DOĞUŞ ÜNİVERSİTESİ DERGİSİ

DOGUS UNIVERSITY JOURNAL

e-ISSN: 1308-6979

https://dergipark.org.tr/tr/pub/doujournal

THE REMUNERATION-PERFORMANCE RELATIONSHIP IN CORPORATE GOVERNANCE: EVIDENCE FROM BOARD MEMBERS' REMUNERATION AND FIRM PERFORMANCE (*)

KURUMSAL YÖNETİMDE ÜCRET-PERFORMANS İLİŞKİSİ: YÖNETİM KURULU ÜYELERİNİN ÜCRETİ VE FİRMA PERFORMANSINDAN KANITLAR

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Abstract: *The board of directors is an important corporate governance mechanism as it is responsible for the operation of a firm and protects the value of the investment made by investors in the firm. Therefore, board members should be supplied with an appropriate incentive to properly discharge their duties. One of the most important incentive mechanisms is remuneration. This study aims to reveal the effect of board members' remuneration on the firm performance. Regression analysis was performed to test the hypotheses. 210 firm-year observations obtained from 76 non-financial firms traded in the BIST 100 between the 2018-2020 period were used. The indicators of firm performance return on assets, return on equity, and earnings per share. As a consequence of the study, the relationship between board members' remuneration and firm performance was found to be positive and statistically significant. These results show that the board members' remuneration is a strong incentive used to increase the firm performance and that a suitable remuneration policy should be established for directors.*

Keywords: *Firm Performance, Board of Directors, Corporate Governance, Remuneration*

JEL: *G34, L25, J31.*

Öz: Yönetim kurulu, bir firmanın işleyişinden sorumlu olması ve yatırımcıların firmaya yaptıkları yatırımın değerini koruması nedeniyle önemli bir kurumsal yönetim mekanizmasıdır. Dolayısıyla yönetim kurulunda yer alan üyelere görevlerini düzgün bir şekilde yerine getirmeleri için uygun bir teşvik sağlanmalıdır. En önemli teşvik mekanizmalarından biri de ücrettir. Bu çalışmanın amacı, yönetim kurulu üyelerine ödenen ücretin firma performansı üzerindeki etkisini ortaya koymaktır. Oluşturulan hipotezleri test etmek amacıyla 2018-2020 dönemi arasında BİST 100'de işlem gören finans dışı 76 firmadan elde edilen 210 firma yılı gözleminden yararlanarak regresyon analizi gerçekleştirilmiştir. Firma performansının göstergesi olarak aktif kârlılığı, özkaynak kârlılığı ve hisse başına kâr kullanılmıştır. Çalışma sonucunda yönetim kurulu üyelerine ödenen ücret ile firma performansı arasında

(*) This study is a revised and expanded version of the paper presented at the "4th International Anatolian Scientific Research Congress" held in Kars on February 17-20, 2023.

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Geliş/Received: 18-07-2023; Kabul/Accepted: 19-01-2024

Atıf bilgisi: Özer, G., Aktaş, N. and Merter, A. K. (2024). The remuneration-performance relationshıp in corporate governance: Evidence from board members' remuneration and firm performance. *Doğuş Üniversitesi Dergisi*, *25*(2), 231-248, DOI: 10.31671/doujournal.1329041.

pozitif ve istatistiksel olarak anlamlı bir ilişki olduğu ortaya konmuştur. Bu sonuçlar, yönetim kurulu üyelerine ödenen ücretin firmanın performansını arttırmak amacıyla kullanılan güçlü bir teşvik unsuru olduğunu ve yönetim kurulunda görev yapan üyelere uygun bir ücretlendirme politikasının oluşturulması gerektiğini göstermektedir.

