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An Investigation of Corporate Governance Practices of Businesses in Terms of Financial Performance: An Application on Borsa Istanbul Corporate Governance Index Companies *

İşletmelerin Kurumsal Yönetim Uygulamalarının Finansal Performans Açısından İncelenmesi: Borsa İstanbul Kurumsal Yönetim Endeksi Şirketleri Üzerine Bir Uygulama

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ÖZ

Bu çalışma, 2010–2022 döneminde BIST Kurumsal Yönetim Endeksi (BİST XKURY)'nde yer alan şirketlerde kurumsal yönetimin finansal performans üzerindeki etkisini panel veri analiziyle incelemektedir. Araştırmanın önemi, yalnızca bu ilişkiyi incelemekle kalmayıp yönetim kurullarındaki kadın temsili de çalışmada incelemesidir. Kurumsal yönetim; pay sahipleri, şeffaflık, paydaşlar ve yönetim kurulu boyutlarıyla değerlendirilmiş, finansal performans ROA, ROE ve EPS göstergeleriyle ölçülmüş, firma büyüklüğü ve kaldırılacak oran kontrol değişkeni olarak kullanılmıştır. Örnekleme, %25 kadın üye eşliğine göre ayrılmış, sonuçlar ise bu oranın üzerindeki şirketlerde yönetim kurulu etkinliği ile kârlılık ilişkisinin daha güçlü olduğunu ve cinsiyet çeşitliliğinin finansal performansı artırıcı rol oynadığını göstermiştir.

ABSTRACT

This study examines the impact of corporate governance on financial performance in firms listed on the BIST Corporate Governance Index (BIST XKURY) over the 2010–2022 period using panel data analysis. The significance of the research lies not only in investigating this relationship but also in analyzing the role of female representation on board of directors. Corporate governance is evaluated across four dimensions: shareholders, transparency, stakeholders, and the board of directors. Financial performance is measured through ROA, ROE, and EPS, with firm size and leverage included as control variables. The sample is divided by a 25% threshold of female board members. The findings indicate that in firms with $\geq 25\%$ female representation, the link between board effectiveness and profitability is stronger, highlighting the performance-enhancing role of gender diversity.

1. Introduction

Corporate governance has become a widely discussed topic due to global crises, corporate scandals, and excessive

executive payments. It is a legal and financial structure based on transparency, aiming to protect shareholder and stakeholder rights, ensure business sustainability, and maintain investor confidence. As a holistic system, it

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provides long-term economic benefits through effective resource use and is grounded in legal regulations (Millstein, 1999:5). Unlike traditional management, which focuses on planning, organizing, and controlling, corporate governance emphasizes aligning stakeholder interests with corporate goals (O'Sullivan, 1998:147).

Although first mentioned by Adam Smith in 1776 regarding managers' misuse of company resources, corporate governance in its modern sense gained importance in the 20th century as firms grew and became more complex (Berle et al., 1932). The concept entered international literature in the early 1990s with the Cadbury Report (1992), defining it as "a system for the management and control of companies." It was later reinforced by the Millstein, Greenbury (1995), and Hampel (1998) Reports (Yazgan, 2017). The OECD (1994) defined corporate governance as internal tools for company management and control, followed by the establishment of the OECD Corporate Governance Committee in 1998 and the adoption of principles, updated in 2004 and 2015, which serve as a global guide. In the USA, the Sarbanes-Oxley Act (2002) placed Cadbury and OECD principles on a legal basis to address agency problems and conflicts of interest (Calder, 2008:17).

The corporate governance process in Türkiye started in 2002 with TÜSİAD's "Best Governance Code," followed by the CMB's Corporate Governance Principles (2003) and compliance regulation (2004). Revisions by the CMB and BRSA came in 2005, and the BIST Corporate Governance Index, established the same year, began to be calculated in 2007. Corporate governance became mandatory for listed firms in 2011 with the CMB Communiqué, while the new TCC and CMB Law entered into force in 2012, and the Communiqué was renewed in 2014. Later, OECD Principles were published in Istanbul (2015), a new Compliance Framework was prepared (2019), and sustainability disclosures were added (2020).

Corporate governance has been explained through various theories: Agency theory highlights conflicts between managers and shareholders and the need for transparency and audits (Jensen et al., 1976); Stakeholder theory stresses firms' social responsibilities (Freeman, 1984); Resource dependence theory focuses on access to external resources (Pfeffer et al., 1978); Institutional theory emphasizes social norms and regulations (DiMaggio et al., 1983); and Upper echelons theory examines governance at leadership level (Hambrick et al., 1984). These theories show the multidimensional nature of governance, supporting both economic and social goals.

To analyze the link between corporate governance and financial performance in BIST XKURY firms, the study first presents the historical development of corporate governance. The first section covers national and international literature, the second presents data, method, and findings, and the conclusion offers evaluations and recommendations for future research.

2. Literature Review

This section reviews domestic and international studies on how corporate governance affects financial performance, showing extensive research across countries. The relationship is of key interest to investors, regulators, and academics, with studies examining different governance components, periods, and methods.

Findings highlight that factors such as board structure, ownership, managerial incentives, corporate social responsibility (CSR), and governance ratings influence firm performance. While some effects are universal, results vary with institutional frameworks, regulations, culture, and market conditions. This underlines the need for thematic, multivariate analyses rather than context-free generalizations. Core principles like transparency, accountability, and effective audits remain essential for sustainable financial success.

2.1. Corporate Governance Ratings and General Performance Indicators

Early structural contributions explored the direct link between corporate governance ratings and financial performance. Renders et al. (2010) analyzed FTSE Eurofirst 300 firms (1999–2003) rated by Deminor, using Worldscope financial data, correlation analysis, and the Benchmark Model. With governance rating as the independent variable and ROA, ROE, Tobin's Q, market value/sales, and market value/book value as dependents, they found that higher ratings improve performance, though the effect declines over time. Similarly, Cengiz et al. (2022) examined 156 Borsa Istanbul firms (2008–2018) with panel data, using governance ratings as the independent variable, ROE, ROA, and Tobin's Q as dependents, and leverage, size, age, ownership, and tenure as controls. Their results show that stronger governance positively affects financial performance.

2.2. Ownership Structure, Family Businesses and Financial Performance

In corporate governance literature, ownership structure and family ownership are seen as key factors shaping firm performance. Ghazali (2010) analyzed 87 Malaysian non-financial firms post-Asian Crisis, showing that governance affects performance mainly through ownership structure, using board and ownership as independents and Tobin's Q as the dependent variable. Rodrigues (2010), examining 208 Milan Stock Exchange firms (2000–2006) with GMM regression, found that family-owned firms benefit more from governance practices, with ROA and Tobin's Q as dependents. Similarly, Ibrahim et al. (2011), using 290 Malaysian firms (1995–2005), reported that family and non-family ownership have similar effects on ROA, ROE, and Tobin's Q.

Abdallah et al. (2016) studied 581 GCC firms (2008–2012) and showed that concentrated ownership and ownership structure affect governance levels, which then influence

ROE, ROA, and Tobin's Q. Expanding this perspective, Ducassy et al. (2017) examined 2,118 French firm-year observations (2000–2009), finding that shareholder homogeneity reduces agency conflicts, while control contestability is crucial. They argue that classical agency theory is insufficient for complex ownership structures, stressing the need to include institutional and socio-organizational factors in governance analyses.

