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#### SUBJECT:

THE INFLUENCE OF COMPANY CHARACTERISTICS AND ACCOUNTING
REGULATION ON INFORMATION DISCLOSED IN ANNUAL REPORTS

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#### **ABSTRACT**

The main purpose of this paper is to evaluate the level of disclosure in the annual reports of Greek companies and to empirically investigate the hypothesized impact of several firm characteristics on the extent of mandatory disclosure. A disclosure checklist consisting of 88 mandatory items was developed to assess the level of disclosure in the 2014 annual reports of 32 Greek firms. The sample of the 32 firms is listed in Athens stock Exchange excluding financial institutions, insurance companies and investment funds-listed on it. The correlation between the level of disclosure and some firm characteristics was examined using multiple linear regression analysis. The results revealed that profitability was significant negatively associated with the disclosure level. The remaining variables such as size, age, leverage, auditing and industry type were found to be insignificant in explaining the variation of mandatory disclosures. The outcome of this study is undoubtedly of great concern to the investment community at large to assist in evaluating the extend of mandatory disclosure by Greek firms and explaining the variation of disclosure in light of firm-specific characteristics.

Keywords: Disclosure, Annual report, Firm characteristics, Impact on disclosure index

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## CHAPTER 1

## **INTRODUCTION**

Disclosure of information in annual reports of firms and its determinants have been characterized as an important area for both analytical and empirical researches in accounting the last half century. Analytical researches include agency theory, signaling theory and competition theories.

In the late 1990s, the Athens Stock Exchange experienced significant development as an emerging capital market. Its status was upgraded by international investment funds in 2000 to that of a development market. However, the market fell significantly in 2000 and has subsequently showed only limited recovery. Under these circumstases, corporate financial reporting has been under the spotlight of regulators, investors and the press, and there has been increasing demand for greater transparency and quality in corporate financial communications with stakeholders.

Furthermore to the above there is one more significant reason explaining why the information of disclosure has such a big gravity. Greece from 2010 faces the economical crisis, a crisis that from 2008 has been expanding all over the world. Specifically Greece since the last five years is an unstable economy, which leads investors to make a research more carefully and trying to examine every detail they can.

This study examines the correlation between company characteristics and the extend of disclosure. We believe that this research will contribute to the growing literature on the determinants of corporate mandatory disclosure level and findings of the study would be of immense interest to listed companies, investors, and those involved in standard processes.

During our research in the existing literature there is currently no published study examining the determinants of corporate disclosures reporting by Greek companies. Therefore this study tries to fill this gap by testing a set of hypotheses on the influence of several factors on the level of mandatory information disclosed by a sample to Greek firms in their financial statements.

The remainder of this thesis is organized as follows. In order to study the policy of accounting information disclosure and to measure the information included in annual reports we made our research in all previous relevant studies. The research gave us the hypotheses, the factors and the results of each previous study. This literature review is in Chapter 2. In Chapter 3 we present the methodology of this thesis. We present the sample of our research and the hypotheses we took as factors in disclosure information. The model is presented and the variables are analyzed in this section. Variables independent based in the hypotheses we made and one dependent variable a disclosure index using a dichotomous approach to scoring the items included. Continuing Chapter 4 describes the empirical results, for both variables and regression, and finally Chapter 5 summarizes the main conclusions and implications of the study and discusses its limitations.

## CHAPTER 2

LITERATURE REVIEW

#### 2.1 GENERAL REVIEW

Business organizations have become aware of the importance of presenting information about the broader range of activities including both their financial performance and non-financial performance such as socially responsible performance. After corporate scandals and financial crises, regulators, academicians, investors and other stakeholders called for greater corporate transparency from the business world. Greater corporate transparency means decreasing information asymmetry between managers and stakeholders by better information disclosure via various media such as press releases, corporate web sites, prospectuses, and annual reports. (Uyar, Kilic & Bayyurt, 2013)

The annual report to shareholders is a document used by most public companies to disclose corporate information to their shareholders. It is usually a state-of-the-company report, including an opening letter from the Chief Executive Officer, financial data, results of operations, market segment information, new product plans, subsidiary activities, and research and development activities on future programs. Reporting companies must send annual reports to their shareholders when they hold annual meetings to elect directors. Under the proxy rules, reporting companies are required to post their proxy materials, including their annual reports, on their company websites.

Corporate reporting is evolving as technology advances, and as report readers demand better and more complete information. While currently used tools are improved, new tools are being developed. Penrose (2008) summarizes the situation saying corporate reporting is no longer restricted to only hard copy, periodic, template driven financial and accounting reporting that includes the income statement, the balance sheet, the statement of retained earnings, and the statement of cash flow, but now also extends to such dynamic media as internet web sites and automated telephone systems". Corporations communicate with stakeholders through various ways such as face-to-face meetings, written and visual media, and corporate websites. However, one of the most important communication tools corporations use is annual reports they publish. A company's published annual report and accounts are important primary documents for

anyone who is interested in that organization. Uyar, 2011 mention that the corporate annual report defined as "the traditional, statutory formal communication vehicle between a publicly listed corporation and its interested constituencies". The audiences of annual reports include stockholders, financial specialists, financial analysts, employees, lenders, and creditors corporate annual reports may be utilized in a variety of ways. Many of the recent company collapses, such as Enron, WorldCom, Tyco and Global Crossing, are believed to have been predictable by the detailed analysis of a company's annual report and accounts over a number of years. Penrose (2008) states that one of the elements readers often use in assessing whether to buy, keep, or sell stock in the corporation is the annual report. Although corporate annual reports are designed first and foremost for financial disclosure and to fulfil the legal requirements for financial statements, Beattie et al. (2008) state that, during the past few decades, they have been transformed from a rather dull financial document to a colourful marketing and public relations vehicle. Corporations used to publish paper-based annual reports, but nowadays, they are made available on the corporate websites. This enables more timely and, in addition, less costly publication of annual reports.

Disclosure is a comprehensive term in accounting and includes all of the financial reporting process approximately. One of the primary principles of accounting is disclosure principle of all the material and relevant facts in regard to financial events and transactions of profit-seeking organization particularly public companies. Adequate, proper and complete terms are characteristics that are often used in order to describe the disclosure. In accounting and auditing texts, according to the perception of the every author with regard to disclosure, expressions of adequate disclosure, proper disclosure and complete disclosure, in terms of, have been referred to as well. However, the most common theories among these mentioned concepts, adequate disclosure is that as least indicate required disclosure and is consistent with this negative phrase (financial statements must not be misstatement). Adequate and proper characteristics are more positive concepts. Proper disclosure is based on the ethics that all potential users be considered the same with regard to the financial information disclosure. Complete disclosure indicating the present of all information in a way that financial statement show

complete picture concerning events and transactions of business enterprise. Although, it is necessary to be presented financial statement completely but, it is not included unimportant information. Sometimes, users of financial statements may pay attention to less important information and as a result of this, neglect important events and operations.

The purpose of disclosure in financial reporting, presenting the required information in order to achieve the following goals: 1) Performance valuation of business enterprise 2) Judgments on how existing resources are used by business enterprise and 3) Predict the trends of business enterprise's profitability in the future. Therefore, information is presented by use of financial reports must be reliable, relevance, proper and complete. The needs and requirements of main investors, investment companies, creditors and analytics should be considered. As a rule, Performance valuation of business enterprise, Judgments on how existing resources are used by business enterprise, and predict the trends of business enterprise's profitability in the future can take into account as the purpose of financial information disclosure.

The subject of information disclosure is not only limited to the exclusive users but also consists of people's necessity in the society such as professional institutions, creditors, government, investors and other decision-makers. One of the main rights of investors is to get informed by the companies they invest. Because, they are outside the business and they make decision regarding their investments depending on the information disclosed in corporate reports. Thus, providing sufficient information for investors on corporate reports is quite important. In recent years, corporate reports are expanding their scope by covering non-financial activities of the firms along with financial results. As a result of comprehensive public disclosure, investors and other stakeholders are becoming more aware of companies' financial results and also non-financial aspects such as social responsibility, environment, employees, customers, and so on. Doing so, firms will reduce the asymmetric information problem between stakeholders and the managers, reduce agency costs, and legitimize their activities. Disclosure increase transparency while market transparency is observed as a fundamental mechanism in order to decrease

the information asymmetry among the market's participants (Bleck and Liu 2007). Disclosure helps the stockholders and other participants in market to organize their operations favourably. The investors can buy and sell stocks accurately and have control over the company with the help of proper disclosure of information (Kohl & Schaefers 2012, Kanda 2001). Increasing the information disclosure is useful for the users who are not able to determine future viewpoint of the company (Dastgir and BazazZadeh 2003). The high level of disclosure will make reliability of investors in companies increase and hence efficiency in capital market

Popova, Georgakopoulos, Sotiropoulos & Vasileiou, 2013 mentioned that mandatory disclosure is a responsibility of regulatory organizations (security exchange authorities, IASB, FASB, etc.), while voluntary disclosure is a responsibility of managers. Therefore, investors must be aware when mandatory disclosure is not relevant anymore and managers start employing voluntary disclosure "as managers are likely to consider their own interests when exercising managerial discretion" (Akhtaruddin, 2005).

Owusu-Ansah (1998) and Wallace et al. (1995) consider disclosure as a communication of economic information, whether financial or non-financial, quantitative or otherwise concerning a company's financial position and performance. Disclosure results in a combination of mandatory and voluntary items that constantly interact with each other. Mandatory disclosure is a company's obligation to disclose a minimum amount of information in corporate reports (Wallace et al., 1995; Owusu-Ansah, 1998), whereas voluntary disclosure is a provision of additional information when mandatory disclosure is unable to provide a true picture about company's value and managers' performance.

Mandatory disclosure is governed by regulatory agencies in all countries around the world (Healy et al., 2001; Akhtaruddin, 2005). Regulators force companies to disclose information that companies may wish to hide (Darrough, 1993). One of the explanations for disclosure regulation is the concern of the regulatory bodies to safeguard the welfare of ordinary investors (Watts & Zimmerman, 1986; Taplin et al., 2002). Regulators aim to

redistribute the wealth between informed and uniformed investors by requiring a minimum level of disclosure, as the information gap among them is expected to shorten (Healy et al., 1999). Furthermore, the credibility of the information in capital markets is positively influenced by the existence of disclosure regulation, which also ensures companies' compliance to the regulatory requirements.

But sometimes mandatory disclosure may not be sufficient to address the expectations of investors. Thus, voluntary disclosure is used by managers to transfer to investors their best information of company's performance (Graham et al., 2005; Healy et al., 2001). Therefore, voluntary disclosure concerns the additional information, which depends on the company's discretion, the relevant legislation and the external pressures of the consulting firms, financial analysts, capital markets and the cultural factor.

Thus, mandatory and voluntary disclosures should not be considered as different items of financial reporting, as both are potentially important (Omar et al., 2011) and they interact with each other constantly (Yu, 2011). When mandatory requirements are limited or regulations are vague and difficult to interpret, companies have incentives to replace missing information with voluntary one. When regulators mandate voluntary information there is no need for company to create discretionary disclosure strategies (Einhorn, 2005).

Cooke (1989) represents that the theory suggests that much of the impetus for voluntary disclosure surrounds the need to raise capital at the lowest possible cost (Choi 1973; Spero 1979). A number of explanations can be advanced to support the capital-need hypothesis:

- Additional disclosures may help to attract new shareholders thereby helping to maintain a healthy demand for shares, and a share price that more fully reflects its intrinsic value. It is possible that poor disclosure could lead to an undervalued share making it attractive to a potential predator;
- Increased information may assist in reducing informational risk and thereby lower the cost of capital (Spero 1979). A lower cost of capital should mean that marginal projects become profitable.

- In order to raise capital on the markets, companies will increase their voluntary disclosure. Consequently, listed companies are more likely to have a higher level of disclosure than unlisted companies and multiple listed companies those raising capital on the international markets will have a higher level of disclosure than domestically listed companies.
- Multiple listed companies often have an interest in foreign capital markets since foreign operations are often financed by foreign capital (Choi and Mueller, 1984). Disclosure levels might be increased to adapt to local customs to meet the requirements of banks and other suppliers of capital;
- Listed and multiple listed companies might increase their social responsibility disclosures to demonstrate that they act responsibly (Watts and Zimmerman, 1979). Companies may have attained their status on the securities markets and be able to attract new funds, not least because they act responsibly.

Several theories have been used by earlier researchers to explain why firms are engaged in disclosing information voluntarily. The most frequently used ones are agency theory, signalling theory, legitimacy theory, and stakeholder theory.

Agency theory expresses the relationship between the managers and shareholders of a firm and explains why managers try to maximize their own benefit (Jensen & Meckling, 1976). Agency costs are incurred resulting from the conflict of interests and information asymmetry between owners and managers. Thus, managers are expected to disclose more information to reduce agency costs (Hossain et al., 1995; Marston & Polei, 2004; Barako, Hancock & Izan, 2006; Hassan, Giorgioni, Romilly & Power, 2009). Agency theory suggests that disclosure may vary with quotation status. Where there is a divorce of ownership from control the potential for agency costs exists because of conflicts between firstly, shareholders and managers, and secondly, between bondholders and shareholders - managers. A major problem is that the agent is likely to have access to superior information than the principal. Since the principal has difficulty in observing the behaviour of the agents it is possible that the agent will use the superior information to his own advantage. It is possible that monitoring problems may vary according to

quotation status. For example, where there is a small number of a shareholder, such as in an unlisted company, monitoring the agents may be easier than in a listed company with a multitude of shareholders. Furthermore, companies with multiple quotations are more likely to have a greater number of shareholders thereby making monitoring costs more significant. Disclosure in corporate annual reports is one way of reducing shareholders' monitoring costs and of alleviating the moral hazard problem (Schipper, 1981). Therefore, listing status is likely to be of crucial importance in the context of Sweden because of the domination of the economy by a small number of multinational companies with multiple quotations.

