

Firm-Specific Determinants Affecting Compliance with IFRS 15 Revenue from Contracts with Customers Standard Disclosure Requirements: BIST100 Review

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ARTICLE INFO	ABSTRACT
Keywords: IFRS 15 Disclosure Requirements Firm Characteristics BIST 100 Received 5 January 2025 Revised 7 June 2025 Accepted 20 June 2025 Article Classification: Research Article	Purpose – The study aims to determine whether there is a relationship between firm characteristics and the degree of compliance with IFRS 15 disclosure requirements. Design/methodology/approach – This study first examines the 5-year financial statements of 54 companies listed in BIST 100, starting from 2018, when the standard was implemented. The study then assesses level of compliance with disclosure requirements to determine whether there is a relationship between firm characteristics and degree of compliance with the IFRS 15 disclosure requirements. To determine the level of adjustment, the study used panel data analysis. Findings – The panel data analysis revealed a statistically significant relationship between compliance with IFRS 15 disclosure requirements and firm size, Return on Assets, Return on Equity, and audit firm size. However, there was no significant relationship between leverage ratio and audit firm rotation. Contrary to expectations, company age was significantly and negatively related with disclosure requirements. Discussion – The content analysis revealed that level of compliance varied. The findings of this study have important implications regarding the accounting rules and principles of regulating organizations striving to improve the level of auditing and reporting standards in Turkey, as well as for all users of financial reports. In addition, the findings help to evaluate the scope of mandatory disclosures made by companies in Turkey.

1. INTRODUCTION

Compliance with accounting standards also requires compliance with disclosure requirements. Better accounting quality is directly related to compliance with accounting standards and disclosure requirements (Wang, 2019: 680). Previous studies have tried to determine the disclosures that are mandatory under many standards and the level of company compliance with these disclosure requirements. Many of these studies have determined that there is a significant lack of compliance with the International Financial Reporting Standards (IFRS) disclosure requirements (Hodgdon et al., 2008: 1; Glaum and Street, 2003: 64; Street et al., 1999: 11; Tsalavoutas, 2011: 403; Demir and Bahadır, 2014: 20; Wang, 2019: 688).

IFRS 15 is a comprehensive accounting standard characterized by a complex structure with rules-based guidance and detailed disclosure requirements. Given that companies have different business models and are constantly changing, they need to consider how their current and future contracts will be affected when applying IFRS 15 (KPMG, 2019: 6). IFRS 15, which has been in force since 2018, requires more transparent presentation and disclosure requirements in companies' interim and annual financial statements than the previous IAS 18. In addition, IAS 1 requires companies to disclose their accounting policies. The revenue model outlined in the standard is based on the occurrence of contract assets or contract liabilities, which arise from the relationship between the company's performance and the customer's payment when one party fulfills the contract (EY, 2021: 388). According to IFRS 15, a company must provide users with sufficient information to describe the nature, amount, timing, and uncertainty of cash flows and revenue arising from contracts with

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customers. To achieve this, the following information must be disclosed either qualitatively or quantitatively (IFRS 15, p.110):

- a. Contracts with customers
- b. Important decisions and changes in these decisions
- c. Any assets recognised from the cost to obtain or fulfill a contract with a customer

These disclosure requirements, which are divided into three categories, are broad in scope, so not all will be relevant to some companies. The International Accounting Standards Board (IASB) therefore recommends that these disclosure requirements should not be considered as checklist; rather, they should be disclosed in accordance with the financial statements user's expectations and the principle of materiality (IFRS 15, p.111-112; IFRS Foundation, 2011, BC248). Financial statements are expected to present information in the following seven main areas (IFRS Community, 2024):

- a. Contracts with customers (IFRS 15, p.113).
- b. Revenue recognition (IFRS 15, p.114-115).
- c. Contract balances (IFRS 15, p.116-118).
- d. Performance obligations (IFRS 15, p.119-122).
- e. Significant accounting judgements (IFRS 15, p.123-126)
- f. Contract cost recognized as assets (IFRS 15, p.127-128)
- g. Relief practices (IFRS 15, p.129)

Contracts with customers: Revenue from contracts with customers should be disclosed separately at the reporting date, unless it is presented separately in the statement of comprehensive income in accordance with the rules in other standards. In addition, impairment losses recognized in accordance with IFRS 9 for receivables and assets arising from contracts with customers should be disclosed separately (IFRS 15, p. 113).