2.3. Board Composition and Its Effects

Another central theme in the corporate governance literature is how board characteristics affect performance. Masulis et al. (2012), using OLS on RiskMetrics data (1998–2006), found that foreign independent directors lower performance in domestic markets but add value abroad. Luckerath-Rovers (2013), analyzing 116 Dutch firms (2005–2007), showed that female directors improve financial outcomes. Francis et al. (2015), with data from 2,703 U.S. firms (1998–2011), reported that academic directors positively affect Tobin's Q, ROA, and stock returns. Habib (2016), in Bangladesh, found board structure and director qualifications improve ROA.

Mohan et al. (2018), studying 30 Indian firms, revealed that board structure was not significant, but board size and segregation of duties negatively impacted ROE and market/book ratios. Sheikh et al. (2021), on 274 Bangladeshi maritime firms, found board ownership, leadership, and size significantly influence ROA, but composition was insignificant. Arvanitis et al. (2022), using panel data (111 Greek firms, 2008–2020), found a positive link between gender diversity and firm performance, with an inverted U-shape: performance peaks at 33% female participation.

Singh et al. (2023), examining 26 Indian IT firms (2013–2021), reported an insignificant relationship between gender diversity and Tobin's Q, attributing it to low female representation, with policy implications for stricter regulation. Shanak (2024), analyzing Palestinian firms (2016–2019), showed CEO duality and gender diversity positively affect ROA, while board size and independence had insignificant effects. Aziz et al. (2025), with 1,414 ASEAN firm observations (2017–2023), found ESG controversies negatively impact performance, but gender diversity and sustainability committees mitigate these effects, enhancing reputation and performance.

2.4. Corporate Social Responsibility and Governance

The joint evaluation of CSR and governance enables assessing firms' performance both financially and socially. Ntim et al. (2013), using data from 291 Johannesburg Stock Exchange firms (2002–2009), applied regression and panel analysis with governance and CSR indicators as independents, ROA, Tobin's Q, and EPS as dependents, and firm/structural factors as controls. Findings show that strong governance enhances the positive link between CSR and financial performance. Similarly, Flammer (2015), analyzing 2,729 observations from 123 firms (1997–2012) with data from RiskMetrics, SharkRepellent, and

Compustat, found that CSR (KLD index) and governance (G index) significantly affect ROE, ROA, Tobin's Q, net profit margin, and EPS.

2.5. Managerial Ownership and Incentive Mechanisms

Managerial ownership, central to agency theory, plays a key role in firm performance. Bhagat et al. (2019), using data from 2003–2016, showed that executive shareholding is consistently linked to higher future performance. In the 2008 crisis, analysis of the 100 largest US financial institutions revealed that managerial stock ownership improved performance while reducing risk—findings with regulatory implications. Similarly, Ma et al. (2024), studying Chinese firms listed on the Shanghai and Shenzhen exchanges (2012–2022), found that balanced ownership, larger boards, and executive incentives enhance performance, with technological innovation mediating the governance–performance relationship.

2.6. Country and Sector-Based Analyses

The impact of corporate governance on financial performance differs by country and sector. Bauer et al. (2010), analyzing REITs (2003–2005) with OLS, found no significant link between governance indices (CGQ, ISS, GIM) and Tobin's Q, ROA, ROE, or profitability measures. Similarly, Pham et al. (2011), studying 150 Australian firms, reported no significant association between governance compliance and performance. In contrast, Vo et al. (2013), examining 77 Vietnamese firms (2006–2011), found board structure and ownership had a partially positive effect on ROA.

Amba (2014), with 39 Bahraini firms (2010–2013), showed mixed results: some governance practices improved ROA, others had negative effects. Rizwan et al. (2016), studying 20 top Karachi firms (2007–2014), found board structure, ownership, and committees positively influenced profitability and market ratios. Al-ahdal et al. (2020), using 53 Indian and GCC firms (2009–2016), reported that board accountability, audit committees, and transparency had no significant effect on ROE or Tobin's Q, though Indian firms outperformed GCC peers. Finally, Chakraborty (2023), analyzing Indian manufacturing firms (1995–2017), showed that product market competition enhances performance, acting as an external governance mechanism that strengthens reforms, particularly in less competitive sectors.

3. Purpose of the Study, Data Set, Methodology and Findings

3.1. Purpose of the Study

The main objective of the study is to comprehensively analyze the relationship between corporate governance practices and financial performance of firms listed in the Borsa Istanbul Corporate Governance Index (XKURY). The distinctive feature of the study from similar studies is to determine whether the representation of female members on the boards of directors of firms listed in the BIST Corporate Governance Index has an impact on their financial

performance. Considering the 25% limit in the Corporate Governance Communiqué on the representation of women on the Board of Directors (i.e. “less than 25%” and “25% or more”), the sample was divided into two parts and included in the scope of the analysis.

This study aims to create a wide impact area by providing implications not only for firms listed in the Borsa Istanbul Corporate Governance Index, but also for other markets with similar corporate governance practices.

3.2. Data Set of the Study

Within the scope of the study, companies included in the BIST Corporate Governance Index were examined. The BIST Corporate Governance Index was started to be calculated as of 31.08.2007 and there have been companies that have continuously entered and exited the index since the year it was started. In this context; in order to reach the optimum data set in terms of the number of companies (taking into account the effect of inflation accounting), the study was conducted on 20 companies that were continuously included in the BIST Corporate Governance Index between 2010 and 2022 (banks included in the index were not included in the analysis due to differences in balance sheet structure). Since corporate governance rating scores are not published annually, financial performance indicators and control variables were also used based on year-end data.

Within the scope of the study, the Corporate Governance Rating sub-scores (Shareholders, Public Disclosure and Transparency, Stakeholders, Board of Directors), which are also frequently used in the literature, were used as independent variables. Return on equity ratio, return on assets ratio and earnings per share ratios used to measure financial performance were used as dependent variables. Leverage ratio and firm size (natural logarithm of total assets) were included in the study as control variables.

The dependent variable and control variable data used in the study were obtained from Reuters, Rasyonet and Bloomberg terminals. The independent variable data used in the analyses were obtained from the Corporate Governance Rating reports published by independent rating agencies. While calculating the firm size in the study, the logarithm of total assets was taken in order to standardize it with other variables. The reason for including the firm size as a control variable in the study is that large firms have more access to information than small firms. From this point of view, large firms may exhibit higher financial performance and have higher market capitalization than small firms. In using the leverage ratio, it was aimed to include the effect of debt on firms' financial performance and assets in the model.

3.3. Methodology of the Study

In the study, “Panel Data Analysis”, which is the most commonly used method for the analysis method in studies examining the relationship between corporate governance and financial performance, was used as the estimation

method. Data analysis was performed with the Stata 18 program in the study.

Panel data analysis allows for a more detailed analysis of economic models by combining time series and cross-section data. This method reduces estimation errors and increases the reliability of model results as it takes into account individual heterogeneities (Balestra et al., 1966).

