Internet Financial Reporting Quality and Corporate Characteristics: The Case of Construction Companies Listed in Greek and Cypriot Stock Exchange

Michail Bekiaris[1], Chrysoula Psimada[2], Tasos Sergios[3]

Abstract:
This study examines the role of the Internet in the financial reporting practices of publicly traded Greek and Cypriot construction companies. Its key contribution is the development of a relevant index that is assessed against key business characteristics: profitability, leverage, audit firm size, firm size, ownership dispersion, time length of operations, and market to book value. The association between the proposed index and firm characteristics was examined with the use of multiple regression analysis. Our findings indicate, among others, that Internet-related financial disclosure is significantly associated with profitability, leverage, firm age and ownership dispersion.

Key Words:
Internet Financial Reporting, Voluntary Disclosure, Firm Characteristics, Greece, Cyprus

JEL Classification: *M41, M19, G34*

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[1] Business School University of the Aegean, e-mail:m.bekiaris@aegean.gr
[2] e-mail:xrysapsimada@yahoo.com
[3] e-mail: stasios@ba.aegean.gr

1. Introduction

Internet is undoubtedly one of the most significant means of communication in our days. Its use enables the worldwide dissemination of information and encourages investments (Aly, Simon & Hussainey, 2010). In addition, it supports better functioning of capital markets by enhancing companies' ability to provide investors with up to date, timely information (Abdelasalam, Bryant & Street, 2007). Consequently, its wide use in a business environment can have a significant impact on business activities and the related requirements for financial reporting.

According to the International Accounting Standards Board "the objective of financial reporting is to provide financial information about the reporting entity that is useful to present and potential equity investors, lenders and other creditors in making decisions in their capacity as capital providers" (IASB, 2008). In this context, web based business information is considered helpful in making investment and other business decisions, (Financial Accounting Standards Board 2000). Companies have several potential motives to provide financial information on the internet, which among others include, the reduction of cost and time for the distribution of information, communication with previously unidentified consumers, supplementation of traditional disclosure practices, increase of the amount and type of information disclosed and improvement of access to potential investors for small companies, (FASB, 2000).

The objective of this study is twofold. On the one hand, it aims to examine the disclosure practices of listed construction companies and assess the quality of their financial reporting provided through the internet. On the other hand, it purports to investigate the association of selected firm characteristics with the level of internet financial reporting. For this purpose a disclosure index was constructed consisting of 51 items that cover 4 broad categories: content, technology, user support and timeliness.

Since 2009 and especially 2010, the deep concern on the solvency of European states has highly affected financial markets. Therefore, the study of internet disclosures in Greece and Cyprus presents an additional interest due to the specific financial conditions created by the economic crisis in these countries. Moreover, the financial reporting of Greek companies provided through the internet is perceived by auditors to be of moderate quality (Tasios & Bekiaris, 2012).

The findings of the study contribute to existing literature of internet financial reporting by strengthening the evidence on the relationship between the extent of disclosure and profitability, leverage, firm age and ownership dispersion. Furthermore, the index of the study could be a useful tool to the managers of the

companies in their effort to improve the quality of internet reporting by identifying areas with weaknesses and inefficiencies.

The remainder of the paper is organized as follows: part two presents an overview of relevant research, while part three develops research hypotheses examined in the study. Research methodology is presented in part four, which includes the construction of the index and the development of the research model. The results of the study are included in part five and a summary of conclusions is presented in part six.

2. Literature Review

Internet financial disclosures are voluntary and as no relevant or common legal framework that regulates them exists, differences occur in corporate disclosure practices. Some companies disclose only a part of their financial statements using a low level of technology, while others disclose a whole set of financial statements using the technological advancements of the internet such as, multimedia and analytical tools, (Budisusetyo & Almilia, 2008). As the purpose of financial reporting is to provide information useful for decision making, timeliness consists another crucial element of internet financial reporting (Liapis, Katsianis and Galanos, 2013; Eriotis, 2004; Soltani, 2002). Internet provides financial information to its users in direct time and assists the transparency of investor relations (Marston, 2003).