Revenue recognition: Companies classify revenue from contracts with customers recognized in the financial statements into categories that reflect how the nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factors (IFRS 15, p.114). The categories selected depend on the terms and conditions of the company's contract with the customer. Some companies may need to classify revenue into more than one category, such as geographical area, market and customer type, contract type, contract duration, and timing of transfer of goods and services, while others may use only one type of category (IFRS 15, p. 87-89).

Contract balances: The objective is to facilitate understanding of the relationship between revenue recognized in a particular period and changes in contract balances (IFRS Community, 2024). In this section, the following should be disclosed: opening and closing balances of receivables, contract assets and contract liabilities arising from contracts with customers, revenues recognized as contract liabilities at the beginning of the period and recognized in the financial statements during the period, revenues recognized in the period from performance obligations that were partially or fully fulfilled in previous periods. In addition, there should be qualitative and quantitative explanations of the relationship between the timing of the performance obligation and the normal payment period, and the effect of that relationship on the contract asset and liability balances. If there are any factors that may cause significant changes in the contract asset and liability balances during the period, these should also be disclosed (IFRS 15, p. 116-118).

Performance obligations: This section requires companies to disclose how they generally meet their performance obligations and any payment terms, guarantees, or repayment obligations. Companies are also expected to disclose any outstanding work, or the transaction price allocated to any remaining performance obligations (IFRS Community, 2024).

Significant judgements used in the application of this standard: Companies should disclose the judgements they have made in applying the standard and in determining the amount and timing of revenue arising from contracts with customers, and any changes in those judgements (IFRS 15, p.123). For obligations to be fulfilled over time, the methods used to recognize revenue in the financial statements and the reasons for choosing these methods should be explained. In performance obligations that are fulfilled at a certain time, some basic judgments are used to determine when the customer takes control, and these basic judgments need to be stated (Şavlı, 2016: 86). This also includes explanations of the methods, assumptions, and assessments used in determining the transaction price, allocating this price to the obligations, measuring refunds, repayments, and similar obligations, and assessing whether the estimate of the variable price is limited (IFRS 15, p.126).

Contract costs recognized as an asset: Costs incurred by a company to enter into a contract with a customer that would not have been incurred had the contract not been entered into are called incremental costs. An example of these costs is sales commission. Whether or not the contract is entered into, these costs incurred to enter into the contract are recognised as an expense in the financial statements. However, if the company expects to recover the additional costs incurred, it recognizes those costs as an asset in the financial statements. As a convenience, if the additional costs are amortized within one year, they may be recognized immediately as an expense (IFRS 15, p. 91-94). In cases where the company incurs additional costs as a result of an amendment to a contract rather than at the commencement of the contract, those costs should still be recognised as an asset even if the amendment is considered to be part of the existing contract (IFRS Community, 2024). Additional costs recognised as assets should be amortized systematically in a manner consistent with the transfer of the goods or services associated with the asset (IFRS 15, p.99).

Facilitating practices: If there is a significant financing component in the customer contract or if the customer has chosen to use facilitating practices for additional costs incurred in concluding the contract with the customer, these issues should also be disclosed (IFRS 15, p.129).

IASB requested information from the public on how to interpret application results after the implementation of IFRS 15. They assessed the information requested, with a deadline of January 2023. Disclosure requirements were also included in the evaluation results, which showed that companies are generally disclosing more useful information about revenue and that there has been some improvement compared with the previous standard. Stakeholders' have two main concerns about the disclosure requirements (IASB, 2023: 23):

- a) The cost of complying with some disclosure requirements exceeds the benefits that the resulting information will provide to users of financial statements. For example, stakeholders are concerned about the cost of disclosures about contract assets, contract liabilities, and remaining performance obligations.
- b) Companies sometimes ignore the information required by IFRS 15. Some stakeholders suggest that this problem may arise from the lack of specific information required by the disclosure requirements.