3.4. Research Model

Three different models were studied in the study. In order to measure the impact of corporate governance practices of firms on their financial performance, the following models were created and regression equations were used:

Model 1: The effect of corporate governance practices on return on equity ratio and control variables

$$ROE_{it} = \alpha_{it} + \beta_1 * SH_{it} + \beta_2 * PDT_{it} + \beta_3 * STH_{it} + \beta_4 * BoD_{it} + \beta_5 * CS_{it} + \beta_6 * LR_{it} + \epsilon_{it}$$

Model 2: The effect of corporate governance practices on return on assets ratio and control variables

$$ROA_{it} = \alpha_{it} + \beta_1 * SH_{it} + \beta_2 * PDT_{it} + \beta_3 * STH_{it} + \beta_4 * BoD_{it} + \beta_5 * CS_{it} + \beta_6 * LR_{it} + \epsilon_{it}$$

Model 3: The effect of corporate governance practices on earnings per share and control variables

$$EPS_{it} = \alpha_{it} + \beta_1 * SH_{it} + \beta_2 * PDT_{it} + \beta_3 * STH_{it} + \beta_4 * BoD_{it} + \beta_5 * CS_{it} + \beta_6 * LR_{it} + \epsilon_{it}$$

$i=1,2,\dots,n$ number of firms, $t=1,2,\dots,t$ is the time period.

α =constant term, ϵ =error term and $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ are the regression coefficients.

$i=1,2,\dots,20, n=20$, the number of firms,

$t=1,2,\dots,13, t=13$ (2010–2022), the number of periods (years),

$n \times t = 20 \times 13=260$, the number of observations for each variable.

In the above models, ROE: Return on Equity Ratio, ROA: Return on Assets Ratio, EPS: Earnings Per Share Ratio, SH: Shareholders Section Corporate Governance Rating Score, PDT: Public Disclosure and Transparency Section Corporate Governance Rating Score, STH: Stakeholders Section Corporate Governance Rating Score, BoD: Board of Directors Section Corporate Governance Rating Score, CS: Company Size (Natural Logarithm of Asset Size), LR: Leverage Ratio.

In order to achieve the objective of the study, firstly, descriptive statistics are given and then panel unit root tests, Hausman test, panel data basic assumption tests and regression analyses are performed respectively.

3.5. Limitations of the Study

The study has some limitations. The analysis is limited only to publicly traded companies included in the Borsa Istanbul

Corporate Governance Index. In the study, the data set period was limited to 2010-2022 due to the inflation accounting effect in the data after 2022, and companies in the banking sector were not included in the study because they contain sector-based ratio differences. This limits the generalization of the results to all sectors or all companies. Furthermore, the data used are based on quantitative rating scores; qualitative aspects of governance quality are beyond the scope of this study.

Table 1: Descriptive Statistics

Variables	Average	Std. Dev.	Minimum	Maximum	Observation	Skewness	Kurtosis
ROE	0.1795	0.2710	-0.7824	1.4445	260	1.9061	12.1314
ROA	0.0650	0.1031	-0.1835	0.7605	260	1.0202	6.6787
EPS	1.7962	5.9988	-6.2851	64.2178	260	6.8208	59.4920
SH	0.8897	0.0612	0.5770	0.9592	260	-1.0603	5.0335
PDT	0.9365	0.0456	0.8040	0.9947	260	-0.9377	3.2874
STH	0.9330	0.0730	0.6630	0.9951	260	-1.6500	5.3892
BoD	0.8722	0.0842	0.6086	0.9782	260	-1.4717	4.1249
CS	1.5600	1.7400	-3.2890	5.9341	260	-0.0535	2.6040
LR	1.7912	1.3434	0.0200	7.1900	260	1.1352	4.5757

Source: Stata 18. (Created by the author.)

As seen in Table 1, for the 20 companies (260 observations) used in all models of this research, the average value of the dependent variable ROE (Return on Equity Ratio) was found to be 0.18, the average value of the dependent variable ROA (Return on Assets Ratio) was found to be 0.06, and the average value of the dependent variable EPS (Earnings per Share Ratio) was found to be 1.80. The independent variables used in the research, SH (Shareholder Rating Score), PDT (Public Disclosure and Transparency Rating Score), STH (Stakeholder Rating Score) and BoD (Board of Directors Rating Score), have average values of 0.89, 0.94, 0.93 and 0.87, respectively.

3.6.1. Conducting Tests and Analyses in terms of the Relationship between Financial Performance and Corporate Governance

From this point on, the necessary analyses will be carried out by testing the assumptions of panel data analysis on the 3 models described above. After the initial analyses are performed, the 3 models will be re-examined within themselves in 2 sub-divisions and 6 different models regarding Female Representation on the Board of Directors. Before moving on to the model analysis, it was first necessary to determine whether the fixed effects model or the random effects model would be more appropriate for each analytical category. To address this, the Hausman test—based on the chi-square distribution with k degrees of freedom—was employed. The test evaluates whether the difference in coefficients between the two models is systematic. A rejection of the null hypothesis, which assumes that the random effects model coefficients are consistent with those of the fixed effects model, indicates

3.6. Findings of the Study

In this section of the study, the findings obtained as a result of the analysis and the evaluation of these findings will be presented. Descriptive statistics regarding the variables used in the analysis covering the period 2010 – 2022 are presented in Table 1.

that the fixed effects model yields more reliable results (Bayraktutan et al., 2011: 9). The hypotheses of the Hausman test are given below:

H0: The random effects model is valid.

H1: The random effects model is invalid.

In the next stage, the basic assumptions in the models (horizontal cross-section dependence, autocorrelation and heteroskedasticity) are tested and the models are estimated. Heteroskedasticity, or varying variance, means that the variance of the error term varies depending on the level of the independent variables in the model. In such a case, although the regression coefficients remain consistent, the estimated standard errors may deviate, which reduces the efficiency of the model. Therefore, it is essential to test whether the model has a heteroskedasticity problem. Levene, Brown and Forsythe tests for the random effects model and Modified Wald test for the fixed effects model are among the methods that can be used for this purpose (Yerdelen-Tatoğlu, 2012). The existence of a relationship between the error terms in the model, that is, the presence of autocorrelation, weakens the effectiveness of the estimates despite preserving the consistency of the estimated parameters and leads to deviations in standard errors (Gerni et al., 2012). Positive or negative autocorrelation can deviate the variance and R^2 value of the model from their true levels; it may also cause misinterpretations by reducing the reliability of t and F statistics (Yavuz, 2019). Therefore, in order to detect the autocorrelation problem, the Durbin-Watson (DW-d) test proposed by Bhargava, Franzini, and Narendranathan and the Locally Best Invariant (LBI) test developed by Baltagi and Wu (1999) were used in the study

(Ün, 2008).

In panel data analyses, the situation where the error terms between different units are related to each other is called horizontal cross-section dependence and this situation can seriously affect the reliability of the analysis results. When horizontal cross-sectional dependence is present, significant deviations may occur in the results of traditional unit root tests (O'Connell, 1998). In addition, ignoring such dependencies may cause the model to produce biased and inconsistent results. Therefore, testing the existence of horizontal cross-sectional dependence in panel data models is of great importance. The methods commonly used in the

literature to determine the dependency in question include the Breusch-Pagan Lagrange Multiplier (LM) test, Pesaran's CD test, Friedman's rank correlation test and Frees Q test. In this study, the Friedman Rank Correlation Test, which is suitable for situations where the time dimension (T) is smaller than the number of units in the panel (N), was preferred (Ün, 2008). Since the time dimension studied in the models is larger than the sample size, the models were estimated with the Driscoll-Kraay Robust Estimators Method.

Conducting Tests and Analyses for Model 1 (ROE):

Table 2: Hausman Test Results (Model 1)

	Test Statistics		Model Selection
Model 1	Chi-Square Statistics	59.13	Fixed Effect Exists
	p value	0.0000	

Source: Stata 18. (Created by the author.)

According to the Hausman test result, the null hypothesis is rejected since the p value is less than 0.05 significance level. There is a fixed effect in the model. From this point on, it will be assumed that there is a fixed effect in the model.

