IFRS COMPLIANCE REGARDING INFORMATION DISCLOSED BY COMPANIES IN CONSOLIDATED FINANCIAL STATEMENTS - *CASE STUDY ON IAS 23 BORROWING COSTS APPLICABILITY*

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Abstract: *This paper concentrates on information disclosure regarding IAS 23, being included in accounting research field. It comprises an empirical study on the correlation between information published by companies in consolidated financial statements with respect to borrowing cost policies and a series of variables that characterize a firm. The objectives of this paper involve estimating and establishing an econometric model in which is assumed that disclosure index for information required by IAS 23 depends on certain elements in the form of country of origin, sales, total assets, debt ratio, solvency, ROA and ROE. International accounting literature presents a series of studies on the subject of compliance with IAS disclosure requirements. Similar with this paper, various authors considered annual reports as starting point for data gathering in their reasearch on disclosure phenomena. The criteria used for data gathering, processing and analysing have been previously used in a successful manner by important scientists who published in accounting field. The methodology used involves Disclosure Index computation, as well as SPSS data processing, analysis and interpretation. Results show that the model is valid, meaning that there is correlation between information disclosure with respect to IAS 23 and the analyzed variables. According to our estimated econometric model, most of the variables maintain a certain influence on disclosure as we can observe a significant correlation level between the studied elements. This research contributes to the development of both accounting field and international accounting literature, by studying borrowing costs disclosed information in relation to certain elements that best characterize the activity of a company. Although an empirical paper, it concentrates also on accounting practices, as it uses real data extracted from annual reports and consolidated financial statements. The importance of this research relies in its originality approach, by studying the information disclosure for borrowing costs that represent one of the most important accounting fields.*

Keywords*: information, disclosure, borrowing costs, annual reports, correlation*

JEL Codes: *C51, C53, M41*

I. Introduction

International accounting literature contains a serie of studies on disclosure. The most recent of them, involve the analysis of compliance with IAS requirements. Many scientists have started to consider annual reports in their reasearch on disclosure phenomena. In addition, this paper uses certain criteria in data gathering, processing and analysing that have been previously used in a successful manner by important scientists who published in accounting field. Regarding the motivation for implementing this research, there is a need to establish the level of IFRS compliance, as both recognition and appliance of IAS is considered to be an essential element in the process of accounting development. Further on, by analysing information disclosure in financial reports, and defining its correlation to some key indicators that show the financial position and profitability of companies, IFRS requirements

regarding information made public could meet progress in compliance. This study contributes to a better understanding of IFRS compliance as well as of the factors that influence information disclosure. Furthermore, international organisms from accounting field should supervize IAS acceptance and thus the process of disclosure is one imporant part of it.

II. Literature review

Nowadays is becoming more and more difficult to make economic forecasts whithout having the necessary information. Decisions cannot be made in the absence of information disclosure. Further on, in all fields there is a need for published information, otherwise negative effects of non-disclosure can appear (Edmiston 2011:281-320). There is evidence of the fact that a 'real-time reporting' can be attained only through continuous evolution of financial reporting, in order for accounting standards and policies addopted by companies in practice to reach a common point (Kueppers and Sullivan 2010:292). International accounting literature mentions the benefits of improved disclosure (Lang and Lundholm 1993), as firms increase intensity of disclosure efforts before offering public debt and equity, and thus from compliance with international standards (Barry et al. 1991). There have been many attempts to study the level of disclosure for mandatory and voluntary issues using disclosure index. Donna Street (Street 2001:27-35) made a research on factors that generate noncompliance, and uses regression analysis in order to estimate their correlation to information disclosure. By studying the information made public in annual reports, some sientists try in fact to underline the importance of disclosure for accounting and for the economy, in general. According to them, the process of disclosure assumes three main aspects or characteristics of the information to be disclosed (Hossain 2008: 661): efficiency from economical point of view of disclosed information, influence of published information on economic agents' behavior, background of disclosure decision. Results of the study reveals that banks seldom choose to disclose voluntary elements; on the other hand, for mandatory issues, disclosure and transparency meets compliance. Hossain et al. (Hossain et al. 2009:664-667) made a study on corporate disclosure measurement for financial and non-financial companies. Their research is based on some analysis criteria, including: size of the firm given by turnover or sales, profitability (ROE, ROA), complexity of business- industry, activity field, country of origin, and assets. According to the authors, all these variables are supposed to influence information disclosure in financial reporting. In scoring of disclosure index, they used 0 for non disclosed and 1 for disclosed, which is known as the unweighted disclosure approach. Another research on disclosure concerns public listed companies in Malaysia (Lee 2010: 40-42) in which is studied the level of human resource information disclosed in correlation to a series of variables: size, industry and listing. The conceptual and relational SPSS analysis is based on information disclosed in companies' annual reports. Some researchers intended to create models for borrowing costs, in order to facilitate decisions and secure debt (Booth 2006: 70-72). In addition, ROE and ROA ratio indicators are used in empirical research to perform comparative analysis for companies' data in relation to borrowing costs (Bohusova and Nerudova 2009: 35-39). Other studies on capitalization of borrowing costs and their disclosure (Chung et al. 1993: 886-893) investigate firms from oil and gas industry, the analysis revealing two types of companies: successful efforts that expense borrowing costs, and are expensed full costs which capitalize costs.