Anahtar Kelimeler: Firma Performansı, Yönetim Kurulu, Kurumsal Yönetim, Ücret

1. Introduction

Corporate governance is a mechanism for managing and regulating firms. The basis of this mechanism is the relations between shareholders, the board of directors, and senior management. The mission of the board of directors is to protect the interests of the shareholders by monitoring the top management. Thus, it is made difficult for the top management to act by considering their interests. The board of directors is a mechanism that determines the remuneration of the people working in the management and monitors their performance. In this role, the board of directors ensures that the objectives of maximizing the wealth of the shareholders are realized and protected. It ensures that the managers consider the interests of the shareholders and do not exclude them while performing their activities. In other words, the board of directors plays a role in limiting the power held by the managers and the degree of control over the wealth of the shareholders (Parthasarathy et al., 2006: 4139). When examined concerning corporate governance, it is an important issue that the board members conduct their mission of monitoring and the impact of their decisions on the firm performance. How the mentioned activities are carried out can be affected by the remuneration paid to the board members. The board members' remuneration is an important topic that needs to be investigated as it affects enabling talented members to serve on the firm's board of directors, providing a balance between shareholder and management interests, increasing the firm performance, and increasing transparency and accountability.

The remuneration of directors is a rich, complex, and controversial topic that has attracted both academic and public attention (Edmans et al., 2017: 385). Searches have empirically documented the relationship between remuneration paid to board members and issues such as ownership concentration, corporate owners, the board size, the presence of independent board members, and ownership structure (Pinto and Leal, 2013; Andreas et al., 2012; Fernandes, 2008; Barontini and Bozzi, 2011; Darmadi, 2011). In addition, the relationship between the remuneration paid to the members of the board of directors and the firm performance is investigated and it is discussed whether the remuneration of the members is an important mechanism in eliminating the conflict between the manager and the shareholder. With directors' compensation packages tailored to performance, shareholders seek to encourage directors to balance the interests of managers and shareholders (Dong and Özkan, 2008: 17-18).

It is expected that the expertise and skills of the individuals serving on the firm's board of directors will have a positive impact on the firm's performance and profitability. Although there are studies investigating this relationship in developed countries (Crespi-Cladera and Gispert-Pellicer, 1999; Brick et al., 2006; Ozkan, 2007; Ndayisaba and Ahmed, 2015; Capuano, 2022; Nunez et al., 2022), there is limited information on how compensation packages affect firm performance in emerging economies (Müller, 2014: 983). Within the scope of this study, the relationship between the board members' remuneration and the firm performance is discussed. Thus, by investigating the relationship between the board members' remuneration and the firm performance, it will be possible to make inferences on various issues, including how effective corporate governance practices, corporate reputation, and shareholder value of firms. A regression analysis was conducted to test this relationship by using a sample of non-financial firms traded in the BIST100 Index during the 2018-2020 period. When the findings are considered, the relationship between the remuneration paid to the members of the board of directors and the firm performance is statistically significant and positive direction.

The contributions of the paper are two-way. The theoretical contribution of the paper is to the agency theory, and the practical contribution is to the practitioners. The agency theory is based on the view that management can act by placing its interests above the interests of shareholders. Board remuneration is seen as an important tool for members to act in the most appropriate way to carry out monitoring and surveillance activities and to maintain a balance between their interests and those of shareholders. Setting board remuneration in a way that balances the interests of both the members and the firm can help reduce agency costs and improve the firm's performance by enabling members to be more motivated and manage firm strategies more effectively. This represents the practical contribution of our study. Performing regular performance appraisals in firms may allow for continuous review of remuneration policies and better alignment of management and shareholder objectives. Firms can benefit from this paper to improve their corporate governance practices to increase their transparency and accountability. It can also help increase investor confidence. In general, this paper may provide an opportunity to improve corporate governance activities, reduce agency costs, improve firm performance, and thus build investor confidence.

The next section of the article discusses the conceptual framework. In section III, the hypotheses of the research are formed by using the literature. Section IV mentions the methodology and Section V presents the findings.

2. Conceptual Framework

The concept of corporate governance refers to an understanding of governance that regulates the management of a firm and other organizations and aims to ensure transparency, accountability, and fairness among stakeholders (Clegg, 2019: 266). The importance of this understanding begins with strengthening stakeholder values and building trust (Caldwell and Karri, 2005: 255; Brennan and Solomon, 2008: 890). Effective corporate governance ensures the sustainability of long-term business relationships by contributing to the building of trust between the firm's internal and external stakeholders (Kocmanova et al., 2011: 544). It also plays a critical role in improving financial performance and building investor confidence (Xuan and Loang, 2023: 244).

