stages of the Romanian capital market evolution (Pirtea et al., 2009): the initial stage (1995-1996) of building the capital market; the second one starting from 1997 and ending in 2000, when the Bucharest Stock Exchange (BSE) experienced a generalized regression; the third stage starting from 2001 until 2004, when the falling stopped and the BSE started to develop with a sustainable pace; the last stage, after 2005, when the evolution of the BSE was relatively favourable, starting to become more mature and more correlated with the other capital markets.

### 3.2. Valuation models

The value relevance of accounting information has been demonstrated, on the one hand, by incremental association studies between share return and balance sheet items or profit and loss account items, and on the other hand, by relative association studies between share price and balance sheet items, profit and loss account items or both. In order to test our hypothesis, we use two models for analysing the value relevance of Romanian accounting information: the return model of Easton and Harris (1991) and the price model of Ohlson (1995).

Assuming the book value of equity is a noisy proxy for the market value of equity and assuming clean surplus, Easton and Harris (1991) argue that earnings measure the change in the market value of equity. In our model, in order to reduce heteroskedasticity in estimating a value-relevance regression, we divided earning per share, and variation of earnings per share at opening price, similar with other study as Filip and Raffournier (2010). The return model used in this current study is the following:

$$RETURN_{t,i} = \alpha_0 + \alpha_1 EPS_{t,i}/P_{t-1,i} + \alpha_2 (EPS_{t,i} - EPS_{t-1,i})/P_{t-1,i} + \varepsilon_{t,i} \quad (1)$$

- $RETURN_{t,i}$  – annual return (including cash dividends ) for the year  $t$  of the firm  $i$ ;
- $EPS_{t,i}/P_{t-1,i}$  – annual earnings per share for the year  $t$  of the firm  $i$ , divided by the share price of firm  $i$  at the last year  $t-1$ ;
- $(EPS_{t,i} - EPS_{t-1,i})/P_{t-1,i}$  – change of annual earnings per share for the year  $t$  of the firm  $i$ , divided by the share price of firm  $i$  at the last year  $t-1$ ;
- $P_{t-1,i}$  – share price at the beginning of the last year

We also used in this study the price model (Ohlson, 1995), because this model has two advantages over return model (Chen, Chen, and Su, 2001): on the one hand, accounting information can be relevant if it is related to share price even though it does not provide new information to affect share return; and on the other hand, return model only allow assessing value relevance of earnings, whereas the price model show how a company's market value is related both to book value of equity and earnings. Ohlson's model represents firm value as a linear function of book value of equity and the present value of expected future abnormal earnings. The model assumes perfect capital markets, but permits imperfect product markets for a finite number of periods (Barth, Landman, and Lang, 2008). The assumption that the amounts reflected in share prices are the "true" variables is stronger than the assumption of market efficiency: the market's estimates are not just unbiased, they are error-free (Holthausen and Watts, 2001). In our study we started from the modified Ohlson model (1995) in which the share price can be written as a linear function of book value of equity and earnings. This model was also used in other studies in order to analyse the value relevance of accounting information. The price model used in this current study is the following:

$$PRICE_{t,i} = \beta_0 + \beta_1 EQUITY_{t,i} + \beta_2 EPS_{t,i} + \varepsilon_{t,i} \quad (2)$$

- $PRICE_{t,i}$  – share price for the year  $t$  of the firm  $i$ ;
- $EQUITY_{t,i}$  – book value of equity per share for the year  $t$  of the firm  $i$ ;
- $EPS_{t,i}$  – annual earnings per share for the year  $t$  of the firm  $i$ ;

We use both  $R^2$  and regression coefficients in order to assess the value relevance of accounting information.

### 3.3. Data collection

In order to test the value relevance of accounting information in Romania we used the data available for all manufacturing companies listed on the BSE for the period 2005-2008 because until 2004 there was an inflationary period in Romania and beginning with the year 2009 the financial crises was felt on the Romanian capital market. On BSE there were traded a number of 104 companies at data collection, May 2011. In order to obtain homogeneous data, we eliminated companies providing services and financial institutions. Also we eliminated the unlisted companies and the firms for which there are not available data (Table 1).

