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The Moderator Effect of The Internal Control System on The Financial Success of Corporate Governance*

Araştırma Makalesi /Research Article

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ABSTRACT: *In the literature, there are studies investigating whether the internal control system and corporate governance principles have an effect on financial performance. However, there is no study investigating the moderator effect of the internal control system on the financial success of corporate governance. For this purpose, it was examined in this study whether there was a moderator effect of the internal control system on the financial success of corporate governance. The study was conducted on companies in the Borsa Istanbul (BIST) corporate governance index (XKURY). The effectiveness of the internal control system was determined by the survey method, and then corporate governance effectiveness ranking was obtained with corporate governance rating scores. The moderator effect was investigated by regression analysis using the data obtained. As a result of the analysis, it has been determined that the internal control system has a moderator effect on the financial success of corporate governance. On the other hand, it is concluded that although corporate governance is thought to have a moderator effect on the financial performance of the internal control system, it does not. This result indicates that the efficiency of the internal control system should be increased for the financial success of corporate governance in enterprises. The reasons for this theoretically unexpected result were investigated in the study.*

Keywords: *Corporate Governance Rating; Monitoring; Moderator Effect; Internal Audit.*
JEL Codes: *M10, M40.*

Kurumsal Yönetimin Finansal Başarısında İç Kontrol Sisteminin Moderatör Etkisi

ÖZ: *Literatürde iç kontrol sistemi ile kurumsal yönetim ilkelerinin finansal performans üzerine etkisinin bulunup bulunmadığına yönelik çalışmalar olduğu görülmektedir. Ancak, her bir faktörün finansal başarısında diğer faktörün moderatör etkisinin olup olmadığına veya hangi faktörün daha güçlü bir moderatör etkiye sahip olduğuna dair bir çalışma mevcut değildir. Bu amaçla çalışmada, önce iç kontrol sisteminin daha sonra kurumsal yönetimin finansal performans üzerine etkisinde hem kurumsal yönetimin hem de iç kontrol sisteminin moderatör etkisinin olup olmadığı incelenmiştir. Araştırma, BİST (XKURY) kurumsal yönetim endeksindeki şirketler üzerinde gerçekleştirilmiştir. Anket yöntemi ile iç kontrol sistemi etkinliği tespit edilmiş daha sonra kurumsal yönetim derecelendirme puanları ile kurumsal yönetim etkinlik sıralaması oluşturulmuştur. Elde edilen veriler kullanılarak, moderatör etki, regresyon analizi ile tespit edilmeye çalışılmıştır. Sonuç olarak şirketlerde iç kontrol sisteminin finansal performansı üzerinde, kurumsal yönetimin moderatör etkisinin olmadığı, kurumsal yönetimin finansal başarısında iç kontrol sisteminin moderatör etkisinin güçlü olduğu sonucuna ulaşılmıştır. Bu sonuç işletmelerde kurumsal yönetimin finansal başarısı için iç kontrol sisteminin etkinliğini artırılmaları gerektiğini ifade etmektedir. Çalışmada teorik olarak beklenmeyen bu sonuçların nedenleri araştırılmıştır.*

Keywords: *Kurumsal Yönetim Derecelendirmesi; İzleme; Moderatör Etkisi; İç Denetim.*
JEL Kodları: *M10, M40.*

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1. Introduction

Ensuring continuity in the performance of the companies in capital markets is possible by facilitating access to detailed and accurate information about the company. Accounting frauds that occurred especially after the 1980s increased the importance of the internal control system and led to the emergence of corporate governance principles. It was not deemed sufficient to prevent mistakes and frauds within the company, but also corporate principles were also developed to increase investors' trust in the markets. Easy access to accurate information has become important for the company's management and all stakeholders. While the internal control system sets rules for preventing the generation of artificial or fraudulent information within the company, corporate governance principles include fast and accurate delivery of truthful information and include rules for protecting the rights of the company's investors. The concept of corporate governance deals with how companies can be managed more effectively and efficiently, how to identify and resolve deficiencies, if any, management of the company and its relations with all stakeholders, and management of these relations as its main subject. A successful corporate governance and internal control system ensure that fact-based decisions are made and that success is sustainable in companies. The present study aimed to determine the moderator effects of corporate governance practices on the financial performance of the internal control system.

For this purpose, first, the concepts of an internal control system and corporate governance were explained, then the purpose, scope and method of the study were explained and the findings of the same were revealed and finally, the results were evaluated.