Corporate governance activities include creating a strategy that is aligned with the firm's objectives, effectively managing risks, monitoring financial performance, increasing transparency, and complying with ethical standards (Çakalı, 2022: 13). These principles enhance relationships between the board, senior executives and other stakeholders and support the firm's long-term sustainable success. At the heart of corporate governance is the process of creating and implementing an effective strategy. At this stage, the board of directors steps in. Boards of directors are responsible for developing strategies that are in line with the firm's purpose and ensuring these strategies are successfully implemented (Adams et al., 2010: 63). They also promote cooperation and coordination between departments within the firm to achieve strategic goals.

According to the corporate governance approach, the persons for whom the board of directors is primarily responsible while performing its activities are the shareholders. To these activities, giving external advice to the management and monitoring the management, determining strategies for firms to enter new markets or produce new products can be given as examples. The main objective of the mentioned activities is to maximize the profits of the firm, thus maximizing the value of the shareholders' shares. Apart from the shareholders, the board members also act responsibly towards other stakeholders such as workers, society, and the state. For this, the members to be elected to the board of directors must be talented people. Thus, a good board of directors will be formed (Hempel and Fay, 1994; 112).

Within the scope of corporate governance, the remuneration of senior executives appears as one of the remarkable issues in firms. It is widely featured in academic congresses, newspapers, and television news. This is because the remuneration paid to CEOs has nearly doubled; High salaries paid to CEOs followed by an increase in layoffs, plant closures, and downsizing of firms; and the bull market in the 1990s created opportunities for managers, as the salaries of CEOs depended on changes in the firm's share price (Murphy, 1999: 2486). In addition, agency problems have come to the fore again in the recent past, due to the board of directors' commitment to excessive fees. Scandals in large firms such as Enron and WorldCom also led to the questioning of the oversight and control activities of the boards of directors. While the firm's financial condition was not good, moreover, it was on the verge of bankruptcy, and board members were paid wages in this artificial environment. Such problems caused a decrease in the confidence of the investors (Merino et al., 2012: 392).

It is important how sincere and careful the people in the top management of a firm act while doing their jobs. The important decisions they make about the company are critical factors affecting the success of the firm. Therefore, the reward and remuneration of people in management should be properly designed (Akram et al., 2019: 294). Remuneration is used as an incentive mechanism that affects the decisions and strategies of the board members who have a say over the firm's performance (Zain et al., 2019: 1). In addition to shaping the behavior of board members, it ensures that talented people stay in the firm for a long time as an interesting element. Therefore, the remuneration policies implemented by the firms are a key factor affecting the success of the firm. The board members' remuneration is a cost incurred by the shareholders to protect their rights and to protect and improve the value of the investments they transfer to the firm. That is, it is a systematic investment by shareholders in the corporate governance system (Akter et al., 2020: 265).

When people who have a say in the management have more power and control in matters that concern the firm, they can use the knowledge they have acquired to maximize their interests, and this is the main source of many problems such as excessive remuneration of the people in the management and the decrease in the firm performance (Akram et al., 2019: 306). From the perspective of agency theory, the design of remuneration payments to the firm's top management is an important issue. Managers can be risk-averse individuals. In addition, since remuneration contracts are prepared in an environment with asymmetric information, an appropriate remuneration plan should be established that will enable managers to show maximum effort (Crespi-Cladera and Gispert-Pellicer, 1999: 5).

Since agency theory assumes that everyone will pursue their interests at some point, it states that there may be conflicts of interest on certain issues that require cooperation. Conflict of interest is a situation that people often encounter in both business and social life. Therefore, it is now invisible (Ghosh and Aggarwal, 2011: 95-96). Jensen and Meckling (1976) also made an important contribution to the firm theory with their paper, which outlined the organizational structure, management behavior and ownership structure of firms. This article is a classic reference in the corporate finance and governance literature. Jensen and Meckling (1976) examine the agency costs that may arise when managers act on behalf of firm owners and define the agency relationship as a relationship in which one or more individuals assign another person to perform a service on their behalf and delegate decision-making authority to this person. The person who delegates decision-making authority are referred to as principals, and the person taking it over is referred to as an agent. Principals are the firm's shareholders and stakeholders. These persons are those who own the firm's shares and typically invest for financial returns. Additionally, principals are primary stakeholders who aim to enhance the firm's long-term success and value. On the other hand, senior management is expected to represent the interests of principals. However, conflicts may arise between their own interests and those of the principals. Senior management refers to persons responsible for the daily operations and representation of the firm, undertaking a broad range of responsibilities from strategic management to making operational decisions (Shambaugh, 2003: 12). Since both sides of this relationship may be people who aim to maximize their interests, a suspicion arises between the parties that the agent will not act in a way that maximizes the interests of the principal. To avoid this doubt, principals create appropriate incentives for the agent and incur some costs to monitor the agent's activities (Jensen and Meckling, 1976: 308).