**Table 1. Data collection**

<b>Companies listed on BSE (May 2011):</b>	<b>104</b>
Extractive industry	3
Manufacturing industry	62
Industry of production, electricity, gas, steam and air conditioning	5
Construction	6
Services	15
Financial institutions	13
- Companies providing services and financial institutions	(28)
- Non listed companies	(16)
- Companies without available data for 2005-2008 period	(16)
<b>Number of companies for this study</b>	<b>44</b>
Extractive industry	3
Manufacturing industry	37
Industry of production, electricity, gas, steam and air conditioning	1
Construction	3

The data were taken from the online database [www.securities.com](http://www.securities.com), section Emerging Markets Information Systems-Romania-Financial Markets, from the site of the National Securities Commission of Romania from the "Reports of Issuers" and from the BSE website, the "Companies - List of companies".

## 4. Results

### 4.1. Descriptive statistics

Table 2 presents descriptive statistics for the variables in the return and price model. The average share return over a four-year period from 2005 to 2008 is 24%, but the median is negative (3%). The average share price is 3.56 with a standard deviation of 8.87. The book value of equity per share has an average value of 7.24 being one company which was a negative value for the 2008 year. Although earning per share has positive values for the majority of companies, these values are very low, the median being 0.027.

**Table 2. Descriptive statistics for the variables in the return and price model**

	<b>Mean</b>	<b>Std. Dev</b>	<b>Minimum</b>	<b>Median</b>	<b>Maximum</b>
<b>RETURN</b>	0.240	1.455	-0.992	-0.030	10.405
<b>EPS/Pt-1</b>	0.120	0.486	-1.609	0.040	2.835
<b>ΔEPS/Pt-1</b>	-0.049	0.744	-7.682	-0.006	1.658
<b>PRICE</b>	3.560	8.875	0.014	0.568	50.800
<b>EQUITY</b>	7.242	30.987	-0.733	0.610	327.993
<b>EPS</b>	0.446	1.768	-0.754	0.027	15.937

Definitions: RETURN: return over the period between current and last year's annual report; EPS/Pt-1: earnings per share over beginning share price; ΔEPS/Pt-1: change in earnings per share over beginning share price; PRICE: market value of equity per share at the end of the year; EQUITY: book value of equity per share at the end of the year; EPS: earnings per share.

Because the most variables seem to contain extreme values, the top and bottom one until two percentile of outliers was eliminated before estimating the regression models.

#### **4.2. Correlation analyses**

The Pearson bivariate correlation coefficients are presented in Table 3. These results highlight the positive correlation between return and earnings, on the one hand, and positive strong correlation between share price and book value of equity or earnings, on the other hand. In addition, there is a stronger correlation between specific variables of the price model than those specific of the return model. In general, correlations among the independent variables are not high except for the correlation between book value of equity and earnings, which is slightly higher than 0.70. Because book value of equity and earnings per share are basic variables of the price model, it is impossible to eliminate any of them.

**Table 3. Pearson correlation coefficients**

<i>Return model</i>	<b>RETURN</b>	<b>EPS/Pt-1</b>	<b>ΔEPS/Pt-1</b>
<b>RETURN</b>	1		
<b>EPS/Pt-1</b>	0.359	1	
<b>ΔEPS/Pt-1</b>	0.113	0.256	1
<i>Price model</i>	<b>PRICE</b>	<b>EQUITY</b>	<b>EPS</b>
<b>PRICE</b>	1		
<b>EQUITY</b>	0.543	1	
<b>EPS</b>	0.674	0.707	1



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Definitions: RETURN: return over the period between current and last year's annual report; EPS/Pt-1: earnings per share over beginning share price;  $\Delta$ EPS/Pt-1: change in earnings per share over beginning share price; PRICE: market value of equity per share at the end of the year; EQUITY: book value of equity per share at the end of the year; EPS: earnings per share.

