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An investigation of compliance with International Financial Reporting Standards by listed companies in Turkey

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Abstract: This study investigates the extent of compliance with international financial reporting standards (IFRSs) by listed companies in Turkey. Based on a sample of 168 companies we investigate the extent to which companies comply with IFRS disclosure requirements in their year - 2011 financial statements. Compliance levels range from 64 percent to 92 percent, with an average of 79 percent. The results unveil a considerable extent of non-compliance. The overall level of compliance with IFRSs disclosures is positively related to firms being audited by Big 4 auditing firms. Compliance is also negatively associated with the level of leverage. Other company characteristics, such as profitability, company size and age are determined to be statistically insignificant in explaining the level of disclosure compliance with IFRSs. The findings add to the growing concerns regarding the lack of effective monitoring in the Turkish capital market.

Keywords: IFRS implementation, IFRS compliance, disclosure checklist, company characteristics, Turkey

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1. Introduction

Globalization of financial markets has accelerated the demand for more understandable and internationally comparable financial reporting. International Accounting Standards Board (IASB) was formed to develop a single set of high

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quality, understandable and enforceable global accounting standards that require transparent and comparable information in general purpose financial statements. IFRSs (International Financial Financial Reporting Standards) which were issued by IASB aim to increase the consistency, transparency and comparability of financial statements. Numerous developed and developing countries have been accepted IFRSs (Demir *et al.*, 2013: 74). A major milestone towards IFRS adoption was the decision of European Commission to adopt IFRS for listed companies. In 2002, European Union approved a regulation requiring all European Union listed companies to comply with IFRSs beginning in 2005. As a result of these developments, the desired goal of internationally comparable financial reporting was almost achieved. However, companies' compiance level with IFRSs requirements is still in question.

In recent years, the issue of compliance with IFRSs has received a great deal of attention from many researchers. The extent to which companies comply with IFRSs disclosure requirements, as well as the association between the level of disclosure and company characteristics (namely; company size, leverage, profitability, company age, and audit firm size) are examined in many researches. However, the results obtained from these researches are inconsistent. For example, Dumontier and Raffournier (1998), Naser (1998), Ali *et al.* (2004), Akhtaruddin (2005), Alsaeed (2006), Al-Shammari *et al.* (2008), Hossain and Hammami (2009), Al-Shammari (2011) and Juhmani (2012) found a positive influence of company size on the level of compliance with IFRSs while Street and Bryant (2000) and Glaum and Street (2003) reported insignificant association.

This paper investigates the disclosure practices of listed companies in Turkey to see how they comply with mandatory rules established by IASB. In addition, it examines the association between company characteristics and the extent of disclosure. This study contributes to the literature by extending international accounting compliance studies in developping economies and by providing insights to compliance level of listed companies with IFRS disclosure requirements in Turkey, a code-law country with a very different cultural and institutional framework from that of common law countries.

Using a self-constructed disclosure compliance checklist, the extent of 168 listed companies' compliance with relevant IFRSs at the end of 2011 is measured. Data was collected manually from annual reports of companies which are available at web site of Istanbul Stock Exchange. The results reported that the mean level of disclosure compliance with IFRSs was 79 percent. The level of compliance was lower than that observed in developed countries such as Australia (0.94; Tower *et al.*, 1999), and Germany (0.81; Glaum & Street, 2003). This suggests that incentives for compliance are less in Turkey than in developed countries. Compared to developping countries, the level of compliance in Turkey is higher

than that observed in Jordan (0.63; Naser, 1998), Bangladesh (0.44; Akhtaruddin, 2005) and Saudi Arabia (0.33; Alsaeed, 2006) but lower than that observed in Gulf Co-Operation Member States (0.82; Al-Shammari *et al.*, 2008), Kuwait (0.82; Al-Shammari, 2011) and Bahrain (0.81; Juhmani, 2012).

The association between the level of disclosure and company characteristics is analyzed using regression analysis. Results show that disclosure compliance varies by leverage and audit firm size. Leverage is negatively associated to the level of disclosure compliance with IFRSs while the level of compliance is associated with having a Big 4 auditor. Other company characteristics, such as profitability, company size and age, are found insignificant in explaining the level of disclosure compliance with IFRSs.

The remainder of the paper is organized as follows. The First section presents the corporate financial reporting environment in Turkey. The Second section reviews relevant literature and includes hypotheses. The Third section describes sample selection, data collection and statistical method. Results are reported in the Fourth section. Conclusions, limitations and suggestions for further research complete the paper.

2. The environment of corporate reporting in Turkey

The need for attracting foreign investments and the application of Turkey for full European membership require Turkey to adopt and implement IFRSs. Turkish Accounting Standards Board [1] (now Public Oversight Accounting and Auditing Standards Authority) was formed to set and issue Turkish Accounting Standards compliant with the international standards, to ensure uniformity, high quality and confidence in the area of financial reporting. Some countries adopt IFRSs as their national GAAP, while some other countries use IFRSs as guidance to develop their own accounting standards. Turkey lies in the second category. All of IFRSs were translated into Turkish and accepted as TFRSs (Turkish Financial Reporting Standards).

An important development in reference to the wider adoption and application of IFRSs in Turkey is the communiqué issued by Turkish Capital Markets Board wich mandates listed companies to present their financial statements in accordance with IFRSs since the fiscal year beginning after 1 January 2005. Furthermore, New Turkish Commercial Legislation which was legalized in 2012 and entered into force in 2013 adopted several accounting and reporting measures aimed at improving the local investment environment. These measures included the mandatory implementation of TFRSs by all companies, whether listed or non-listed, from the year beginning with January 1, 2013. According to the decision of

Public Oversight Accounting and Auditing Standards Authority, all listed companies will prepare and present their financial statements in accordance with TFRSs from the period beginning with January 2013. However, only non-listed companies with total assets of more than 150,000,000 Turkish Liras, total revenues of more than 200,000,000 Turkish liras and number of employees of more than 500 will adopt TFRSs for the year 2013. The Board plans to reduce gradually these criteria and so TFRSs will supersede Turkish GAAP and full transition to IFRSs will be achieved in the near future.

3. Literature review and hypothesis development

There are two accepted global financial reporting languages, the Unites States Generally Accepted Accounting Principles (US GAAP) and the IFRSs. Compliance with disclosure requirements of these global financial reporting languages has been measured in prior research. The majority of studies in the literature focused on the level of compliance with mandatory disclosure requirements and the association between the level of disclosure and corporate characteristics. These characteristics include size, listing status, leverage, profitability, industry, type of auditor, size of the equity market, number of shareholders, degree of economic development and culture. Evidence produced on this research area is mixed.

Malone *et al.* (1993) investigate the extent of financial disclosure of 125 oil and gas firms which are preparing their financial statements in accordance with US GAAP. Using a weighted index of disclosure items, Malone *et al.* (1993) identify a positive association between the level of information disclosure and four corporate characteristics, namely, leverage, listing status, leverage and number of shareholders. However, size, profitability and auditor type are determined to be statistically insignificant.

Dumontier and Raffournier (1998) test the association between the level of disclosure and corporate characteristics on a sample of 133 Swiss listed companies. Univariate analyses show a positive influence of size, intemationality, listing status, auditor type and ownership diffusion on voluntary compliance with IFRSs. Inversely, leverage, profitability and capital intensity are found to be insignificant in explaining the level of compliance. They conclude that political costs and pressures from outside markets play a major role in the decision to apply IFRSs for Swiss listed companies.