Corporate financial reporting is mandatory for listed companies in order to provide shareholders and potential investors with useful information for the company's past, present and future (Pattern, 2002; Thalassinos & Liapis, 2013). Public use of the internet began in the early nineties and has evolved in our days as a main means of communication for the presentation of information in an increasing degree. The wide use of the internet therefore affected corporate financial disclosure practices and the accounting communication (Spanos & Mylonakis, 2006).

Corporate disclosures are vital for a company because the provision of value adding information is useful for the estimation of the firm's value. In addition, enhanced corporate disclosures enable the development of a mutually beneficial relationship for all related company parties and especially shareholders, (Cormier, Ledoux & Magnam, 2009). Moreover, the disclosure of corporate information constitutes a valuable source of information that facilitates the decision making process by the shareholders of the company.

Several studies have examined corporate internet financial reporting practices both in one country, as well as in several different countries. Marston and Leow (1999) examined financial reporting on the internet selecting companies of FTSE 100 index

in the United Kingdom (UK) for the year 1996. Results showed that only 34 of the 45 selected companies presented detailed annual financial reports, while 11 of them presented a part or a summary of their annual reports. The level of disclosure was found to be positively associated with firm size, but not with the industry in which the company belonged. Ashbaugh, Johnstone and Warfield (1999) examined internet financial reporting on a sample of 290 companies in the United States of America (USA) finding that the timeliness of the disclosure of financial information varied significantly. In addition, the usefulness of information depended on the easiness of the access by the users. Finally, firm size was found to be a significant variable that affected internet financial reporting.

Pirchegger and Wagenhofer (1999) examined the disclosure practices in the internet of 32 companies in Austria for the years 1997 and 1998. Results showed that the level of disclosure increased from 57% in 1997, to 64% in 1998, and was positively associated with firm size and free float. Ettredge, Richardson and Scholz (2002) examined internet financial disclosure practices on a sample of 220 companies in the USA for the year 1997. Results showed that voluntary disclosure on the internet was associated with firm size, information asymmetry, demand for external financing and company reputation.

Debreceny, Gray and Rahman (2002) examined the extent of internet financial reporting and the association with selected firm characteristics in 22 countries, selecting companies that were included in Dow Jones Index for the year 1998. Results showed that internet financial disclosure was positively associated with firm size, listing in the USA capital market and the level of technology, negatively associated with intangible assets and growth prospects and not associated with leverage. The following year (2003), Allam and Lymer examined internet financial reporting practices in 5 countries (USA, UK, Canada, Australia and Hong Kong) and with the exception of Australia, found no association of internet financial reporting with firm size. In addition, significant differences were found in the disclosure practices of these countries, with the exception of USA, UK and Canada.

The same year (2003), Marston examined the level of internet financial reporting of 99 companies in Japan and the association with firm size, profitability, industry type and multiple listing status. The survey did not find an association of the above firm characteristics with the level of internet financial reporting. On the contrary, a survey conducted by Oyelere, Laswad and Fisher (2003) on a sample of 229 listed companies in New Zealand, found a positive association with firm size, liquidity, industry type and ownership diffusion. No association was found between the level of disclosure and leverage, profitability and multinationality.

Marston and Polei (2004) examined internet financial reporting in Germany for the years 2000 and 2003. Results showed an association between firm size and the level of disclosure. Furthermore, an association was found with multiple listing for the year 2003 and with free float for the year 2000. Profitability was not found to be a significant variable. Xiao, Yang and Chow (2004) examined the use of the internet for the dissemination of financial information in 300 Chinese listed companies. The survey found a positive association of the level of disclosure with firm size and a negative association with profitability. Audit firm size and industry type were also found to be significant.