The neoclassical economic theory examines the issue of remuneration and incentives paid to senior management from a principal-agent framework. Today, the separation of ownership and management in firms means that the owners, in a word shareholder, cannot control resources. This authority is accepted in the hands of the managers of the firm. Managers have the power to both control and use the firm's resources. Therefore, it does not seem possible to solve the principal-agent problem without establishing a proper balance between the owner of the resources and the goals of the manager. There is a need for solutions that effectively maximize the wealth that consider the interests of both parties (Parthasarathy et al., 2006: 4139). Strategies such as improving corporate governance practices, strengthening internal control systems and audit mechanisms, increasing transparency, developing performance measurement systems, strict compliance with ethical standards and fair remuneration are among the solutions. İmproving corporate governance practices can balance the interests between principals and agents by making board of directors more effective and diverse. Strengthening internal control systems and audit mechanisms can help agents fulfill their duties more responsibly (Mukhina, 2015: 58). Increasing transparency can reduce information asymmetry between principals and agents, creating a fairer environment for all stakeholders within the firm (Brown and Martinsson, 2019: 1600). Developing performance measurement systems allows for an objective evaluation of agents' achievements and can link rewards to their performance (Chalmeta and Grangel, 2005:73; Berber et al., 2012: 110). Strict adherence to ethical standards can help maintain trust and integrity within the firm and encourage both principals and agents to uphold ethical principles in decision-making processes (Saurage-Altenloh and Randall, 2020: 84-85). Following fair remuneration policy can boost agents' motivation, incentivize their performance, and increase their long-term commitment, contributing more to the firm's goals and strengthening the relationship between principals and agents (Filatotchev and Allcock, 2010: 20-21).

For the board of directors to provide better quality service and to maintain this, their remuneration should also be good. The long-term success of the firm depends on the service provided by the board of directors. Firms pay better remuneration to their board members when their board members are more skilled, knowledgeable, and experienced. In return for this remuneration, members need to work harder on their strategies and planning. The smooth running of the firm's business can also increase performance (Jaafar et al., 2012: 206).

3. Hypothesis Development

It is an important corporate governance mechanism that performs duties such as appointing, monitoring, and making strategic recommendations to board members. Board members are elected observers, and shareholders face a trade-off between encouragement and control by members. Incentives are assumed to play a more important role as shareholders have only a limited space to monitor members (Andreas et al., 2012: 66-69). One of these incentives is remuneration. All issues related to the management of the firm are discussed by the board of directors. Therefore, when board members are paid an appropriate remuneration, they may be more careful in their decisions. Appropriate remuneration may contribute to board members feeling greater commitment and responsibility towards the firm (Razali et al., 2018: 102). This, in turn, may lead them to put more effort for the long-term success of the firm. An appropriate remuneration policy can also encourage board members to take their work seriously and carefully consider the impact of their decisions on the firm's overall performance (Bessouh and Ounane, 2018: 12; Zain et al., 2019: 2). This, in turn, can help make sounder, strategic and long-term decisions. It is thought that when high remuneration is determined to increase the motivation of the members, it will also improve the firm performance (Rahayu et al., 2022: 5).

Supporting the need for higher remuneration to the board members, researchers argue that higher remuneration should be paid to compensate members as the demand and risk for the service they perform increase (Hempel and Fay, 1994: 112). Lewellen et al. (1992), in their research using the remuneration data of the three highest-paid managers of the firm in the 1964-1969 period, stated that the companies that pay higher remuneration perform better. Main et al. (1996) analyzed the data of firms traded in the FTSE 100 between 1981 and 1990 and investigated the relationship between the total remuneration paid to the board of directors and firm performance. According to the results of the analysis, the relationship between board remuneration and firm performance is statistically significant. On the other hand, Crespi-Cladera and Gispert-Pellicer (1999) analyzed the association between board remuneration and firm performance using a sample of Spanish firms that were listed on the stock exchange between 1990 and 1995. The article's statistical results support the notion that board remuneration and firm performance are positively linked. Hassan et al.