From this point on, it is questioned whether the created model contains horizontal cross-sectional dependency, autocorrelation of error terms and heteroscedasticity problems.

Table 3: Testing Basic Assumptions (Model 1)

Model 1 (ROE)	Test Statistics	
Horizontal Cross-Section Dependence (Friedman)	p value	0.6510
Autocorrelation (Modified Bhargava et al. Durbin-Watson)	p value	1.7263
Autocorrelation (Baltagi-Wu LBI)	p value	1.9136
Heteroscedasticity (Modified Wald)	p value	0.0000

Source: Stata 18. (Created by the author.)

Therefore, firstly, horizontal cross-section dependence was analyzed and the Friedman Rank Correlation test showed that there is no horizontal cross-section dependence. Then, Bhargava, Franzini, and Narendranathan's Durbin Watson Test and Baltagi Wu LBI Tests used to detect autocorrelation were applied, and since the probability values were less than 2, the null hypothesis of "no

autocorrelation" was rejected. Then, the Modified Wald Test was applied to analyze the heteroscedasticity problem as a result, the null hypothesis of "no heteroscedasticity" was rejected. Therefore, in order to correct the errors caused by deviations from the basic assumptions in the obtained results, the model was re-estimated with the help of Pooled Least Squares Robust Errors estimator.

Table 4: Pooled Least Squares Robust Errors Estimator (Model 1)

Dependent Variable	ROE			
Independent Variables	Coefficient	Std. Deviation	t	P-Value
Constant	-0.5408	0.1915	-2.82	0.005
SH	-1.2382	0.3363	-3.68	0.000
STH	1.5183	0.2222	6.83	0.000
BoD	0.4645	0.1525	3.05	0.003
Test Results	Coefficient	P-Value		
F Test	17.98	0.0000		
R ²	0.1328			

Source: Stata 18. (Created by the author.)

According to the results obtained, it is confirmed that the independent variable SH affects ROE negatively at the statistically significant level, while the independent variables STH and ROE affect ROE positively at the statistically significant level. Accordingly, it was determined that a one-unit increase in the Shareholders Rating Score decreased the Return on Equity by 1.2381 units, a one-unit increase in the Stakeholders Rating Score

increased the Return on Equity by 1.5183 units, and a one-unit increase in the Board of Directors Rating Score increased the Return on Equity by 0.4644 units. Moreover, when the R^2 of the model is analyzed, it is seen that these variables explain 13.28% of the Return on Equity.

Conducting Tests and Analyses for Model 2 (ROA):

Table 5: Hausman Test Results (Model 2)

	Test Statistics		Model Selection
Model 2	Chi-Square Statistics	18.58	Fixed Effect Exists
	p value	0.0049	

Source: Stata 18. (Created by the author.)

According to the Hausman test result, the null hypothesis is rejected since the p value is less than 0.05 significance level. There is a fixed effect in the model. From this point on, it will be assumed that there is a fixed effect in the model.

From this point on, it is questioned whether the created model contains horizontal cross-sectional dependency, autocorrelation of error terms and heteroscedasticity problems.

Table 6: Testing Basic Assumptions (Model 2)

Model 2 (ROA)	Test Statistics	
Horizontal Cross-Section Dependence (Friedman)	p value	0.3663
Autocorrelation (Modified Bhargava et al. Durbin-Watson)	p value	1.7314
Autocorrelation (Baltagi-Wu LBI)	p value	1.9557
Heteroscedasticity(Modified Wald)	p value	0.0000

Source: Stata 18. (Created by the author.)

Therefore, firstly, horizontal cross-section dependence was analyzed and the Friedman Rank Correlation test showed that there is no horizontal cross-section dependence. Then, Bhargava, Franzini and Narendranathan's Durbin Watson Test and Baltagi Wu LBI Tests used to detect autocorrelation problem were applied and since the probability values were less than 2, the null hypothesis of

"no autocorrelation" was rejected. Then, Modified Wald Test was applied to analyze the heteroscedasticity problem and as a result, the null hypothesis of "no heteroscedasticity" was rejected. Therefore, in order to correct the errors caused by deviations from the basic assumptions in the obtained results, the model was re-estimated with the help of Pooled Least Squares Robust Errors estimator.

Table 7: Pooled Least Squares Robust Errors Estimator (Model 2)

Dependent Variable	ROA			
Independent Variables	Coefficient	Std. Deviation	t	P-Value
Constant	-0.4880	0.1859	-2.62	0.009
SH	-0.9057	0.3026	-2.99	0.003
STH	1.5789	0.2301	6.86	0.000
Test Results	Coefficient	P-Value		
F Test	26.84	0.0000		
R^2	0.1193			

Source: Stata 18. (Created by the author.)

According to the results obtained, it is confirmed that the independent variable SH affects ROA negatively at a statistically significant level, while the independent variable STH affects ROA positively at a statistically significant level. Accordingly, it was determined that a one-unit increase in the Stakeholders Rating Score decreased the Return on Assets by 0.9057 units, while a one-unit increase

in the Stakeholders Rating Score increased the Return on Assets by 1.5789 units. Moreover, when the R^2 of the model is analyzed, it is seen that these variables explain 11.93% of the Return on Equity.

Conducting Tests and Analyses for Model 3 (EPS):

Table 8: Hausman Test Results (Model 3)

	Test Statistics		Model Selection
Model 3	Chi-Square Statistics	75.85	Fixed Effect Exists
	p value	0.0000	

Source: Stata 18. (Created by the author.)

According to the Hausman test result, the null hypothesis is rejected since the p value is less than 0.05 significance level. There is a fixed effect in the model. From this point on, it will be assumed that there is a fixed effect in the model.

From this point on, it is questioned whether the created model contains horizontal cross-sectional dependency, autocorrelation of error terms and heteroscedasticity problems.

Table 9: Testing Basic Assumptions (Model 3)

Model 3 (EPS)	Test Statistics	
Horizontal Cross-Section Dependence (Friedman)	p value	0.0474
Autocorrelation (Modified Bhargava et al. Durbin-Watson)	p value	0.9791
Autocorrelation (Baltagi-Wu LBI)	p value	1.7312
Heteroscedasticity (Modified Wald)	p value	0.0000

Source: Stata 18. (Created by the author.)

Therefore, firstly, horizontal cross-section dependence was analyzed and the Friedman Rank Correlation test showed that there is horizontal cross-section dependence. Then, Bhargava, Franzini and Narendranathan's Durbin Watson Test and Baltagi Wu LBI Tests used to detect

autocorrelation problem were applied and since the probability values were less than 2, the null hypothesis of "no autocorrelation" was rejected. The Modified Wald Test indicated heteroscedasticity, leading to re-estimation of the model using Pooled Least Squares with robust errors.

Table 10: Pooled Least Squares Robust Errors Estimator (Model 3)

Dependent Variable	EPS			
Independent Variables	Coefficient	Std. Deviation	t	P-Value
Constant	-1.3225	0.6482	-3.73	0.000
STH	1.3074	0.1962	4.16	0.003
BoD	2.6842	0.5891	2.97	0.000
Test Results	Coefficient	P-Value		
F Testi	8.88	0.0002		
R^2	0.0527			

Source: Stata 18. (Created by the author.)

According to the results obtained, it was confirmed that the independent variables STH and BoD positively affected the EPS at a statistically significant level. Accordingly, it was determined that a one-unit increase in the Stakeholders Rating Score increased the Earnings Per Share by 1.3074 units, while a one-unit increase in the Board of Directors Rating Score increased the Earnings Per Share by 2.6842

units. Moreover, when the R^2 of the model is analyzed, it is seen that these variables explain 5.27% of the Earnings per Share.