There have been many studies regarding the changes brought about by this standard after the implementation of IFRS 15 and how this standard is accounted for (Tezel and Üçoğlu, 2021: 94). Few studies, however, have explored the extent to which companies comply with the detailed disclosure requirements of IFRS 15 in their financial statements. Boujelben and Kobbi Fakhfakh (2020) applied content analysis to examine the 2018 financial reports of 25 companies operating in the telecommunications and construction sectors in the European Union. They found that these companies did not sufficiently comply with IFRS 15 requirements. Karim and Riya (2022) examined the 2019 and 2020 financial statements of 88 companies operating in 14 different sectors on Bangladesh's Dhaka Stock Exchange. They found low compliance with IFRS 15 disclosure requirements for 88 companies. In contrast to other studies, Kobbi Fakhfakh, and Belguith (2024) investigated whether firm characteristics affect compliance with IFRS 15 disclosure requirements. They found that compliance was affected by firm size, leverage and profitability ratios, the size of the audit firm, and the characteristics of the firm's owners.

The present study examines the relationship between compliance with IFRS 15 disclosure requirements and firm characteristics, as reported in the five-yearly reports for 2018-2022 of non-financial companies listed in

the BIST 100 index Borsa Istanbul. The study makes three contributions to the literature. First, no previous study has investigated whether there is a relationship between IFRS 15 disclosures and company characteristics in Turkey. Indeed, we found only one such study (Kobbi Fakhfakh, and Belguith, 2024) conducted in other countries. Second, our study tests more independent variables than the earlier study, including return on equity, return on asset, audit firm rotation, and firm age. Thirdly, the study covers a longer 5-year reporting period than previous in studies. We believe that the findings can provide valuable insights for standard regulatory authorities like IASB, Public Oversight, and the Accounting and Auditing Standards Authority. We are also confident that the results will be of value to companies and independent audit firms in their future financial reports.

The remainder of the paper is organized as follows: Section 2 summarizes relevant literature on the possible impact of firm-specific factors and the degree of compliance with IFRS 15 disclosure and discusses hypothesis development; Section 3 describes the data and research design; Section 4 presents the results while conclusions are included in Section 5.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This section reviews previous research on the impact of the firm-specific determinants used in the current study. Based on the findings reported by these studies, seven hypotheses are developed regarding the potential impact of firm-specific determinants on the degree of compliance with IFRS 15 disclosure requirements.

2.1. Firm Size

The IFRS are much more detailed and systematic than national accounting practices. In particular, the qualitative characteristics of the financial information are stronger, resulting in higher quality financial statements. These characteristics mean that the financial information presented using international standards will reduce the asymmetry between information users (Özdemir, 2019: 601).

Agency theory (Jensen and Meckling, 1976) explains the relationship between parties seeking to maximize their interests. If these parties act on behalf of an individual, group, or organization, they are referred to as agents, while the represented party is called the principal. One of the most important sources through which principals can monitor agents is financial reports. When there are conflicts of interest between the parties, managers may resort to manipulating financial reports. However, financial reports should present the financial position and operating results of companies truthfully. Hence, for companies that comply with international standards, financial reports will be transparent and comparable, agency costs will decrease, and corporate governance will be strengthened (Ateş, 2018: 259). According to agency theory, larger companies have lower information production costs than smaller companies and are more likely to disclose more information to meet stakeholders' needs. Therefore, they are more likely to comply with disclosure requirements.

Cooke (2012) found that firm size had a positive effect on the mandatory and voluntary disclosures made by Japanese companies in their annual financial reports. Santos et al. (2014) examined the relationship between the level of compliance with IFRS disclosures and the business characteristics of non-financial companies in Brazil in the early years of IFRS adoption. They found that firm size is positively related to level of compliance with IFRS disclosures. Kobbi-Fakhfakh and Belguith (2024) examined the relationship between the characteristics of 431 companies listed on the French stock exchange and IFRS 15 disclosure requirements by applying content analysis to their annual reports for 2018–2021. They found that firm characteristics, including firm size, positively affected compliance with IFRS 15 disclosure requirements.