Bini, Dainelli & Giunta, 2011 mention that theory that explains voluntary information disclosure practices is signalling theory. This theory suggests that managers need to disclose more information to lower information asymmetry between investors and themselves. The users of financial reporting need confidence of financial markets; information disclosure will increase this confidence (Hossain & Hammami, 2009). Thus, the investors will feel safer with the increased level of voluntary information disclosure. Financial markets are based on contractual relationships that occur under conflicting conditions where, if one market player benefits, another loses. Contractual relationships reflect economic decisions which, when approached rationally are based on the quality, the reliability, and the timeliness of information related to the contract (Grossman and Stiglitz, 1980; Rasmunen, 1987).

In the financial market, there are some players who have both more and better quality information than other players. As a consequence, the best informed players are able to make economic decisions which allow them to tease out, from the contractual relationships, greater benefits than the other players (Grossman and Stiglitz, 1980; Rasmunen, 1987,). Contracts entered into when the players do not all possess the same information might result in capital misallocation. In this way, profitable companies may have more problems with fund raising or pay a higher cost of capital than less profitable companies (Rothschild, 1976). In a market where contracts are constantly being entered into and renewed, according to signalling theory, lenders and investors (principals)

require companies who are seeking for capital (agents) to provide information about their performance (Holden and Subrahmanyan, 1992). The management, therefore, is naturally induced to send signals to the market (Healy and Palepu, 2001; Verrecchia, 2001). Signalling theory goes so far as to posit that the most profitable companies signal their competitive strength by communicating more and better information to the market (Verrecchia, 1983; Dye, 1985; Trueman, 1986; Jung and Kwon, 1988; Miller, 2002).

However, research that moves from this theoretical premise and relates a company's profitability to the general level of disclosure in annual reports indicates conflicting results. All of these independent pieces of research point to the relationship between profitability and the general level of a company's disclosure; the latter, however, depends on several factors, making it difficult to isolate the signalling effect. Nevertheless, research development on signalling theory can be informative and beneficial. In fact, it has been confirmed that the conflicting nature of the relationships between principal and agent causes the managers to focus the signal they send to the market on a few focal points (Ross, 1977; Thakor, 1990).

According to legitimacy theory, the firm tries to justify its existence in society by legitimizing its activities (Naser et al., 2006). Firms should behave in accordance with perceived goals of the society to alleviate the public pressures and to legitimize their activities (Freedman & Jaggi, 2005; Sobhani, Amran & Zainuddin, 2009; Belal & Cooper, 2011). One important way for firms to legitimize their activities is to disclose information to the public. Hence, they need more information disclosure.

Finally, stakeholder theory can be used to explain why firms tend to disclose information voluntarily. Stakeholders are the parties that have interest in the firm, and therefore, are interested in firms' activities. Stakeholders include the managers, stockholders, creditors, customers, suppliers, government, trade unions, and the general public (Uyar & Kılıη, 2012a). In order to gain the support of stakeholders, the companies should communicate with their stakeholders (Smith, Adhikari & Tondkar, 2005). Thus, the stakeholders' demand for more information motivates companies to disclose information voluntarily.

According to positive accounting theory there are reasons that can explain the voluntary disclosure of information by firms and market forces may themselves produce an appropriate level of disclosure, removing the need for accounting regulation (Watts and Zimmerman, 1986). If the firm is seen as a nexus of contracts among different individuals and groups, financial information will be used as the basis for establishing contracts, and for controlling these contracts (Jensen and Meckling, 1976). The contracts specify the rules of the game: the performance evaluation system, the reward system and the assignment of decision rights (Jensen, 1983). But accounting information is also used in the contractual arrangements accompanying transactions between the firm and parties outside the firm, as for example in debt contracts.

Positive accounting theory also considers the influence of political costs. Political process theories suggest hypotheses about the use of accounting data to fix prices in regulated industries, to fix tax policy or to decide policy on subsidies for companies. Companies which are politically visible and subject to high political costs, may employ financial information to avoid these risks, and also may execute accounting changes to reduce such risks or even costs (Holthausen and Leftwich, 1983). Therefore the existence of contracting costs – agency and political costs – may be used to explain the attitude of companies towards the disclosure of information and choice among different accounting procedures (Watts and Zimmerman, 1986).

Many researchers cite the work of Cerf (1961) as the starting point of empirical studies regarding disclosure level in annual reports. Since then, the topic has attracted great attention of academicians from both developed and developing countries. Earlier empirical studies were mostly conducted in developed countries, and then developing or less developed countries started to follow them. Moreover, in prior studies, the number of variables and the number of items in the disclosure list were lesser than those of current studies. The majority of these studies were applied to developed countries such as the UK [Spero, L.L. (1979).], [Firth, M. (1979).]), the USA ([Buzby, S.L. (1974).], [Lang, M., & Lundholm, R. (1993).], Sweden [Cooke, T. E. (1989).], Switzerland [Raffournier,

B. (1995).], Japan [Cooke, T. E. (1992).] and Hong Kong [Wallace, R. S. O. & Naser, K. (1995).]. A smaller group of studies have examined developing countries, such as Egypt [Mahmood, A. (1999).], Jordan [Naser, K., Alkhatib, K. and Karbhari, Y. (2002).], Nigeria, Bangladesh [Ahmed, K., & Nicholls, D. (1994).]. Also, some studies have adopted a comparative approach to assess the intensity of disclosure across two or more countries, for example reference [Barret, M.E. (1977).], [Zareski, M. (1996).], and [Camfferman, K. & Cooke, T.(2002).]. While earlier studies mostly evaluated the association between certain firm characteristics such as firm size, profitability, leverage, auditor size and voluntary disclosure level, recent studies have investigated the association between corporate governance attributes and ownership structure along with the variables in earlier studies and voluntary disclosure level. Ahmed and Courtis (1999) conducted meta-analysis based on 29 disclosure studies between 1968 and 1997 by using variables such as corporate size, listing status, leverage, profitability, and audit firm size. They confirmed significant and positive relationships between disclosure levels and corporate size, listing status, and leverage, but they found no significant association between disclosure levels and profitability, and audit firm size.

#### 2.2 FACTORS OF DISCLOSURE INDEX

In this paragraph we analyse the factors that most of previous studies used for their research.

#### Size

Size can be an important variable in explaining the variability in the extent of voluntary disclosure. There are a number of reasons why we might expect a positive association between the size of the firm and the extent of voluntary disclosure. Large enterprises, may suffer additional political costs. For example, Jensen and Meckling (1976) have suggested that some citizens may lobby elected officials for nationalisation, expropriation or the breakup of the entity or industry. Political lobbying may also be undertaken to increase regulation of a particular industry. In response to these 'potential government intrusions, corporations employ a number of devices, such as social responsibility campaigns in the media, to minimise reported earnings. As part of the social responsibility campaign firms might decide to increase social responsibility accounting in their corporate annual reports. Furthermore, elected governments have shown a willingness to bring business into public ownership when considered necessary. Another explanation for increased disclosure by large firms is that such business is likely to be more complex. They are more likely to be multiproduct based and operate in a number of geographical areas including overseas. Additional complexity requires efficient management information systems to meet the needs for managerial control and meet the needs of financiers. The larger the firm the more likely it will be able to attract a wide variety of highly skilled individuals necessary to introduce more sophisticated management reporting systems that can disclose an extensive array of information (Buzby, 1972, p. 76). There may also be greater demands on large firms to provide information for customers, suppliers and analysts as well as the public in general. The number of shareholders is also a measure of size and may possibly be a surrogate for another independent variable. It can be hypothesised that the greater the number of shareholders, the more likely that their information needs will be heterogeneous and the

greater the diversity of information disclosure. This may result from pressure from both shareholders and analysts for additional disclosures. Pressure from analysts is likely to be more intense on those companies with multiple quotations. As Schipper (1981, p. 86) has pointed out '... any monitoring problems that could be solved by issuing public accounting reports would (increase with) the number of owners'. Furthermore, it may be in the interests of the company to improve disclosure to increase the marketability of its securities. It is also likely that large firms will be more able to meet the costs of increased disclosure than smaller firms. In addition, small firms might be reluctant to disclose because it might place them at a competitive disadvantage. As a result small firms may disclose less than a large firm. Significant power groupings may also have an impact on voluntary disclosure.

Furthermore inchausti (1997) argued that information disclosures may be used to decrease agency costs, to reduce information asymmetries between the company and the providers of funds, and to reduce political costs. The reasons for large firms' tendency to disclose more information are explained by Singhvi and Desai (1971) as follows: accumulation and disclosure cost of information is not high compared to smaller firms; management of larger corporations is likely to realize the possible benefits of information disclosure, such as greater marketability and greater ease of financing; smaller corporations may feel that full information disclosure may endanger their competitive position. In addition, since larger firms are more exposed to public scrutiny than smaller firms, they are inclined to disclose more information (Alsaeed, 2006). Large firms are likely to be more complex and complexity requires more disclosure (Cooke, 1989). As it mentioned above many previous studies have supported a positive association between firm size and voluntary disclosure level (Wallace, Naser & Mora, 1994; Inchausti, 1997; Eng & Mak, 2003; Aksu & Kosedag, 2006; Alsaeed, 2006; Hossain & Hammami, 2009;Uyar, 2009;).

<u>Age</u>

Popova, Georgakopoulos, Sotiropoulos & Vasileiou, 2013; Uyar, Kilic, Bayyurt, 2013; Soliman, 2013 mention the age an extra variable. A variable that is new and identified first time by Camfferman and Cooke (2002). The rationale for selecting this variable lies in the possibility that old firms might have improved their financial reporting practices over time (Alsaeed, 2006) and secondly they try to enhance their reputation and image in the market (Akhtaruddin, 2005). Company age is a critical factor in determining the level of corporate disclosure. Older companies with more experience are likely to include more information in their annual reports in order to enhance their reputation and image in the market. Owusu-Ansah (1998: page 614) mentioned three factors in this regard:

- Younger companies may suffer from a competitive disadvantage and, thus, they
  disclose information with some caution
- The cost of gathering, processing, and disseminating the required information may be a burden for younger companies, and
- Younger companies may lack a 'track record' to rely on for public disclosure and therefore may have less information to disclose or less rich disclosures.

While, Hossain and Hammami (2009) found positive significant association between firm age and disclosure level, Alsaeed (2006) and Hossain and Reaz (2007) found no significant association.

Moreover, Haniffa and Cooke (2002) utilized listing age in their study. Listing age has not been tested at all in earlier studies, and therefore, there is not much empirical evidence pertaining to this variable. This approach has been adopted in this study as well. Listing age is the length of time a company has been listed on a capital market, and it may be relevant in explaining the voluntary disclosure level (Haniffa & Cooke, 2002). Haniffa and Cooke (2002) investigated the association between listing age and the extent of voluntary disclosure, and found no significant association between the two variables. Therefore, in principle the age of the firm can be offered as an independent variable in explaining disclosure level.

#### **Profitability**

Uyar, Kilic, Bayyurt, 2013 & Soliman, 2013 mention that there is a general proposition that a company's willingness to disclose information is positively related to its profitability. One motive for this can be derived from agency theory. It is suggested that managers of profitable companies disclose extensive information in order to show and explain to shareholders that they are acting in their best interests and justify their compensation packages. Similarly, management of a profitable company wishes to disclose more information to the public to promote positive impression of its performance (Ghazali and Weetman, 2006). The association between profitability and voluntary disclosure has also been investigated in previous studies (Marston and Polei, 2004). Ghazali and Weetman (2006) argue that the more profitable the companies, the more likely it is for them to disclose financial information. Marston and Polei (2004) also stress that "good news" firms are encouraged to distinguish themselves out from other firms by disclosing more information. (12)

#### <u>Industry type</u>

Levels of disclosure in corporate annual reports are not likely to be identical throughout all sectors of the economy. This may occur for a number of reasons. For example, country's unparalleled economic growth and the extraordinary efficiency and productivity of county's manufacturing together with the international exposure of the manufacturing sector may have an effect on the extent of disclosure in corporate annual reports that differs from other sectors. In addition, there may be historical reasons for differences in levels of disclosure. For example and specifically for Japan during the war years accounting in certain businesses was heavily regulated. Such regulations included the issuance of Working Rules for the Calculation of Manufacturing Costs in 1937, cost accounting regulations for industries supplying war materials in 1939 and 1940, and in 1941 the Planning Board's Tentative Standards for Financial Statements of Manufacturing Companies. While all these regulations were abolished after the Second World War it is possible that they have had a lasting effect on disclosure in the

manufacturing sector. Similarly, Cooke (1989c, p. 33) suggested that historical factors may have been important in the development in financial reporting in different sectors in the Swedish economy. He found that when Swedish corporations were classified into manufacturing, trading, services or conglomerate industry types, aggregate disclosure and voluntary disclosure was lower in those corporations classified as 'trading'. Stanga (1976) also found industry type to be a significant explanatory variable. In the case of Japan, post-war economic success has been founded on manufacturing industry in which the ' . . . economy prospers because areas of industry that show promise are stimulated by fiscal policies favouring investment'. Since manufacturing is of fundamental importance to Japan it is possible that levels of disclosure in their corporate annual reports may differ from those in other business sectors. Consequently, corporations included in this research are categorised as either manufacturing or non-manufacturing.