(2003) investigated the relationship between the board members' remuneration and the firm performance of the firms traded in the stock exchange in Malaysia between 1996-1998 and suggested a positive relationship. Raithatha and Komera, (2016), using the remuneration data published between 2002-2012 in their study in India, showed that both accounting-based and market-based firm performance is in a positive and statistically significant relationship with executive remuneration. Lemma et al. (2020) investigated whether the remuneration paid to board members affects the firm performance in South Africa. They found a direct relationship between the remuneration of board members and the firm performance, using their observations of 1736 firm years from firms listed on the JSE stock exchange between 2005 and 2018. It has been found that firms that pay higher remuneration to board members tend to perform better.

Firms can use the remuneration paid to members as a corporate governance tool to increase the effectiveness of the board of directors (Lemma et al., 2020: 491). When considered within the scope of agency theory, it is expected that increasing the board members' remuneration to reduce agency costs will also increase the firm performance. Based on this, the following hypothesis was formed.

Hypothesis 1: There is a positive relationship between the board members' remuneration and firm performance.

4. Methodology

Non-financial firms traded in the BIST 100 between the period 2018-2020 constitute the sample of the research. Relevant years have been selected to understand the impact of the Covid-19 pandemic in 2020. Information on board members' remuneration was collected manually from the minutes of the general meeting and annual reports of the firms. Information on the firm's performance was obtained by using the Finnet database. The variables used in the research and their explanations are given in Table 1.

Table 1. Variable Description

Variable Type	Variable Name	Variable Measurement
Dependent Variable	ROA	Return on assets is defined as the ratio of net income to total assets.
	ROE	Return of equity is defined as the ratio of net income to total equity.
	EPS	Earnings pers hare is defined as the ratio of net income to total number of outstanding shares.
Independent Variable	Remuneration	Remuneration is defined as the ratio of annual net remuneration paid to board members to 100,000.
Control Variables	BSize	Board size refers to the number of board members.
	BInd	Board independence refers to the percentage of independent members on the board of directors.
	Duality	If the chairman of the board of directors and the CEO are different persons 1; otherwise, a value of 0

Big4	If working with one of the four big audit firms 1; otherwise, a value of 0
Multinational	If the firm is multinational 1; otherwise, a value of 0.
Firm_Age	Firm age refers to the natural logarithm of firm age.
Size	Firm size refers to the natural logarithm of total assets.
Leverage	Leverage is defined as the ratio of total debt to total assets.
Liquidity	Liquidity is defined as the ratio of current assets to current liabilities.
Sales	Sales refers to the natural logarithm of total sales.
Covid	The year 2020 is 1; otherwise, a value of 0

The following model was created to test the relationship between the board members' remuneration and the firm performance.

$$Firm\_Per_{it} = \alpha + \beta_1 Remuneration_{it} + \beta_2 Control_{it} + \varepsilon_{it} \quad (1)$$

The i index in the model shows the companies and the t index shows the years. Firm_Per is the firm's return on assets (ROA), return on equity (ROE), and earnings per share (EPS); Remuneration refers to the annual net remuneration paid to the board members. Control variables are the number of board members, percentage of independent members, CEO Duality, Big4, multinationality, firm age, firm size, leverage, liquidity, sales, and Covid. Eit is the error term.

5. Analysis

5.1. Descriptive Statistics

Information on the descriptive statistics of the research variables for the 2018-2020 period is given in Table 2. Our performance variables, the ROA average, are 0.06, the ROE average is 0.12, and the EPS average is 1.62. The average of annual net remuneration paid to the board members is 101,468 TL. When we look at the minimum value, it is seen that it is 0. This means that some firms do not pay their board members. The average of the ratio of independent members on the board of directors is 0.31 and the minimum value is 0.00. Therefore, it is seen that some firms do not include independent board members on their boards of directors. The average of board members number is 7.95.

