Economics

RESEARCH DISCLOSURE OF IAS 2, IAS 11 AND IAS 37 IN COMPANIES LISTED ON THE STOCK MARKET OF LONDON, GERMANY AND PARIS

Mihaela MATEIU (căs. MAN)[1]

ABSTRACT

STARTING WITH THE ASSUMPTION THAT COMPANIES REPORTING UNDER IAS HAVE COMPLETE AND ACCURATE INFORMATION IN THE FINANCIAL STATEMENTS, WE CONDUCTED A STUDY IN WHICH WE WANT TO SHOW THE DEGREE OF DISCLOSURE IN ACCORDANCE WITH IAS 2, IAS 11 AND IAS 37 FOR A SAMPLE OF COMPANIES OPERATING IN THE CONSTRUCTION FIELD OF ACTIVITY AND ARE LISTED ON STOCK EXCHANGES IN LONDON, GERMANY AND PARIS AND TO SHOW THAT THERE IS A CONNECTION, AND IF SO THE TYPE OF RELATIONSHIP BETWEEN CERTAIN VARIABILES (SUCH AS AUDIT FIRM, TURNOVER, ROE, BV, P/B) AND THE DISCLOSURE INDEX.

KEYWORDS*:* VARIABLES, FINANCIAL STATEMENTS, IAS, DISCLOSURE INDEX

INTRODUCTION

Adoption of international accounting standards has sparked great controversy over time. In March 2002 the European Parliament adopted a resolution requesting that all EU companies listed on a stock exchange to prepare financial statements in accordance with International Accounting Standards as of fiscal year 2005. This was necessary for financial convergence in the capital market not only in Europe but also between Europe and other countries.

[1] Ph.D Student, Babeş-Bolyai University, Faculty of Economics and Business Administration, Romania, mihaela.man@econ.ubbcluj.ro

RESEARCH METHODOLOGY AND LITERATURE REVIEW

The entities listed on the stock markets have an obligation to demonstrate transparency. Considering this aspect, adopting the international accounting standards will further improve and standardize the information provided, in order to satisfy an ever increasing number of interested parties, particularly inverstors.

As shown in a study by Barth (2008), international accounting standards are superior to national accounting standards and ensure comparability between entities.

Regarding the construction field of activity, publicly traded entities in this area have been forced to adopt IFRIC 15 - Agreements for the Construction of Real Estate**,** since the beginning of the fiscal year 2010, at the latest. IFRIC 15 is an interpretation that contains guidance on recognizing revenue from the construction of real estate and help identify a construction agreement under IAS 11 or IAS 18[2].

For this study, we used the method of observation. Therefore, we selected a sample of companies operating in the activity field of construction (Real Estate) , listed on the stock markets in London (London Stock Exchange), Germany (Deutsche Börse) and Paris (Paris Bourse). Under the European Equity Market Report issued by the Federation of European Securities Exchanges (FESE) for 2011, these are the most influential and powerful stock exchanges in Europe, and this is confirmed by the total value of transactions on the markets in 2011. This study is conducted on European capital markets because at the beginning of March 2002, the European Parliament passed a resolution, which states that all companies listed on stock exchanges in European Union countries must prepare financial statements in accordance with IFRS, starting with the fiscal year 2005. Regarding the three stock exchanges analyzed, they operate in countries that have adopted IAS/IFRS since the very beginning, some companies adopting IAS/IFRS voluntarily.[3]

The three aforementioned stock exchanges, have listed under the construction field of activity a number of 45 companies, out of which 14 were excluded for the reasons given in Table 1:

[2] Dylag Renata; Kucharczyk Malgorzata; Recognising Revenue From The Construction Of Real Estate In Financial Statements Of Developers In Poland, Accounting & Management Information Systems 10 (2011)
[3] Eva K. Jermakowicza; Sylwia Gornik-Tomaszewski; Implementing IFRS from the perspective of EU publicly traded companies, Journal of International Accounting, Auditing and Taxation 13 (2006)

Tabel 1 – Sample selection

	London	**Germany**	**Paris**	**Total**
Initial sample	26	12	7	45
Companies excluded				
Unavailable datas	6	1	1	8
Financial statements are not prepared in accordance with the IAS standard	0	3	1	4
Applying IAS 18 for the recognition of revenue from construction field	0	2	0	2
Final sample	20	6	5	31

Source: authors' computation

Similarly, Suzanne Fifield (2011) selected a sample of companies applying IFRS in the UK, Ireland and Italy.