### 4.3. Analyses of value relevance of accounting information in Romania

Estimating the return and price models for the pooled cross-section and time-series sample as well as for each year, we present in the Table 4 the slope coefficients, the related t-statistics in parentheses, adjusted R<sup>2</sup> and significant F. According to the F-test, both models are highly significant. As expected, the price model produces better results. For all data, the coefficient for earnings level in the *return model* is positive and significant at  $\alpha < 0.01$ . In contrast, the coefficient for earnings change is negative and significant at  $\alpha < 0.05$ , which denotes an inverse relationship between earnings changes and market returns. The adjusted R-square explains about 12% of the return for the whole period. In *the price model*, the both independent variables are positive and significant (at  $\alpha < 0.01$  for equity and  $\alpha < 0.05$  for earnings) with expected sign and the adjusted R<sup>2</sup> indicates that they jointly explain about 45.1% of the cross-sectional variation in share price.

**Table 4. Coefficient analyses**

Panel A: $RETURN_{t,i} = \alpha_0 + \alpha_1 EPS_{t,i}/P_{t-1,i} + \alpha_2 (EPS_{t,i} - EPS_{t-1,i})/P_{t-1,i} + \varepsilon_{t,i}$						
Year	N	EPS/Pt-1	$\Delta$ EPS/Pt-1	Adj.R2	Signif.F	
All years	164	1.290 (4.915)***	-0.776 (-2.312)**	0.120	0.000	
2005	38	0.680 (2.814)***	-0.071(-0.207)	0.151	0.021	
2006	38	2.772 (5.799)***	-0,903 (-2.267)**	0.469	0.000	
2007	38	1.455 (2.736)***	0.329 (0.378)	0.160	0.010	
2008	38	0.476 (1.468)	-0.459(-0.843)	0.004	0.348	
Panel B: $PRICE_{t,i} = \beta_0 + \beta_1 EQUITY_{t,i} + \beta_2 EPS_{t,i} + \varepsilon_{t,i}$						
Year	N	EQUITY	EPS	Adj.R2	Signif.F	
All years	164	0.583(8.063)***	0.505 (0.700)**	0.451	0.000	
2005	38	0.610 (3.277)***	0.296 (0.217)	0.368	0.000	
2006	38	0.845 (4.451)***	0.404 (0.153)	0.676	0.000	
2007	38	0.929 (18.954)***	3.476 (2.184)**	0.946	0.000	
2008	38	0.516 (9.366)***	-0.686 (-0.686)	0.706	0.000	

Definitions: EPS/Pt-1: earnings per share over beginning share price;  $\Delta$ EPS/Pt-1: change in earnings per share over beginning share price; PRICE: market value of equity per share at the end of the year; EQUITY: book value of equity per share at the end of the year; EPS: earnings per share;

\*, \*\*, \*\*\* statistically significant at 0.10, 0.05, and 0.01, respectively.

The year-by-year regressions further support the pooled-sample results. Analysing the evolution in time of the results by applying the two models it can be seen that only one of the two independent variables is significant for investors: respectively earnings level in the return model and book value of equity in the price model. Consequently the substantiation of hypothesis validation or invalidation will be based only on the analysis of significant coefficient of independent variables for each model and on  $R^2$ . In the return model it can be seen an increase of the earnings level coefficients in 2006 and 2007 compared to 2005. Very high value of earnings level coefficient in 2006 may be motivated by the fact that 2006 was the first year when in Romanian accounting has applied the substance over form principle, which led to a significant increase of value relevance of accounting information in that year. Because for the 2008 year the F-test for the return model is not significant, we could not use the data from this year for making decision. In the price model there is an increase of the book value of equity coefficients for the period 2005-2007. In the 2008 year, even if the book value of equity coefficient is smaller than that in the previous years, as a result of informing the investors in Romania on the triggering financial crisis in America (financial crisis beginning to be felt in Romania since 2009), the  $R^2$  value is still very high. The increase in time of the earnings level coefficients in the return model, on the one hand, and of the book value of equity coefficients in the price model, on the other hand, supports the validation of the hypothesis that changes in accounting regulation in Romania led to the increase of the value relevance of accounting information.