Given these findings, the first hypothesis is as follows:

H₁: There is a significant and positive relationship between the degree of compliance with IFRS 15 disclosure requirements and firm size.

2.2. *Leverage*

According to agency theory, borrowing policies are an important tool for reducing agency costs. The leverage ratio, obtained by dividing a company's total debt by its total assets, shows the percentage of the company's assets that are financed by debt. A high leverage ratio indicates that the company is in a risky position in terms of debt repayment, so many information users, particularly lenders, prefer a low leverage ratio. Therefore, it is expected that companies with high leverage will be less transparent in financial reporting; that is, their financial reporting quality will be lower.

Amanamah (2024) measured the relationship between corporate governance, financial leverage, independent audit quality, and financial reporting quality in Ghanaian companies, finding a negative relationship between financial leverage and the level of compliance with the disclosures required by financial reporting standards. Özçelik et al. (2023) analyzed the relationship between financial reporting quality and the leverage ratio of enterprises operating in the BIST cement sector. They also found that leverage ratio negatively reduces financial reporting quality. Tran (2022) found that Vietnamese firms with higher financial reporting quality had lower information asymmetry and lower leverage. However, some previous studies did not find a statistically significant relationship between leverage ratio and level of compliance with IFRS disclosure requirements (Dumontier and Raffournier, 1998: 240; Alsaed, 2006: 490; Juhmani, 2017: 36).

Given these findings, the second hypothesis is as follows:

H₂: There is a significant and negative relationship between the degree of compliance with IFRS 15 disclosure requirements and leverage.

2.3. *Return on Assets (ROA) and Return on Equity (ROE)*

According to agency and signaling theories, companies with high profitability may want to showcase their positive financial performance while simultaneously conceal profitability information to reduce their tax obligations and maintain their competitive position. Several studies have found a positive relationship between profitability and transparent financial reporting (Lazar and Velte, 2018: 301; Cascino and Gassen, 2015: 265; Jahanshad et al., 2014: 30). However, other studies have reported that the quality of financial reporting is lower in companies with higher profitability (Palmer, 2008: 863; Kobbi-Fakhfakh and Belguith, 2024: 16).

Given that many studies use ROA and ROE as profitability measures in a significant part of academic studies, they are both included among the independent variables as two different profitability measures. However, due to the inconsistent results in the literature, they are considered under separate hypotheses:

H₃: There is a significant relationship between the degree of compliance with IFRS 15 disclosure requirements and ROA.

H₄: There is a significant relationship between the degree of compliance with IFRS 15 disclosure requirements and ROE.

2.4. *Independent Audit Firm (BIG4)*

Another factor affecting companies' compliance with IFRS implementation and mandatory disclosures is the independent auditing firm that conducts their audit. Many studies have found that the size of the auditing firm positively impacts the quality of financial reporting (Jerry and Saidu, 2018: 35; Mesbah and Ramadan, 2022: 71; Yayangida et al., 2023: 228; Kobbi-Fakhfakh and Belguith, 2024: 16). This is because large and well-known auditing firms can provide better quality auditing services due to their greater financial resources and teams specialized in many fields. Hence, the quality of the financial reporting of the audited companies is higher.

Given these findings, the fifth hypothesis is formulated as follows:

H₅: There is a significant and positive relationship between the degree of compliance with IFRS 15 disclosure requirements and audit firm size.

2.5. Audit Firm Rotation

There are various rotation rules for companies subject to independent audits regarding the independence of the audit firm and the auditors assigned to the audit team. In Turkey, for example, the regulations subject independent audit firms to rotation if they have performed audit work in the company for 7 of the last 10 years while independent auditors in the audit team are subject to rotation if they have performed audit work in the company for 5 of the last 7 years. This is referred to as mandatory rotation. Rotation can also be conducted for various other reasons, such as changes in the client company's field of activity, retirement of the joint responsible auditors, and resignations or promotions in the audit team.