Table 2. Descriptive Statistics

Variables	Observations	Mean	St. Deviation	Median	Minimum	Maximum
ROA	225	0.06	0.07	0.05	-0.07	0.20
ROE	225	0.12	0.18	0.13	-0.31	0.43
EPS	225	1.62	2.62	0.76	-0.92	10.22
Remuneration	212	101468.40	103142.40	62519.50	0.00	554400.00
BInd	225	0.31	0.08	0.33	0.00	0.60
BSize	225	7.95	2.06	7.00	5.00	15.00

Duality	220	0.85	0.36	1.00	0.00	1.00
Big4	223	0.74	0.44	1.00	0.00	1.00
Multinationality	225	0.50	0.50	1.00	0.00	1.00
Firm_Age	225	3.77	0.43	3.91	2.08	4.47
Size	225	21.92	1.62	21.79	17.46	25.96
Leverage	225	0.58	0.22	0.63	0.08	1.01
Liquidity	225	1.02	0.71	0.82	0.06	4.25
Sales	225	21.67	1.86	21.80	12.99	25.23
Covid	225	0.33	0.47	0.00	0.00	1.00

The correlation relationship between the research variables is in Table 3. While ROA, which is our financial performance measure, does not have a statistically significant relationship with the board remuneration; ROE and EPS have a positive and statistically significant relationship. When the correlation coefficient between the variables used in the model is above 0.70, the problem of multicollinearity arises. To test whether there is a multicollinearity, variance inflation factors were calculated, and it was found that there was no multicollinearity problem in the research models.

6. Findings

The results of the regression analysis investigating the effect of the board members' remuneration on firm performance are given in Table 4. Return on assets (ROA) was used as the dependent variable in the first model, return on equity (ROE) in the second model, and earnings per share (EPS) in the third model.

According to the F value, R-square, and P values in Table 4, all models are statistically significant. This shows that all models have a statistically significant predictive ability on the firm's performance. Statistics with independent variables Remuneration, ROA ($t=2.02$, $p<0.05$), ROE ($t=2.79$, $p<0.01$), and EPS ($t=2.03$, $p<0.05$) have a significant and positive relationship. The results support our hypothesis. As expected, the higher the remuneration firms pay to their board members, the higher the firm's performance will be. All issues related to the management of the company are discussed by the board of directors. Therefore, when suitable remuneration is paid to the members serving on the board, the members should pay attention to the decisions they make. It is thought that when high remuneration is determined to increase the motivation of the members, it will also improve the firm performance (Rahayu et al., 2022: 5). From the point of view of agency theory, it can be said that the firm performance will improve if the interests of the board members are aligned with the interests of the shareholders by following an appropriate remuneration policy. Our results also support the studies on this subject. For example, Rahayu et al., in their study published in 2022, found a positive relationship between the board members' remuneration and the financial performance of firms traded on the Indonesian Stock Exchange. They documented that the higher the remuneration, the higher the firm's current performance.

Table 3. Correlation Matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1)	1														
(2)	**0.84*** **	1													
(3)	**0.56*** **	**0.57*** **	1												
(4)	0.02	**0.15** **	**0.15** **	1											
(5)	**-0.15** **	-0.10	**0.11* **	**0.15** **	1										
(6)	0.08	0.09	**0.28*** **	**0.25*** **	**0.53*** **	1									
(7)	0.02	-0.01	0.03	0.08	**0.13* **	**0.22*** **	1								
(8)	0.06	**0.13** **	0.10	-0.08	**0.19*** **	**0.14** **	**0.32*** **	1							
(9)	**-0.13* **	-0.05	0.02	0.06	**0.19*** **	-0.08	**-0.13* **	**0.15** **	1						
(10)	**0.21*** **	**0.11* **	**0.12* **	0.10	0.04	**0.23*** **	0.08	0.08	0.02	1					
(11)	**-0.12* **	0.01	0.06	**0.23*** **	**0.52*** **	**0.37*** **	0.05	**0.39*** **	**0.37*** **	-0.03	1				
(12)	**-0.51*** **	**-0.18*** **	-0.10	**0.21*** **	**0.22*** **	0.03	-0.10	**0.15** **	**0.26*** **	**-0.23*** **	**0.35*** **	1			
(13)	**0.48*** **	**0.23*** **	**0.20*** **	**-0.19*** **	-0.10	**0.11* **	**0.14** **	-0.08	-0.13*	**0.24*** **	**-0.25*** **	**-0.69*** **	1		
(14)	-0.02	**0.14** **	**0.15** **	**0.29*** **	**0.43*** **	**0.38*** **	-0.03	**0.35*** **	**0.34*** **	-0.01	**0.89*** **	**0.43*** **	**-0.24*** **	1	
(15)	0.06	0.07	0.01	0.10	0.07	-0.01	-0.02	-0.02	0.01	0.04	0.11	0.00	0.06	0.08	1