3.6.2. Conducting Tests and Analyses for Firms with 25% or More Female Member Representation in the Board of Directors

Conducting Tests and Analysis for Model 1 (ROE):

Table 11: Hausman Test Results (Model 1)

	Test Statistics		Model Selection
Model 1	Chi-Square Statistics	37.10	Fixed Effect Exists
	p value	0.0000	

Source: Stata 18. (Created by the author.)

According to the Hausman test result, the null hypothesis is rejected since the p value is less than 0.05 significance level. There is a fixed effect in the model. From this point on, it will be assumed that there is a fixed effect in the model.

From this point on, it is questioned whether the created model contains horizontal cross-sectional dependency, autocorrelation of error terms and heteroscedasticity problems.

Table 12: Testing Basic Assumptions (Model 1)

Model 1 (ROE)	Test Statistics	
Horizontal Cross-Section Dependence (Friedman)	p value	0.0705
Autocorrelation (Modified Bhargava et al. Durbin-Watson)	p value	1.4594
Autocorrelation (Baltagi-Wu LBI)	p value	1.7698
Heteroscedasticity (Modified Wald)	p value	0.0000

Source: Stata 18. (Created by the author.)

First, cross-sectional dependence was tested using the Friedman Rank Correlation test, which showed no dependence. Then, the Bhargava et al. Durbin-Watson and Baltagi-Wu LBI tests indicated autocorrelation, rejecting the

null. The Modified Wald test also revealed heteroscedasticity. To address these issues, the model was re-estimated using Driscoll-Kraay robust errors.

Table 13: Driscoll-Kraay Robust Errors Estimator (Model 1)

Dependent Variable	ROE			
Independent Variables	Coefficient	Std. Deviation	t	P-Value
<i>Constant</i>	1.9961	0.8401	2.38	0.035
<i>SH</i>	-0.7509	0.2861	-2.62	0.022
<i>PDT</i>	-2.0713	0.9280	-2.23	0.045
<i>BoD</i>	0.8432	0.2408	3.50	0.004
<i>CS</i>	0.0420	0.0154	2.74	0.018
Test Results	Coefficient	P-Value		
<i>F Test</i>	4.64	0.0171		
<i>R²</i>	0.0978			

Source: Stata 18. (Created by the author.)

According to the results obtained from the Driscoll-Kraay estimator, it is confirmed that the independent variables SH and PDT affect ROE negatively at the statistically significant level, while the independent variable ROE is confirmed to affect ROE positively. Accordingly, it was understood that a one-unit increase in the Shareholders Rating Score decreased the Return on Equity by 0.7509 units, a one-unit increase in the Public Disclosure and

Transparency Rating Score decreased the Return on Equity by 2.0713 units, and a one-unit increase in the Board of Directors Rating Score increased the Return on Equity by 0.8432 units. Moreover, when the R² of the model is analyzed, it is seen that these variables explain 9.78% of the Return on Equity.

Conducting Tests and Analysis for Model 2 (ROA):

Table 14: Hausman Test Results (Model 2)

	Test Statistics		Model Selection
Model 2	Chi-Square Statistics	23.81	Fixed Effect Exists
	p value	0.0006	

Source: Stata 18. (Created by the author.)

According to the Hausman test result, the null hypothesis is rejected since the p value is less than 0.05 significance level. There is a fixed effect in the model. From this point on, it will be assumed that there is a fixed effect in the model.

From this point on, it is questioned whether the created model contains horizontal cross-sectional dependency, autocorrelation of error terms and heteroscedasticity problems.

Table 15: Testing Basic Assumptions (Model 2)

Model 2 (ROA)	Test Statistics	
Horizontal Cross-Section Dependence (Friedman)	p value	0.0526
Autocorrelation (Modified Bhargava et al. Durbin-Watson)	p value	1.4459
Autocorrelation (Baltagi-Wu LBI)	p value	1.8036
Heteroscedasticity (Modified Wald)	p value	0.0000

Source: Stata 18. (Created by the author.)

First, the Friedman Rank Correlation test showed no cross-sectional dependence. Then, the Bhargava et al. Durbin-Watson and Baltagi-Wu LBI tests indicated autocorrelation, rejecting the null hypothesis. The Modified Wald test also

confirmed heteroscedasticity. To correct for these violations, the model was re-estimated using the Driscoll-Kraay robust error estimator.

Table 16: Driscoll-Kraay Robust Errors Estimator (Model 2)

Dependent Variable	ROA			
Independent Variables	Coefficient	Std. Deviation	t	P-Value
<i>Constant</i>	1.9960	0.8402	2.38	0.035
<i>SH</i>	-0.7509	0.2860	-2.62	0.022
<i>PDT</i>	-2.0713	0.9280	-2.23	0.045
<i>BoD</i>	0.8432	0.2408	3.50	0.004
<i>CS</i>	0.0420	0.0154	2.74	0.018
Test Results	Coefficient	P-Value		
<i>F Test</i>	4.64	0.0171		
<i>R²</i>	0.0978			

Source: Stata 18. (Created by the author.)

According to the results obtained from the Driscoll-Kraay estimator, it is confirmed that the independent variables SH and PDT affect ROA negatively at the statistically significant level, while the independent variable ROA affects ROA positively. Accordingly, it was understood that a one-unit increase in the Shareholders Rating Score decreased the Return on Assets by 0.7509 units, a one-unit

increase in the Public Disclosure and Transparency Rating Score decreased the Return on Assets by 2.0713 units, and a one-unit increase in the Board of Directors Rating Score increased the Return on Assets by 0.8432 units. Moreover, when the R^2 of the model is analyzed, it is seen that these variables explain 9.78% of the Return on Assets.

Conducting Tests and Analysis for Model 3 (EPS):

Table 17: Hausman Test Results (Model 3)

	Test Statistics		Model Selection
Model 3	Chi-Square Statistics	27.69	Fixed Effect Exists
	p value	0.0001	

Source: Stata 18. (Created by the author.)

According to the Hausman test result, the null hypothesis is rejected since the p value is less than 0.05 significance level. There is a fixed effect in the model. From this point on, it will be assumed that there is a fixed effect in the model.

From this point on, it is questioned whether the created model contains horizontal cross-sectional dependency, autocorrelation of error terms and heteroscedasticity problems.

Table 18: Testing Basic Assumptions (Model 3)

Model 3 (EPS)	Test Statistics	
Horizontal Cross-Section Dependence (Friedman)	p value	0.0489
Autocorrelation (Modified Bhargava et al. Durbin-Watson)	p value	1.1033
Autocorrelation (Baltagi-Wu LBI)	p value	1.7886
Heteroscedasticity (Modified Wald)	p value	0.0000

Source: Stata 18. (Created by the author.)

Therefore, firstly, horizontal cross-section dependence was analyzed and the Friedman Rank Correlation test showed that there is horizontal cross-section dependence. Then, Bhargava, Franzini and Narendranathan's Durbin Watson Test and Baltagi Wu LBI Tests used to detect autocorrelation problem were applied and since the probability values were less than 2, the null hypothesis of

"no autocorrelation" was rejected. Then, Modified Wald Test was applied to analyze the heteroscedasticity problem and as a result, the null hypothesis of "no heteroscedasticity" was rejected. Therefore, in order to correct the errors caused by deviations from the basic assumptions in the obtained results, the model was re-estimated with the help of Driscoll-Kraay Robust Errors estimator.