Naser (1998) empirically examined the effect of specific financial characteristics on the comprehensiveness of disclosure in the annual reports of a sample of 54 companies in Jordan which are preparing and presenting their financial statements

in accordance with IFRSs. His findings reveal that disclosure compliance improved after international standards were adopted. The empirical evidence also show that company size, leverage and return on equity are positively related to the comprehensiveness of disclosure of the sample companies. Other corporate characteristics such as industry type, audit firm size and ownership structure, however, are found to be unrelated to the level of compliance with IFRSs.

Street and Bryant (2000) examine the factors associated with the the overall level of disclosure and the level of compliance by analyzing 1998 annual reports of companies claiming to use IFRSs. Their results show that the overall level of disclosure is greater for companies with US listings. This finding supports the idea that there is a significant association between listing status and overall level of disclosure. In addition to listing status, their findings indicate that the accounting policies footnote and the audit opinion provide a better indication of the overall level of disclosure. On the other hand, overall level of disclosure is found to be unrelated to other variables including size and profitability. Following a similar methodology, Street and Gray (2001) examine compliance with IFRSs required disclosures. Like Street and Bryant (2000), Street and Gray (2001) report a significant positive association between the level of compliance with IFRSs and having a US listing.

Glaum and Street (2003) examine compliance with both IFRSs and US GAAP for companies listed on Germany's New Market. Based on a sample of 100 firms that apply IFRSs and 100 that apply US GAAP, they investigate the extent to which companies comply with IFRSs and US GAAP disclosure requirements. Their results show a considerable extent of non-compliance implying lack of effective supervision in the German capital market. Moreover, the average compliance level is significantly lower for companies that apply IFRSs as compared to companies applying US GAAP. The overall level of compliance with IFRSs and US GAAP disclosures is positively related to firms being audited by Big 5 auditing firms and to cross-listings on US exchanges while company size and company age is not significantly related to the level of compliance with IFRSs and US GAAP disclosures.

In other study, Ali *et al.* (2004) examine disclosure compliance of listed companies within the three major countries in South Asia, namely India, Pakistan and Bangladesh and evaluates the corporate attributes which influence the degree of compliance with these standards. Using a scoring system to develop a total compliance index for each sample company, the results indicate significant variation in total disclosure compliance levels across companies and different national accounting standards. Their results also support the idea that compliance levels are positively related to company size, profitability and multinational-company status. However, leverage levels and the quality of external auditors are found to be insignificant in explaining the compliance level.

In order to examine the association between company characteristics and the extent of disclosure, Akhtaruddin (2005) investigates disclosure practices of listed companies in Bangladesh. His results show that many corporate annual reports do not meet the disclosure requirements of IFRSs in Bangladesh. In addition, his analysis does not support the hypothesis that old companies will provide more information than new companies and company status has no effect on disclosure. However, he finds little support for the relationship between size and profitability and the level of disclosure.

The impact of several firm characteristics on the extent of voluntary disclosure is another research area. Alsaeed (2006) developped a disclosure checklist consisting of 20 voluntary items to assess the level of disclosure in the annual reports of non-financial Saudi firms and to empirically investigate the hypothesized impact of several firm characteristics on the extent of voluntary disclosure. His findings report low disclosure level. Further, the study revealed that large firms tend to present more voluntary information than small firms. The remaining firm characteristics (debt, ownership dispersion, company age, profit magrin, return on equity and liquidity) however, were found to be insignificant in explaining the variation of voluntary disclosure.

Al-Shammari *et al.* (2008) investigate the extent of compliance with IFRSs by companies in the Gulf Co-Operation Council (GCC) member states. They find that compliance for both measurement and disclosure increased over the period 1996-2002. Moreover, the level of mandatory compliance increases with a company's size, leverage, and internationality as suggested by the literature. Al-Shammari *et al.* (2008) also report that compliance improved in Kuwait and Oman more so than in the other GCC member states thanks to monitoring and enforcement in these countries beginning in 1999.

In a study examining the extent to which non-US firms comply with IFRS disclosure requirements in their 1999 and 2000 annual reports, Hodgdon *et al.* (2009) find that compliance improves between 1999 and 2000. Their results also reveal that auditor choice is positively related to firm compliance when controlling for unmeasured, firm-specific effects.

Hossain and Hammami (2009) studied the association between firm-specific characteristics and disclosure in Qatar. A total of 44 voluntary items developed to assess the level of disclosure in the annual reports of 25 listed firms. The findings indicate that age, size and complexity are significantly positively associated with the level of disclosure, however, profitability is found to be insignificant in explaining the variation of voluntary disclosure.

In the empirical study that examine the extent of disclosure compliance with IFRSs by 168 companies listed in the Kuwait Stock Exchange for the financial year ending in 2008, Al-Shammari (2011) reports that the mean level of disclosure compliance with IFRSs in Kuwait (0.82) is lower than that observed in developed countries. Moreover, multivariate regression analysis provides evidence that the level of compliance is associated positively with company size, age, internationality, auditor type and negatively with liquidity.

Based on a sample of firms listed in Bahrain Stock Exchange, Juhmani (2012) examines the level of compliance with mandatory IFRSs disclosure requirements and the association between the level of disclosure and corporate characteristics. His findings indicate that the level of compliance is positively and significantly associated with company size and audit firm size while profitability, leverage and company age are found to be insignificant in explaining the level of compliance with IFRSs disclosure.

3.1. Company size

It is commonly argued that because larger companies act to protect their reputation and avoid government intervention (Watts & Zimmerman, 1978; Holthausen & Leftwich, 1983) they are more likely to comply with accounting standards. This argument is supported by agency theory framework (Jensen & Meckling, 1976), which proposes that larger firms having higher agency cost because of a more complex organizational structure use disclosure to reduce informarmation asymmetry between company insiders (managers) and providers of capital (outsiders). On the other hand, larger firms are more likely to be more international that is, to have more foreign investors, foreign sales, or to have foreign stock exchange listings (Al-Shammari *et al.*, 2008). The findings of empirical studies investigating the association between disclosure compliance and listing status, such as Malone *et al.* (1993), Street and Bryant (2000), Street and Gray (2001) and Glaum and Street (2003), show that companies which are cross-listed have higher levels of compliance. Hence, there is a general agreement that a positive relationship between the size of a firm and its extent of disclosure is to be expected. Studies of the relationship between disclosure compliance with IFRSs and company size are, however, mixed. For instance, Naser (1998), Dumontier and Raffournier (1998), Ali *et al.* (2004), Alsaeed (2006), Juhmani (2012), Akhtaruddin (2005), Hossain and Hammami (2009), Al-Shammari *et al.* (2008) and Al-Shammari (2011) report that company size is positively related to IFRS compliance, while Malone *et al.* (1993), Street and Bryant (2000), Street and Gray (2001) and Glaum and Street (2003) find no significant relationship.

The size variables considered in previous studies include revenue (Hodgdon *et al.*, 2009), total assets (Naser, 1998; Street & Bryant, 2000; Juhmani, 2012), firm value (Glaum & Street, 2003), number of employees, and number of shareholdings.

Consistent with Street and Bryant (2000) and Juhmani (2012), we measure company size using companies' total of assets.