Spanos and Mylonakis (2006) examined internet financial disclosure practices in Greece, on a sample of 141 companies. The survey concluded that larger, long established and well known companies had a significantly higher level of disclosure for both financial and non financial information. Al-Shammari (2007) studied the association of internet financial reporting with selected firm characteristics in Kuwait. The study found that firm size, liquidity, audit firm and industry were decisive factors for the voluntary adoption of internet financial reporting. Similarly, Gandia (2008) examined the association of the level of internet financial disclosure with firm characteristics of listed companies in Spain. Results showed that the level of disclosure was associated with age, analysts following, listing status and industry. In Greece, Anargyridou and Papadopoulos (2009) examined internet disclosure practices of 302 companies listed in Athens Stock Exchange and the association of industry and capitalization with the extent of disclosure. Results showed a positive relationship of industry type and capitalization with the level of internet disclosure. Accordingly, Andrikopoulos, Diakidis and Samitas (2009) examined the factors that impact on internet financial reporting of companies listed in the Cyprus stock exchange. The study concluded that firm size affects significantly the extent of internet financial reporting, in contrary to factors like profitability and leverage.

Aly, Simon and Hussainey (2010) studied the factors that affect the level of corporate internet reporting on a sample of 62 Egyptian listed companies. Profitability, foreign listing and industrial type were significantly associated with the amount and presentation of the disclosed information. Corporate characteristics like firm, size, leverage, liquidity and auditor size did not explain the level of internet corporate reporting. Bozcuk (2012) explored internet financial reporting and firm specific drivers of Turkish listed companies. Firm size, auditor and corporate governance effects were found to affect the sophistication of internet financial reporting. Evidence also supported industry effect.

Boubaker, Lakhal and Nekhili (2012) examined internet corporate reporting on sample of 529 listed firms in France. Results showed that French firms used the internet to disseminate existing information, rather than timely information. In addition, large firms, firms with dispersed ownership, those who issued bonds and

equity, as well as information technology firms made an extensive use of internet disclosures. Finally, Andrikopoulos, Merika, Triantafyllou and Merikas (2013) examined the relationship between internet disclosure, profitability and financial structure on a sample of websites of 171 international shipping companies. Results showed a positive association between firm size, profitability, leverage and ownership dispersion with the extent of financial disclosure on corporate websites.

The literature review shows that the association between internet financial disclosures and firm characteristics has been examined by various researchers, either in one country or in different countries. The most frequently firm characteristics examined include firm size, audit firm size, industry type, leverage, and profitability. The results of the relationship between the level of internet disclosures and various firm characteristics are mixed with other studies identifying a significant relationship and others not. As far as Greek and Cypriot companies are concerned research is limited (Papadeas, 2007) with few studies conducted in each country.

3. Research Hypothesis

Based on the literature review of previous research the following firm characteristics were selected and research hypotheses were formulated.

3.1 Profitability

Agency theory suggests that managers of profitable companies disclose more extensive information in order to obtain personal advantages like maintenance of their position and justify their compensations, (Haniffa & Cooke, 2002; Wallace, Naser & Mora, 1994). On the other hand, less profitable companies could disclose more information in order to explain the negative performance and assure market about future growth (Leventis & Weetman, 2004). Prior studies provide mixed results regarding the impact of profitability on disclosure. Several studies (Marston, 2003; Marston & Polei, 2004; Oyelere, Laswad & Fisher, 2003; Xiao, Yang & Chow, 2004) found that profitability was not significant for internet financial disclosures. Other studies however, identified a positive relationship between profitability and internet financial disclosures (Ashbaugh, Johnstone & Warfield, 1999; Debreceny & Rahman, 2005). Profitability in this study is measured by the profit/loss per share. As the results of prior research are mixed no specific expectation regarding the association of disclosure with profitability can be made.

Therefore the following hypothesis is formulated:
H_1: *The level of disclosure is associated with profitability.*

Leverage

Agency theory provides also insights in the relationship between leverage and disclosure. According to the agency theory highly leveraged companies have the

incentive to provide more disclosures to related parties. This is due to the fact that the higher the ratio of debt to the capital of a company, the higher the agency costs, because a higher proportion of debt results to greater potential transfer of wealth from debt holders to shareholders (Depoers, 2000). Financial disclosures can contribute to the solving of monitoring problems between creditors and shareholders that are more likely to arise in companies that make a large use of debt (Raffournier, 1995). Highly leveraged companies therefore are motivated to increase the extent of voluntary disclosure to related parties through the financial statements, as well as through other means of communication like the internet, (Oyelere, Laswad & Fisher, 2003). Several studies have examined the association of leverage with internet financial disclosures, with mixed results. Some studies found no significant association (Debreceny, Gray & Rahman, 2002; Oyelere, Laswad & Fisher 2003; Bollen, Hassink & Bozic, 2006), while other studies identified the existence of a significant relationship (Ismail, 2002; Xiao, Yang & Chow, 2004). Leverage is calculated as the ratio of debt to total assets. Taking into account that the results of prior research regarding leverage are mixed, with other studies identifying a significant relationship and others not, the following hypothesis is stated:
H_2: *The level of disclosure is associated with leverage.*