Accounting information is consistently perceived as value relevant by investors in Romania in each year group especially for the price model according to the  $R^2$ . In the return model, the values of  $R^2$  in our study are similar to the ones obtained in emerging or more mature markets: 0.112 in China (Chen, Chen, and Su, 2001); 0.075 in Japan (Kang, 2003); 0.117 in UK (Kang, 2003). In the price model, the values of  $R^2$  are much higher than the values of  $R^2$  obtained in emerging or more mature markets: 0.048 in Japan (Kang, 2003); 0.142 in UK (Kang, 2003); 0.029 in China for A share (Samia and Zhou, 2004); 0.117 in China for B shares (Samia and Zhou, 2004). With the results of the two models complementing and validating each other, we conclude that accounting information as reflected in the financial statements is value-relevant to domestic investors in the Romanian stock market.

#### **4.4. Five factors affecting value relevance in Romania**

We will further analyse the impact of other factors that influence the value relevance of accounting information, namely: positive versus negative earnings, large versus small firms, dividends versus non dividends distributions, company's growth versus company's decline, and degree of leverage. Because the price model was proved to be superior to return model, the analysis of the influence of the five factors on value relevance of accounting information it was based only on price

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model. We added two DUMMY variables in the model and creates two models: *DUMMY*<sub>1</sub> which takes the value 1 if: company has positive earning, or company is large, or company distributes dividends, or company records an increase of turnover, or company is low indebted and 0 otherwise; and *DUMMY*<sub>2</sub> which takes the value 1 if: company has negative earning, or company is small, or company does not distribute dividends, or company records a decrease of turnover, or company is high indebted, and 0 otherwise. The price model is estimated separately for each model and each factor and the results are presented in Table 5.

**Table 5. Factors affecting value relevance**

<i>Model DUMMY 1: <math>PRICE_{t,i} = \beta_0 + \beta_1 EQUITY_{t,i} * DUMMY_1 + \beta_2 EPS_{t,i} * DUMMY_1 + \varepsilon_{t,i}</math></i>					
<b>Factors affecting value relevance</b>	<b>N</b>	<b>EQUITY</b>	<b>EPS</b>	<b>Adj.R2</b>	<b>Sig. F</b>
Positive versus negative earnings	143	0.037 (1.478)	2.911 (6.548)***	0.448	0.000
Large versus small firms	88	0.034 (1.102)	2.782 (5.149)***	0.432	0.000
Dividends versus non dividends distributions	46	0.649 (6.983)***	0.277 (0.468)	0.696	0.000
Growth versus decline	123	0.039 (1.395)	2.759 (5.344)***	0.378	0.000
Low versus high indebted	122	0.087 (1.608)	1.313 (0.840)	0.328	0.000
<i>Model DUMMY 2: <math>PRICE_{t,i} = \beta_0 + \beta_1 EQUITY_{t,i} * DUMMY_2 + \beta_2 EPS_{t,i} * DUMMY_2 + \varepsilon_{t,i}</math></i>					
<b>Factors affecting value relevance</b>	<b>N</b>	<b>EQUITY</b>	<b>EPS</b>	<b>Adj.R2</b>	<b>Sig. F</b>
Positive versus negative earnings	33	0.324 (2.598)**	-1.179 (-1.838)*	0.369	0.000
Large versus small firms	88	-0.653 (-0.504)	6.080 (1.055)	-0.010	0.559
Dividends versus non dividends distributions	130	-0.011 (-0.490)	3.663 (6.627)***	0.517	0.000

Growth versus decline	53	0.033 (1.177)	3.375 (8.153)***	0.821	0.000
Low versus high indebted	54	0.313 (1.820)*	1.812 (2.142)**	0.653	0.000

#### 4.4.1. Positive versus negative earnings

Previous studies have shown that companies that report negative earnings have smaller earnings response coefficients than those reporting positive earnings (Chen, Chen, and Su, 2001). To test this hypothesis on the Romanian capital market, we divided the data into two categories: positive earnings (143 items) and negative earnings (33 items). The results disclosed in Table 5 confirm that Romanian companies with negative earnings have smaller earnings coefficients (this assertion is supported by a 0.1 degree of error). In addition, it may be noted an inverse relationship between negative earnings and share price which suggests the fact that reporting a negative earning leads to reduction the share price. When a Romanian company reports losses, investors will be interested in the book value of equity ( $t = 2.598$ ). It is normal given the fact that in this situation the balance sheet reported by a company is seen as a liquidation balance sheet in which the equity reflects the value that investors could recover by company's liquidation. Instead, when the company achieves positive earnings, investors are not interested in the book value of equity ( $t = 1.478$ ) but in company's ability to obtain future performance, ability which is proven by positive current earnings.