Table 19: Driscoll-Kraay Robust Errors Estimator (Model 3)

Dependent Variable	EPS			
Independent Variables	Coefficient	Std. Deviation	t	P-Value
<i>Constant</i>	1.5971	0.4891	2.13	0.034
<i>SH</i>	-1.4236	0.1677	-2.12	0.046
<i>LR</i>	-1.2328	0.5442	-2.27	0.043
<i>CS</i>	3.1974	1.0029	3.19	0.008
Test Results	Coefficient	P-Value		
<i>F Test</i>	4.70	0.0216		
<i>R²</i>	0.0341			

Source: Stata 18. (Created by the author.)

According to the results obtained from the Driscoll-Kraay estimator, it is confirmed that the independent variable SH has a statistically significant negative effect on ROA. Accordingly, it was understood that a one-unit increase in the Shareholder Rating Score decreased the Earnings Per Share by 1.4236 units. Moreover, when the R² of the model is analyzed, it is seen that these variables explain 3.41% of the Earnings Per Share.

3.6.3. Conducting Tests and Analyses for Firms with Less than 25% Female Member Representation on the Board of Directors

Conducting Tests and Analysis for Model 1 (ROE):

Table 20: Hausman Test Results (Model 1)

	Test Statistics		Model Selection
Model 1	Chi-Square Statistics p value	186.73 0.0000	Fixed Effect Exists

Source: Stata 18. (Created by the author.)

According to the Hausman test result, the null hypothesis is rejected since the p value is less than 0.05 significance level. There is a fixed effect in the model. From this point on, it will be assumed that there is a fixed effect in the model.

From this point on, it is questioned whether the created model contains horizontal cross-sectional dependency, autocorrelation of error terms and heteroscedasticity problems.

Table 21: Testing Basic Assumptions (Model 1)

Model 1 (ROE)	Test Statistics	
Horizontal Cross-Section Dependence (Friedman)	p value	0.5330
Autocorrelation (Modified Bhargava et al. Durbin-Watson)	p value	1.9628
Autocorrelation (Baltagi-Wu LBI)	p value	2.0887
Heteroscedasticity (Modified Wald)	p value	0.0000

Source: Stata 18. (Created by the author.)

Therefore, firstly, horizontal cross-section dependence was analyzed and the Friedman Rank Correlation test showed that there is horizontal cross-section dependence. Then, Bhargava, Franzini and Narendranathan's Durbin Watson Test and Baltagi Wu LBI Tests used to detect autocorrelation problem were applied and since the probability values are less than 2 in one case and greater than 2 in the other, the null hypothesis of "there is no

autocorrelation" is rejected. Then, Modified Wald Test was applied to analyze the heteroscedasticity problem and as a result, the null hypothesis of "no heteroscedasticity" was rejected. Therefore, in order to correct the errors caused by deviations from the basic assumptions in the obtained results, the model was re-estimated with the help of Driscoll-Kraay Robust Errors estimator.

Table 22: Driscoll-Kraay Robust Errors Estimator (Model 1)

Dependent Variable	ROE			
Independent Variable	Coefficient	Std. Deviation	t	P-Value
Constant	-0.6131	0.3554	-1.72	0.110
SH	-0.8738	0.2762	-3.16	0.008
STH	1.7002	0.3040	5.59	0.000
Test Results	Coefficient	P-Value		
F Test	23.41	0.0001		
R ²	0.1788			

Source: Stata 18. (Created by the author.)

According to the results obtained from the Driscoll-Kraay estimator, it is confirmed that the independent variable SH affects ROE negatively at the statistically significant level, while the independent variable STH affects ROE positively at the statistically significant level. Accordingly, it was understood that a one-unit increase in the Shareholders Rating Score decreased the Return on Equity by 0.8739

units, while a one-unit increase in the Stakeholders Rating Score increased the Return on Equity by 1.7002 units. Moreover, when the R² of the model is analyzed, it is seen that these variables explain 17.88% of the Return on Equity.

Conducting Tests and Analysis for Model 2 (ROA):

Table 23: Hausman Test Results (Model 2)

	Test Statistics		Model Selection
Model 2	Chi-Square Statistics	47.10	Fixed Effect Exists
	p value	0.0000	

Source: Stata 18. (Created by the author.)

According to the Hausman test result, the null hypothesis is rejected since the p value is less than 0.05 significance level. There is a fixed effect in the model. From this point on, it will be assumed that there is a fixed effect in the model.

From this point on, it is questioned whether the created model contains horizontal cross-sectional dependency, autocorrelation of error terms and heteroscedasticity problems.

Table 24: Table 24: Testing Basic Assumptions (Model 2)

Model 2 (ROA)	Test Statistics	
Horizontal Cross-Section Dependence (Friedman)	p value	0.1917
Autocorrelation (Modified Bhargava et al. Durbin-Watson)	p value	2.0515
Autocorrelation (Baltagi-Wu LBI)	p value	2.1861
Heteroscedasticity (Modified Wald)	p value	0.0000

Source: Stata 18. (Created by the author.)

Therefore, firstly, horizontal cross-section dependence was analyzed and the Friedman Rank Correlation test showed that there is no horizontal cross-section dependence. Then, Bhargava, Franzini and Narendranathan's Durbin Watson Test and Baltagi Wu LBI Tests used to detect autocorrelation problem were applied and since the probability values are greater than 2, the null hypothesis of "there is no autocorrelation" is accepted. Then, Modified

Wald Test was applied to analyze the heteroscedasticity problem and as a result, the null hypothesis of "no heteroscedasticity" was rejected. Therefore, in order to correct the errors caused by deviations from the basic assumptions in the obtained results, the model was re-estimated with the help of Driscoll-Kraay Robust Errors estimator.

Table 25: Driscoll-Kraay Robust Errors Estimator (Model 2)

Dependent Variable	ROA			
Independent Variable	Coefficient	Std. Deviation	t	P-Value
<i>Constant</i>	-0.2386	0.1332	-1.79	0.099
<i>SH</i>	-0.5136	0.0830	-6.19	0.000
<i>PDT</i>	0.7993	0.1550	5.16	0.000
Test Results	Coefficient	P-Value		
<i>F Test</i>	24.62	0.0001		
<i>R²</i>	0.0810			

Source: Stata 18. (Created by the author.)

According to the results obtained from the Driscoll-Kraay estimator, it is confirmed that the independent variable SH affects ROA negatively at the statistically significant level, while the independent variable PDT affects ROA positively at the statistically significant level. Accordingly, it was determined that a one-unit increase in the Shareholder Rating Score decreased the Return on Assets by 0.5136

units, and a one-unit increase in the Public Disclosure and Transparency Rating Score increased the Return on Assets by 0.7994 units. Moreover, when the R² of the model is analyzed, it is seen that these variables explain 8.10% of the Return on Assets.

Conducting Tests and Analysis for Model 3 (EPS):

Table 26: Hausman Test Results (Model 3)

	Test Statistics		Model Selection
Model 3	Chi-Square Statistics	48.84	Fixed Effect Exists
	p value	0.0000	

Source: Stata 18. (Created by the author.)

According to the Hausman test result, the null hypothesis is rejected since the p value is less than 0.05 significance level. There is a fixed effect in the model. From this point on, it will be assumed that there is a fixed effect in the model.

From this point on, it is questioned whether the created model contains horizontal cross-sectional dependency, autocorrelation of error terms and heteroscedasticity problems.