III. Research methodology

The methodology used involves *Disclosure Index* computation, as well as *SPSS* data processing, analysis and interpretation of results. Data gathering implies a selection of companies and a detailed read through all their consolidated financial statements. Research development is being sustained by certain analysis criteria, such as: *market capitalization, company profile, headquarter,* or *time period*. The number of firms involved in the study has been elected in accordance to the market capitalization level corresponding to each one of the ten countries implied in the research (*France, Germany, Spain, Italy, Poland, Austria, Romania, Hungary, Ukraine and Bulgaria*) and the period of study comprises a five years' analysis (from year 2005 to 2009). The elements determined for all the 92 participating companies include: *disclosure index, sales, total assets, gearing-solvency and debt rate-, ROE, ROA.* Regarding the information disclosed by firms in their consolidated financial statements, the paper investigates the compliance with Disclosure Checklists of borrowing costs that is disclosing the *accounting policy* adopted with respect to borrowing costs, amount of *capitalized borrowing costs* and *capitalization rate*.

The function that best describes the econometric model can be presented as follows:

$$DI_t = \partial_0 + \partial_1 \, Sales + \partial_2 \, TA + \partial_3 \, DebtRatio + \partial_4 \, Solvency + \partial_5 \, ROA + \partial_6 \, ROE + \partial_7 \, Country \quad (1)$$

In the above function, t is the year of study and takes values from 2005 to 2009. Disclosure Index determination involved two stages. First of all, for each one of the three items to be disclosed, in the form of borrowing costs policy adopted by company, amount of capitalysed borrowing costs and capitalization rate, were denoted with '1' in case information for that item has been disclosed in the annual report, and '0' for the firm that did not publish the rspective information. The second step involved summing up the result for the three elements, and then dividing by three- as this was the maximum probability for disclosure.

$$DI = \sum(d_i \, \text{effectively presented}) / \sum(d_i \, \text{all the possible cases}) \quad (2)$$

IV. Interpretation of results

Table no. 1. SPSS- Descriptive statistics: Correlations
(Source: own computations)

Table no. 2. Results

Year	Variables						
	Dependent	*Independent*	Variable	Alfa	T (sign.)	F (sign.)	Adj.R²
2005	DI	Sales, Total Assets, Debt Rate, Solvency, ROA, ROE	Sales	5,970	0,167	4,974	0,396
			T.A.	5,353	0,159		
			Debt rate	0,039	0,291		
			Solvency	0,032	0,238		
			ROA	0,109	0,016		
			ROE	-0,0013	0,019		
Year	**Variables**						
	Dependent	*Independent*	Variable	Alfa	T (sign.)	F (sign.)	Adj.R²
2006	DI	Sales, Total Assets, Debt Rate, Solvency, ROA, ROE	Sales	3,422	0,236	4,611	0,373
			Total Assets	9,253	0,188		
			Debt rate	-0,0057	0,039		
			Solvency	0,058	0,037		
			ROA	-0,0023	0,411		
			ROE	0,00423	0,481		