Since this case study is based on the analysis of three IAS (IAS 2, IAS 11 and IAS 37), we selected the information necessary to be disclosed separately in the financial statements for each IAS, as follows:

- IAS 2 - Inventories:
    1. Accounting policies adopted in measuring inventories, including the cost formulas used – S1;
    2. Amount of inventories per category – S2;
    3. The amount of inventories recognized as an expense during the period, that is, cost of sales – S3;
    4. Amount of any write-downs and reversals of any write-downs – S4.
- IAS 11 – Construction contracts:
    1. Amount of advances recived – C1;
    2. Gross amount due from customers (assets) – C2;
    3. Gross amount due to customers (liabilities) – C3;
    4. Methods used for revenue recognition –C4;
    5. Methods used for stage of completion – C5.
- IAS 37 – Provisions:

1. A detailed itemized reconciliation of the carrying amount at the beginning and end of the accounting period – P1;
2. A brief description of the nature of the obligation and the expected timing of any resulting outflows of economic benefits – P2;
3. Indication of uncertainties about the amount of timing of those outflows – P3;
4. The amount of any expected reimbursement, stating the amount of any asset that has been recognized for that expected reimbursement – P4.

These disclosures are recommended by the audit firm KPMG for 2011, in a checklist (Disclosure checklist)[4] that identifies the information required to be disclosed in the annual financial statements of companies that report under IFRS.

The data used in this study is based on the financial statements for 2011, for each one of the sample companies. These were taken from the Bloomberg platform.

For each disclosed feature found in the financial statements of the sample companies, we have given a value of 1. On the contrary, when the feature was not disclosed and could not be found in the financial statements, we have given a value of 0.

Based on the score accumulated, we calculated the degree of disclosure of the sample companies, with the formula below:

$$D_I = \frac{\sum_{i=1}^{m} d_i^{IAS\,2} + \sum_{i=1}^{m} d_i^{IAS\,11} + \sum_{i=1}^{m} d_i^{IAS\,37}}{\sum_{i=1}^{4} d_i^{IAS\,2} + \sum_{i=1}^{5} d_i^{IAS\,11} + \sum_{i=1}^{4} d_i^{IAS\,37}}, \quad D_I \in [0,1] \qquad (1)$$

where:

D_I = disclosure index;

$d_i^{IAS\,2}$ = information in accordance with IAS 2, 1 if information was provided and 0 otherwise;

$d_i^{IAS\,11}$ = information in accordance with 11, 1 if information was provided and 0 otherwise;

[4] http://www.kpmg.com/Global/en/IssuesAndInsights /ArticlesPublications/IFRS-disclosurechecklists/Pages/IFRS-disclosure-checklist-2011.aspx

$d_i^{IAS\,37}$ = information in accordance with IAS 2, 1 if information was provided and 0 otherwise;

m = number of items effectively disclosed;

n = maximum number of disclosure items possible.

To calculate the disclosure index, we used Microsoft Excel.

Tabel 2 – Disclosure index

Stock Exchange	Companies	Di
London	Balfour Beatty	0.7692
	Billington Holdings Plc	0.6923
	CARILLION PLC	0.7692
	Costain Solutions	0.3846
	Galliford Try Plc	0.5385
	Havelock Europa Plc	0.5385
	INTERIOR SRVCS	0.4615
	Interserve Plc	0.8462
	Keller Group Plc	0.8462
	KENTZ CORP LTD	0.2308
	Morgan Sindall	0.7692
	Mountfield Group Plc	0.6923
	NM Construction	0.6923
	POCHINS PLC	0.7692
	REDHALL GROUP	0.6923
	RENEW HOLDINGS	0.9231
	Severfield-Rowen Plc	0.6923
	SMART & CO CNTRC	0.4615
	Speymill Plc	0.3077
	Tclarke	0.6923
Paris	Bouygues	0.6923
	Cife	0.7692
	Colas	0.6923
	Eiffage	0.9231
	Vinci Autoroutes	0.6923
Germany	Bauer	0.7692
	Bdi-bioenergy	0.3846
	HOCHTIEF AG	0.7692
	KHD Hymboldt	0.8462
	Renerco	0.3077
	SOLAR MILLENNIUM	0.4615

Source: authors' computation

POTENTIAL DETERMINANTS OF DISCLOSURE PRACTICES

Based on the literature, we identified five independent variables that may affect disclosure (Di):