Table 27: Testing Basic Assumptions (Model 3)

Model 3 (EPS)	Test Statistics	
Horizontal Cross-Section Dependence (Friedman)	p value	0.0127
Autocorrelation (Modified Bhargava et al. Durbin-Watson)	p value	0.9737
Autocorrelation (Baltagi-Wu LBI)	p value	1.7345
Heteroscedasticity (Modified Wald)	p value	0.0000

Source: Stata 18. (Created by the author.)

First, the Friedman Rank Correlation test indicated cross-sectional dependence. Then, the Bhargava et al. Durbin-Watson and Baltagi-Wu LBI tests revealed autocorrelation, as the statistics were below 2. The Modified Wald test also

showed heteroscedasticity. To address these violations of classical assumptions, the model was re-estimated using the Driscoll-Kraay robust error estimator.

Table 28: Driscoll-Kraay Robust Errors Estimator (Model 3)

Dependent Variable	EPS			
Independent Variable	Coefficient	Std. Deviation	t	P-Value
Constant	-1.0703	0.2964	-3.61	0.004
STH	1.3760	0.3570	3.85	0.002
Test Results	Coefficient	P-Value		
F Test	14.85	0.0023		
R ²	0.1562			

Source: Stata 18. (Created by the author.)

According to the results obtained from the Driscoll-Kraay estimator, it is confirmed that the independent variable STH positively affects the EPS at a statistically significant level. Accordingly, it was understood that a one-unit increase in the Stakeholder Rating Score decreased the Earnings Per Share by 1.3760 units. Moreover, when the R² of the model is analyzed, it is seen that these variables explain 15.62% of the Earnings Per Share.

4. Conclusion and Recommendations

The study analyzes the impact of corporate governance rating dimensions—Shareholders (SH), Stakeholders (STH), Public Disclosure and Transparency (PDT), and the Board of Directors (BoD)—on the financial performance of Borsa Istanbul firms, showing different effects on ROE, ROA, and EPS.

Overall, SH has a significant negative effect on ROE and

ROA, while STH has a consistent positive effect, strongest on ROA. PDT is insignificant, whereas BoD positively influences ROE, ROA, and EPS, highlighting the role of effective boards in investor returns.

For firms with $\geq 25\%$ female board representation, SH negatively affects all indicators, especially EPS. PDT has a negative effect on ROE and ROA, while STH is insignificant. BoD shows a positive effect on profitability.

For firms with $<25\%$ female representation, SH again negatively impacts ROE and ROA. STH positively affects ROE and EPS; a one-unit rise increases ROE by 1.7002 units and significantly boosts EPS. PDT positively affects only ROA by improving asset efficiency and reducing information asymmetry. BoD is insignificant in this subgroup.

Overall, women's representation on boards strengthens the positive link between BoD ratings and firm performance. Diversity contributes to better decision-making,

responsibility, and risk management, thereby improving financial outcomes. The results confirm that the positive effect of board quality on performance is more evident in companies with higher female representation, making gender diversity a strategic factor for both social and financial sustainability. Subgroup analyses conducted according to female representation on the board of directors show that the composition and diversity of the board of directors are important differentiating factors in the corporate governance-financial performance relationship. In particular, the positive effect of Board Rating on profitability is more pronounced in firms with higher female representation. This finding supports studies such as Luckerath-Rovers (2013) and Franciset al. (2015) who argue that women's participation in governance processes improves governance quality and contributes positively to performance.

The study's results align in part with those of Renders et al. (2010), who found a positive but diminishing relationship between corporate governance and financial performance. Similarly, Cengiz et al. (2022), using data from Türkiye, also identified a positive link between governance quality and company performance, thereby reinforcing the conclusions of this research. However, previous studies—including those by Ghazali (2010), Bauer et al. (2010), and Pham et al. (2011)—have noted that certain corporate governance practices either lack a significant relationship with financial outcomes or may even correlate negatively. These findings suggest that not all governance elements contribute equally to performance and that this association can be influenced by variables such as firm structure, industry characteristics, time period, and country-specific dynamics.

The study reveals that the impact of corporate governance practices on financial performance is not homogeneous but contextual. In particular, elements such as the structural nature of the board of directors, its diversity and female representation play a critical role in determining the strength and direction of this relationship. These findings indicate that not only the existence of corporate governance practices but also the nature of their implementation and the diversity of representation they contain should be taken into consideration by both policy makers and investors. This contextual nature is also confirmed by recent empirical evidence. For instance, Arvanitis et al. (2022) emphasize a non-linear effect of board gender diversity, showing that firm performance is maximized when female representation reaches around one-third, whereas Singh et al. (2023) reveal that in industries with very low female participation, such as the Indian IT sector, gender diversity has no significant impact on performance. Similarly, Shanak (2024) finds a significant and positive relationship between gender diversity and financial performance in developing markets, while Aziz et al. (2025) highlight that board gender diversity not only contributes directly to performance but also mitigates the negative effects of ESG controversies. Taken together, these studies strengthen the argument that board composition, particularly gender representation, operates as

a contingent factor whose effectiveness depends on firm-specific, industry-specific, and institutional dynamics.

The study is differentiated by the fact that it offers a unique perspective on the relationship between corporate governance quality and financial performance and aims to contribute to the literature by evaluating the issue of gender representation on boards within this framework. In order to contribute to future studies, it should be taken into account that the impact of corporate governance practices may vary depending on firm type, industry structure and managerial characteristics. In subsequent studies, more qualitative dimensions of governance quality can be taken into account or comparative analyses can be conducted with corporate governance indices of different countries. In addition, the effects of board diversity on performance can be examined by considering not only gender but also other demographic dimensions such as age, education level and experience.

Since the data set of the study is limited to a certain period, it is recommended that future studies reveal time-dependent effects and possible causal relationships through panel data analyses covering longer time periods. In addition, including not only the structural but also the functional characteristics of the governance structure (for example, the level of expertise, degree of independence or social capital of the board members) in the studies will provide the opportunity to evaluate the corporate governance-financial performance relationship in a more holistic framework.

In conclusion, this study reveals that corporate governance is not only a formal regulatory area but also a dynamic management tool that can create decisive effects on the strategic performance outcomes of companies; it shows that elements such as the structural nature and diversity of the board of directors play a critical role in terms of both financial and social sustainability. Consistent with the literature, the findings indicate that while stakeholders' orientation and board structures significantly enhance profitability, shareholder-related practices and, in certain cases, disclosure requirements may impose short-term constraints on firm performance. These results align with Agency Theory by confirming the role of governance mechanisms in mitigating conflicts of interest, while also supporting Stakeholder Theory in highlighting the long-term value creation stemming from inclusive and sustainable practices. Furthermore, the positive role of board diversity, particularly female representation, resonates with Resource Dependence Theory and Upper Echelon Theory, underscoring the strategic contribution of diverse leadership to decision-making quality, resource efficiency, and investor confidence. Taken together, these insights position corporate governance not merely as a compliance framework but as a strategic management instrument with the potential to reinforce both financial and social sustainability. For policymakers and investors, the evidence suggests that the effectiveness of governance depends on the quality, diversity, and contextual implementation of its mechanisms. Future research may expand this perspective

by incorporating longer time horizons, comparative cross-country analyses, and qualitative dimensions of board functionality, thereby enabling a more holistic understanding of the governance–performance nexus.