Based on the above discussion, it can be expected that companies with a higher size disclose information to a greater extent than companies with a lower size. Thus, the hypothesis developed for the study is as follows:

H1. *There is a significant positive association between the company size and the extent of mandatory disclosure.*

3.2. Profitability

The influence of profitability on the level of compliance with IFRSs may be based on several arguments. As suggested by signaling theory, since managers of more profitable companies wish to signal their success and strength to outsiders, companies with larger profits are more likely to disclose more information. Moreover, in order to justify their position and compensation package managers of more profitable companies are expected to disclose more information than nonprofitable companies.

With respect to the association between the extent of compliance with IFRSs disclosure requirements and profitability, prior studies show inconsistent findings. For example, Malone *et al.* (1993), Durantier and Raffournier (1998), Street and Bryant (2000), Hossain and Hammami (2009) and Street and Gray (2001) find no association between profitability and the level of voluntary compliance with IFRSs disclosure requirements. Similarily, Glaum and Street (2003), Al-Saeed (2006) and Juhmani (2012) report that profitability is not significantly related to the level of mandatory compliance with IFRSs disclosure requirements. On the other hand, Naser (1998), Ali *et al.* (2004), Akhtaruddin (2005) and Al-Shammari (2011) report a positive relationship.

Researchers of previous studies have used net profit to sales (Akhtarrudin, 2005), earnings growth, dividend growth, return on assets, and return on equity (Juhmani, 2012; Hodgdon *et al.*, 2009; Al-Shammari, 2011; Akhtaruddin, 2005) as proxies for profitability. Consistent with most previous research, we measure profitability using companies' return on equity (ROE), measured as the ratio of the companies' net income to the companies' shareholders' equity.

Based on the arguments, it can be expected that companies with larger profits disclose information to a greater extent than companies with a lower profits. Thus, the hypothesis developed for the study is as follows:

H2. *There is a significant positive association between the firm profitability and the extent of mandatory disclosure.*

3.3. Leverage

It has been suggested that leverage is relevant in explaining variation in the extent of disclosure compliance. According to Jensen and Meckling (1976) the level of information disclosure increases as the leverage of the firm grows. Therefore, companies with higher leverage can be expected to comply with IFRSs to reduce agency costs, to reassure debtholders that their interests are protected (Al-Shammari, 2011). Moeover, companies with higher leverage can be expected to disclose detailed information to enhance their chance of getting funds from financial institutions.

Prior studies report mixed findings regarding the association between leverage and the level of disclosure, some studies some studies have reported a positive association (e. g. Malone *et al.*, 1993; Naser, 1998; Al-Shammari *et al.,* 2008), other studies reported a negative relationship (Juhmani, 2006; Al-Shammari *et al.*, 2011). Hovever, most of the previous research report that leverage is not significantly related to the level of compliance with IFRSs disclosure requirements (e. g. Dumontier & Raffournier, 1998; Ali *et al.*, 2004; Alsaeed, 2006; Juhmani, 2012).

Prior research has used a number of measures of leverage including debt to total assets, total debt and debt to equity ratios. The present study uses the total debt to total assets ratio as the measure of leverage. Based on the above discussion, it can be expected that companies with higher leverage disclose information to a greater extent than companies with lower leverage. Thus, the hypothesis developed for the study is as follows:

H3. *There is a significant positive association between the level of leverage and the extent of mandatory disclosure.*

3.4. Company age

Company age has often been used in previous studies examining disclosure variability. It is generally argued that old firms disclose more information. Several factors support this argument. First, old companies are more likely to have established, well-organised professional staff to deal with the technical aspects of their financial statements. Their accounting systems are more capable to produce detailled information. Therefore, older companies with more established accounting systems are more likely to be able to meet the detailled IFRSs requirements than younger companies with less established and less comprehensive accounting systems (Al-Shammari, 2011). Second, since old firms try to enhance their reputation and image in the market, they are more likely to comply with disclosure requirements of IFRSs (Akhtaruddin, 2005). Third, young firms are not likely to disclose full information about their financial results and position, because this may prove to be harmful if sensitive information is disclosed to the established competitors (Owusu-Ansah, 1998).

Previous research have examined the effect of company age on the level of disclosure compliance with IFRSs. However, empirical results from the research are mixed. For example Glaum and Street (2003), Akhtaruddin (2005), Alsaeed (2006) and Juhmani (2012) have reported no association between company age and the level of information disclosure, while, Hossain and Hammani (2009) and Al-Shammari (2011) reported a positive association between firm age and level of disclosure compliance with IFRSs. The Turkish evidence regarding the influence of firm age on the level of disclosure compliance with IFRSs is tested by the following hypothesis:

H4. *There is a significant positive association between company age and the extent of mandatory disclosure.*

3.5. Audit firm size

The extent of a company's compliance with IFRSs may be associated with audit firm size. Agency theory suggests that large audit firms act as a mechanism to reduce agency costs and exert more of a monitoring role by limiting opportunistic behaviour by managers. Moreover, large audit firms are more likely to associate with clients that disclose a high level of information in their annual reports (Malone *et al.*, 1993). Therefore, companies audited by large audit firms are more likely to comply with IFRSs disclosure requirements compared to those audited by small audit firms. Conventionally, larger audit firms are identified as being one of these Big Four international audit firms, and smaller audit firms are the rest.

The empirical evidence on relationship between information disclosure and size of audit firms has provided mixed results. While Dumontier and Raffournier (1998), Glaum and Street (2003), Hodgdon *et al.* (2009), Al-Shammari (2011) and Juhmani (2012) report a positive association between audit firm size and the level of disclosure, Malone *et al.* (1993), Naser (1998) and Ali *et al.* (2004) identify an insignificant relationship between these two variables:

H5. *There is a significant positive association between audit firm size and the extent of mandatory disclosure.*

4. Methodology

4.1. Sample selection and data collection

The sample used to measure the level of compliance with the mandatory IFRSs disclosure requirements and the association between corporate characteristics and the level of compliance consists of the firms included in Istanbul Stock Exchange

national index. These companies fall into 15 industries: agriculture-forestry and fishing, mining, manufacturing, electricity-gas and water, construction and public works, wholesale-retail trade-hotels and restaurants, transportation-telecommunication and storage, financial institutions, education-health-sports and other social services, renting and business activities, technology, professional-scientific and technical activities, administrative-support service activities, real estate activities and miscellaneous. To ensure that no bias was introduced into the analysis by including companies which, because of their activities, were unable to disclose some of the items in the disclosure index, only those non-financial companies with a primary interest in manufacturing activities were included (Ali *et al.*, 2004). The number of companies was thus reduced to 194. However, 26 companies are eliminated because of incomplete data. Therefore, the final sample consists of 168 manufacturing companies listed on Istanbul Stock Exchange national index.

The data for measuring the dependent and independent variables investigated in this study were manually collected from the sampled companies' annual reports that were downloaded from the official website of the Istanbul Stock Exchange. The annual reports of year 2011 were chosen because they are relatively more recent and easier to obtain.

4.2. Disclosure compliance index

In order to select proper items of information that are expected to be disclosed in IFRS based financial statements, we consulted the mandatory disclosure checklist used in prior studies. Furthermore, we considered mandatory disclosure requirements of all IFRSs while constituting the disclosure checklist. Appendix 1 presents the items included in the disclosure index.