#### **Listing status**

Given the importance of size, listing status can also be a factor in explaining variability in the extent of disclosure. This is because multiple listed corporations may well incorporate certain aspects of foreign regulation into their domestic accounts. Again, this can be linked to the capital-need hypothesis since those corporations that wish to raise money at the lowest cost of capital through a stock exchange are likely voluntarily to increase disclosure. Consequently, multiple listed corporations, raising capital on the international markets, will have a higher level of disclosure than purely domestically listed enterprises if the requirements of overseas stock markets are greater than those of their domestic exchanges. Indeed, Cooke (1989a) found that this was the case. We can say so that companies listed in any stock market have to comply with listing rules, which are often strict and require extra disclosure in annual reports. As a result, the level of detail in annual reports and accounts may vary between listed and unlisted companies

#### Stock exchange cross listing

Firms that are quoted on several stock exchanges disclose more information. The arguments derived from agency costs and signalling to justify this hypothesis are similar to those for hypothesis one. To test this hypothesis, it was necessary to introduce a dummy variable, with the value 1 if a company is quoted on the Valencia Stock Exchange and others, and 0 if only quoted in Valencia. Evidence on this hypothesis is available from other studies but is not definitive. Several studies have found a positive relationship between levels of disclosure and cross listing (Singhvi and Desai, 1971; Firth, 1979; Cooke, 1989), but others have not (Cerf, 1961; Raffournier, 1991).

#### Leverage

Firms with a high rate of leverage disclose more information. The arguments that support this hypothesis are similar to those for the hypotheses relating to size and stock exchange listing. Information may be used to avoid agency costs and to reduce information asymmetries. It must be considered that leverage may also help to reduce agency costs in the relationship between owners and managers. Leverage describes a company's financial structure, and measures the long term risk implied by that structure (Watson et al., 2002). Previous studies have largely used agency theory to explain the relationship between leverage and corporate disclosure (Hossain et al., 1995; Watson et al., 2002; Alsaeed, 2006; Abdullah & Ku Ismail, 2008). Firms which have higher debt in their capital structure are prone to higher agency cost (Alsaeed, 2006). Information disclosure may be used to avoid agency costs and to reduce information asymmetries (Inchausti, 1997). Hence, it is argued that leveraged firms have to disclose more information to satisfy information needs of the creditors (Uyar & Kilic, 2012). Many of the previous studies proved no significant association between leverage and the level of voluntary disclosure while some found a positive significant association. In contrast, surprisingly, L.L. Eng Y.T. Mak(2003) found a negative significant association.

#### Auditing

Inchausti (2010) mentions that firms audited by one of the Big audit firms will disclose more information. Auditing firms may use the information disclosed by their clients as a way of signalling about their own quality. According to DeAngelo's argument (1981) the larger audit firms have incentives to supply a higher level of audit quality, and they risk losing some of their reputation if they are associated with clients whose reporting practices are considered as offering 'bad quality'. Therefore as Craswell and Taylor (1992) suggest a firm's choice of auditor is likely to be associated with the decision to disclose more or less information. Big audit firms are larger than others, and it is suggested that clients of these firms will disclose more information. This hypothesis might also be based on the argument that companies audited by Big firms have substantial agency costs, and try to reduce them by contracting with these auditing firms. Auditing may be considered as a means of reducing agency costs (Jensen and Meckling, 1976; Watts and Zimmerman, 1983), and as Francis and Wilson (1988: 680) argue: 'It follows that when agency costs are greater there is increased demand for higher-level audit quality. As noted above there is a positive relationship between agency costs and the disclosure decision.

#### Dividend Pay out

The more generous the policy of dividend payment followed by a firm, the less information is disclosed. This hypothesis has not been considered in previous studies, but it may be justified by contracting theory and signalling theory. Dividend policy may also be used to reduce agency costs, because the regular payment of dividends helps to keep the financial structure of the firm's constant, avoiding wealth transfers from owners to creditors. When profits are retained in the firm, the leverage ratio is reduced and the firm becomes less risky, but if interest rates do not change creditors benefit at the expense of owners. Signalling theory suggests that firms with a low dividend pay-out rate may need

to explain to their owners the reasons for the restrictive policy adopted and therefore they will have a higher level of disclosure. If it were considered that a low dividend pay out ratio has been caused by the low profitability of the firm, two hypotheses, pay out and profitability, would stand in contradiction to each other. However, here it is argued that the profitability ratio is one of the factors that influence the dividend pay out ratio, but not the only one. There are other potential hypotheses derived from the agency relationship between managers and shareholders, such as hypotheses relating to share ownership by managers, or the existence of compensation plans for managers, that would have been very interesting to consider, but the lack of information about them made it impossible to include them in the model.

#### Ownership diffusion/dispersion

Diffuse ownership is beneficial in terms of an optimal allocation of risk bearing, but as a consequence, the firm's shareholders are generally too diversified to take much direct interest in a particular fir. Hence, there is an increased need for monitoring in firms whose ownership is diffused (Eng & Mak, 2003). Prior studies have investigated the relationship between ownership structure and voluntary disclosure practices of the corporations. Malone et al. (1993) point out that as the number of shareholders increases, financial disclosures are expected to increase. Singhvi and Desai (1971) state that there may be a positive association between the number of stockholders and the quality of disclosure in annual reports. Moreover, Raffournier (1995) argues that agency relations may play a major role in the disclosure policy of companies because annual reports can be used to reduce monitoring costs. Hence, he believes that managers of firms with diffuse ownership are motivated to disclose more information to help shareholders monitor their behaviour. However, Raffournier (1995) and Alsaeed (2006) found no significant association between ownership diffusion and the level of voluntary disclosure, whereas Patelli and Prencipe (2007) found positive significant relationship.

#### Institutional/Corporate ownership

Although, institutions are considered one of the types of block holder ownership (Eng & Mak, 2003), there is not sufficient empirical evidence in relation to association between institutional ownership and voluntary disclosure level. Two studies found no significant association between these two variables (Haniffa & Cooke, 2002; Eng & Mak, 2003). However, Healy, Hutton and Palepu (1999) argued that one of the potential benefits of expanded disclosures is increasing institutional analyst interest. Their findings from both univariate test and multivariate analysis were consistent with their hypotheses that expanded disclosure is associated with increased growth in institutional ownership. Bushee and Noe (2000) also provided evidence on the impact of corporate disclosure practices on the composition of a firm's institutional investor base.

#### 2.3 ANALYSIS OF PREVIOUS RESEACHES

In this paragraph exists a brief analysis of some of the basic studies that we will base our research.

The influence of company Characteristics and accounting regulation on information disclosed by Spanish firms. (Inchausti, 1997)

In this paper Begoña Giner Inchausti in 1997 (published 2010) in order to explain the level of information disclosure of Spanish companies this paper being focused on positive accounting theory and uses several developments referring to this approach, such as agency theory, political process theory and signaling theory, identifying the determinants of information disclosure by companies, which is in addition to the requirements of accounting regulation. In order to study the policy of accounting information disclosure followed by Spanish companies and to measure the information contained in annual reports, during the three years under study, an information index has been constructed. The information index contains a list of items of accounting, financial and social information. If an improvement in disclosure is found over the period studied, it can be argued that a process of improvement is under way. The sample of companies that has been analyzed is then presented. This is followed by a discussion of the hypotheses and the explanatory variables that are derived from the positive accounting literature. This paper includes two types of variables, some referring to company characteristics and others to regulation, provides a more complete explanation of how the two different approaches, positive and normative, influence the disclosure of information by companies. The sample was drawn from the 92 companies – excluding financial institutions, insurance companies and investment funds. Accordingly the 92 companies in the population were stratified according to asset size and a sample was constructed which could show two characteristics: the same approximate size distribution as the population and the same industrial structure as the population. The resulting sample contained 55

companies. The total number of observations during the period studied was 138. Explaining the three theories of accounting policy Contractual, Political process and Signaling theory they had their framework. According to that framework, seven hypotheses have been developed to explain the accounting policy of companies, showing the kind of relationship with the above theories. These seven hypotheses briefly are:

- $\checkmark$  *H1 size*: Larger firms are expected to have a higher level of disclosure than smaller firms.
- ✓ *H2 Stock exchange cross listing*: Firms that are quoted on several stock exchanges disclose more information.
- ✓ H3 Profitability: The greater the profitability of a firm the greater the level of disclosure it will have.
- ✓ *H4 Leverage*: Firms with a high rate of leverage disclose more information.
- $\checkmark$  *H5* − *Auditing:* Firms audited by one of the Big Six audit firms will disclose
- ✓ more information.
- ✓ H6 Industry: Firms in the same industry will disclose similar information to
   ✓ third parties.
- $\checkmark$  *H7 Dividend pay-out:* The more generous the policy of dividend payment
- ✓ followed by a firm, the less information is disclosed.

Using these seven hypotheses as independent variables a stepwise regression was run in order to determine which of the independent variables better explain the dependent variable. The aim of this paper was to determine the factors that influence the disclosure of financial information by Spanish companies. A general index was used that contained compulsory and voluntary information. According to the results obtained through the regression analysis and the panel data analysis, the hypotheses concerning size, auditing firm and stock exchange listing – related to positive accounting theory – provide a satisfactory basis for explaining the attitude of firms regarding the provision of financial information. Other hypotheses, relating to variables such as profitability, leverage, dividends and industry were rejected by the analysis. Size is a proxy for contractual costs and political costs, therefore it can be said that Spanish quoted firms use financial information as a way to reduce these costs. The hypothesis relating to stock exchange

listing suggests that firms quoted in several markets need more funds, therefore they can have high contractual costs, and also that information asymmetry between firms and providers of funds may be very large. The auditing firm variable may be considered as a proxy for high contractual costs in the audited company. As was suggested above firms audited by the Big Six audit firms are normally larger, and have more agency costs than other companies, therefore they will disclose more information. This behavior may also be considered as a signal about auditing firms. Big Six audit firms may encourage their clients to provide comprehensive high quality information in order to increase their own reputation. The analysis of panel data indicates the influence of legislation over Spanish companies. Legislation appears to produce a strong increase in disclosure, even before being compulsory. For example, the information required by the General Accounting Plan was generally provided by sample companies one year before being compulsory. This confirms an announcement effect produced by the legislation. As a conclusion, it can be argued that although positive theory can be used to provide an explanation of the attitudes of Spanish firms towards information disclosure, it is necessary to recognize the effects of legislation. Therefore it may not be possible to leave disclosure to the market alone, and it may be necessary to regulate accounting in order to ensure that firms satisfy the information needs of different users. It appears that an obvious consequence of Spanish accounting reform in recent years has been the improvement of accounting information disclosed by firms.

Concluding in this paper was suggested the research be done again by analyzing the influence on information disclosure in a period without regulation changes.

## The Impact of Size, Stock Market Listing and Industry Type on Disclosure in the Annual Reports of Japanese Listed Corporations (Cooke, 1992)

This paper (Cooke, 1992), as a pilot study, represents a contribution to rigorous testing of Japanese financial reporting and specifically reports on the impact of size, stock market listing and industry type on disclosure, both voluntary and mandatory, in the annual reports of Japanese listed corporations. The topic is of interest because findings in one country may not be applicable to Japan because of its so-called unique business environment and unique culture. A furthermore interest in this paper is that there is a there is a specificity concerning the regulation financial reporting system. An unusual feature of the post-war accounting regulatory framework in Japan is its dual nature in which listed companies produce one set of accounts based on the requirements of the Commercial Code (CC) and a second set based on the requirements of the Securities and Exchange Law (SEL). The dual nature of the regulatory system inevitably affects disclosure in corporate annual reports. All corporations produce one set of accounts prepared in accordance with the CC and these are distributed to shareholders and may be available to others if a request is made to head office. In addition all listed entities must prepare a second set of accounts that comply with the SEL. The difference of this study according to the previous is first that the sample of examining companies is bigger and secondly that the research is based in annual reports prepared both in SEL and CC regulation system. Furthermore disclosure is defined here as consisting of both voluntary and mandatory items of information provided in the financial statements, where mandatory called an item which has to be disclosed both in SEL an CC accounts. The distinction between mandatory and voluntary disclosures is often blurred in Japan since companies must comply with GAAP, consequently the distinction is subjective. So Japanese listed corporations not only produce two sets of annual reports for the domestic market but some produce a third set designed to meet the needs of the international reader, where the latter is normally perceived to be a US investor.