Definitions of the variables are presented in Table 1. Our sample is 76 non-financial firms traded on the BIST 100 during the 2018-2020 period. *, ** and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively. The coding of the variables in Table 3 is as follows: (1) ROA, (2) ROE, (3) EPS, (4) Remuneration, (5) BInd, (6) BSize, (7) Duality, (8) Big4, (9) Multinationality, (10) Firm_Age, (11) Size, (12) Leverage, (13) Liquidity, (14) Sales (15) Covid.

Table 4. Board Remuneration and Firm Performance

Variables	Expected Sign	(1) ROA	(2) ROE	(3) EPS
Remuneration	?	0.008*	0.034**	0.178
		(1.89)	(2.43)	(0.90)
BInd	+	0.041	-0.011	3.708
		(0.67)	(-0.05)	(1.33)
BSize	+	0.001	0.001	0.457***
		(0.59)	(0.12)	(4.07)
Duality	+	-0.019	-0.038	-0.447
		(-1.48)	(-0.95)	(-0.76)
Big4	+	0.036***	0.106***	1.339***
		(3.36)	(3.18)	(2.78)
Multinationality	+	-0.012	-0.045	-0.042
		(-1.31)	(-1.52)	(-0.10)
Firm_Age	+	-0.003	-0.032	-0.679
		(-0.29)	(-0.91)	(-1.33)
Size	+	-0.028***	-0.069***	-1.110***
		(-4.55)	(-3.51)	(-3.93)
Leverage	-	-0.158***	-0.228**	-1.877
		(-5.59)	(-2.56)	(-1.46)
Liquidity	+	0.021**	0.038	0.419
		(2.50)	(1.47)	(1.12)
Sales	+	0.028***	0.073***	0.893***
		(5.45)	(4.52)	(3.83)
Covid	-	0.003	0.015	0.225
		(0.27)	(0.52)	(0.53)
Constant		0.124	0.194	4.176
		(1.56)	(0.78)	(1.16)
Year effects		Yes	Yes	Yes
Industry effects		Yes	Yes	Yes
Observations		210	210	210
R-squared		0.444	0.238	0.180
F - value		13.10***	5.141***	3.604***

This table shows the regression results where the dependent variable is firm performance. ROA in the 1st column, ROE in the 2nd column, and EPS in the 3rd column were used as the dependent variable. Explanations of the research variables are given in Table 1. The sample consists of 76 non-financial firms traded on the BIST 100 between the 2018-2020 period. In the regression analysis, all continuous variables were winsorized in the 1st and 99th ratios to minimize data loss and outliers. T statistics are in parentheses. *, ** and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively.

7. Conclusion

A good corporate governance mechanism is important in valuing and determining the remuneration of board members and eliminating agency problems (Omoye and Ogiedu, 2016: 35). Because directors are the main decision-makers in a firm, remuneration agreements or offers need to be made to align the interests of directors or board members with those of shareholders (Herdan and Szczepkańska, 2011: 43-44).

The remuneration paid by the firm to senior management has become a prominent issue in the academic literature and has started to take place in academic research since the early 1980s (Conyon, 1997; Herdan and Szczepkańska, 2011; Khalid and Rehman, 2014; Alqatan et al., 2019; Burns et al., 2022). While most of the research has tried to find a relationship between the remuneration paid and the performance of the firm, the answers to various issues such as what are the factors affecting the manager's remuneration, how much a remuneration would be more appropriate for the firms to pay, and under which conditions more remuneration can be paid to motivate the managers have been sought. The majority of these studies are based on agency theory. (Herdan and Szczepkańska, 2011: 43-44).