References

- Abdallah, A. A. N., & Ismail, A. K. (2016). Corporate governance practices, ownership structure, and corporate performance in the GCC countries. *Journal of International Financial Markets, Institutions and Money*.
- Al-Ahdal, W., Alsamhi, M. H., Tabash, M. I., & Farhan, N. H. S. (2020). The impact of corporate governance on financial performance of Indian and GCC listed firms: An empirical investigation. *Research in International Business and Finance*, 51, 101083.
- Amba, S. M. (2014). Corporate governance and firms' financial performance. *Journal of Academic and Business Ethics*, 8, 1.
- Arvanitis, S. E., Varouchas, E. G., & Agiomirgianakis, G. M. (2022). Does board gender diversity really improve firm performance? Evidence from Greek listed firms. *Journal of Risk and Financial Management*, 15(7), 306. <https://doi.org/10.3390/jrfm15070306>
- Aziz, S. A., Alshdaifat, E. A., & Al Amosh, H. A. (2025). ESG controversies and firm performance in ASEAN-5: Do board gender diversity and sustainability committees matter? *Business Strategy and Development*, 8(4), 397–408. <https://doi.org/10.1002/bsd2.70094>
- Balestra, P., & Nerlove, M. (1966). Pooling cross-section and time-series data in the estimation of a dynamic model: The demand for natural gas. *Econometrica*, 34(3), 585–612.
- Bauer, R., Eichholtz, P., & Kok, N. (2010). Corporate governance and performance: The REIT effect. *Real Estate Economics*, 38(1), 1–29.
- Bayraktutan, Y., & Demirtaş, İ. (2011). Gelişmekte olan ülkelerde cari açığın belirleyicileri: Panel veri analizi. *Kocaeli Üniversitesi Sosyal Bilimler Dergisi*, (22), 1–28.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*.
- Bhagat, S., & Bolton, B. (2019). Corporate governance and firm performance: The sequel. *Journal of Corporate Finance*, 58, 142–168.
- Calder, A. (2008). *Corporate governance: A practical guide to the legal frameworks and international codes of practice*. Kogan Page.
- Cengiz, S., & Karabayır, M. E. (2022). Kurumsal yönetim ile finansal performans ilişkisi: Türkiye’de ampirik bir araştırma. *Journal of Accounting and Taxation Studies*, 15(2), 321–348. <https://dergipark.org.tr/tr/pub/muvu/issue/69840/10539>
- 21
- Chakraborty, I. (2023). Uncovering heterogeneity in the relationship between competition, corporate governance and firm performance using quantile regression on Indian data. *Asia and the Global Economy*, 3(2), 100066.
- Dimaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
- Ducassy, I., & Guyot, A. (2017). Complex ownership structures, corporate governance and firm performance: The French context. *Research in International Business and Finance*, 39(Part A), 291–306.
- Flammer, C. (2015). Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. *Management Science*, 61(11), 2549–2568.
- Francis, B., Hasan, I., & Wu, Q. (2015). Professors in the boardroom and their impact on corporate governance and firm performance. *Financial Management*, 44(3), 547–581.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
- Gerni, M., Emsen, Ö. S., Özdemir, D., & Uzdağlı, Ö. (2012). Yolsuzluğun belirleyicileri ve büyüme ile ilişkileri. In *International Conference on Eurasian Economies* (pp. 131–139).
- Ghazali, N. A. M. (2010). Ownership structure, corporate governance and corporate performance in Malaysia. *International Journal of Commerce and Management*, 20(2), 109–119.
- Habib, M. A. (2016). Relationship between corporate governance and firm performance: A case study in Bangladesh. *International Scholar Journal of Accounting and Finance*, 2(1), 11–20.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193–206.
- İbrahim, H., & Samad, F. A. (2011). Corporate governance mechanisms and performance of public-listed family-ownership in Malaysia. *International Journal of Economics and Finance*, 3(1), 105.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. In *Corporate governance* (pp. 77–132). Gower.
- Luckerath-Rovers, M. (2013). Women on boards and firm performance. *Journal of Management and Governance*, 17(2), 491–509.
- Ma, Y., Rahim, N. S. B. A., Panatik, S. A. B., & Li, R. (2024). Corporate governance, technological innovation,

- and corporate performance: Evidence from China. *Heliyon*, 10(11), e031459.
- Masulis, R. W., Wang, C., & Xie, F. (2012). Globalizing the boardroom—The effects of foreign directors on corporate governance and firm performance. *Journal of Accounting and Economics*, 53(3), 527–554.
- Millstein, I. (1999). Corporate governance reform in Asia. *Corporate Governance Advisor*, 5.
- Mohan, A., & Chandramohan, S. (2018). Impact of corporate governance on firm performance: Empirical evidence from India. *International Journal of Research in Humanities, Arts and Literature*, 6(2), 209–218.
- Ntim, C. G., & Soobaroyen, T. (2013). Corporate governance and performance in socially responsible corporations: New empirical insights from a neo-institutional framework. *Corporate Governance: An International Review*, 21(5), 468–494.
- O’Connell, P. G. (1998). The overvaluation of purchasing power parity. *Journal of International Economics*, 44(1), 1–19.
- O’Sullivan, N. (1998). Ownership and governance in the insurance industry: A review of the theory and evidence. *The Service Industries Journal*, 18(4), 145–161.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. Harper & Row.
- Pham, P. K., Suchard, J. A., & Zein, J. (2011). Corporate governance and alternative performance measures: Evidence from Australian firms. *Australian Journal of Management*, 36(3), 371–386.
- Renders, A., Gaeremynck, A., & Sercu, P. (2010). Corporate-governance ratings and company performance: A cross-European study. *Corporate Governance: An International Review*, 18(2), 87–106.
- Rizwan, M., Asrar, H., Siddiqui, N. A., & Usmani, W. U. (2016). The impact of corporate governance on financial performance: An empirical investigation. *International Journal of Management Sciences and Business Research*, 5(9), 11–27.
- Rodrigues, C. D. J. C. (2010). *Corporate governance and performance in public listed, family-controlled firms: An empirical evidence from Italian corporate sector* (Doctoral dissertation, Universidade da Beira Interior, Portugal).
- Shanak, H. S. H. (2024). Does gender diversity moderate the nexus between board characteristics and financial performance? *Migration Letters*, 21(S3), 307–319.
- Sheikh, W., & Alom, K. (2021). Corporate governance, board practices and performance of shipping firms in Bangladesh. *The Asian Journal of Shipping and Logistics*, 37(3), 259–267.
- Singh, J., Singhania, S., & Aggrawal, D. (2023). Does board gender diversity impact financial performance? Evidence from the Indian IT sector. *Society and Business Review*, 18(1), 51–70.
- Ün, T. (2008). Panel veri modellerinin varsayımlarının testi. In S. Güriş (Ed.), *Uygulamalı panel veri ekonometrisi* (pp. 75–101). Der Yayınları.
- Vo, D., & Phan, T. (2013). Corporate governance and firm performance: Empirical evidence from Vietnam. *Journal of Economic Development*, 62–78.
- Yavuz, S. (2019). Hataları ardışık bağımlı (otokorelasyonlu) olan regresyon modellerinin tahmin edilmesi. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 23(3), 126.
- Yazgan, K. (2017). *Kurumsal yönetim derecelendirmesinin hisse senedi performansına etkisi: BIST kurumsal yönetim endeksi üzerine bir inceleme* (Yüksek lisans tezi). Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü.
- Yerdelen-Tatoğlu, F. (2012). *Panel veri ekonometrisi* (1. bs.). Beta.