The variables that are used to this research are three: size, listing status and industry type. Size can be measured in a number of different ways. In this paper, eight size variables are considered, viz. capital stock, turnover, number of shareholders, total assets, current assets, fixed assets, shareholders' funds and bank borrowings. The unusual measure since then was the size of bank borrowings that Cooke correlated this with the other size variables. So in this paper we have three variables:

- ✓ **Size** as we explained the reasons in the analysis of the possible variables
- ✓ **Listing status** can also be a factor in explaining variability in the extent of disclosure. This is because multiple listed corporations may well incorporate certain aspects of foreign regulation into their domestic accounts.
- ✓ Industry type- Levels of disclosure in corporate annual reports are not likely to be identical throughout all sectors of the economy. This maybe happens due to Japan's unparalleled economic growth and the extraordinary efficiency and productivity of Japanese manufacturing or due to international exposure of the manufacturing sector or even though due to historical reasons such as wars. Since manufacturing is of fundamental importance to Japan it is possible that levels of disclosure in their corporate annual reports may differ from those in other business sectors. Consequently, corporations included in this research are categorised as either manufacturing or non-manufacturing.

As concerned the research they took as a sample 35 companies and they made a list of 165 items including in the scoring sheet both mandatory and voluntary disclosures. They used a linear regression for their hypotheses.

Concussing the research set out to examine whether the extent of disclosure by Japanese corporations in their annual reports that are published domestically is associated with the size of the corporation, stock market listing and industry type. More specifically it was found that:

➤ It has been found that multiple listed corporations disclose more information in their Japanese annual reports than corporations listed only on the Tokyo Stock Exchange.

- ➤ Size was found to be an important influence. The composite size variable, derived by factor analysis, was included in the multiple linear regression equation. Total assets, shareholders' funds and fixed assets were most highly correlated with this factor. It appears that sheer size in terms of controlling assets is more influential on this factor than the number of shareholders.
- ➤ Japanese manufacturing corporations disclose significantly more information than other types of corporations so interaction effects between industry type and quotation status were also found to be significant.

# The Association between the Firm Characteristics and Corporate Mandatory Disclosure the Case of Greece (Galani, Alexandridis and Stavropoulos, 2011)

The main thrust of this paper is to assess the level of disclosure in the annual reports of non-financial Greek firms and to empirically investigate the hypothesized impact of several firm characteristics on the extent of mandatory disclosure. A disclosure checklist consisting of 100 mandatory items was developed to assess the level of disclosure in the 2009 annual reports of 43 Greek companies listed at the Athens stock exchange. The association between the level of disclosure and some firm characteristics was examined using multiple linear regression analysis. The study reveals that Greek companies on general have responded adequately to the mandatory disclosure requirements of the regulatory bodies.

According to this paper (Galani, Alexandridis & Stavropoulos, 2011) the hypotheses were token are the following;

- ✓ **Size** Companies with different values of total assets disclose varying amounts of financial information
- ✓ **Age-** Older firms are more likely to disclose more mandatory information than younger firms.

- ✓ Profitability- Firms with high profitability are more likely to disclose more information in their annual reports compared with firms with low profitability.
- ✓ **Industry type-** Modern companies disclose different level of disclosure than traditional companies.

After the hypotheses and multiple regression that was adopted to test these hypotheses the results were shown below:

- Firm size: Firm size coefficient shows that this variable is significantly positively correlated to the disclosure level, there by suggesting that large firms disclose more data than small ones. This suggests that large Greek companies tend to disclose more information than small ones and can afford to do so, since their competitive advantage will not be affected by disclosing more information.
- Firm age: It seems that firm age does not explain the variation of disclosure level among the Greek firms while the age variable is not significant.
- ➤ Profitability: From the results, none of the above performance-related variables provides an explanation of the disclosure level variation. The observations are not surprising as reference indicated that performance could serve as a yardstick for the information asymmetries between management and shareholders, thus, the direction of the relationship is unclear. Evidence from earlier studies is also mixed.

## Firm Characteristics and the Extent of Voluntary Disclosure: The Case of Egypt (Soliman, 2013)

Soliman in 2013 made his own study concerning the extend of voluntary disclosure. The purpose of this study is to investigate the association between the voluntary disclosure

level in annual reports and firm characteristics of more active 50 Egyptian companies listed on the Egyptian Stock Exchange of the non-financial sector during the period 2007-2010. The relevance of this paper is based on several reasons. First, it contributes to the recent literature on the information transparency and accountability. Second, it can be of interest to both managers and investors, because of the influence of transparency on domestic and foreign investments. Finally, the study addresses voluntary disclosure practices over the period of considerable changes in the business environment in general and the capital market in particular. The period of the study has witnessed, among other changes, the first application of the new listing rules and the issuance of an Egyptian corporate governance code. Considering previous researches so in Egypt as in other countries he examined the following hypotheses:

- ✓ **Firm size-** There is a positive association between firm size and the voluntary disclosure in annual reports.
- ✓ **Auditor size**-There is a positive significant association between auditor size and the voluntary disclosure in annual reports.
- ✓ **Profitability-**There is a positive association between profitability and the voluntary disclosure in annual reports.
- ✓ **Age-**There is a positive association between firm's age and the voluntary disclosure in annual reports.

As we mentioned the sample in the current study consists of the Egyptian companies from amongst the top 50 most active-traded companies listed in the Egyptian Stock Exchange over the period 2007-2010. Following the majority of disclosure literature. Banks, insurance companies, and leasing companies; were excluded from the sample due to the different requirements of disclosure and corporate governance. Hence their annual reports may be not comparable to those of other companies. This gave us a sample of 40 firms. Based on information provided by firms in annual reports Soliman made the disclosure index. Using as dependent variable that disclosure index and as independent

variables the firm size the auditor size the profitability and the age decided to use an OLS regression for the model using the stepwise method to take his results. These results are:

- The first hypothesis predicted a significant and positive relation between companies' size and voluntary disclosure. The study result supports this hypothesis. The firm size has been found to be significantly and positively correlated with disclosure level.
- Audit firm size is statistically related to the level of voluntary disclosure by the sample of companies in their annual reports. But it is non-significant and so the second hypotheses were not supported. The rationale justification behind this result lies in the possibility that the role of auditors is limited to the boundaries of mandatory information. Simply put, auditors, in general, do not require their clients to report data in excess of that required by the accounting standards. The non-significance of auditor type in explaining variation in corporate disclosure inconsistent with the vast majority of prior studies in both developed capital markets
- The third hypothesis predicted a positive relation between companies' profitability and voluntary disclosure. This study result supports the previous hypothesis. This result suggests that companies that are performing well tend to voluntarily disclose more information. The positive statistical significant relation between organizational profitability and the voluntary disclosure index also corroborate the argument as the firm's earnings increase; managers have incentives to supply more information to the market in order to signal quality. On the other hand, voluntary disclosure helps investors to differentiate the high quality stocks. Furthermore, this result cans also analyse in light of the legitimacy theory. In this sense, companies with good performance feel persuaded by the social contract to perform voluntary reporting of their activities and results. According to the signalling theory, it was expected that managers of companies that are performing well disclose more information about their present situation, in order to send signs to the market about the quality of the companies they manage

The results don't find a statistical significant association between firm's age and the voluntary disclosure index, but the coefficients are positive. This finding lends non-support to the last hypothesis. This can be explained by the signalling objectives and the legitimacy of the newly listed companies and is consistent with that found by Bushee *et al.*, (2003); and Akhtaruddin (2005).

## Association between firm characteristics and corporate voluntary disclosure: Evidence from Turkish listed companies (Uyar, Kilic & Bayyurt, 2013)

Uyar, Kilic and Bayyurt in their research in 2013 in this paper empirically investigate the factors that impact voluntary information disclosure level of Turkish manufacturing companies listed in the Borsa Istanbul (BIST). They worked as previous researchers developing the following hypotheses:

- ✓ There is a positive association between proportion of shares held by institutional/corporate investors and the level of voluntary disclosure.
- ✓ There is a positive association between a firm's ownership diffusion and the level of voluntary disclosure.
- ✓ There is a positive association between proportion of independent directors on the board and the level of voluntary disclosure.
- ✓ There is a positive association between board size and the level of voluntary disclosure.
- ✓ There is a positive association between listing in the XCORP of the BIST and the level of voluntary disclosure.

For the above hypothesis Aksu and Kosedag (2006) state that expected benefits of good corporate governance, and transparency and disclosure practices are especially important for emerging markets like Turkey which grow faster than developed countries, and

therefore, needs external capital. Bokpin and Isshaq (2009) views high information disclosure level as the symptom of quality corporate governance practices. In order to ensure investor protection and to promote transparency, Corporate Governance Principles of Turkey (CGP) was issued by the Capital Markets Board in June 2003 for the first time and amended in February 2005 (CMB, 2005). The XCORP of the BIST is established to measure the price and return performances of the companies traded on the BIST markets, determining corporate governance rating grades according to the CGP issued by the Capital Markets Board (BIST, 2009). The companies listed in this index implement the best practices of corporate governance principles including public disclosure and transparency. Previously, Uyar (2012) investigated the association between listing in the XCORP and disclosure level on the corporate web sites, and found significant positive association between the two variables)))

- ✓ There is a positive association between listing age and the level of voluntary disclosure.
- ✓ There is a positive association between firm size and the level of voluntary disclosure.
- ✓ There is a positive association between profitability and the level of voluntary disclosure.
- ✓ There is a positive association between leverage and the level of voluntary disclosure.
- ✓ There is a positive association between auditor size and the level of voluntary disclosure.

This research was the only that had the hypotheses 1, 2 and 5. The fifth hypothesis concerned only Turkish companies and thus is explained here and not in the analysis of the variables. Furthermore this study has the most hypotheses rather than everything else we occupied with.

The data collection methodology of the study is content analysis of annual reports of the corporations listed on the BIST for the year 2010. In order to analyze the results, they

used Ordinary Least Square (OLS) and Two-Stage Least Squares (2SLS) regressions to examine the association between the explanatory variables and voluntary disclosure level.

Respectively to the above hypotheses the results are as follows:

- First hypothesis is accepted as they found significant association between the two variables. This finding may suggest that institutional/corporate ownership contributes to better development of corporate disclosure culture, and improves transparency leading to less information asymmetry and reduced agency costs.
- The second hypothesis is rejected. Hence, we can say that the more diffused ownership a firm has, the less voluntary information it discloses. The rejection of this hypothesis might be due to the fact that when ownership is too much diffused, the firm's shareholders are generally too diversified to take much direct interest in a particular firm
- ➤ It is implied that the higher the proportion of independent directors on the board, the more the firm discloses voluntary information. Hence, Hypothesis 3 is accepted.
- ➤ No significant association was found between boarder size and disclosure. Hence, Hypothesis 4 is rejected. This could be explained by the fact that board size may not mean board quality if it does not operate efficiently.
- The hypothesis testing provided evidence that there is a significant positive association between listing the XCORP and disclosure. Therefore, it can be said that listing in the XCORP improves the disclosure level of voluntary information. Hence, Hypothesis 5 is accepted.
- Listing age was also expected to have positive impact on the disclosure level. However, hypothesis testing yielded no significant result in all models. Thus, Hypothesis 6 is rejected.
- Firm size affects the voluntary disclosure level positively. The findings lend support to Hypothesis 7 regarding firm size. Hence, there is a significant positive association between firm size and voluntary disclosure level.

- Profitability has no significant association with disclosure in all models. This implies that the profitability does not explain the variation of disclosure level among Turkish companies. Hence, Hypothesis 8 in relation to profitability is rejected.
- ➤ The results of all models reject Hypothesis 9 which presumed significant positive association between the two variables.
- ➤ Hypothesis 10 stating a positive association between auditor size and the level of voluntary disclosure is accepted.

In conclusion the findings of the study provide evidence of a positive association between voluntary information disclosure level and the variables such as firm size, auditing firm size, proportion of independent directors on the board, institutional/corporate ownership, and listing in the Corporate Governance Index of the BIST. However, leverage and ownership diffusion were found to have negative significant association with the extent of voluntary disclosure. The remaining variables, namely, profitability, listing age, and board size were found to have insignificant effect.

Except the above papers we found interesting information in some others. For example Uyar in his paper in 2011 (Firm characteristics and voluntary disclosure of graphs in annual reports of Turkish listed companies) made a research about the association between firm characteristics and the voluntary disclosure level of graphs in annual reports of Turkish companies listed on the Istanbul Stock Exchange (ISE). The firm characteristics used in the study are auditor size, ownership structure, firm performance (profitability), and firm size. The four hypotheses according the above characteristics were taken. In testing hypotheses, negative binomial regression from count data regression models was used. The results of multivariate analyses indicated that firm size and auditor size have significant positive association with voluntary disclosure level of graphs. On the other hand, profitability and ownership structure do not have any significant association with graphical disclosure level. This was a fresh and experimental discourse that we found interesting to study and enclose its results in our research.

Although we are not going to study the influence characteristics in disclosures of banking companies in our study it is interesting to mention that the results were in proportion with the previous researches. (Hossain, 2008; Arif & Tuhin, 2013)

Also impressive the fact that as concerned the level of risk disclosure and corporation characteristics in annual reports the results was given by researches were in proportion with the previous researches (Baroma, 2014)

Below listed the Table 1 with the researches we studies and analyzed showing briefly the variables they used and the results they had.