Table 1 shows the distribution of 215 items of information included in disclosure compliance index: general presentation items 30%, statement of financial position items 24%, statement of profit or loss and other comprehensive income items 12% and special topics items 34% .

Table 1. Distribution of index items

	No. of Items	%
General presentation	65	30
Statement of financial position	51	24
Statement of profit or loss and other comprehensive income	26	12
Special topics	73	34
	215	100

There are two methods for determining the level of corporate disclosure: weighted and dichotomous approaches (Cooke, 1989). The weighted approach is based on the assumption that all items of information are not equally important and, therefore, researcher allocates arbitrarily weights to each items. Most researchers measuring compliance with IFRSs mandatory disclosure requirements employ the "dichotomous" disclosure index approach (Juhmani, 2012; Al-Shammari, 2011; Hossain & Hammami, 2009; Al-Shammari *et al.*, 2008). This method gives equal weight to the individual items required to be disclosed by all standards. One main problem of dichotomous approach is that a company may be penalized by assigning a score of zero for the absence of an item of information that is not applicable to it. In order to overcome this problem, the relevance of each absent item needs to be investigated and then classified as non-disclosure for a relevant item of reporting and non-applicable otherwise (Akhtaruddin, 2005). Following the prior researches, our study adopts "dichotomous" disclosure index approach in which we assigned a value of one if the company discloses an item of information and zero otherwise, when a disclosure is deemed irrelevant for a specific company, then the item is ignored in the computation of the index for that company.

Disclosure compliance index thus arrived at for a company is additive as follows:

Where, d = one if the item d_1 is disclosed; zero, if the item d_2 is not disclosed;
n = number of items.

4.3. The independent variables

Five company characteristics were examined for their association with the level of disclosure compliance to discover if the level of compliance with IFRSs was influenced by company characteristics. Data were obtained from companies' annual reports. Table 2 summarizes the independent variables and their proxies.

Table 2. Summary of the idependent variables

Variable	Proxy	Expected sign
Company size	Total assets	+
Profitability	Return on equity (ROE) = Net profit/Total shareholders' equity	+
Leverage	Total debt to total assets ratio	+
Company age	Number of years since foundation	+
Audit firm size	Dummy variable coded 1 = a company audited by local auditor with international affiliation (Big Four), 0 = a company audited by local auditor without international affiliation (non-Big Four)	

4.4. Model development

In order to assess the effect of each corporate characteristic on the the level of Turkish companies' compliance with the mandatory IFRSs disclosure requirements, the following multiple linear regression model was fitted to the data:

$$DI = \beta 0 + \beta 1\ TA + \beta 2\ LEV + \beta 3\ ROE + \beta 4\ CA + \beta 5\ AFS + e$$

where:

DI = Disclosure Index;
TA = Total Assets;
LEV = Leverage;
ROE = Return on Equity;
C*A* = **C**ompany Age
AFS = Audit firm size;
e = error term.

5. Results

5.1. Descriptive statistics

Descriptive statistics for the dependent and independent variables are reported in Table 3. The mean of the level of disclosure compliance with IFRSs of the sample companies was 79 percent with a minimum of 64 percent and a maximum of 92 percent indicating variations in the level of disclosure compliance with IFRSs in Turkey. It is lower than the level of disclosure compliance observed in Australia (0.94; Tower *et al.*, 1999), Germany (0.81; Glaum & Street, 2003), Gulf Co-Operation Member States (0.82; Al-Shammari *et al.*, 2008), Kuwait (0.82; Al-Shammari, 2011) and Bahrain (0.81; Juhmani, 2012), but higher than the level of disclosure compliance observed in Switzerland (0,74; Street & Gray, 2002), Jordan (0.63; Naser, 1998), Bangladesh (0.44; Akhtaruddin, 2005) and Saudi Arabia (0.33; Alsaeed, 2006). Table 3 also shows that the maximum level of compliance was 92 percent, indicating that no company in Turkey complied with all requirements of the IFRSs. Moreover, Table 3 reports a wide range of variation within the sample in the independent variables as indicated by the minimum and maximum values. The mean of company size was 854 TL millions with a minimum of 0,6 TL millions and a maximum of 14,800 TL millions. This size distribution was, as usual, skewed. Skewness was mitigated by utilizing the natural logarithm of size in the regression analysis, consistent with prior studies (Cooke, 1991; Wallace *et al.*, 1994).

Table 3. Descriptive statistics for the dependent and independent continuous variables

	Mean	Median	Maximum	Minimum	Std. Dev.
Dependant Variable					
Disclosure Compliance Index	0.79	0.79	0.92	0.64	0.03
Independent Variables					
Company size	8.54E+08	2.16E+08	1.48E+10	620,182	1.97E+09
Leverage	0.61	0.48	12,560	0.04	1.08
Profitability	1.73	0.08	281.85	-1.2	21.81
Company age	38.52	39	101	4	15.40

The average leverage for the sample companies was 61 percent with a minimum of 4 and a maximum of 12,560 percent. The figure of 4 percent implied that some companies had almost no debt, whereas a ratio of 12,560 percent indicated that the company had high debt. Profitability ranges from -1.2 to 281.85 with a mean of 1.73, indicating variation in profitability ratios among sample companies. The value of -1.2 implied that 1.2 times the amount of the entire equity of the company was eroded due to operations. Company age ranges from 4 to 101 with a mean of 38.52.

It is important to assess whether multicollinearity exists before estimating the model as it could cause estimation problems (Al-Shammari, 2011). Table 4 displays the correlations among the continuous independent variables. It is shown in the table that the highest correlation was between company size and audit firm size (0.402). Other variables were also correlated, but probably no correlation was sufficient to impair the regression results since the pair-wise correlation coefficients are less than 0.80 (Gujarati, 2003). However, another method that is widely used to detect multicollinearity is the Variance Inflation Factor (VIF) (Al-Shammari, 2011). This was reported in Table 5. Since VIF did not exceed 10 for any variable in any model, it was concluded that collinearity was not a serious problem (Neter *et al.*, 1983).

Table 4. Pearson correlation coefficients matrix for the continuous independent variables

	Company Age	Company Size	Audit firm size	Profitability	Leverage
Company Age	1.000000				
Company size	0.350097 4.757066 0.0000	1.000000			
Audit firm size	0.289589 3.850868 0.0002	0.402524 5.596730 0.0000	1.000000		
Profitability	-0.050656 -0.645576 0.5195	0.200996 2.611561 0.0099	0.080814 1.031970 0.3036	1.000000	
Leverage	-0.0083784 -1.070153 0.2861	-0.043671 -0.556373 0.5787	-0.051563 -0.657162 0.5120	0.097759 1.250258 0.2130	1.000000

5.2. Regression results

This study investigates the association between the extent of disclosure compliance with IFRSs and 5 company characteristics (companysize, leverage, profitability, company age and auditor firm size) by analyzing annual reports of sample companies listed on Istanbul Stock Exchange in 2011. Table 5 reports the regression results. The R (adj.) suggests that approximately 11 percent of the compliance level variation is explained by the independent variables. The explanatory power of this model is lower than than that of Glaum and Street, 2003 (0.29), Hodgdon *et al.*, 2009 (0.21), and Al-Shammari, 2011 (0.40). The results also show that the model was significant ($F= 5.139733$, $p< 0.001$).