Audit firm rotation has been discussed for many years regarding its impact on financial reporting and audit quality. It is known that, after rotation, new auditors may experience a learning curve that can reduce audit quality. On the other hand, they may provide a different perspective on the audit process that can identify important new audit issues. However, absent significant revisions to the organization's organizational structure or business environment, the new audit team is unlikely to form opinions that differ from those of its predecessors. In conclusion, the impact of rotation on financial reporting quality remains a matter of debate, with numerous inconsistent empirical findings of both positive and negative relationships between rotation and financial reporting quality (Chi et al., 2010: 385; Firth et al., 2011: 109; Kwon et al., 2014: 167; Lennox et al., 2014: 1775; Kuang et al., 2020: 161; Gipper et al., 2021: 303).

Given these inconsistent findings, the sixth hypothesis is as follows:

H₆: There is a significant relationship between the degree of compliance with IFRS 15 disclosure requirements and audit firm rotation.

2.6. Firm Age

A number of studies have examined the relationship between firm age and compliance with IFRS disclosure requirements. Some studies conclude that older companies try to protect their investors more because they are well-known in the sector and strongly wish to protect their reputation. Hence, older companies are thought to be more compliant with disclosure requirements (Appiah et al., 2015: 137-138). However, empirical studies have produced inconsistent findings. For example, Hossain and Hamani (2009) and Al-Shammari (2011) found a positive relationship between firm age and disclosure level, whereas Glaum and Street (2003), Alsaeed (2006), and Demir and Bahadır (2014) did not.

Given these findings, the sixth hypothesis is as follows:

H₇: There is a significant and positive relationship between the degree of compliance with IFRS 15 disclosure requirements and company age.

3. DATA AND RESEARCH METHODOLOGY

The dataset includes financial statement data and footnotes from BIST100 company reports published between 2018 and 2022, obtained from Borsa Istanbul, Public Disclosure Platform and Finnet 2000+. The analysis starts from 2018 because this is the year when IFRS 15 came into effect. The data ends at 2022 because of the inflation accounting applied in Turkey for 2023 reports. Under inflation accounting, financial statements are restated, making comparisons with previous years impossible. Therefore, in order for all the data included in the analysis to provide sound results, 2023 was excluded from the analysis, which is a limitation of the study. A second limitation is that data was only available from 54 BIST100 companies while another 46 companies were excluded. In total, the study includes 270 observations based on 5 years of data from 54 companies.

The study used both qualitative and quantitative research methods. First, content analysis was used to determine whether IFRS 15 disclosures were included in companies' financial reports. Then, panel data

analysis, one of the quantitative research methods, was used to determine the level of compliance with company characteristics and disclosure requirements.

The analytical model is as follows:

$$\text{COMPL}_{i,t} = \beta_0 + \beta_1(\text{SIZE})_{i,t} + \beta_2(\text{LEV})_{i,t} + \beta_3(\text{ROA})_{i,t} + \beta_4(\text{ROE})_{i,t} + \beta_5(\text{BIG4})_{i,t} + \beta_6(\text{AFR})_{i,t} + \beta_7(\text{AGE})_{i,t} + \Sigma\beta_n \text{INDUSTRY}_{i,t} + \Sigma\beta_k \text{YEAR}_{i,t} + \varepsilon_{i,t}$$

The dependent variable in the empirical model is level of compliance with the IFRS 15 disclosure requirements of the companies included in the analysis. Level of compliance was measured by a checklist of 25 questions. The data for the independent variable were collected by examining the independent audit reports (financial statements and footnotes) of the 54 companies for 5 years. If the company's report met a required item in the standard, then the checklist item was coded '1', otherwise '0'. The scores for the 25 questions were then averaged for each company.

Information on the independent variables of the study, the source of the data, and the expected results are defined in Table 1.