Audit firm size
Audit firms are classified into two categories: large audit firms, that consist of the "big4" (PricewaterhouseCoopers, Ernst and Young, KPMG and Deloitte) and small audit firms which consist of all the others. According to Michael Jensen and William Meckling (1976) large audit firms act as mechanism that reduces agency cost and monitors the opportunistic behavior of management. Large audit firms are concerned more with their reputation and consequently are more willing to associate with companies which disclose more information in their published financial reports (Alsaeed, 2006). Results on the relationship between the audit firm size and disclosure are mixed. Several studies identified a significant and positive relationship between disclosure and audit firm size, (Raffournier 1995; Nasser, Al-Khatib & Karbhari, 2002), others found a positive but insignificant relationship (John Forker, 1992) and others (Wallace and Naser, 1995) a negative and significant relationship. Firm size is a dichotomous variable that takes the value 1 if the company is a member of the big 4 audit firms and 0 otherwise. Based on the above mixed results an expected association (positive or negative) between audit firm size and disclosure cannot be predicted and therefore the following hypothesis is formulated:
H_3: *The level of disclosure is associated with audit firm size.*

Firm size
Several studies have examined the impact of firm size on financial disclosures. Most of prior research provided sufficient evidence that there is a positive relationship between company size and financial disclosure (Rafournier, 1995; Owusu-Ansah,

1998; Depoers, 2000). Larger firms may disclose more information compared to smaller firms for several reasons:

- larger firms are more exposed to public scrutiny and hence it is more probable to disclose more information (AlSaeed, 2006)
- collection, generation and dissemination of data are costly activities that small companies may not be able to afford from their resources, (Owusu, 1998)
- smaller firms may be reluctant to full disclosure of their activities which could lead to a competitive disadvantage (Raffournier, 1995).

Various measures have been used in prior research for the measurement of firm size which include turnover, sales, revenue and total assets. In this study, the value of total assets is used as firm size variable. Since most of prior research and theory support a positive relationship the following hypothesis is formulated:

H_4: *The level of disclosure is positively associated with firm size.*

3.2 Ownership dispersion

Agency theory suggests that managers of companies with dispersed ownership have the incentive to disclosure more information in order to assist shareholder's decisions and reduce agency costs. Research on the relationship between ownership dispersion and disclosure has produced mixed results. Gerald Chau and Sidney Gray (2002) found a significant relationship between outside ownership and disclosure, while other researchers like Eng and Yuen Mak (2003) found a negative relationship with director ownership. Wallace, Naser and Mora (1994) and Naser, Al-Khatib and Karbhari (2002) concluded that no significant association between ownership dispersion and disclosure exists. Ownership dispersion is measured by the percentage of common shares owned by individuals that exceed 5% of total share capital. Based on the above mixed results of prior research an expected association (positive/negative) between ownership dispersion and disclosure cannot be predicted and therefore the following hypothesis is formulated:

H_5: *The level of disclosure is associated with the proportion of shares held by individual investors.*

Firm age

Older and well established companies are likely to disclose more information in their annual reports for three reasons (Owusu, 1998):

- Younger companies may have a competitive disadvantage if they disclose certain information.
- The cost of gathering, processing and disseminating the required information is more onerous for younger companies compared to older ones.
- Younger companies may lack a "track record" on which to rely on for their public disclosure, while new companies would not have any past operating history and may have less incentive to disclose more information.