	Disclosure Index				
	2005	**2006**	**2007**	**2008**	**2009**
DI	1,000	1,000	1,000	1,000	1,000
Sales	0,102	0,076	0,073	0,132	0,076
Total Asset	0,105	0,093	0,051	0,091	0,070
Debt ratio	-0,058	-0,185 **	-0,214 **	0,062	0,159 *
Solvency	0,075	0,187 **	0,211 **	-0,073	-0,181 **
ROA	0,224 **	0,024	0,115	0,003	-0,031
ROE	0,216 **	-0,005	-0,027	0,009	-0,011
Romania	-0,545 ***	-0,529 ***	-0,564 ***	-0,450 ***	-0,432 ***
Bulgaria	0,025	0,007	0,011	0,003	-0,034
Hungary	0,255 *	0,305 **	0,229 **	0,170 *	0,147 *
Poland	0,056	0,0015	0,024	0,006	-0,075
Ukraine	0,031	0,008	0,013	0,003	0,130
Spain	0,066	0,017	0,028	0,007	-0,089
France	0,042	0,231 **	0,263 *	0,097	0,079
Italy	-0,175 **	0,127	0,129	-0,114	-0,080
Germany	0,139 *	0,043	0,036	0,060	0,201
Austria	0,052	0,014	0,022	0,139	0,092
Significance	*, for Sig ≤0,10		**, for Sig ≤0,05		***, for Sig ≤0,01

Year	Variables						
	Variables						
	Dependent	Independent	Variable	Alfa	T (sign.)	F (sign.)	Adj.R²
			Sales	3,0988	0,244	4,897	0,391
		Sales, Total Assets, Debt Rate, Solvency, ROA, ROE	Total Assets	-0,017	0,315		
2007	DI		Debt rate	-0,0085	0,020		
			Solvency	0,060	0,022		
			ROA	-0,0014	0,137		
			ROE	0,0037	0,399		

Year	Variables						
	Variables						
	Dependent	Independent	Variable	Alfa	T (sign.)	F (sign.)	Adj.R²
			Sales	3,982	0,105	2,683	0,217
		Sales, Total Assets, Debt Rate, Solvency, ROA, ROE	Total Assets	-3,7	0,195		
2008	DI		Debt rate	0,235	0,278		
			Solvency	0,331	0,244		
			ROA	0,005	0,490		
			ROE	-0,0005	0,467		

Year	Variables						
	Dependent	Independent	Variable	Alfa	T (sign.)	F (sign.)	Adj.R²
		Sales, Total Assets, Debt Rate, Solvency, ROA, ROE	Sales	1,1826	0,234	2,672	0,216
2009	DI		Total Assets	-0,861	0,253		
			Debt rate	-0,101	0,065		
			Solvency	-0,088	0,042		
			ROA	-0,443	0,385		
			ROE	0,0949	0,459		

(Source: own computations)

Table no.1 presents the correlation between Disclosure Index and its corresponding variables (Sales, Total Assets, Debt ratio, Solvency, ROA, ROE). In analyzing the evolution of correlation coefficients for the 5 years' period (2005-2009), we consider three significance thresholds, of 10%, 5% and 1%. The results show that according to our estimated econometric model, most of the variables (Sales, Total Assets, ROE and ROA), maintain a strong influence on disclosure for year 2005, as we can observe a high correlation level between the studied elements. In addition, we can observe that in most of the case, Pearson Coefficient registers values that are above the significance levels (see Table no.1). One of the variables that influences disclosure index with respect to borrowing costs is represented by *sales*. Pearson Coefficient for sales (0,102) shows that the more complex the company is, having a high turnover, the higher the level of published information. This is also valid for the case of *total asset*. Its coefficient of 0,105 demonstrates that as a firm increases its assets, it is also willing to publish a greater amount of information. On the other hand, for both *debt ratio* and *solvency* there is a low correlation level in their relation to disclosure index. For instance, debt rate has a negative