**Table 1: Literature Review- Research and results** 

Researcher, year	Country of interest	Subject of research	Significant variable	Insignificant variable
Cooke, 1992	Japan	The Impact of size, Stock Market Listing and Industry Type on Disclosure in the Annual Reports of Listed corporations	-Size -Listing status -Industry Type	
Inchausti, 1997	Spain	The influence of company characteristics and accounting regulation on information disclosed by firms	-Size -Auditing firm -Stock Exchange Listing	-Profitability -Leverage -Industry -Dividends
Galani, Alexandridis, Stavropoulos, 2011	Greece	The Association between the Firm Characteristics and Corporate Mandatory Disclosure	-Firm size	-firm age -Profitability
Takhtaei, Mousavi, 2012	Iran	Disclosure Quality and Firm's Characteristics	-Firm size	
Baroma, 2014	Egypt	The association between the level of risk disclosure and corporation characteristics in the annual reports	-Firm size	-Industry type -leverage
Hossain,2008	India	The Extent of Disclosure in Annual Reports of Banking	-Size -Profitability	-age -complexity

		Companies	-Board Composition	of business -asset-in- place
Cooke,1989	Sweden	Voluntary Corporate Disclosure	-Size	-Industry Type
Michailesco, 2010	France	The determinants of the quality of accounting information disclosed by listed companies		<ul><li>Ownership diffusion</li><li>leverage</li><li>-Profitability</li></ul>
ARIF, TUHIN, 2013	Bangladesh	Disclosure of non-Financial information voluntarily in the annual report of financial institutions: a study on listed banks	-size -age	-Profitability
Galani, gravas. Stavropoulos, 2011	Greece	the relation between firm size and environmental disclosure	-size	
Uyar,Kilic,Bay yurt,2013	Turkey	Association between firm characteristics and corporate voluntary disclosure	-institutional/ corporate ownership - firm's ownership diffusion - firm size - auditor size	<ul><li>board size</li><li>Listing age</li><li>profitability</li><li>leverage</li></ul>
Uyar,2011	Turkey	Firm characteristics and voluntary disclosure of graphs in annual reports of listed companies	- firm size - auditor size	<ul><li>profitability</li><li>ownership structure</li></ul>
Soliman,2013	Egypt	Firm Characteristics and the Extent of Voluntary Disclosure	- companie's size - profitability	- audit firm size - firm's age
Ahmed, Courtis, 1999		Associations between corporate characteristics and disclosure levels in annual reports: A meta-analysis	-size -listing status -leverage	-profitability -size of audit Firm
Akhtaruddin, 2005	Bagladesh	Corporate mandatory disclosure practices	-size	-Age -Profitability
Hossain, Hammami, 2009	Qatar	Voluntary disclosure in the annual reports of an emerging country	-age -size -complexity -assets in place	-Profitability
Alsaeed, 2006	Saudi Arabia	Association of firm-spesific charactheristics and disclosure	-firm size	
Patton, Zelenka, 1997	Czech Republic	An empirical analysis of the determinants of the extent of disclosure in annual reports of joint stock companies	-type of auditor -number of employees -stock exchange listing status	

			-return of equity
Owusu, Ansah,1997	Switzerland	The determinants of voluntary financial disclosure by listed companies	-size
Wallace,Naser, Mora, 1994	Spain	The Relationship Between the Comprehensiveness of Corporate Annual Reports and Firm Characteristics	-firm size - stock exchange listing - liquidity
Abdulah, Ismail, 2008	Malaysia	Disclosure of Voluntary Accounting Ratios	-size -liquidity

# CHAPTER 3

**METHODOLOGY** 

### 3.1 SAMPLE

In order to take our results and be able to make comparisons with the previous literature review we have to decide about our sample and the model regression we are going to use. We took as sample companies from the Athens Stock Exchange. The sample was drawn from the all the fields of Athens Stock Exchange excluding financial institutions, insurance companies and investment funds-listed on it. The groups that gave us the total list of our sample are shown on Table 1.

**Table 1: Fields** 

#### **FIELDS**

CONSTRUCTION & MATERIAL
TRADE
MANUFACTURED PRODUCTS
PETROLEUM
PERSONAL AND HOUSEHOLD
RAW MATERIALS
TRAVEL & LEISURE
TECHNOLOGY
FOOD
HEALTHY
CHEMICALL

From the total amount of the companies listed on the above groups we choose a sample of 32 corporations. We tried to take sample of all types of activities included in each group. We came at that exact sample, choosing companies that are going to be applicable at some following criteria that analyzed below. Regarding the above, the analysis of the sample exists at Appendix A.

Annual reports were obtained for all the resulting sample companies. All the annual reposts of our sample were available and suitable for our research. Therefore the total number of observations was 32. Our purpose is not to analyse the index of annual reports but to analyse the behaviour of the whole sample according to disclosure size.

### 3.2. THE HYPOTHESES AND THE VARIABLES

### 3.2.1. HYPOTHESES AND INDEPENDENT VARIABLES

According to the framework provided in chapter 2, six hypotheses have been developed to explain the accounting policy of companies. We took these hypotheses in order to examine the influence that is going to have on the disclosure of annual reports of our sample.

$$\checkmark$$
 H1 − size

Larger companies are expected to have a higher level of disclosure than smaller.

In any previous research size was the most common variable to evaluate. We defined the size of each firm as the Natural Log of total assets.

$$✓$$
  $H2-age$ 

Older firms are more likely to disclose more mandatory information than younger firms.

Age can be represented in various ways. Other researches report the age as the years from foundation. Meanwhile some others defined it as the years since listed in Exchange stock. We defined the age of our sample counting the years of each company since its foundation.

#### ✓ *H3- Profitability*

Firms with high profitability are more likely to disclose more information in their annual reports compared with firms with low profitability.

As the factor of profitability, we observed that it had been measured with different ways throughout researches. The results were complicated about profitability. Here in our research we decided to examine profitability with two different ways. The first way is define the profitability as the Return of equity and the second as the Return of assets.

Return of Equity (ROE) = Net Profit / Average of Equity

Return of Assets (ROA) = Profit before Taxes, Financial and Investment results / Average of Total Assets

#### ✓ H4 - Industry type

Modern companies disclose different level of disclosure than traditional companies.

In researches that Industry type was examined as variable the way was varied. Inchausti, (1997) categorised the sample of companies into three sectors:

- 1) Manufactory companies
- 2) Industry companies
- 3) Service industry companies

For this study, companies have been divided broadly into two categories:

- 1) Traditional
- 2) Modern.

Traditional are food, textile, paper and cement and modern companies are engineering, pharmaceuticals and chemicals. That type of separation was used by Galani, Alexandridis, Stavropoulos (2011) too.

For this hypothesis we used a dummy variable giving 1 if a company of our sample defined as modern and 0 if a company defined as traditional.

#### $\checkmark$ H5 − Auditing

Firms audited by one of the Big Four audit firms will disclose more information.

For this hypothesis we use also a dummy variable giving 1 for a company audited by one of the Big Four audit firms and 0 for the companies audited by another audit firm.

The four audit firms that recognised as Big four are:

- 1) DELOITTE
- 2) KPMG
- 3) ERNST & YANG
- 4) PREISWATERHOUSECOOPERS

## ✓ *H6 – Leverage*

Firms with a high rate of leverage disclose more information.

By this hypothesis we are going to examine the correlation between loaning and disclosure information. As leverage we define the amount of debt liabilities either long-term either short-term derived by the Total Assets.

Beyond the above six hypotheses that are going to be examined and having in mind previous researches we were willing to examine also as variable the dividend pay out. However, for the reason of the unstable economical situation of Greece and its companies, the majority of them decided in 2014 that they would not give dividend. And therefore the variable of dividend pay out excluded from the list as not useful for giving results.

There were other potential hypotheses derived from the agency relationship between managers and shareholders, such as hypotheses relating to share ownership by managers, or the existence of cross listing that would have been very interesting to consider, but the lack of information about them made it impossible to include them in the model.

The above hypotheses as they were shown they are going to be the model's independent variables. The relevant table of variables and the expected influence of the disclosure in annual reports exists below in Model's analysis paragraph and references as Table 3.

### 3.2.2 DISCLOSURE INDEX

There is an extensive accounting literature relating to the use of disclosure indices to measure the information contained in the annual reports of companies. Indices constructed to measure the quality of information vary considerably among the different studies, although all share the basic idea of usefulness of information for the investment decision process. In some studies only voluntary information is considered (Firth, 1979; Raffournier, 1991), whilst in other studies a wider perspective is adopted with both compulsory and voluntary information being included in an index (Inchausti,1997; Singhvi and Desai, 1971; Choi, 1973; Cooke, 1989). Studies also differ in the number of items of information included in the index, from 17 to 224 (Cooke, 1989). Some of these studies measure the evolution of disclosure of accounting information over a period and others compare the disclosure of accounting information in different countries.

The present study takes the following more comprehensive approach taking only mandatory items (Cooke, 1989). Concerning the selection of items for inclusion in previous research studies, recommended disclosures by the IASC, accounting standards issued by the Business Accounting Deliberation Council (BADC), Ordinances of The Ministry of Finance, statements and opinions issued by the JICPA, and the law. Here in this study 88 items of information were included in the disclosure index. All of these items were compulsory according to the *IFRS compliance*, *presentation and disclosure checklist 2014* presented by Deloitte. The list of the selected items is presented in Appendix B

As it mentioned above and explaining why we took only mandatory items, the regulatory framework was introduced gradually before the study period, and compulsory items were constant over this period. This does not provide the possibility of analysing the impact of the regulatory system on the disclosure index.

In this study there are no voluntary disclosures as the sample consists of Greek companies listed in Athens Stock Exchange and so the compliance with IAS KAI IFRS is dedicated as it mentioned above. It is convenient to clarify that this study does not try to evaluate the accounting reform, or the degree of fulfilment of the imposed requirements by the sample of companies, but to observe the influence of information disclosure.

Therefore these items do not cover all compulsory requirements, but they were selected based on *International Accounting Standards – IAS and International Financial Reporting Standards-IFRS* that would be applicable on companies of our sample. The list of IAS and IFRS follows at Table 2.

Table 2: IFRS-IAS

	IFRS - IAS
IFRS 9	FINANCIAL INSTRUMENTS 2014
IFRS 10	CONSOLIDATED FINANCIAL STATEMENTS
IFRS 13	FAIR VALUE
IAS 2	INVENTORIES
IAS 8	ACCOUNTING POLICIES
IAS 11	CONSTRUCTION CONTRACTS
IAS 16	PROPERTY, PLANT, EQUIPMENT
IAS 18	REVENUES
IAS 36	IMPAIRMENT OF ASSSETS
IAS 37	PROVISIONS, CONTIGENT LIABILITIES AND ASSETS
IAS 38	INTAGIBLE ASSETS
IAS 39	FINANCIAL INSTRUMENTS RECOGNITION
IAS 40	INVESTMENT PROPERTY

An important issue in the use of disclosure indices is whether values are attached to each item in the index. Using a weighted index may seem reasonable because it allows distinctions to be made for the relative importance of items of information to the users of accounts. Importance to users and corresponding weights are generally determined by inquiries to users (Buzby, 1974). However points out 'some arbitrariness is clearly

inherent in the use of any weighted index'. Moreover, the evidence indicates that decision makers, in general, lack insight concerning their own use of information. To illustrate this point he compared the relative weights assigned to different items of information by different samples of analysts (the samples of the Buzby study), and concluded that there is no consensus between them. In addition, studies which have used both weighted and unweighted indices draw similar conclusions from both types of indices (Choi, 1973). Therefore in this paper the approach using an unweighted index (as in Cooke, 1989; Raffournier, 1991; and Wallace *et al.*, 1994; Inchausti, 1997; Galani, Alexandridis, Stavropoulos, 2011) was followed.

Moreover In determining the weights, if an item of information in either set of accounts is disclosed then the item is part of the information set, whereas if an item is not disclosed in either corporate report the item is classified as not being part of the information set. The implied assumption when an item is relevant is that each item of disclosure is equally important. Clearly one class of user will attach different weights to an item of disclosure than another class of user. However, the focus of this research is not on one particular user group but rather on all users of corporate annual reports. An approach which tried to encapsulate the subjective weights of a multitude of user groups would be unwieldy, and probably futile. Thus, the approach here is in effect to assume that the subjective weights will average each other out. Support for not attaching weights can be found in Spero (1979, p. 57) and Robins and Austin (1986).

Summing up a disclosure index was constructed which consists of 88 items of information, in order to measure the degree of compliance of the companies with the required disclosures. By referring to the recommended disclosures by the International Standards Committee a list of mandatory disclosures was prepared based on the information that firms supply in their annual financial reports to shareholders. A dichotomous approach to scoring the items was adopted, in which an item scores 1 if disclosed and 0 if not disclosed. This procedure is conventionally termed the unweighted approach. Thus, the unweighted disclosure method measures the corporate disclosure score of a company as additive as follows:

$$Ds = \sum_{t=1}^{n} d_i$$

1

Where,

di= 1 if item i is disclosed

=0 if item i is not disclosed

n= number of items

## 3.3 MODEL DEVELOPMENT

Multiple regression was adopted to test the hypotheses developed in this study. Before proceeding to the results of regression analysis, it was instructive to check the existence of multicollinearity among explanatory independent variables. Multicollinearity or collinearity, the situation where two or more of the independent variables are highly correlated, can have damaging effects on the results of multiple regression. After testing that collinearity is not a problem for this model. Additionally, to test the assumption of independent errors (autocorrelation), the Durbin-Watson statistic was used. As a conservative rule, values less than 1 or greater than 3 should pose a problem (Field A., 2000). The closer to 2 the value is, the better. In sum, the diagnostics indicated that the model was valid and reliable. The estimated multiple linear regression model employed to test the relationship between specific- related variables and the level of disclosure is presented below:

$$DS = b_0 + b_1 size + b_2 age + b_3 roe + b_4 roa + b_5 audit + b_6 lever + b_7 ind + e$$
 2

Where

DS: disclosure score

bo: Intercept

e: residual error

and as we analysed above we took some hypotheses in order to examine the respective variables on the above regression model. The variables that we use as indepedend variables are shown in the below Table 3.