Firm age is calculated in a six month basis from the date of listing in the stock exchange until the first quarter of 2011. Based on the above the following hypothesis is formulated for firm age:

H_6: *The level of disclosure is positively associated with firm age.*

Market value to book value

During the last twenty years, the construction industry was a major developmental pillar for both Greek and Cypriot economies. Therefore, it is expected that the construction industry could be indicative of market-wide prospects of these national economies. It is also expected that such economic prospects to be mirrored in the fluctuations of the stock market. It is also estimated that stock market valuations will deviate from accounting values that cannot fully account for the dynamics of the construction industry. Moreover, Greek and Cypriot stock markets are not always efficient and (therefore) information asymmetries may affect stock market valuations and investor behavior; the efforts of listed companies to dissolve such asymmetries, through extensive communication with stakeholders could also be observed. Web disclosures are such communication tools. The literature has already indicated that Greek and Cypriot listed companies tend to disclose larger amounts of information online, depending on the deviation of the market value from the book value of equity (Andrikopoulos, Diakidis & Samitas 2009; Anargyridou & Papadopoulos 2009); the larger the deviation the greater the need to "explain" it through extensive disclosure. Therefore, a positive relation between the extent of internet disclosure and the divergence between the book value and the market value of equity is expected:

H_7: *The level of disclosure is positively associated with market value to book value.*

4. Research Methodology

4.1 Disclosure index

For the measurement of the quality of internet financial reporting (i.e. the level of disclosure) an index was developed consisting of 51 items. These items were categorized in four categories (content, timeliness, technology, user support) based on the study of Davey and Homkajohn (2004). The above index of Davey and Homkajohn (2004) was enhanced with the addition of 10 new items derived from the corporate and financial reporting literature (Boechler, 2001; Crandall & Phillips, 2002; Beattie & Pratt, 2003; Gowthorpe, 2004; Khadaroo, 2005).

These items were the following: analysts essays/presentations, financial statement chart, "in content" category, financial data in usable format, links to relevant web pages through hyperlinks in the category of "technology" and e-mail of investor relations department, mailing list/e-mail alert, option to the investor to order financial data and appearance of hyperlink in the first page of the website regarding news alert, in the category of "user support".

Content category includes 23 financial information components. Financial information disclosed in html format (Hypertext Mark-Up Language) takes the higher value (2), compared to pdf format (1), based on the assumption that user access to html format is more convenient and effective.

Timeliness category consists of 10 items. Timeliness is one of the enhancing qualitative characteristics of financial information. Taking into account that internet provides information in real time, it is important to find out to what extent it is utilized. Real time data includes elements such as press releases, unaudited quarterly financial statements and profit forecasts. Items in this category take the value 1 if they exist and 0 for non existence.

Technology consists of 7 items. The items of this category refer to enhancements that cannot be provided in printed format. These elements are download, plug-in on spot, online feedback, use of presentation slides, use of multimedia technologies, analysis tools.

User Support contains 11 items. Since computer skills are different among users it is important that a company uses tools which facilitate the use of internet financial reporting irrespective of the level of expertise. Such tools used in the index are links, site map, site search etc. Items of this category take a value from 0 to 3 depending to the nature of each item. Total score (Q_i) equals to the sum of the score of each category of items. Q_i is an index which takes values between 1 to n:

$$Q_i = \sum_{i=1}^{4} C_i$$

where C_i represents each category of the index.

$$Q_i = Content + Timeliness + Technology + User\ support$$

4.2 Data

The web sites of construction companies were selected for the application of the disclosure index. Prior research (Cooke, 1989 & 1992) suggests that companies belonging to the construction industry tend to disclose more information in comparison to companies of other industries. In addition the construction industry presents an increased interest as it was heavily impacted by the economic crisis in Greece, which at the time of the study (2011) had not yet affected the Cypriot economy. Moreover the construction industry is one of the most important industries in the Greek economy and an important industry in Cyprus.

The purpose of the study is to examine the internet financial reporting of construction companies in Greece and Cyprus. As such, the whole population of construction companies listed in the stock exchanges of Greece and Cyprus was

selected. In total 36 construction companies were examined, 25 listed in the Greek stock exchange and 11 in Cypriot exchange.