Table 5. Regression results

Independent variables (expected sign)	Model Coefficients	VIF
Company size (+)	0.002310107	1.389042
Leverage (+)	-0.007234679**	1.042353
Profitability (+)	8.59E-05	1.065017
Company age (+)	-0.000117857	1.193321
Auditor (+)	0.01123463*	1.246332
Constant	0.749422944	
Adjusted R	0.110867	
F	5.139733	
Prob. (F)	< 0.001	
No. of companies	168	

significant p< 0.10; ***ttest (two-tailed) significant p< 0.01; **ttest (two tailed) significant p< 0.05; *ttest (two-tailed) significant p< 0.10.

The results provide evidence that that the extent of disclosure compliance with IFRSs is associated with company leverage and audit firm size. The remaining independent variables (profitability, company size and age) were not significant while leverage was significant but in the opposite prediction.

The results revealed that company size is not significant in explaining variation in the extent of disclosure compliance with IFRSs. Therefore, the hypothesis that there is a significant positive association between the firm size and the extent of mandatory disclosure was not supported. This finding is contradicted with that of Juhmani (2012), Akhtaruddin (2005), Hossain and Hammami (2009), Al-Shammari *et al.* (2008) and Al-Shammari (2011) which report positive association between company size and disclosure compliance with IFRSs.

Similar to Glaum and Street (2003), Al-Saeed (2006) and Juhmani (2012), we found no association between profitability and the level of compliance with IFRSs disclosure requirements. Therefore, the hypothesis that there is a significant positive association between the firm profitability and the extent of mandatory disclosure is not supported.

Since companies with higher leverage are more likely to be subject to greater shareholder demand for information it is expected that these companies comply with IFRSs. However, our findings, similar to Juhmani (2006) and Al-Shammari *et*

al. (2011) reported a negative association between the leverage and the extent of disclosure compliance with IFRSs. It is opposite to the prediction. Therefore, hypothesis 2 is not supported. This finding may be explained by the fact that Turkish companies with lower levels of leverage may comply more with IFRSs in order to satisfy the needs of shareholders for information.

The results provide evidence that company age has no effect on the level of disclosure compliance with IFRSs. This result support the findings of Glaum and Street (2003), Akhtaruddin (2005), Alsaeed (2006) and Juhmani (2012) which reported no association between company age and the level of information disclosure.

Consistent with Dumontier and Raffournier (1998), Glaum and Street (2003), Hodgdon *et al.* (2009), Al-Shammari (2011) and Juhmani (2012) our results indicate a positive association between audit firm size and the level of disclosure compliance with IFRSs. This finding supports the idea that large audit firms (Big Four) which have a stronger incentive to protect their reputation and to signal to the market their higher audit quality encourage their clients to have a higher level of disclosure compliance with IFRSs.

6. Conclusions

This study examines the extent of disclosure compliance with IFRSs by 168 companies listed on the Istanbul Stock Exchange in 2011 and outlines the underlying company characteristics affecting the disclosure compliance of companies with IFRSs. The extent of disclosure compliance with IFRSs is measured using a self-disclosure compliance index. A multivariate regression analysis was employed to test the relationship between the level of disclosure compliance with IFRSs and five company characteristics.

The results showed that the level of compliance with IFRSs of Turkish companies is 0.79. It is lower than the level of disclosure compliance observed in Australia (0.94; Tower *et al.*, 1999), Germany (0.81; Glaum & Street, 2003), Gulf Co-Operation Member States (0.82; Al-Shammari *et al.*, 2008), Kuwait (0.82; Al-Shammari, 2011) and Bahrain (0.81; Juhmani, 2012). This suggests that national monitoring and enforcement mechanisms in Turkey need to be improved.

The results of multivariate analysis showed that disclosure compliance also varies by leverage and audit firm size. Other company characteristics, such as profitability, company size and age, however, are not significant in explaining the level of disclosure compliance with IFRSs. Leverage is negatively related to the level of disclosure compliance. This implies that Turkish companies which are

subject to higher public equity risk due to large amount of equity financing comply more with IFRSs in order to satisfy the needs of shareholders for information. Audit firm size, as predicted, is positively associated to the level of disclosure compliance. It is infered from this result that big audit firms encourage their clients to have a higher level of disclosure compliance with IFRSs while small audit firms do not.

This study contributes to the literature by extending international accounting compliance studies in developping economies and by providing insights to compliance level of listed companies with IFRS disclosure requirements in Turkey, a code-law country with a very different cultural and institutional framework from that of common law countries. It also contributes to the literature on the relationship of company characteristics and compliance with IFRSs, by testing its application to a developing country like Turkey.

As with any research, this study has some limitations. The following limitations are the most pertinent. First, the items constituting the disclosure index do not reflect their level of importance as perceived by financial information users. Hence, the approach used in this study may not entirely capture the depth of items, thereby not measuring the disclosure properly. Second, the disclosure index includes only mandatory items. The results could have changed if voluntary items had been included. Third, the data used to test the compliance level was manually collected from the annual reports. Fourth, some firm-specific characteristics, specifically profitability and debt, were measured based on two commonly used ratios-return on equity and total debt to total assets ratios. The findings might have altered if other ratios, such as net profit to sales and total debt to equity had been applied. With these caveats in mind, much caution should be exercised when interpreting the results.

Future research could address the following suggestions:

- introduce voluntary items not addressed by the current study;
- classify mandatory disclosure into discrete groups, such as financial and non-financial information;
- incorporate other firm-specific characteristics, such as ownership concentration and international ownership;
- construct the disclosure index based on the value financial information users attach to every disclosure item.

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Appendix 1. Disclosure index

General presentation

1. Fair presentation of financial position, financial performance and cash flows of the entity in the financial statements
2. Financial statements that are not prepared on a going concern basis
3. A complete set of financial statements
4. The name of the reporting entity or other means of idendification,
5. Whether the financial statements are of an individual entity or a group of entities
6. Reporting date or the period covered by the set of financial statements or notes,
7. The presentation currency and the level of rounding used in presenting amounts in the financial statements
8. Comparative information
9. Consistency of presentation
10. Reclassification of comparative amounts if the presentation or classification of items in the financial statements is changed
11. A brief description of the nature and principal activities of the company and its subsidiaries
12. The domicile and legal form of the entity, its country of incorporation and the adres of its registered office
13. The name of the parent and the ultimate parent of the group
14. Current vs non current distinction
15. Seperate presentation of each material class of similar items
16. For each class of share capital; the number of shares authorised, the number of shares issued and fully paid and issued but not fully paid, par value pers hare, a reconcilliation of the number of shares outstanding at the beginning and at the end of the period
17. Presentation of a statement of profit or loss and other comprehensive income either in a single statement that includes all components of profit or loss and other comprehensive income, or in the form of two seperate statements, one displaying components of profit or loss followed immediatley by another statement beginning with profit or loss and displaying componenets of other comprehensive income
18. Profit or loss for the period attributable to non-controlling interests and owners of the parent and comprehensive income for the period attributable to non-controlling interests and owners of the parent
19. Line items for amounts of other comprehensive income classified by nature
20. Reclassification adjustments relating to components of other comprehensive income
21. Circumtances that would give rise to the seperate disclosure of items of income and expense
22. An analysis of expenses recognised in profit or loss using a classification based on either the nature of expenses or their function within the entity
23. The amount of income tax relating to each component of other comprehensive income
24. The gain or loss on net monetary position of the entity (if the entity's functional currency is a currency of a hyperinflationary economy)
25. The aggregate amount of research and development expenditure recognised as an expense during the period