Table 3: Independent variables and their expected significance.

VARIABLE	SYMBOL	EXPECTED SIGNIFICANCE	DEFINITION
SIZE	size	+	Log of Total Assets

AGE	age	?	Years from foundation
PROFITABILITY	roe	?	Net Profit / Average in Equity
PROFITABILITY	roa	?	Operating Income / Average of Total Assets
AUDITING	audit	?	<b>dummy variable</b> 1 if autided by Big Four or <b>0</b> if not
LEVERAGE	lever	?	Longterms and Shorterm debt / Total Assets
INDUSTRY TYPE	ind	?	dummy variable 1 for modern or 0 for traditional

Notice that in the Table 3 we exhibit the expected significance according with previous researches. Reminding a brief presentation of significance exists in Table 1 in Chapter 2: Literature review.

### For better understanding:

- + is for variables that had significant position in all previous researches examined
- is for variables that had insignificant position in all previous researches examined
- ? is for variables that showed significance in some researches and insignificance in some others

# CHAPTER 4

# **RESULTS**

4.1 Results for Disclosure Score

After evaluating the annual reports of each company we came out on the disclosure score showed in Table 1.

**Table 1: Disclosure Scoring and Rank of the sample** 

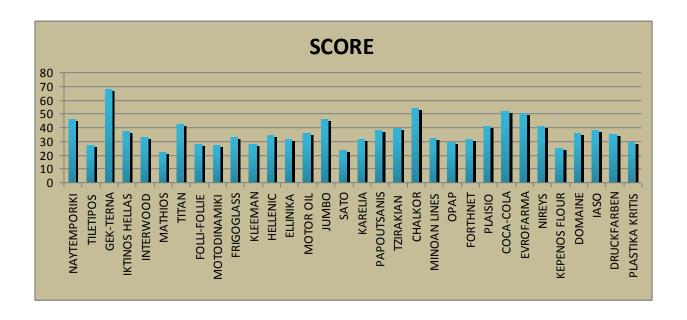
COMPANIES	SCORE	RANK
NAYTEMPORIKI	46	5
TILETIPOS	27	28
GEK-TERNA	68	1
IKTINOS HELLAS	37	13
INTERWOOD	33	18
MATHIOS	22	32
TITAN	42	7
FOLLI-FOLLIE	28	26
MOTODINAMIKI	27	28
FRIGOGLASS	33	18
KLEEMAN HELLAS	28	26
HELLENIC CABLES	34	17
ELLINIKA PETRELEA	31	23
MOTOR OIL	36	14
JUMBO	46	5
SATO	23	31
KARELIA	31	21
PAPOUTSANIS	38	11
TZIRAKIAN	39	10
CHALKOR	54	2
MINOAN LINES	32	20
OPAP	29	24
FORTHNET	31	21
PLAISIO COMPUTERS	41	8
COCA-COLA	52	3
EVROFARMA	50	4
NIREYS	41	8
KEPENOS FLOUR MILLS	25	30
DOMAINE		
COSTA LAZARIDI	36	14
IASO	38	11
DRUCKFARBEN	35	16
PLASTIKA KRITIS	29	24

On the above table we can distinct the score of each corporation and the rank it has at the total. The number of the score shows how many from the items that have been chosen are

included in company's annual report. The total amount of the items that included in its annual report, rank it respectively in the list.

Chart 1 gives us a graphical clue of the score.

**Chart 1: Disclosure Scoring of the sample** 



As a conclusion we can see that the range of the score has dispersion as well the minimum score was given by MATHIOS at 22 and the maximum was given by GEK-TERNA at 68. A score too high as the average score of our sample is 36,125. The optical view of that seems in Chart 2. We can assume that GEK-TERNA's too high score exists due to the variety of fields that the company actives. It is a group of companies that includes companies of different sectors like construction or electricity even though real estate.

### **Chart 2: Range of Scoring**



Having the separate score of each company we came at the results that the 41% of our sample scored above the average score and the 59% below it as we see in chart 3.

**Chart 3: Comparison with average score** 



In Table 2 we can see the descriptive results for the score and in Table 3 the range of scoring.

## **Table 2: Descriptive Results of score**

Included Observations:	32	
	SCORE	
MEAN	36,3125	
MINIMUM	22	
MAXIMUM	68	
MEDIAN	34,5000	
ST.DEVIATION	9,9820	
SKEWNESS	1,2147	
KURTOSIS	1,9886	

**Table 3: Range of scoring** 

RANGE OF SCORE	NUMBER OF COMPANIES	
20-40	23	
40-60	9	
60-80	1	

As a conclusion of the above we observe that there is a range in disclosure concering the minimum and the maximum price but as far for the countdown we see gathered results in a category (unlike on Galani, Alexandridis, Stavropoulos,2011 in which we see dispersion). After that we can comment the results from the side of items just for more information.

In Table 3 we can see the score of items that suceed in each seperate category of IAS-IFRS. It is interesting to see that although the items selected from specific standards that could be applicable for our sample the results are impresive. The range of the score of items based on standards has dispersion. The reason that explains this is that each standard has different number of items in order to manage a right disclosure scoring. That conclusiton confirmed also in Table 4 that shows the score of each item seperately. And in this case the range of item's score is more constricted.

Table 3: Score of Items per Standard

IFRS - LA	AS	VIEWS OF ITEMS
IFRS 9	FINANCIAL INSTRUMENTS 2014	171
IFRS 10	CONSOLIDATED FINANCIAL STATEMENTS	95
IFRS 13	FAIR VALUE	14
IAS 2	INVENTORIES	59
IAS 8	ACCOUNTING POLICIES	59
IAS 11	CONSTRUCTION CONTRACTS	15
IAS 16	PROPERTY, PLANT, EQUIPMENT	90
IAS 18	REVENUES	120
IAS 36	IMPAIRMENT OF ASSSETS	102
IAS 37	PROVISIONS, CONTIGENT LIABILITIES AND ASSETS	93
IAS 38	INTAGIBLE ASSETS	137
IAS 39	FINANCIAL INSTRUMENTS RECOGNITION	91
IAS 40	INVESTMENT PROPERTY	116

**Table 4: Score of Items** 

ITEM	VIEWS	ITEM	VIEWS	ITEM	VIEWS	ITEM	VIEWS
1	21	23	16	45	12	67	13
2	9	24	12	46	7	68	15
3	14	25	14	47	23	69	11
4	7	26	14	48	11	70	14
5	17	27	11	49	17	71	16
6	13	28	10	50	15	72	15
7	11	29	10	51	13	73	9
8	16	30	15	52	9	74	8
9	16	31	14	53	14	75	14
10	10	32	15	54	14	76	7
11	13	33	9	55	15	77	10
12	9	34	15	56	16	78	12
13	15	35	13	57	15	79	14
14	23	36	14	58	9	80	11
15	18	37	10	59	15	81	12
16	18	38	22	60	9	82	10

17	12	39	12	61	17	83	11	
18	13	40	17	62	14	84	15	
19	11	41	7	63	12	85	13	
20	14	42	16	64	12	86	10	
21	11	43	16	65	14	87	12	
22	20	44	11	66	15	88	8	

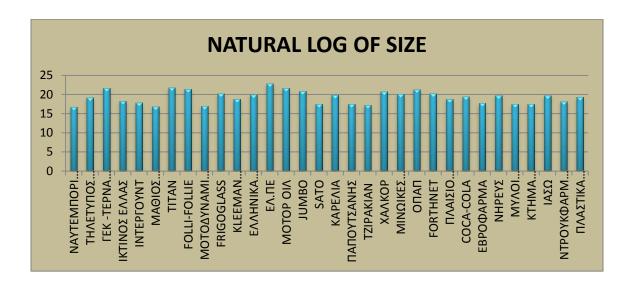
### 4.2 RESULTS OF VARIABLES

According the above we had to gather the size, the age, the profitability, the leverage of all the companies in our sample and define in addition both dummy variables industry type and auditing. In order to achieve this, examining the annual reports we took all our data from the balance sheets.

#### 1) SIZE

According to the above analysis the size was measured as the total assets of each company of our sample. In order to have a homogenized result we adjusted the size as the natural logarithm of total assets. At chart 4 we can have a first view of the results.

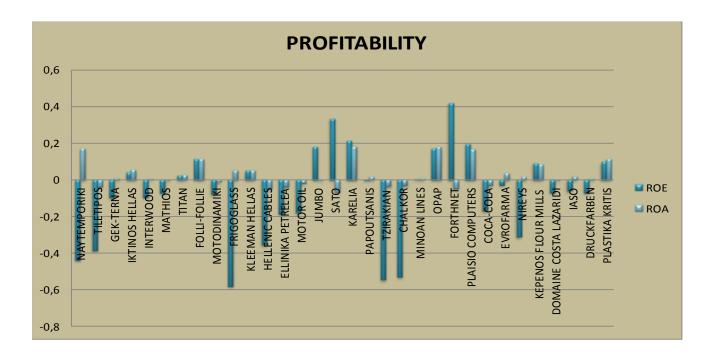
**Chart 4: Results of size** 



### 2) PROFITABILITY

We gathered data for both two ways measuring profitability as it had been mention above. We calculated the Return of Equity and the Return on assets. An optical view of both indicators is shown on chart 5



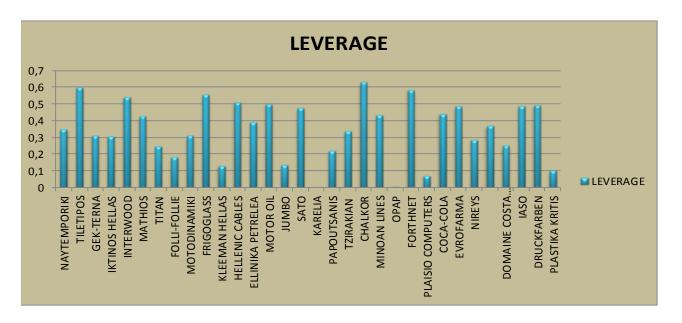


From the chart we can say that there is a correlation in direction of ROE and ROA in the majority of the companies but this is not consists a rule as we can see companies having positive ROE and negative ROA and the opposite.

### 3) LEVERAGE

For this variable we calculated the short-term debt with the long-term debt associating with the total assets. The optical view of the results is shown in chart 6.

**Chart 6: Results of leverage** 



From the chart of the leverage's results we can see that there are differences between the companies concerning their debts. Remarkable are the results for Opap which has very low leverage and more remarkable the results for Karelia of which leverage indicator is zero, something that means that Karelia has no debt.

### 4) AGE

As it analyzed in Chapter 3 we define the age of each company as the duration of its life from foundation.

**AGE** 160 140 120 100 60 40 20 SATO DOMAINE COSTA.. IASO HELLENIC CABLES JUMBO MINOAN LINES OPAP PLAISIO. COCA-COLA EVROFARMA **NIREYS NAYTEMPORIKI GEK-TERNA IKTINOS HELLAS** INTERWOOD TITAN MOTODINAMIKI **FRIGOGLASS** KLEEMAN HELLAS **ELLINIKA PETRELEA** KARELIA **PAPOUTSANIS** CHALKOR FORTHNET DRUCKFARBEN PLASTIKA KRITIS **MATHIOS** FOLLI-FOLLIE **MOTOR OIL TZIRAKIAN** 

**Chart 6: Results of age.** 

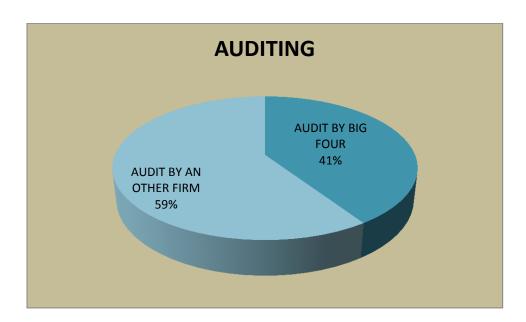
As a result from the above chart we have a spread of the life between the companies. The younger have been establised within the latest twenty years and on the other side there are four companies that overcome a century of life.

After the measurable variables below are some comments about the dummy variables: Auditing and Industry Type. As we mentioned in chapter 3 since auditing and industry type are categorical variables, dummy variables were used for each of these variables, omitting one from each category to avoid perfect collinearity.

### 5) AUDITING

From the countdown of the sample's results was found that the listed companies that are being audited from one of the Big four firms are less than companies that are being audited by smaller ones. However there is no big difference in the percentages as we can see at the chart 7.