Table 1. Information On the Independent Variables

Variable	Definition	Expected Sign	Data Source
Size	Natural logarithm of total assets	+	Finnet 2000+
Leverage	Total liabilities/Total assets	-	Finnet 2000+
ROA	Net profit/Average asset	+/-	Finnet 2000+
ROE	Net profit/Equity	+/-	Finnet 2000+
BIG4	If it is one of the big four audit firms, 1 point, otherwise 0	+	Public disclosure platform
Audit Firm Rotation	If the independent audit firm is different from the previous year, 1 point, otherwise 0	+/-	Public disclosure platform
Age	How long the company has operated since its establishment	+	Public disclosure platform

The study used 5 years of data for 1 dependent variable and 7 independent variables. Econometric analysis using data collected from different units in different time periods is called panel data analysis. Data covering more than one period from more than one unit are called cross-sectional data. Data covering more than one period from one unit are called time series data. The models developed for the analysis include 5 years of cross-sectional data and time series data from 54 companies. The panel data analysis was conducted using the Stata programme.

4. FINDINGS

Table 2 shows the descriptive statistics of the study variables.

Table 2. Descriptive Statistics of Variables

Variable	Mean	Median	Standard Deviation	Maximum Value	Minimum Value
Compliance	0.362963	0.32000	0.164807	0.880000	0.120000
Size	3.100010	1.05001	6.090010	5.790011	5.158288
Leverage	59.34304	63.2200	21.64147	116.6500	1.080000
ROA	10.33670	7.50500	12.72882	63.50000	-22.5500
ROE	25.54041	23.8450	46.94705	339.5400	-255.810
BIG4	0.796296	1.00000	0.403499	1.000000	0.000000
Audit Firm Rotation	0.155556	0.00000	0.363107	1.000000	0.000000
Age	41.644	46.0000	20.35428	89.00000	3.000000

As Table 2 shows, the dependent variable compliance ranged between 0.12 and 0.88. Regarding the independent variables, size varied between 5.79 and 5.16, leverage between 116.65 and 1.08, ROA between 63.50 and -22.55, ROE between 339.54 and -255.81, BIG4 and audit firm rotation between 1 and 0, and age between 89 and 3. Leverage had the highest mean value; firm rotation had the lowest.

Table 3 shows the Pearson correlation coefficients between the study variables.

Table 3. Pearson Correlations

Variables	Compliance	Size	Leverage	ROA	ROE	BIG4	AFR	Age
Compliance	1							
Size	0.239765	1						
Leverage	0.276415	0.0126	1					
ROA	-0.239617	-0.0289	-0.490228	1				
ROE	-0.003926	0.0085	0.012633	0.55563	1			
BIG4	0.261788	0.1791	0.223656	-0.12816	-0.0234	1		
AFR	-0.020155	0.0111	-0.057051	0.07263	-0.0493	-0.0322	1	
Age	-0.026858	0.2501	-0.07000	-0.05967	-0.0350	0.33967	0.0322	1

As Table 3 shows, no variables had correlations higher than 60%. ROA and ROE, ROA and leverage, and age and BIG4 were the most highly correlated variables. Conversely, ROE and compliance, and ROE and size were the least correlated variables.

Before applying panel data analysis to determine the effect of the independent variables on the dependent variable, several statistical assumptions must be met. First, when calculating the regression of one time series against another, a high level of explanation (R^2), known as spurious or fake regression, can be obtained in cases where there is in fact no significant relationship between the two series. Spurious regression can occur if the time series show strong general trends due to a permanent downward or upward trend rather than a real relationship between them. That is, the time series are not stationary (Gujarati, 2003: 709). In order to determine whether the relationship between two time series is real or fake, unit root tests should be performed for each variable to test their stationarity. In the present study, the Augmented Dickey and Fuller (ADF) panel unit root test developed by Dickey and Fuller (1981) was used. Table 4 shows the panel unit root test results measured with ADF using the Schwarz information criterion.

Table 4. Panel Unit Root Test (ADF) Results

Variables	t-statistics	p-value
Compliance	114,34	0.0000
Size	128,262	0.0000
Leverage	170,867	0.0000
ROA	155,084	0.0000
ROE	172,212	0.0000
BIG4	138,147	0.0000
Audit Firm Rotation	132,692	0.0000
Age	165,021	0.0000

As Table 4 shows, because the p values calculated for the variables are less than the critical value of 0.05, there is no general unit root in the series and all variables are stationary at the level.