#### 4.4.2. Large versus small firms

To examine the impact of firm size on the value relevance of accounting information, we separated the analysed companies in two categories: large firms and small firms. Company size was measured as the natural logarithm of total assets. We perform a median split of our sample into two equal portfolios (88 items each) based on natural logarithm of total assets. The price model results are value relevant only for large firms and only for earnings ( $t = 5.149$ ). The book value of equity is not value relevant for large firms investors ( $t = 1.102$ ) which is obviously because the value of the large firm is given largely by internally generated goodwill which is not recognized in the company's assets. However, the earnings and book value of equity are not value relevant for investors of the Romanian small firms (the price model being invalidated, significance  $F = 0.559$ ).

#### 4.4.3. Dividends versus non dividends distributions

Another very important factor which we analysed in order to test if it influences the value relevance of accounting information is the policy dividends of the company. We divided the data in two categories: companies which distribute dividends (46 items) and companies which do not distribute dividends (130 items).

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The results presented in Table 5 show that the book value of equity is value relevant for companies which distribute dividends ( $t = 6.983$ ) but the net income is not value relevant ( $t = 0.468$ ) because the investors of these companies pursue long-term ownership of shares in order to collect dividends. Instead, for the companies which do not distribute dividends, the results are opposite: the book value of equity is not value relevant ( $t = -0.490$ ) but net income is value relevant ( $t = 6.627$ ) and influences significantly share price (the change by one unit of net income, share price changes by 3.663 units) because the investors of these companies hold shares for speculative purposes.

### 4.4.4. Growth versus decline

In order to examine the impact of changes in turnover on the value relevance of accounting information, we separated the analysed companies in two portfolios: companies which records an increase of turnover (123 items) and companies which records a decrease of turnover (53 items). The price model results are value relevant only for net income both for companies which record an increase in turnover ( $t = 5.344$ ) and for companies which record a decrease in turnover ( $t = 8.153$ ). In addition it may be noted that net income influences in much larger extent share price for companies which record a decrease in turnover ( $\beta_4 > \beta_3$ ).

### 4.4.5. Low versus high indebted

To determine if the degree of company's indebtedness influences value relevance of accounting information, we will proceed to the separation of data into two portfolios: low indebted companies (122 items) and high indebted companies (54 items). Leverage was calculated as ratio between the total liabilities and book value of equity. We considered low indebted companies those with leverage less than one and high indebted companies those with leverage greater than one. The results demonstrated that accounting information is not value relevant for low indebted companies and only for high indebted companies ( $t = 1.820$  for book value of equity and  $t = 2.142$  for net income). This suggests that investors are aware of the importance of accounting information only when the company's activity becomes risky, as in the case of highly leveraged.

## 5. CONCLUSIONS

In the last years there is an increased focus on the value relevance of accounting information on emerging stock markets. The results of this study find that accounting information is value relevant to investors in the Romanian stock market. The continuous improvement of accounting regulation that characterized the economic environment in Romania has resulted in increasing the value relevance of accounting information. There are many factors that affect the value relevance of accounting information, namely: positive versus negative earnings, positive versus negative equity, large versus small firms, dividends versus non

dividends distributions, company's growth versus company's decline, and degree of leverage.

Thus, the companies in Romania which have negative earnings have smaller earnings coefficients than the companies which report positive earnings. Regarding the size of the companies, the results of this study demonstrated that the accounting information is not value relevant for small companies. Regarding the dividends policy, the book value of equity is value relevant only for the companies which distribute dividends whereas earnings are relevant only for the companies which do not distribute dividends. The earnings are more value relevant for the companies which record a decrease of turnover than those which record an increase of turnover. The results of this study also showed that accounting information is value relevant only for the companies which are high indebted.

The limit of this study consists in the small number of companies analysed due to the small number of companies traded on the BSE. However the disadvantages of this limit were offset by a series of advantages of data analysis as: the data was collected from companies in the same field; and the data were collected for the period 2005-2008, when: there was not an inflationary environment and financial crisis had not yet appeared on Romanian capital market.

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