**Chart 7: Results of Auditing.** 



Specifically in Table 5 we have analytical results for the big four audit firms and the number of the companies of the sample that they manage.

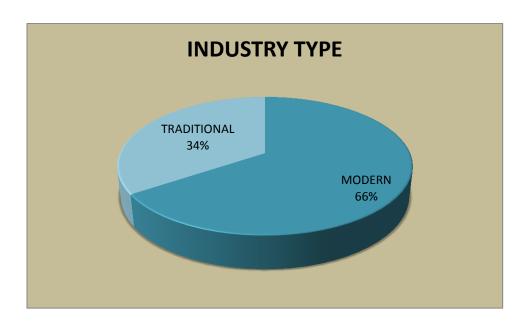
**Table 5: Score of Big Four Audit Firms** 

	TOTAL
AUDIT FIRMS	SCORE
ERNST & YANG	4
KPMG	3
PREISWATERHOUSECOOPERS	4
DELOITTE	2

### 6) INDUSTRY TYPE

The results gave us that the modern companies of our sample are twice than the traditional.

**Chart 8: Results of Industry Type** 



As we gave a little closer view of each variable seperately in in Table 6 we have the descruptive results for the depedend variables neluding the indepedend of score too and in Table 7 we have the results of both depedent and independent variables summirised.

**Table 6: Descriptive results** 

Included Observations:	32					
	SCORE	SIZE	AGE	ROE	ROA	LEVERAGE
MEAN	36,3125	19	55	-0,0733	0,0292	0,3460
MINIMUM	22	16,6814	20	-0,5809	-0,0675	0
MAXIMUM	68	23	146	0,41852	0,179953	0,62607813
MEDIAN	34,5000	19,3149	46,5000	-0,06571	0,009694	0,35437263
ST.DEVIATION	9,9820	1,6950	33,8811	0,248608	0,07036	0,17645205
SKEWNESS	1,2147	0,2090	1,4721	-0,38356	0,968232	-0,3832247
KURTOSIS	1,9886	-1,0088	1,5064	-0,17522	0,04464	-0,7813987

**Table 7: Results of model's variables** 

				PROF.	PROF.			INDUSTRY
COMPANIES	SCORE	SIZE	AGE	ROE	ROA	AUDIT	LEVERAGE	TYPE
NAYTEMPORIKI	46	16,68137	92	-0,439021	0,167781	1	0,343563	1
TILETIPOS	27	19,12872	27	-0,385782	-0,040394	0	0,595342	1
GEK-TERNA	68	21,59074	56	-0,097948	0,010039	0	0,307615	0
IKTINOS HELLAS	37	18,18770	42	0,039120	0,055152	0	0,303995	0
INTERWOOD	33	17,79476	33	-0,096866	0,006870	0	0,538905	0
MATHIOS	22	16,85986	136	-0,073669	-0,001043	0	0,424643	0
TITAN	42	21,75689	114	0,022560	0,027965	1	0,243208	0
FOLLI-FOLLIE	28	21,40110	34	0,114327	0,114283	0	0,178278	1
MOTODINAMIKI	27	16,96014	47	-0,078178	-0,011246	0	0,306007	1
FRIGOGLASS	33	20,12435	23	-0,580862	0,052326	1	0,551622	1
KLEEMAN HELLAS	28	18,71251	33	0,050420	0,052640	0	0,128616	1
HELLENIC CABLES	34	19,89694	67	-0,354100	-0,049308	1	0,507816	1
ELLINIKA	<u> </u>	,	<u> </u>	3,001100	3,0 .000		3,00.0.0	
PETRELEA	31	22,76699	58	-0,186959	-0,038789	1	0,387295	0
MOTOR OIL	36	21,60224	46	-0,177897	-0,019479	1	0,497416	0
JUMBO	46	20,80974	30	0,178940	-0,000044	0	0,134633	1
SATO	23	17,46635	52	0,333555	-0,067507	0	0,473628	1
KARELIA	31	19,82467	128	0,212118	0,179953	1	0	1
PAPOUTSANIS	38	17,41617	146	-0,003584	0,017208	0	0,216439	1
TZIRAKIAN	39	17,14897	52	-0,545540	-0,036454	0	0,334483	1
CHALKOR	54	20,68772	79	-0,531976	-0,032359	1	0,626078	1
MINOAN LINES	32	20,04854	44	0,000348	0,008935	1	0,429398	1
OPAP	29	21,28336	58	0,168824	0,176920	1	5,71E-07	1
FORTHNET	31	20,14169	21	0,418520	-0,049568	1	0,582709	1
PLAISIO								
COMPUTERS	41	18,76989	47	0,195461	0,166879	0	0,070377	1
COCA-COLA	52	19,39297	47	-0,169062	-0,030344	1	0,437216	1
EVROFARMA	50	17,67137	22	-0,029622	0,035086	0	0,482875	0
NIREYS	41	19,71558	28	-0,311718	0,016568	1	0,282594	0
KEPENOS FLOUR								
MILLS	25	17,41870	64	0,089038	0,081853	0	0,365183	0
DOMAINE COSTA								
LAZARIDI	36	17,41583	24	-0,071102	-0,002675	0	0,247904	0
IASO	38	19,63804	20	-0,060323	0,017986	0	0,482735	1
DRUCKFARBEN	35	18,10663	46	-0,071246	0,009349	0	0,491466	1
PLASTIKA KRITIS	29	19,23676	46	0,097688	0,114226	0	0,100853	1

### 4.3 MODEL RESULTS

At next stage we ran our multiple linear regression of our model, analyzed in Chapter 3. We ran our regression twice as the profitability measured in two ways and we tried to give results for its measured way separately. Therefore we have initially the results of the regression with the variable of ROA and after that we ran once again the regression excluding ROA and including ROE.

#### -REGRESSION WITH ROA

The results of the multiple regression analysis of the association between the company characteristics and the depth of information disclosure in the financial statements of a sample of listed companies are documented in Table 7. The result gave us as significance of the model. R2 (0.075741), which is not a high result, implies that independent variables explain 7, 5 percent of the variance in disclosure index. Following the process, the regression gave no satisfactory results for all the variables. The significance of each variable measured with the p-value result. As p-value is lower of 5% give the significance of this variable. Continuing the comments of the above regression we can say that together all variables explain -14% of the total variance of the information index.

**Table 7: Descriptive results of regression** 

Depedent Variable:	SCORE
Method:	Least Squares
Included Observations:	32

VARIABLE	COEFFICIENT	STD. ERROR	t- STATISTIC	PROB.
SIZE	1.380304	1.486723	0.928420	0.3621
С	9.472238	32.24779	0.293733	0.7714
AGE	0.005047	0.063582	0.079373	0.9374
PROFITABILITY				
(ROA)	2.679619	39.95472	0.067066	0.9471
AUDITING	-0.040706	5.222214	-0.007795	0.9938
LEVERAGE	4.817316	17.06353	0.282316	0.7800
INDUSTRY TYPE	-2.624281	4.075870	-0.643858	0.5255
R-squared	0.075741	Mean depedent var		36.31250
Adjusted R-squared	-0.146081	S.D. depedent var		9.982040
S.E. of Regression	10.68629	Akaike info	7.766441	
Sum squared resid	2854.921	Schwarz criterion		8.087070
Log likelihood	-117.2631	Hannan-Quinn criter.		7.872720
<b>Durbin-Watson</b>				
stat	0.341448			

The results of this regression gave us only no satisfactory results as none of the variables seem to be significant. A result that does not agree with any of the previous researches. The obvious conclusion of running this regression is that none of the above hypotheses is confirmed.

However the results the regression confirm in some way our predictions, where only leverage was a variable that in all previous researches was insignificant, we ran again the regression changing the variable of profitability from ROA to ROE. The results of this second regression are included in Table 8.

#### -REGRESSION WITH ROE

**Table 8: Descriptive results of regression** 

Depedent Variable:	SCORE
Method:	Least Squares
Included Observations:	32

- 10 10 10 10 10 10 10 10 10 10 10 10 10				
VARIABLE	COEFFICIENT	STD. ERROR	t- STATISTIC	PROB.
SIZE	1.675162	1.379064	1.214710	0.2358
AGE	0.002189	0.060071	0.036439	0.9712
С	6.859483	28.52019	0.240513	0.8119
PROFITABILITY				
(ROE)	-14.50626	8.490398	-1.708549	0.0999
AUDITING	-1.900396	4.885644	-0.388976	0.7006
LEVERAGE	-4.322438	12.39957	-0.348596	0.7303
INDUSTRY TYPE	-2.577602	3.852439	-0.669083	0.5096
R-squared	0.172230	Mean depe	edent var	36.31250
Adjusted R-squared	-0.026435	S.D. deped	ent var	9.982040
S.E. of Regression	10.11312	Akaike info criterion		7.656184
Sum squared resid	2556.879	Schwarz criterion		7.976814
Log likelihood	-115.4989	Hannan-Quinn criter.		7.762464
<b>Durbin-Watson</b>				
stat	0.866935			

The results of the multiple regression analysis of the association between the company characteristics and the depth of information disclosure in the financial statements of a sample of listed companies are documented in Table 7. The result statistically supports the significance of the model. R2 (0.172230), which is a respectable result, implies that independent variables explain 17 percent of the variance in disclosure index. The regression gave satisfactory results only for the variable of profitability. Profitability gave significance 10%. All variables explain 10 % of the total variance of the dependent variable, the information index. This variable provide a satisfactory basis for explaining the attitude of firms regarding the provision of financial information

Regarding the above we can examine each variable separately.

Size: size coefficient shows that this variable is insignificantly correlated to the disclosure level, there by not supporting that large firms disclose more data than small ones. This suggests that large Greek companies don't tend to disclose more information than small ones and can afford to do so, since their competitive advantage will not be affected by disclosing more information. The result doesn't agree with (Cooke,1992; Inchausti, 1997; Galani Alexandridis Stavropoulos, 2011; Takhtaei Mousavi, 2012; Baroma, 2014; Hossain, 2008; Cooke, 1989; Arif Tuhin, 2013; Galani Gavas Stavropoulos, 2011; Uyar Kilic Bayyurt, 2013; Uyar, 2011; Soliman, 2013; Ahmed Courtis, 1999; Akhtaruddin, 2005; Hossain Hammami, 2009; Alsaeed, 2006; Owusu Ansah, 1997; Wallace Naser, 1994; Abdulah Ismail, 2008;)The results are the opposite of the expected.

**Age**: It seems that firm age does not explain the variation of disclosure level among the Greek firms while the age variable is not significant. A similar result was found by (Galani Alexandridis Stavropoulos, 2011; Hossain, 2008; Soliman ,2013; Akhtaruddin, 2005;)

**Profitability:** From the results, none of the above performance-related variables provides an explanation of the disclosure level variation. The standard error of the coefficient of the profitability ratio was high, probably due to the fact that this variable is very volatile or erratic, and its value changes from one company to another. The negative relation that the regression gave us between profitability and disclosure index consider that exists due to the high percentage of negative profit that the sample gave us. Evidence from earlier studies is also mixed as discussed previously. In particular Galani Alexandridis Stavropoulos, 2011 and Inchausti, 1997 gave a negative correlation between profitability and disclosure index. According to the significance our results agree with (Hossain, 2008; Soliman, 2013; Patton Zelenka, 1997;)

**Auditing:** It seems that the audit firm selected by Greek firms doe not influence the information disclosed in annual reports. A similar result was found by (Soliman, 2013; Ahmed Courtis, 1999;)

**Leverage:** Neither here the leverage seems to have an influence in the information disclosed and similar results gave researches by (Inchausti, 1997; Baroma, 2014; Michailesco, 2010; Uyar Kilic Bayyurt, 2013;)

**Industry Type:** Last but not least we have the results of Industry Type that it seems to be insignificant for the disclosure index. The same feedback we take from (Cooke, 1989; Baroma, 2014; Inchausti, 1997;)

# CHAPTER 5

# **CONCLUSION AND IMPLICATIONS**

Since Greece adopted the IASs in 2004 in an attempt to improve the quality of financial reposting in the country, relatively few attempts have been made to investigate the depth of information disclosure and factors that may influence the information disclosure of listed Greek companies. This thesis, therefore, set out to examine such a relation. Consequently, a group of company characteristics was tested to determine the depth of information disclosure.

The aim of this study was to determine the factors that influence the disclosure of financial information by Greek firms. A general index was used that contained compulsory information. According to the results obtained through the regression analysis, the hypotheses concerning size and profitability provide a satisfactory basis for explaining the attitude of firms regarding the provision of financial information. Other hypotheses, relating to variables such as age, leverage, auditing and Industry type were rejected by the analysis.

To investigate this association, a sample of non-financial Greek firms listed on Athens Stock Exchange was taken. An unweighted disclosure index, consisted of 88 mandatory items, was constructed to assess the depth of information disclosure of the sample. Items were chosen from checklist of IFRS-IAS according to standards that were gone to be applicable for the sample. Moreover the determined companies' attributes were then regressed against the constructed disclosure index to recognize factors that may influence the depth of information disclosure.

Mandatory disclosure practices of Greek companies appear not to be effective. Specifically, the study reveals that firms, on average, report 41% of the mandatory information. Therefore there is  $\pi\epsilon\rho\iota\theta\omega\rho\iota$ o for improvements in mandatory disclosure level. Improvements can be achieved by introducing educational policies to raise the awareness of companies about their disclosure responsibilities.