26. Net gains or net losses on financial assets at fair value through profit or loss, available-for-sale financial assets, held-to-maturity investments, loans and receivables and financial liabilities measured at amortised cost
27. Net gains or net losses on total interest income and interest expense
28. Net gains or net losses on fee income and expense
29. Net gains or net losses on interest income on impaired financial assets
30. Net gains or net losses on the amount of any impairment loss for each class of financial asset
31. Information that enables users of the financial statements to evaluate the financial effects of discontinued operations
32. A single amount comprising the total of the post-tax profit or loss of discontinued operations and the post-tax gain or loss recognised on the measurement to fair value less costs to sel lor on the disposal of the assets or disposal groups constituting the discontinued operation
33. An analysis of the single amount of revenue, expenses and pre-tax profit or loss of discontinued operations, the related income tax expense, the gain or loss recognised on the measurement to fair value less costs to sel lor on the disposal of the assets or disposal groups constituting the discontinued operation
34. The investor's share of the discontinued operations of an associate as part of the share of profit or loss of associates
35. Adjustments in the current period to amounts previously presented in discontinued operations that are directly related on the disposal of a discontinued operation in a prior period are classified seperately in discontinued operations
36. Gain or loss on the remeasurement of a non-current asset classified as held-for-sale that does not meet the definition of a discontinued operation
37. Total comprehensive income for the period, showing seperately the total amounts attributable to owners of the parent and non-controlling interests
38. For each component of equity, the effects of retrospective application or retrospective restatement
39. For each component of equity, a reconciliation between the carrying amount at the beginning and the end of the period, seperately disclosing changes resulting from profit or loss, other comprehensive income and transactions with owners in their capacity as owners
40. The amount of dividends recognised as distributions to owners during the period and the related amount of dividends per share
41. The amount of transaction costs accounted for as a deduction from equity
42. The increase or decrease in the carrying amount of non-cash distributed to owners recognised in the period as a result of the change in the fair value of the assets to be distributed
43. Cash flows during the period classified as operating, investing and financing activities
44. Cash flows arising cash receipts and payments on behalf of customers when the cash activities of the customer rather than those of the entity
45. Cash flows arising from cash receipts and payments for items in which the turnover is quick, the amounts are large and the maturities are short
46. Cash flows arising from cash receipts and payments for the acceptance and repayment of deposits with a fixed maturity date
47. Cash flows arising from the placement of deposits with and withdrawal of deposits from other financial institutions

48. Cash flows arising from cash advances and loans made to customers and the repayment of those advances and loans
49. Cash flows from operating, investing and financing activities
50. Cash flows from interest and dividends received and paid
51. Cash flows from taxes on income in operating activities
52. Investing and financing transactions that are excluded from the statement of cash flows because they do not require the use of cash or cash equivalents
53. Cash flows from obtaining or losing control of subsidiaries or other businesses
54. Information about the basis of preparation of the financial statements and the specific accounting policies used
55. An explicit and unreserved statement of compliance with IFRS
56. Material uncertainties related to events or conditions that may cast significant doubt upon the entity's ability to continue as a going concern
57. The measurement basis used in preparing the financial statements
58. The accounting policies used
59. The judgements made by management in the process of applying the accounting policies that have most significant effect on the amounts recognised in the financial statements
60. Information about assumptions made about the future, and other major sources of estimation uncertainty at the reporting date
61. Information that enables users of the consolidated financial statements to understand the composition of the group and the interest that non-controlling interests have in the group's activities and cash flows, and to evaluate the nature and extent of significant restrictions on the ability to Access or use assets, and setle liabilities of the group
62. The functional currency and the reason for using different presentation currency
63. The nature and amount of a change in accounting estimate
64. The nature of the prior period error
65. The date that financial statements were authorised for issue and who gave that authorisation

Statement of financial position

66. For each class of property, plant and equipment; the gross carrying amount and the accumulated depreciation at the beginning and end of the period
67. For each class of property, plant and equipment; a reconcilliation of the carrying amount at the beginning and end of the period showing additions, assets classified as held-for-sale, acquisitions through business combinations, increases or decreases resulting from revaluations, decreases resulting from impairment losses recıgnised, increases resulting from impairment losses reversed, depreciation, the net exchange differences arising on the translation of the financial statements from the functional currency into a different presentation currency
68. Restrictions on title and property, plant and equipment pledged as security for liabilities
69. The amount of expenditures recognised in the carrying amount of an item of property, plant and equipment in the course of construction
70. For revalued property, plant and equipment; the effective date of the revaluation
71. For revalued property, plant and equipment whether an independent valuer was involved
72. For revalued property, plant and equipment; the carrying amount that would have been recognised had the assets been carried under the cost model, the revaluaion surplus

73. For each class of intangible assets; the gross carrying amount and any accumulated amortisation at the beginning and end of the period,
74. For each class of intangible asstes, the line items of the statement of profit or loss and other comprehensive income in which any amortisation of intangible assets is included
75. For erach class of intangible assets, a reconciliation of the carrying amount at the beginning and end of the period
76. For an intangible asset assesed as having an indefinite useful life, the carrying amount of that asset and the reasons supporting the assessment of an indefinite life
77. For revalued intangible assets; the effective date of the revaluation
78. For revalued intangible assets; whether an independent valuer was involved
79. For revalued intangible assets; the carrying amount that would have been recognised had the assets been carried under the cost model, the revaluaion surplus
80. A reconciliation of the carrying amount of goodwill at the beginning and en of the reporting period showing seperately the gross amount and accumulated impairment losses at the beginning period, additional goodwill recognised during the period, adjustments resulting from the subsequent recognition of deferred tax assets during the period, goodwill included in a disposal group, goodwill derecognised during the reporting period, impairment losses recognised during the reporting period, net exchange differences arising during the reporting period, the gross amount and accumulated impairment losses at the reporting period
81. Cash-generating unit (group of units) for which the carrying amount of goodwill or intangible assets with indefinite useful lives allocated
82. The amounts recognised in profit or loss for rental income from investment property, direct operating expenses arising from investment property that generated rental income during the period,
83. The existence and amounts of restrictions on the realisability of investment property or the remittance of income and proceeds of disposal
84. A reconciliation of the carrying amount of investment property at the beginning and end of the period
85. The depreciation methods used, the useful lives, the gross carrying amount and the accumulated depreciation of investment property (when the cost model is applied)
86. Information that enables users of the financial statements to evaluate the nature of, and risks associated with the interests in other entities
87. Information about significant judgements and assumptions made in determining that the entity has significant influence over another entity
88. Information that enables users of the financial statements to evaluate the nature, extent and financial effects of the interests in associates
89. For each associate that is material to the reporting entity; the name of the associate, the nature of the entity's relationship with the associate, the principal place of business of the associate, the proportion of ownership interest or participating share held by the entity, whether the investment in the associate is measured under the equity method or at fair value, dividends received from the associate, summarised financial information for the associate
90. Information that enables users of the financial statements to evaluate the nature, extent and financial effects of the interests in joint arrengements
91. For each joint arrangement that is material to the reporting entity; the name of the joint arrengement, the nature of the entity's relationship with the joint arrangement, the principal place of business of the joint arrangement, the proportion of ownership

interest or participating share held by the entity, whether the investment in the joint arrangement is measured under the equity method or at fair value, summarised financial information for the joint arragement