The second assumption to test is that there is no autocorrelation. For this, Durbin Watson statistics were examined to test for autocorrelation between the error terms of the model, with a value close to 2 being

required (Sarikovanlık et al., 2020: 50). The value for the study data was 2.282, thereby indicating no autocorrelation.

Third, the data should be normally distributed. For this purpose, skewness and kurtosis values were analyzed. If their values fall between -1.5 and +1.5, the data is considered to be normally distributed (Tabachnick and Fidell, 2013). In the present study, skewness was 0.032289 while kurtosis was 1.301951, indicating that the data met the normality assumption.

In panel data analysis, it is necessary to choose between either the random effects or fixed effects approaches for model estimation using the Hausman (1978) test for random and fixed effects estimators. According to the null hypothesis of the Hausman test, there is no systematic difference between the random and fixed effect model coefficients. In the present study, the Hausman test statistic was $p = 0.031$ ($p > 0.01$). Hence, the Hausman no-difference hypothesis was rejected and the random effects approach was used in the study.

Once the above assumptions were tested and satisfied, the panel data analysis of the model was performed. Table 5 presents the results.

Table 5. Panel Data Analysis Results

Dependent Variable: Compliance				
Years: 2018–2022				
Number of Years: 5				
Number of Company Observations: 54				
Total Number of Observations: 270				
Variables	Coefficient	Standard Error	t-statistics	p-value
C	0.295990	0.042932	6.894410	0.0000***
Size	6.240013	1.550013	4.026101	0.0001***
Leverage	0.000810	0.000516	1.569288	0.1178
ROA	-0.003102	0.001026	-3.024190	0.0027***
ROE	0.000479	0.000242	1.979202	0.0488**
BIG4	0.092531	0.024935	3.710939	0.0003***
Audit Firm Rotation	0.004773	0.025237	0.189115	0.8501
Age	-0.001321	0.000494	-2.676335	0.0079***
R ² : 0.205002			p- value: 0.000	
Adjusted R ² : 0.183761			F-statistic: 9.6514	
Schwarz criterion: -0.8353				

** and *** represent significance at the 5% and 1% level, respectively.

Regarding the panel data analysis results in Table 5, an F value of 9.651489 and p value less than 0.01 indicate that the model is significant. The independent variables of the model affect the dependent variable as a whole. The coefficient of determination, R², is calculated as approximately 0.20. This means that 20% of the change in the dependent variable can be explained by changes in the independent variables in the model. In other words, approximately 20% of the change in the dependent variable is explained by the independent variables. However, not all the independent variables had significant effects on the dependent variable: the p values of size, ROA, ROE, BIG4 and age had statistically significant effects; leverage and audit firm rotation did not.

In line with the general literature, there was a significant and positive relationship between the degree of compliance with IFRS 15 disclosure requirements and company size. The degree of compliance with IFRS 15 disclosure requirements increases as the size of company, represented by the natural logarithm of total assets, increases. Hence, H₁ is accepted.

There was a statistically significant relationship between ROA and ROE, analyzed as profitability measures, and the degree of compliance with IFRS 15 disclosure requirements. The direction of the relationship between

these measures and the dependent variable was not estimated due to inconsistent results in the literature. As predicted, the two variables had effects in different directions: ROA negatively affected degree of compliance with IFRS 15 disclosure requirements whereas ROE positively affected it. Hence, H₃ and H₄ are accepted.

As discussed earlier, a company audited by one of the BIG4 audit firms is most likely audited by more knowledgeable and expert independent auditors. The size of the independent audit firm positively affects the independence of the independent auditors and the quality of the audited financial reports. Thus, the company audited in this way complies more with the IFRS disclosure requirements. In line with the literature, there was a significant and positive relationship between the degree of compliance with the IFRS 15 disclosure requirements and the size of the audit firm. Hence, H₅ is accepted.

The relationship between company age and the degree of compliance with IFRS disclosure requirements was statistically significant. However, contrary to expectations, the direction was negative. Hence, H₇ is rejected. Finally, there were no statistically significant relationships between compliance with IFRS 15 disclosure requirements and either leverage or audit firm rotation. Hence, H₂ and H₆ are also rejected.