Size is a dominant corporate characteristic in explaining mandatory disclosure practices. The results of the regression analysis reported a insignificantly relation between size and disclosure level. And for this reason the hypothesis H1 is not confirmed. Larger firms indeed don't include more information in their annual reports than the smaller.

Profitability is also a dominant corporate characteristic in explaining mandatory disclosure practices. The result of the regression analysis reported a significantly but negatively between profitability and disclosure level. Therefore the hypothesis H3 is not rejected but it functions to the opposite direction.

We consider this result came out because the majority of firms end up the year of 2014 with losses.

Following the results of size, it is found out that firm age, leverage, auditing and industry type have no effect on mandatory disclosure level.

The study contributes to accounting research and suggests a better review of the disclosure content of annual reports from responsible committees in order to achieve a higher level of compliance with mandatory disclosure requirements.

The limitation of the research is a single year and a single country. In order to understand the nature of overall disclosure, it is necessary to undertake a study taking more years' data in order to investigate whether the quality of disclosure has improved over time. The present study is limited to the number of the companies listed on the Greek stock exchange. Future research could investigate disclosure performance of more or all the listed companies. Studies should investigate the global stock markets. So the factor of different regulation could participate. Research could also explore the variations in disclosure between listed and unlisted companies. Moreover, firm characteristics like listing status, cross listing, dividend pay out, ownership diffusion, corporate ownership should be investigated as determinants of mandatory disclosures.

# **APPENDIX**

#### **APENDIX A: COMPANIES OF SAMPLE**

APENDIX A: COMPAN
COMPANIES
NAYTEMPORIKI
TILETIPOS
GEK-TERNA
IKTINOS HELLAS
INTERWOOD
MATHIOS
TITAN
FOLLI-FOLLIE
MOTODINAMIKI
FRIGOGLASS
KLEEMAN HELLAS
HELLENIC CABLES
ELLINIKA PETRELEA
MOTOR OIL
JUMBO
SATO
KARELIA
PAPOUTSANIS
TZIRAKIAN
CHALKOR
MINOAN LINES
OPAP
FORTHNET
PLAISIO COMPUTERS
COCA-COLA
EVROFARMA
NIREYS
KEPENOS FLOUR
MILLS
DOMAINE COSTA
LAZARIDI
IASO
DRUCKFARBEN

PLASTIKA KRITIS

NUMBER OF ITEM	DESCRIPTION OF ITEMS

1	Does the entity have financial assets and / or financial liabilities that are within the scope of IFRS9?
2	Has the entity derecognised any financial assets?
3	Has the entity transferred any financial assets?
4	Has the entity derecognised any financial liabilities?
5	Has the entity designated financial assets at fair value through profit or loss?
6	Has the entity designated financial liabilities at fair value through profit or loss?
7	Has the entity reclassified financial instruments?
8	Has the entity applied hedge accounting?
9	Does the entity have financial instruments carried at amortised cost?
10	Has the entity got financial assets which are equity instruments?
11	Has the entity got financial liabilities which are designated as at fair value through profit or loss?
12	Does the entity have financial instruments measured at fair value through other comprehensive income in accordance with paragraph 4.1.2A?
13	Is the entity applying IFRS 9 and has not chosen as its accounting policy to continue to apply the hedge accounting requirements of this Standard (see paragraph 7.2.19 of IFRS 9)?
14	Does the reporting entity 'control' one or more entities during or at the end of the reporting period?
15	A) Does the reporting entity have power over an investee?
16	B) Does the reporting entity have exposure or rights to variable returns from its involvement with the investee?
17	C) Does the reporting entity have ability to use its power over the investee to affect the amount of the reporting entity's returns?
18	Have changes in reporting entity's ownership interest in a subsidiary resulted in a loss of control?
19	Is the reporting entity applying the Investment Entity amendment?
	Does the entity have any assets or liabilities for which another IFRS requires or permits fair
20	value measurements or disclosures about fair value measurements?
21	Does the entity purchase goods for resale (for example merchandise, land)?
22	Does the entity produce or manufacture inventories?
23	Does the entity purchase any materials or supplies to be used in the rendering of services?
24	Does the entity hold any agricultural produce measured in accordance with IAS 2?
	Has the entity developed, in accordance with IFRSs, accounting policies that represent the
	specific principles, bases, conventions, rules and practices to be applied in preparing and
25	presenting its financial statements?
26	Has the adoption of an IFRS or an Interpretation resulted in a change in accounting policy?
	Has the entity voluntarily changed any accounting policy during the year (except for
27	changes resulting from the adoption of a new Standard)?
28	Has there been a change in accounting estimate during the year?
29	During the current period, did the entity discover any errors in the preparation of financial statements of prior periods?

	Has the entity negotiated a contract for the construction of a single asset, or the construction
	of a number of assets which are closely interrelated or interdependent in terms of their
	design, technology and function or their ultimate purpose or use (i.e. a "construction
30	contract" as defined in IAS 11)?
31	Did the entity hold, construct or acquire any property, plant or equipment during the year?
	Did the entity incur any subsequent expenditure relating to an existing item of property,
32	plant and equipment during the year?
	Does the entity have any obligations to dismantle, remove and restore items of property,
	plant and equipment (commonly referred to as 'decommissioning, restoration and similar
33	liabilities')?
2.4	Did the entity acquire an item of property, plant and equipment in exchange for another
34	asset?
25	Does the entity hold/own assets held at cost less accumulated depreciation and accumulated
35	impairment loss under the cost model?
36	Does the entity revalue any class of its property, plant and equipment under the revaluation model?
30	Did the entity sell, scrap or otherwise dispose of any property, plant and equipment during
37	the year?
31	Does the entity sell goods to its customers (this may include both goods that were
	manufactured or produced by the entity for the purpose of sale, or goods that were
38	specifically purchased for resale)?
	Does the entity render a service to its customers (the rendering of a service normally
39	involves the performance of a contractually agreed task over a period of time)?
40	Does the entity generate income by allowing customers the use of its assets?
41	Does the entity provide finance in conjunction with the sale of goods?
	Has the entity accepted goods or other services in exchange for the delivery of goods or
42	services (i.e. has it entered into any exchange or barter transactions)?
	Does the entity enter into transactions that comprise more than one component (e.g. delivery
43	of both goods and services, delivery of a number of different goods or services)?
44	Does the entity enter into buy-back / repurchase agreements?
	Does the entity provide its customers with incentives to buy goods or services by providing
45	award credits as part of sales transactions?
46	Does the entity enter into agreements for the construction of real estate?
	Does the entity recognise assets such as property, plant and equipment and investment
47	properties that are measured on a cost basis, or intangible assets?
40	Has the entity recognised any intangible assets with an indefinite useful life or any
48	intangible assets not yet available for use?
49	Has the entity recognised goodwill acquired in a business combination in its financial statements?
49	
50	Does the entity recognise assets, for which there is an indication that the assets may be impaired? (Refer to compliance questions for 36A)
30	Does the entity have different divisions, business units, branches or outlets that generate
	cash flows independently from the other businesses within the entity? OR
51	Does the entity have investments in subsidiaries, associates or joint ventures?
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	Does the entity have any corporate assets that exist for the benefit of different divisions or
	business units within the larger entity, but do not generate cash-flows independently from
52	the other divisions/business units, for example the building of a headquarters or a research centre?
53	Did the entity recognise an impairment loss in a previous period?
33	Does the entity have any present obligations at the end of the reporting period (legal or
	constructive) of uncertain timing or amount that are expected to result in outflows of
54	resources embodying economic benefits?
	Does the entity have any possible obligations arising from past events that will only be
	confirmed by the occurrence of uncertain future events that are not wholly within the
	control of the entity, OR
	Does the entity have any present obligations arising from past events that have not been recognised as a provision because it is not probable that an outflow of resources embodying
	economic benefits will be required to settle the obligation, or the amount of the obligation
	cannot be measured with sufficient reliability? (Does the entity have any contingent
55	liabilities?)
	Does the entity have any possible assets that arise from past events and whose existence
	will be confirmed only by the occurrence or non-occurrence of one or more uncertain future
56	events not wholly within the control of the entity? (Does the entity have any contingent
56	Is the entity a party to any contract where the unavoidable costs of meeting the obligations
	under the contract exceed the economic benefits expected to be received under it, for
	example the long-term lease of a building that the entity is no longer using? (Is the entity
57	party to any onerous contracts?)
	Has the entity planned or embarked on a restructuring of the business, i.e. a programme that
<b>5</b> 0	is planned and controlled by management that materially changes the scope of the business
58	undertaken by the entity; or the manner in which business is conducted?  Did the entity have an interest in, or have an obligation to make potential additional
	contributions to, a fund or a trust in order to segregate assets to fund some or all of the costs
59	of decommissioning, restoration and environmental rehabilitation?
	Does the entity have any obligations related to decommissioning of waste electrical and
	electronic equipment pursuant to the European Union's Directive on Waste Electrical and
60	Electronic Equipment (WE&EE)?
61	Did the entity hold or acquire any intangible assets (for example intellectual property,
	trademarks, brands, patents, copyrights or customer lists) during the year?  Does the entity recognise any intangible assets that have been generated internally (for
	example designs, processes, goodwill, customer lists or web sites) on its statement of
62	financial position?
	Did the entity incur additional expenditure, relating to an existing item of intangible assets
63	during the year?
	Did the entity incur expenditure on starting up an operation or business, training or
64	advertising & promotion?
65	Did the entity incur expenditure related to research and/or development?
66	Does the entity hold/own intangible assets accounted for using the cost model?
67	Does the entity revalue any class of its intangible assets under the revaluation model?

68	Does the entity hold any intangible assets with an indefinite useful life?
	Did the entity sell, scrap or otherwise dispose of any intangible assets during the year, or are
69	there intangible assets from which no further economic benefits are anticipated?
70	Has the entity incurred costs related to the development of an internet web site or intranet?
	Does one or more of the scope exceptions result in the contract, or a portion of the contract
71	falling outside IAS 39?
72	Is the contract a financial asset?
73	Is the contract a financial liability?
74	Does the contract contain one or more embedded derivatives?
75	Is the contract a derivative instrument?
76	Has the entity removed (i.e. derecognised) a previously recognised financial asset (or a portion of the financial asset) from its statement of financial position?
	Has the entity removed (i.e. derecognised) a previously recognised financial liability (or a
77	portion of the financial liability) from its statement of financial position?
	Has the entity designated a hedging relationship for accounting purposes between one or
78	more hedging instruments and one or more hedged items?
	During the year, did the entity hold, lease under a finance lease, or acquire any land,
79	buildings or properties?
	Did the entity hold a property interest under an operating lease that is accounted for as an
80	investment property?
	During the year, did the entity hold, lease under a finance lease, or acquire any property
81	meeting IAS 40's definition of investment property?
	During the year, did the entity incur additional expenditure relating to an existing
82	investment property?
	Has the entity acquired investment property in exchange for a non-monetary asset(s), or a
83	combination of monetary and non-monetary asset(s)?
84	Has the entity chosen the fair value model to account for all its investment property?
85	Has the entity chosen the cost model to account for all its investment property?
86	Has any item of investment property been transferred during the year?
	During the period, did the entity dispose of any investment property (whether by sale or
	entering a finance lease or otherwise) or permanently withdraw any investment property
87	from use?
	During the period, has the entity received compensation from third parties for investment
88	property that was impaired, lost or given up?



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#### *In order to gather our data the following are used:*

- 1. -Annual Report of MATHIOS 2014
- 2. Annual Report of PLASTIKA KRITIS 2014
- 3. Annual Report of DRUCKFARBEN 2014
- 4. Annual Report of IASO 2014
- 5. Annual Report of DOMAINE COSTA LASARIDI 2014
- 6. Annual Report of KEPENOS FLOUR MILLS 2014
- 7. Annual Report of EVROFARMA 2014
- 8. Annual Report of NIREYS 2014
- 9. Annual Report of COCA-COLA 3E 2014
- 10. Annual Report of PLAISIO COMPUTERS 2014
- 11. Annual Report of FORTHNET 2014
- 12. Annual Report of OPAP 2014
- 13. Annual Report of MINOAN LINES 2014
- 14. Annual Report of CHALKOR 2014
- 15. Annual Report of TZIRAKIAN 2014
- 16. Annual Report of PAPOUTSANIS 2014
- 17. Annual Report of KARELIA 2014

- 18. Annual Report of SATO 2014
- 19. Annual Report of JUMBO 2014
- 20. Annual Report of MOTOR OIL 2014
- 21. Annual Report of ELLINIKA PETRELEA 2014
- 22. Annual Report of HELLENIC CABLES 2014
- 23. Annual Report of LEEMAN HELLAS 2014
- 24. Annual Report of FRIGOGLASS 2014
- 25. Annual Report of MOTODINAMIKI 2014
- 26. Annual Report of FOLLI-FOLLIE 2014
- 27. Annual Report of TITAN 2014
- 28. Annual Report of INTERWOOD 2014
- 29. Annual Report of IKTINOS HELLAS 2014
- 30. Annual Report of GEK-TERNA 2014
- 31. Annual Report of TILETIPOS 2014
- 32. Annual Report of NAUTEMPORIKI 2014