92. The amount reclassified into and out of each category and the reason fort hat reclassification when the entity has reclassified a financial asset
93. The carrying amount of financial assets that the entity has pledged as collateral for liabilities or contingent liabilities
94. The fair value of the collateral held
95. For designated fair value hedges, a description of the hedges, a description of the financial instruments designated as hedging instruments and their fair values at the reporting date and the nature of the risks being hedged
96. Gains or losses on the hedging instrument and on the hedged item attributable to the hedged risk
97. For designated cash flow hedges, a description of the hedges, a description of the financial instruments designated as hedging instruments and their fair values at the reporting date, the nature of the risks being hedged, the periods when the cash flows are expected to ocur and when they are expected to affect profit or loss, a description of any forecast transaction for which hedge accounting had previously been used, the amount that was recognised in other comprehensive income during the period, the amount that was reclassified from equity to profit or loss for the period
98. For hedges of net investments in foreign operations, a description of the hedges, a description of the financial instruments designated as hedging instruments and their fair values at the reporting date, the nature of the risks being hedged and the ineffectiveness recıgnised in profit or loss
99. For each class of financial assets and financial liabilities, the fair value of that class of assets and liabilities in a way that permits it to be compared with its carrying amount
100. For financial instruments whose fair value could not previously be neasured reliably are derocognised, their carrying amount at the time of derecognition and the amount of gain or loss recognised
101. Information to help users of the financial statements make their own judgements about the extent of possible differences between the carrying amount of those financial assets and their fair value
102. Information that enables users of the entity's financial statements to evaluate the nature and extent of risks arising from financial instruments to which the entity is exposed at the reporting date.
103. The exposures to the market risk and how they arise
104. The exposures to the liquidity risk and how they arise
105. The exposures to the credit risk and how they arise
106. For financial assets at fair value through profit or loss; the maximum exposure to credit risk of the loan or receivable, the amount by which any related credit derivatives or similar instruments mitigate that maximum exposure to credit risk, the amount of change in the fair value of the loan or receivable
107. For financial liabilities at fair value through profit or loss; the amount of change in the fair value of liability
108. The total carrying amount of inventories and the carrying amount in classifications appropriate to the entity, the carrying amount of inventories carried at fair value les costs to sell, the amount of inventories recognised as an expense during the period, the amount of any write-down of inventories recognised as an expense in the period, the

amount of any reversal of any write-down that is recognised as a deduction in the amount of inventories recognised as expense, the carrying amount of inventories pledged as security for liabilities

109. The amount of dividends proposed or declared before the financial statements were authorised for issue but not recognised as a distribution to owners during the period, the amount of any cumulative preference dividends not recognised
110. For each class of provision; the carrying amount at the beginning and en of the period, additional provisions made in the period, amounts used during the period, unused amounts reversed during the period
111. For each class of provision; a brief description of the nature of the obligation and the expected timing of any resulting outflows of economic benefits, an indication of the uncertainties about the amount and timing of those outflows
112. Major components of tax expense (including curent tax expense, any adjustments recognised in the period for current tax of prior periods, the amount of deferred tax expense or income relating to the origination and reversal of temporary differences, the amount of deferred tax expense or income relating to changes in tax rates)
113. The aggregate current and deferred tax relating to items that are charged or credited to equity, the amount of income tax relating to each component of other comprehensive income
114. For each class of contingent liability, a brief description of the nature of the contingent liability and an estimate of its financial effect
115. For each class of contingent asset, a brief description of the nature of the contingent asset and an estimate of its financial effect
116. For contingent consideration assets acquired and contingent consideration liabilities assumed in a business combination; any changes in the recognised amounts, any changes in the range of outcomes and the valuation techniques and key model inputs used to measure contingent consideration

Statement of profit or loss and other comprehensive income

117. The amount of each significant category of revenue recognised during the period including revenue arising from the sale of goods, the rendering of services, interest, royalties and dividends
118. The amount of contract revenue recognised as revenue in the period
119. For contracts in progress at the reporting date; the aggregate amount of costs incurred and recognised profits, the amount of advances received and the amount of retentions
120. Information about how the entity determines which agreements meet al the criteria as construction progresses, the amount of revenue arising from such agreements in progress, the methods used to determine the stage of completion of agreements in progress
121. The effect of the grants on any item of income or expense
122. The nature and extent of government grants recognised in the financial statements and an indication of other forms of government assistance from which the entity has benefited directly and unfulfilled conditions and other contingencies attaching to government assistance that has been recognised
123. The amount recognised as an expense for defined contribution plans
124. Information abput contributions to defined contribution plans for key management personel

125. Information that explains the characteristics of the defined benefit plans and risks associated eith them, identifies and explains the amounts in the financial statements arising from the defined benefit plans and describes how the defined benefit plans may affect the amount, timing and uncertainty of the entity's future cash flows
126. A reconciliation from the opening balance to the closing balance for the net defined benefit liability (assets) showing seperate reconciliations for plan assets, the present value of the defined benefit obligation and the effect of the asset ceiling and any reimbursement rights
127. In each reconciliation relating to the net defined benefit liability (asset); curent service cost, interest income or expense, past service cost and gains and losses arising from settlements, remeasurements of the net defined benefit liability (asset) showing seperately the return on plan assets, acturial gains and losses arisinf from changes in demographic assumptions and acturial gains or losses arising from changes in financial assumptions
128. The entity's own transferable financial instruments held as plan assets and the fair value of plan assets that are property occupied by, or other assets used by, the entity
129. The significant acturial assumptions used to determine the present value of the defined benefit obligation
130. A sensitive analysis for each significant acturial assumption as of the reporting date, showing how the defined benefit obligation would have been affected by changes in the relevant acturial assumption that were reasonably possible at that date
131. If the antity participates in a multi-employer defined benefit plan; a description of the funding arrangements
132. If the entity participates in a defined benefit plan that shares risks between entities under common control; the contractual agreeement or stated policy for charging the net defined benefit cost or the fact that there is no such policy
133. Related party transactions with posy-employment benefit plans and post-employment benefits for key management personnel.
134. Information about contingent liabilities arising from post-employment benefit obligations
135. Information that enables users of the financial statements to understand the nature and extent of share-based payment arrangements that existed during the period
136. A description of each type of share-based payment arrangement that existed at any time during the period, the number abd weighted-average exercise prices od share options for each group of options
137. Information that enables users of the financial statements to understand how the fair value of the goods or services received, or the fair value of the equity instruments granted
138. Information that enables users of the financial statements to understand the effect of share-based payment transactions on the entity's profit or loss for the period and on its financial position
139. The total expense recognised fort he period arising from share-based payment transactions in which the goods or services received did not qualify for recognition as assets and hence were recognised immediately as an expense
140. For liabilities arising from share-based payment transactions; the total carrying amount at the end of the period and the total intrinsic value at the end of the period of liabilities for which the counterparty's right to cash or other assets had vested by the end of the period

141. The amount of borrowing costs capitalised during the period
142. The capitalisation rate used to determine the amount of borrowing costs eligible for capitalisation