4.3 Research model

Multiple regression was applied in order to test the above hypotheses of the study. The estimated multiple regression model employed in the study is presented below:

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \varepsilon$$

Suppose that Y_i is the index level (score) and is explained by seven factorial variables X_1 to X_7 where X_1: profitability, X_2: leverage, X_3: audit firm size, X_4: firm size, X_5: ownership dispersion, X_6: firm age, X_7: market value to book value. Multiple regression was applied in order to estimate the significance of each of the seven explanatory variables X_1, X_2 …., X_7.

Dependent variable Y can be also written as following:

$$Y = \sum_{j=1}^{7} b_j x_j + \beta_0 + \varepsilon$$

Where:
j is an index of explanatory variables with cardinality to 7,
x_j are the explanatory variables,
b_j are i the regression coefficients associated with x_j variables (some of these coefficients could be zero indicating that there is no relationship among Y_i and $x_{j)}$, β_0 is the constant term and ε is the error term.

5. Results

5.2 Descriptive statistics

Table 1 illustrates the descriptive statistics of the dependent and continuous independent variables:

Table 1: Descriptive statistics

	Score	Firm size[a]	Leverage	Profitability	Ownership	Firm age[b]	MVBV
Mean	0.096	442.641	0.553	0.032	0.580	42.330	0.401
Median	0.103	119.758	0.591	0.029	0.620	31.000	0.352
Min	0.004	7.122	0.113	-1.533	0.200	8.000	0.049
Max.	0.216	4,095.551	0.921	1.516	0.890	198.000	1.162
Std. Dev.	0.044	871.871	0.203	0.448	0.182	41.422	0.271
Skewness	-0.275	3.133	-0.253	-0.246	-0.364	2.805	0.953
Kurtosis	0.694	10.072	-0.399	6.834	-0.782	8.186	0.490

Note: a. in million €, b. semesters from initial listing
Source: Authors' estimations

As shown in Table 1, mean value of total assets amounted to 442 million euro, with a maximum observed value of 4,095 million euro and a minimum value of 7 million euro. Mean profit per share was 0.03 euro indicating a low profitability for the companies of the study. A low mean value of leverage was also observed (0.55). Mean ownership concentration amounted to 58% and shows a moderate degree of diffusion in the share capital. Finally, the companies of the study had a mean listing age of 21 years. As far as the size of the audit firm is concerned 11% of the companies was audited by one of the big4 audit firms and the remaining companies by small audit firms.

The mean index score for the companies of the study was low and amounted to 9.6%.The higher observed score was 21.6% and the lower score 0.4%. The items with the higher score were mainly items relating to financial reporting (financial statements, annual and interim reports, independent auditor's report). On the other hand the items of the index with low score were mainly items of the categories of technology (download plug in on spot, use of multimedia, financial data in processable format, advanced features etc.) and user support (help, site search, link to top). The continuous independent variables of the model (size, leverage, profitability, ownership, age and market value to book value) were subjected to logarithmic transformation prior to regression analysis.

5.2 Assessment of the validity of the model
Multicollinearity is a situation in which two or more independent variables are highly correlated, having thus damaging effects on the results of multiple regression. Multicollinearity can be assessed through correlation matrix and through variation inflation factor (VIF). Although no strict rule exists a value less than 10 is considered adequate to draw the conclusion that no multicollinearity exists. Average VIF value is less than 2 and thus no multicollinearity problem exists. Normality of residuals was tested through Shapiro Wilk and the predicted dependent variable scores were found to be normally distributed (p=0.062>0.05).

In conclusion, the aforementioned tests indicate that the model was valid and reliable. In our analysis we used the backward method which rejects at each stage the variable that has the less significant impact on R^2, thus defining the optimal model.

5.3 Multiple regression results
We analyzed the data using SPSS, and used the Backward Likelihood method for calculating the beta coefficients *ßj*. According to the Backward Likelihood Method the analysis begins with a model which includes all variables and then removes them one by one if they do not contribute enough to regression equation based on the criterion of the p-value. The cut-off point for significance is 0.10.

Examination of the variables' p-value leads to the conclusion that 3 steps are necessary in order to remove all variables that don't significantly improve the model and identify the significant variables that contribute to the regression equation.