- Auditor's type. For this factor we used dichotomous variables, that takes value 1 if financial statements are audited by a Big4 audit firm and 0 otherwise;
- The size of the entity, operationalized through the turnover (CA). The turnover of the companies listed on the London Stock Exchange was expressed in GBP and those listed on stock exchanges in Germany and Paris in Euro. Thus, we converted the values in RON using the official exchange rates given by NBR – National Bank of Romania on 30.12.2012, to bring them to a common denominator. Then, we applied the natural logarithm of turnover because we wanted to eliminate to some extent the effects of size (scale effects), which occur due to high dispersion of turnover in the sample;
- Return on equity (ROE), which measures the net performance of equity, those brought by investors, the current profit and not withdrawn (in the form of reserves and retained earnings) [5];
- Book value of shares (BV)[6];
- Earnings per share (E/S)[7], the theoretical value that would remain for distribution to shareholders, if it sold all its assets and paid all liabilities.

Regarding how certain corporate characteristics may help anticipate the level of information disclosure, numerous studies have been conducted over time. Christopher S. Armstrong, Mary E. Barth (2008), in their study showed that there is a positive relationship between the type of audit firms and the degree of information disclosure in the financial statements. Francesco Bova, Raynold Pereira (2012) demonstrated an increase in compliance with IFRS for companies that are more profitable, that have a higher return on equity, a higher book value per share and higher earnings per share.

[5] ROE is calculated by dividing net profit to equity
[6] BV is the ratio between equity and number of shares of the entity
[7] E/S is calculated as the ratio of market capitalization and net asset value of the company

FORMULATING HYPOTHESES

Hypotheses were formulated as follows:

H1: Degree of disclosure of information in the financial statements is directly and positively influenced by the type of audit firms (BIG4).

H2: Degree of disclosure of information in the financial statements is directly and positively influenced by the size of entities analyzed, indicator expressed by turnover (CA).

H3: Degree of disclosure of information in the financial statements is affected positively by the return on equity (ROE).

H4: Degree of disclosure of information in the financial statements is directly and positively influenced by the book value of the shares (BV).

H5: Degree of disclosure of information in the financial statements is directly and positively influenced by earnings per share (E/S).

Table 3 – Statistical information on the variables included in the model

Variable	**Mean**	**Standard deviation**
Di	0.6476	0.1882
BIG4	0.7097	0.4614
LNSIZE	7.9084	2.3443
ROE	4.4860	21.3321
BV	10.5261	18.6446
E/S	1.0441	2.0260

Source: authors' computation

In (Table 3), we presented the dependent variable and all independent variables taken into consideration, and for each we calculated the mean values and standard deviation. Therefore, it is observed that in terms of information disclosure index, up to 64.76% of the sample companies have complied with the information disclosure requirements set out in IAS. Regarding the type of the auditor, we can notice that up to 70.97% of the analyzed companies are working with a Big4 audit firm (13 in London, 4 in Paris and 4 in Germany).

INTRODUCING THE MODEL

Assumptions made above were verified using a linear regression model where the dependent variable is expressed through the independent. This model has been replicated in other specialized studies such as that conducted by Cooke (1998), Annelies Renders (2007), Bova and Pereira (2012), Armstrong and Barth (2008), Fekete (2009).

The model that includes independent variables listed above is as follows:

$$DI = a_{1i} + a_2 BIG4_i + a_3 LNCA_i + a_4 ROE_i + a_5 BV_i + a_6 P/S_i + \varepsilon_i \qquad (2)$$

where:

Di – disclodure index;

BIG4 – auditor's type, dichotomous variable;

LNCA – natural logarithm of turnover;

ROE – rate of return on equity;

BV – book value of the share;

E/S – earnings per share.

The estimation method used is the method of least squares.

RESULTS INTERPRETATION

Tabel 4 – Correlation between coefficients

	Di	***BIG4***	***LNCA***	***ROE***	***ROS***	***BV***
BIG4	0.377					
LNCA	0.407	0.517				
ROE	-0.112	0.343	0.506			
BV	0.215	0.250	0.341	0.139	-0.099	
E/S	0.132	0.208	0.452	0.187	-0.102	0.901

Source: authors' computation

(Table 4) shows Pearson's correlation between variables. Disclosure index is significantly correlated positively with the auditor type, sales, book value and earnings per share and significantly correlated negatively with return on equity. Except the hypothesis H3, which argues that the disclosure index is positively correlated with return on equity, the other assumptions made were valid.