The agency theory suggests that there may be a conflict of interest between shareholders and management because their goals are different. Shareholders seek to maximize their wealth and management seeks to maximize their benefits. A situation that is in the best interest of management may not be compatible with the goals and interests of shareholders. An effective corporate governance mechanism is critical to manage conflicts of interest and foster trust between shareholders and management. An independent board of directors can reduce conflicts of interest by impartially evaluating the firm's strategic decisions (Chen et al., 2016: 862). In addition, effective performance measurement systems can help maintain the motivation of executives in line with the firm's strategic goals (Chalmeta and Grangel, 2005:73; Berber et al., 2012: 110). The corporate governance mechanism should also include transparent communication, compliance with ethical standards and internal control systems (Yang, 2023: 259). Open communication within the firm increases stakeholders' trust in the firm's management, while compliance with ethical standards contributes to the firm's success in sustainability and social responsibility (Saurage-Altenloh and Randall, 2020: 84-85). Remuneration of board members is another important matter in this framework. A fair remuneration system can help managers protect the long-term interests of the firm and work in harmony with shareholders (Filatotchev and Allcock, 2010: 20-21). In this way, an effective corporate governance mechanism can enhance the firm's ability to create sustainable value and improve the firm's performance by reducing conflicts of interest.

In this paper, we investigated whether the board members' remuneration of non-financial firms traded in BIST100 has a significant effect on firm performance. 210 firm-year observations of 76 firms for the 2018-2020 period were used. The annual net remuneration paid to the board members is used as an independent variable. The dependent variable represents firm performance as return on assets (ROA), return on equity (ROE), and earnings per share (EPS). The number of board members (BSize), board independence (BInd), chairman and CEO separation (Duality), audit quality (Big4), multinationality (Multinational), firm age (Firm_Age), firm size (Size), financial leverage (Leverage), liquidity (Liquidity), gross sales total (Sales) and Covid dummy variable (Covid) were included in the study as control variables. Our findings indicate that the relationship between the remuneration of board members and firm performance is positive and significant. This result also expands the agency theory literature by providing empirical evidence that board remuneration can be used to balance the interests of management with those of shareholders. The board of directors oversees the senior management and makes strategic decisions about the firm. It can be said that firms can use the remuneration paid as an incentive to enable the board of directors to work better and make more careful decisions. An increase in the firm performance can also be achieved by paying higher remuneration to the board members. In addition, high-remuneration firms can make the firm more attractive for more experienced and skilled people to serve as board members. It is seen that remuneration is an important determinant of firm performance. Firms that remuneration more board members perform better.

The related article contributes to the literature in many ways. Primarily, studies investigating and examining the relationship between the remuneration paid to board members and firm performance are being expanded. Evidence is presented that the relationship between board remuneration and firm performance in the Turkish context is positive. Considering the changes in the Turkish economy, it is important to understand the factors that affect firm performance. Secondly, the study provides information on the state of corporate governance in emerging markets by considering the Turkish sample. Corporate governance practices vary between developed and developing economies for many reasons such as social, cultural, environmental, and institutional differences. There are many studies conducted to investigate the relationship between corporate governance and firm performance in developed countries (Judge et al., 2003; Fernandes, 2008; Merino et al., 2012; Fallatah and Dickins, 2012; Müller, 2014; Alqatan et al., 2019). However, there has not been enough research on which factors affect corporate governance in developing economies. The relevant paper is important as it contributes to the elimination of this deficiency. Thirdly, it provides insight into striking a balance between incentives for board members and activities aimed at increasing the long-term firm value. According to the research findings, the positive relationship between the said variables shows that remuneration can be used as a tool to ensure the firm sustainability and increase its profitability.

Although the board members' remuneration is the subject of research in many countries, no study addresses this issue in our country. It is thought that these results will contribute to regulators, firms, government, and society. In this study, financial firms were excluded from the analysis. Therefore, in future studies, the relationship between the remuneration paid to the board members of the financial firms in Turkey and the firm performance can be examined. In addition, this relationship can be investigated in more detail by increasing the sample size and making sectoral or regional comparisons.

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