Table 2 presents *βj* and the changes of the *βj* coefficients, due to the stepwise method we used. The values of the *βj* coefficient that we will use in the regression equation are those resulting from step 3.

Table 2: Regression results

	Model 1			Model 2			Model 3		
	β	t	VIF	β	t	VIF	β	T	VIF
Constant	-0.088	-0.567		-0.051	-0.916		-0.066	-1.298	
Profitability	-0.011	-2.060	1.820	-0.011	-2.142	1.646	-0.011	-2.131**	1.641
Leverage	0.042	2.746	1.314	0.044	3.332	1.028	0.045	3.460*	1.019
Audit firm	0.015	0.439	2.861	0.020	0.738	1.909	-	-	-
Firm size	0.002	0.255	2.780	-	-	-	-	-	-
Ownership	-0.060	-2.449	1.216	-0.061	-2.572	1.197	-0.062	-2.660**	1.192
Firm age	0.039	2.643	2.286	0.039	2.713	2.284	0.044	3.781*	1.595
MVBV	0.019	1.586	1.211	0.018	1.624	1.113	0.020	1.830***	1.069
	R^2= 0.705, adj.R^2=0.576 F=5.472, sig.=0.002			R^2= 0.704, adj.R^2=0.600 F=6.744, sig.=0.001			R^2= 0.695, adj.R^2=0.610 F=8.190, sig.=0.000		
Note: *significant at the 0.01 level, **significant at the 0.05 level, ***significant at the 0.10 level									

Source: Authors' estimations

The final multiple regression model according to the table above is the following:

$$Y = -0.066 - 0.011 * \text{profitability} + 0.045 * \text{leverage} - 0.062 * \text{ownership} + 0.044 * \text{firm age} + 0.020 * \text{mvbv}$$

Adjusted R^2 for the final regression model indicates that 61% of the variation in the disclosure index is explained by the characteristics of profitability, leverage, ownership, firm age and market value to book value. The results of hypothesis testing are the following:

Profitability: Profit/loss per share is statistically significant at the 0.05 level of significance. The negative sign of the regression coefficient indicates that profitability is negatively associated with the score of the index.

Leverage: Debt to assets ratio is significant at the 0.01 level of significance and is positively associated with the score of the index.

Audit firm: Audit firm variable is not included in the final regression model and is not a significant factor for internet reporting.

Firm size: Firm size is not included in the final regression model, which means that it is also not a significant factor for internet reporting.

Ownership: Ownership diffusion is a significant factor at the 0.05 level of significance and is negatively associated with the score of the index.

Firm age: Firm age is significant at the 0.01 level of significance and is positively associated with the score of the index.

Market value to book value: Market value to book value is significant at the 0.10 level of significance and is also positively associated with the score of the index. The results per hypothesis are summarized in following table:

Table 3: Results per hypothesis

Hypothesis	Result	Hypothesis	Result
H_1	Accepted	H_5	Accepted
H_2	Accepted	H_6	Accepted
H_3	Rejected	H_7	Accepted
H_4	Rejected		

Source: Authors' estimations

6. Conclusion

The objective of this study was to examine the disclosure practices of construction companies listed in the Greek and Cypriot stock exchange and the association with selected firm characteristics. For this purpose a disclosure index was constructed consisting of 51 items that examine elements of disclosure of 4 categories: content, technology, user support, and timeliness. Consequently, seven hypotheses were developed and tested regarding the characteristics of profitability, leverage, audit firm size, firm size, ownership dispersion, firm age and market value to book value. The score of the index was found to be significantly and positively associated with leverage and firm age. A significant negative association of the score of the index with profitability and ownership dispersion was observed. Furthermore, a slightly significant association of the index score with market value to book value was found. On the other hand the characteristics of firm size and the size of the audit firm were not found to be significant factors for the internet reporting of the Greek and Cypriot companies.

Future research could include the application of the index to other industries of the stock exchanges of Greece and Cyprus, as well as to more countries. In addition, more elements can be included in the disclosure index in order to examine other areas and dimensions of corporate reporting on the internet. For instance corporate social reporting elements could be included in the index.

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