Tabel 5 – Regression statistics

R	R Square	Adjusted R square	Std. Error of the Estimate
0.6505	0.4232	0.3078	0.1566

Analyzing (Table 5) we saw that there is a strong correlation between the dependent variable (DI) and the independent variables in terms of R (0.6505), which can take values between -1 and 1. According to indicator R square, 42.32% of the level of disclosure in the financial statements was due to the independent variables. For better accuracy we took the reference value of R square and adjusted it, and so we can say that the independent variables have an influence ratio of up to 30.78% over the disclosure index.

Tabel 6 – ANOVA

	df	SS	MS	F	Sig. F
Regression	5	0.4496	0.0899	3.6679	0.0126
Residual	25	0.6128	0.0245		
Total	30	1.0624			

None of the assumptions made with the value of Sig. F 0.0126> 0.05 were valid.

Tabel 7- Coefficients

	Coefficients Beta	Standard Error	t Stat	P-value
Intercept	0.2113	0.1204	1.7554	0.0914
BIG4	0.0800	0.0756	1.0578	0.3002
LNCA	0.0502	0.0176	2.8530	0.0086
LNROE	-0.0400	0.0016	-2.5819	0.0161
BV	0.0060	0.0037	1.6079	0.1204
P/B	-0.0596	0.0361	-1.6518	0.1111

Source: authors' computation

In (Table 7) the values of P-value indicate a high degree of confidence in the Beta coefficient values, and the values of t State indicate that the values do not occur randomly.

CONCLUSIONS

This paper aims to determine the compliance degree of the information presented in the financial statements of the companies active in the constructions field of activity and that are listed on stock exchanges in London, Germany and Paris. It was assumed that the adoption of international accounting standards, has led to increased transparency and greater financial reporting quality.

Conclusions of this study are based on a relatively small sample of companies. The applications of IAS 11 are limited to certain categories of companies.

The study demonstrated that there is a positive relationship between the level of information disclosure in the financial statements and the variables analyzed.

Turnover size has a positive influence ratio of up to 40.70% over the degree of information disclosure. The audit firm type has a positive influence ratio of up to 37.70%, over the degree of information disclosure of the respective company.

Companies audited by one of the Big4 firms have a degree of information disclosure that is up to 37.70% higher than companies that are not audited by one of the Big4 firms.

This paper used real data and actual information taken from the audited annual reports of the companies analyzed.

RECERENCES

1. **Barth, M.;** Global financial reporting: Implications for U.S. academics., The Accounting Review 83 (2008): 1159–1180;
2. **Christopher S. Armstrong et al**.; Market Reaction to the Adoption of IFRS in Europe, The Accounting Review 85 (2010): 31-61;
3. **Christodoulou, Mario**; IAS 37 rule on legal costs set to cause confusion, Accountancy Age 1/28/2010, 4-5, http://www.accountancyage.com/aa/news/1807778/ias-rule-legal-costs-set-cause-confusion
4. **Cooke, TE**; Regression analysis in accounting disclosure studies, Journal Accounting and Business Research 28 (1998): 209-224;
5. Disclosure checklist, August 2012, KPMG http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/IFRS-disclosurechecklists/Pages/IFRS-disclosure-checklist-2011.aspx
6. **Dylag Renata; Kucharczyk Malgorzata**; Recognising Revenue From The Construction Of Real Estate In Financial Statements Of Developers In Poland, Accounting & Management Information Systems 10 (2011): 25-42
7. European Equity Market Report - Year 2011 - http://www.fese.be/en/?inc=art&id=81
8. **Eva K. Jermakowicza; Sylwia Gornik-Tomaszewski**; Implementing IFRS from the perspective of EU publicly traded companies, Journal of International Accounting, Auditing and Taxation 13 (2006): 89-119
9. **Fekete Szilvester**; Cercetare conceptuală şi empirică privind raportările financiare din românia şi Ungaria, Convergenţă şi conformitate cu IFRS, Cluj-Napoca: Casa Cărţii de Ştiinţă, 2009;
10. **Haider, Tauqir**; Financial Management of Construction Contracts (Coustructability and its Relation with TQM, Cost Shifting Risk and Cost Benefit), International Research Journal of Finance & Economics 28 (2009): 42-51
11. **Hennie van Greuning; Darrel Scott; Simonet Terblanche**; Standarde internaţionale de raportare financiară Ghid practic, Ediţia a IV-a, revizuită, Bucureşti: Irecson, 2011;
12. **Suzanne Fifield et al**.; A cross-country analysis of IFRS reconciliation statements, Journal of Applied Accounting Research 12 (2010): 26 – 42