5. CONCLUSIONS

In the notes to their financial statements, companies should make the disclosures required by international accounting standards. This will improve the quality of accounting and provide users with more information about the company's performance. As revenue is one of the key performance indicators of company, it is also important to users. The standard IFRS 15 Revenue from Contracts with Customers, which has been effective since 2018, requires comprehensive disclosure requirements. The standard is considered by regulators to be a response to criticism that the disclosure requirements in the previous revenue standard were inadequate.

Achievement of the standard-setters' objectives of higher quality reporting and presentation is directly proportional to the extent to which enterprises comply with the principles and rules set out in the standard. In practice, however, these principles and rules are not always sufficiently complied with in practice. For example, several studies have compared the level of compliance of companies with the disclosure requirements of IFRS 15 with these requirements and found that a low level of compliance (Boujelben and Kobbi Fakhfakh, 2020; Karim and Riya, 2022). Even within the same sector, companies may differ in their compliance. In the financial reports examined in the present study, the highest compliance level was 88%, whereas the lowest was 12%. The results also show that no company was fully compliant with the IFRS 15 disclosure requirements while level of compliance varied considerably between companies.

The present study also aimed to identify which company characteristics affect compliance with IFRS 15 disclosure requirements. To this end, 7 hypotheses were tested for 7 independent variables (company size, firm leverage, profitability ratios, audit firm size, audit firm rotation, and firm age) using panel data analysis based on 5 years of financial statement data from 54 companies listed in Turkey's BIST 100. The analysis revealed statistically significant and positive effects on level of compliance for firm size, ROE, and audit firm size, and a significant and negative effect for ROA. These findings are in line with the predictions based on the literature (Kobbi-Fakhfakh and Belguith, 2024; Cooke, 2012; Lazar and Velte, 2018; Cascino and Gassen, 2015; Palmer, 2008; Jerry and Saidu, 2018).

The level of IFRS 15 mandatory disclosures increases if a company is larger, its profitability based on equity is higher, and it is audited by one of the Big Four audit firms. However, the ROA ratio decreases as the amount of assets increases in large companies, so the direction of the relationship is negative. Contrary to expectations, there was no statistically significant relationship between leverage ratio and level of IFRS 15 disclosure, although this is also in line with certain previous studies (Dumontier and Raffournier, 1998; Alsaeed, 2006; Juhmani, 2017). Similarly, contrary to some previous studies, there was no significant relationship in the present study between audit firm rotation and compliance with IFRS 15 disclosure requirements (Lennox et al., 2014; Firth et al., 2011; Chi et al., 2010; Kwon et al., 2014; Kuang et al., 2020; Gipper et al., 2021). In the present study disclosure compliance was not related to audit firm rotation but to whether the audit firm was one of the Big 4 audit firms. Finally, company age also affected level of compliance. However, contrary to

expectations, the reason why this relationship is negative is that newly established companies may want to provide more information to users of the financial statements in order to increase their recognition and therefore increase their level of compliance with IFRS 15 disclosure requirements.

The findings of this study have important implications regarding the accounting rules and principles of regulating organizations striving to improve the level of auditing and reporting standards in Turkey, as well as for all users of financial reports. In addition, the findings help to evaluate the scope of mandatory disclosures made by companies in Turkey. Finally, the results are undoubtedly of great importance for accounting professional organizations and policy makers in countries with similar economic and cultural structures.

Our study is not free from limitations. First, it only analyzed the financial statements of non-financial companies in the BIST 100. Future studies should therefore analyze the financial statements of companies in all sectors in the BIST 100. In addition, the financial statements of companies in other countries can be examined for compliance with the IFRS 15 disclosure requirements.

Our study showed that level of compliance with IFRS 15 disclosure requirements is generally low. It is recommended that the reasons for this be investigated by academics and accounting organizations. Further research should also be conducted to determine the cost to companies of the disclosures required by IFRS 15 and whether the issues to be disclosed are sufficiently understandable. The findings from such research will be useful to standard setters in improving standards.

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