Special topics

143. For each class of financial lease asset; the net carrying amount at the reporting date and a reconciliation between the total future minimum lease payments at the reporting date and their present value
144. The total minimum finance lease payments at the reporting date and their present value for each of the following periods: no later than one year, later than one year and not later than five year and later than five years
145. Contingent rents recognised as expense in the period
146. The total future minimum sub-lease payments expected to be received under non-cancellable sub-leases at the reporting date (for finance leases)
147. A general description of the lessee's material leasing arrangements including the basis on which contingent rent payable is determined, the existence and terms of renewal or purchase options and escalation clauses and restrictions imposed by lease arrangements (for finance leases)
148. The total minimum operating lease payments at the reporting date and their present value for each of the following periods: no later than one year, later than one year and not later than five year and later than five years
149. The total future minimum sub-lease payments expected to be received under non-cancellable sub-leases at the reporting date (for operating leases)
150. Lease and sub-lease payments recognised as an expense in the period, with seperate amounts for minimum lease payments, contingent rents and sub-lease payments (for operating leases)
151. A general description of the lessee's significant leasing arrangements including the basis on which contingent rent payments are determined, the existence and terms of renewal or purchase options and escalation clauses and restrictions imposed by lease arragements (for operating leases)
152. A reconciliation between the total gross investment in the lease at the reporting date and the present value of minimum lease payments receivable at the reporting date (lessor-financie leases)
153. The total gross investment in the lease and the present value od minimum lease payments receivable at the reporting date for each of the following periods: not later than one year, later than one year and not later than five years and later than five years (lessor-finance leases)
154. Unearned finance income (lessor-finance leases)
155. The un-guaranteed residual values accruing to the benefit of the lessor (lessor-finance leases)
156. The accumulated allowance for uncollecteable minimum lease payments receivable (lessor-finance leases)
157. Contingent rents recognised as income in the period (lessor-finance leases)
158. A general description of the lessor's material leasing arrangements (lessor-finance leases)
159. The future minimum lease payments under non-concellable operating leases in the aggregate and for each of the following periods: not later than one year, later than one year and not later than five years and later than five years (lessor-operating leases)

160. Total contingent rents recognised as income in the period (lessor-operating leases)
161. A general description of the lessor's leasing arrangements (lessor-operating leases)
162. A description of the arrangement (service concession arrangements)
163. Significant terms of the arragement that may affect the amount, timing and certainty of future cash flows (service concession arrangements)
164. The nature and extent of rights to use specified assets, obligations to provide or rights to expect provision of services, obligations to acquire or build items of property, plant and equipment, obligations to deliver or rights to receive specified assets at the end of the concession period, renewal and termination options and other rights and obligations (service concession arrangements)
165. Changes in the arrangement during the period (service concession arrangements)
166. How the service arrangement has been classified (service concession arrangements)
167. Revenue and profits or losses recognised on exchanging construction services or a financial asset or an intangible asset
168. Information to enable users of financial statements to evaluate the nature and financial effects of the business activities in which the entity engages and the economic environments in which it operates
169. Factors used to idebtify the entity's reportable segments
170. Types of products and services from which each reportable segment derives its revenues
171. The measure of profit or loss for each reportable segment
172. The measure of total assets and liabilities for each reportable segment if such amounts are regularly provided to the chief operating decision maker
173. Revenues from external customers (for each reportable segment)
174. Revenues from transactions with other operating segments of the same entity (for each reportable segment)
175. Interest revenue (for each reportable segment)
176. Interest expense (for each reportable segment)
177. Depreciation and amortisation (for each reportable segment)
178. Material items of income and expense (for each reportable segment)
179. The entity's interest in the profit or loss of associates and joint ventures accounted for by the equity method (for each reportable segment)
180. Income tax expense or income and material non-cash items other than depreciation (for each reportable segment)
181. An explanation of the measurements of segment profit or loss, segment assets and segment liabilities for each reportable segment
182. The basis of accounting for any transactions between reportable segments
183. The nature of any differences between the measurements of the reportable segments' profits or losses and the entity's profit or loss before income tax expense or income and discontinued operations
184. The nature of any differences between the measurements of the reportable segments' assets and the entity's assets
185. The nature of any differences between the measurements of the reportable segments' liabilities and the entity's liabilities
186. The nature of any changes from prior periods in the measurement methods used to determine reported segment profit or loss and the effect of those changes on the measure of segment profit or loss
187. The nature and effect of any asymmetrical allocations to reportable segments

188. Reconciliations of the following: the total of the reportable segments' revenues to the entity's revenue, the total of the reportable segments' measures of profit or loss to the entity's profit or loss before tax expense and discontinued operations, the total of the reportable segments' assets to the entity's assets, the total of the reportable segments' liabilities to the entity's liabilities, the total of the reportable segments' amounts for every other material item of information disclosed to the corresponding amount for the entity
189. Basic and diluted earnings pers hare
190. The amounts used as the numerators in calculating basic and diluted earnings pers hare and a reconciliation of those amounts to the profit or loss attributable to the parent entity fort he period
191. The weighted-average number of ordinary shares used as the denominator in calculatinf basic and diluted earnings per share, and a reconciliation of these denominators to each other
192. Instruments that could potentially dilute basic earnings pers hare in the future
193. A description of ordinary share transactions or potential ordinary share transactions
194. The classification, presentation and measurement requirements to a non-current asset (or disposal group) that is classified as held-for-sale
195. Information that enables users of the financial statements to evaluate the financial effects of non-current assets (or disposal groups)
196. For a non-current asset or disposal group classified as held-for-sale; the major classes of assets and liabilities classified as hel-for-sale seperately from other assets
197. Related party relationships between parent and subsidiaries irrespective of whether transactions have taken place between those related parties
198. The fact that the related party transactions were made on terms equivalent to those that prevail in arm's length transactions
199. Information about the transactions and outstanding balances between related parties
200. The amount of the transactions, the amount of outstanding balances, provisions for doubtful debts related to the amount of outstanding balances and the expense recognised during the period in respect of bad or doubtful debts due from related party transactions
201. Key management compensation of the entity in total for each of the following categories: short-term employee benefits, post-employment benefits, other long-term benefits, termination benefits and share-based payments
202. Information that identifies and explains the amounts in the financial statements arising from insurance contracts
203. The accounting policies adopted for insurance contracts and related assets, liabilities, income and expenses
204. The recognised assets, liabilities, income and expense arising from insurance contracts
205. The process used to determine the assumptions that have the greatest effect on the measurement of the recognised amounts relating to insurance contracts
206. The effect of changes in assumptions used to measure insurance assets and insurance liabilities
207. Reconciliations of changes in insurance liabilities, reinsurance assets and related deferred acquisition costs
208. Information that enables users of the financial statements to evaluate the nature and extent of risks arising from insurance contracts

209. Information about exposures to interest rate risk or market risk under embedded derivatives conrtained in a host insurance contract
210. Information about market risk arising from insurance contracts
211. Information about liquidity risk arising from insurance contracts
212. Information about credit risk arising from insurance contracts
213. Information that identifies and explains the amounts recognised in the financial statements arising from the exploration for and evaluation of mineral resources
214. The amounts of assets, liabilities, income and expense and operating and investing cash flows arising from the exploration for and evaluation of mineral resources
215. Amount of any impairment loss arising from the impairment test of exploration and evaluation assets

[1] In 2012 Turkish Accounting Standards Board was remplaced by Public Oversight Accounting and Auditing Standards Authority. From beginning with 2012, Public Oversight Accounting and Auditing Standards Authority is charged with the issuance of Turkish Financial Reporting Standards which are compatible with International Financial Reporting Standards.