correlation with respect to DI, which means that is some of the cases (tough, few, as the value of -0,058 does not indicate a significant influence) when a company's debt ratio increases, disclosure concerning borrowing costs has in contrast a tendency to decrease. Concerning ROA and ROE for year 2005, although they seem to be highly correlated with the indicator showing information published by firms in accordance with IAS 23, the significance level is lower than 0,05 (see Table no.2). For years 2006 and 2007 we can state that again debt ratio and solvency show high correlation, but similar with the previous year, the level of significance does not reach 5% (see Table no.2). The other variables do not register coefficients that should indicate a relevant influence for disclosed information regarding borrowing costs. However, there is the exception of Pearson's coefficient for ROA recorded in 2007 (0,115), that stands for a strong correlation between disclosure index and ROA for the mentioned year. The last period of our analysis (2008-2009) is characterized by some evidence of correlation- sales from 2008 (0,132), as well as debt ratio and solvency, in 2009 although for the last two items the significance level is under 10%, respectively 5% (see Table no.2). Regarding the assumption that the country in which a company has it's headquarter and where it has been set up has an influence politics adopted concerning information made public, the findings suggest that Romanian companies have similar behaviors when it comes to publishing information regarding borrowing costs. In addition, the significance level is lower than 1%. Further on, Bulgaria registers a small influence on disclosure index for the entire period of 5 years' analysis, the maximum value being under 0,03. Similar values for Pearson's' Coefficients are recorded for Poland and Spain, that present a negative correlation in 2009 (-0,075 and -0,089). Ukraine does not seem to have an important influence on disclosure with respect to borrowing costs,

excepting year 2009 (0,130). For France, there is evidence for high correlation in 2006 and 2007, but the significance level is under 5% and 10%. In case of Italy, it seems that there is both positive and negative strong correlation. For years 2006 and 2007 the recorded values (0,127 and 0,129), imply that this country influences the firms that have headquarters and were set up within its borders, in the matter of information disclosure policy for IAS 23 issues. In 2008, Austria recorded a high degree of influence on its companies with respect to borrowing costs, while in 2009 Germany seems to also have a great impact on the way its firms publish information of IAS 23 appliance.

Finally, regarding the relevance of the econometric model, according the SPSS analysis, the dependent variable (disclosure index for borrowing costs information) is explained through the model in a percentage of 39% in 2005 and 2007, 37% for 2006, while in 2008 and 2009 this amount decreases to 21%. In addition, the values for adjusted R^2 stand as evidence for the mentioned facts.

V. Conclusions

This paper is meant to study the consistency of information published by companies in their consolidated financial reports. The research objective relates to the impact of international accounting standard IAS 23 Borrowing Cost demands on companies' accounting policies. Further on, the study involves estimating and establishing an econometric model in which is assumed that disclosure index for information required by IAS 23 depends on certain elements in the form of country of origin, sales, total assets, debt ratio, ROA and ROE. The importance of this research relies in its originality approach, by studying the information disclosure for borrowing costs for a *5 years' period*, starting with 2005, until 2009, and also by considering a large sample of companies being significantly chosen. On the whole, this paper is meant to bring a national and international contribution to the literature of

borrowing costs, as one of the most important accounting fields.

Results show that the model is valid, meaning that there is correlation between information disclosure with respect to IAS 23 and the analyzed variables. According to our estimated econometric model, most of the variables maintain a certain influence on disclosure as we can observe a significant correlation level between the studied elements. Regarding the relevance of the econometric model, according the SPSS analysis, the dependent variable -disclosure index for borrowing costs information- is explained by the model, adjusted R^2 taking values between 21% and 39%. This research contributes to the development of both accounting field and international accounting literature, by studying borrowing costs disclosed information in relation to certain elements that best characterize the activity of a company. Although an empirical paper, it concentrates also on accounting practices, as it uses real data extracted from annual reports and consolidated financial statements.

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