2. Conceptual Framework

2.1. The Concept of Internal Control System and Its Elements

An internal control system (ICS) is a process carried out by the management and employees for the companies to achieve their corporate goals. The most widely accepted definition of internal control was published by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its 2013 report. According to this report, internal control was defined as "a process that is guided by the board of directors, executives and employees of the companies, increases effectiveness and efficiency of the activities, and assures the reliability of financial statements as well as compliance with the laws and regulations" (COSO, 2013:3).

Although the ICS was previously known, accounting frauds and company scandals that happened in the early 2000s have increased their importance even further. The events that occurred during these years showed that not only were their management deficiencies in the companies but also the internal control mechanisms did not work adequately. In this context, COSO) was established by five professional organizations that are members of the Treadway Commission and (Hightower, 2008:7) published the internal control model in 1992. Later, the report was revised in 2006, and was last updated in 2013.

According to COSO, elements of the ICS consist of five components: control environment, risk assessment, control activities, information communication and monitoring. Thus, for ICS to be effective in a company, these five elements must be applied together effectively. These five elements are briefly explained below.

Control Environment: It forms the basis of the ICS. The control environment focuses on the human element and organization. According to COSO, ethical values and commitment, professional competence, management philosophy, determination of powers and responsibilities, distribution of powers and finally human resources policies and organizational structure are the necessary attributes for an effective control environment (COSO, 2013: 3; Moeller, 2011:6). The control environment provides the necessary infrastructure for the successful implementation of the ICS. The senior management's approach to all activities within the company and their approach to identifying and solving problems in activities and the importance they attach to moral values is the component that contributes to the complete fulfillment of the powers and responsibilities by all personnel (Rubino et al. 2017:19-20).

Risk Assessment: It is the process of identifying, evaluating and analyzing the risks as a result of determining the company's goals and objectives, or defining and evaluating the risks that may affect the internal control structure (COSO, 2013:4). Risks within the company are the ones that may arise during the company's activities due to the external environment and the ones arising from the internal environment due to the activities within the company (Mock et al. 2009:6). It is possible to eliminate all of these internal and external risks, risks arising from human and technological errors and accidents within the company, as well as managing risks through the ICS risk assessment element. In short, it can be said that identifying all of these risks and finding solutions is an important factor in ensuring the continuity and success of the company.

Control Activities: Control activities are mechanisms designed within the company to ensure effectiveness in the company's activities, to prevent any mistakes and fraud and detect them if they cannot be prevented (COSO, 2013:4). In other words, control activities are the policies and procedures implemented to achieve company goals.

Information and Communication: It is the acquisition, creation and evaluation of information in the company, ensuring maximum access to internal information and communication processes. Accurate information is needed for the activities within the company to function correctly and fully, and the reliability of this accurate information is possible with timely and complete communication (COSO, 2013:7). Accurate information is needed at all levels for the success of the company. Therefore, information must be available and reliable in order to achieve company goals and objectives. Communication is based on ensuring timely and accurate information flow between all personnel.

Monitoring: It is the process of evaluating the effectiveness and performance quality of the ICS within a specified period (Perry & Warner, 2005: 53). The monitoring element is within the responsibility of company executives. The executives are obliged to constantly monitor whether the ICS is operating effectively in the units under their responsibility. The senior management can transfer this monitoring power to the internal audit unit they may establish due to lack of time. However, they cannot transfer the relevant responsibility.

In summary, the internal control system is a set of well-planned measures designed to ensure companies achieve their goals. In addition, there are many studies where the internal control system is important for the existence of companies and provides value to companies and shareholders (Ashbaugh-Skaife et al.2007; Goh & Li, 2007; Dhaliwal, et al. 2011; Rice & Weber, 2011; Ge et al. 2017).

2.2. Corporate Management Concept and Principles

Even though the concept of corporate governance featured in the literature due to the case of the "South Sea Bubble," which was the first management scandal (World Bank, 2000: 1), it has been used in its current meaning only after the 1980s. As a result of the company scandals all over the world, especially in the USA, the importance of the concept of corporate governance has increased even further to eliminate the distrust of the investors in the financial information disclosed by the companies and to win them back (Coates, 2007:91–92).

Corporate governance has been defined as "the set of rules related to the control and management of companies" (Cadbury Report, 1992:14) or "the rules that the company management will implement for the investors to bring back their investments" (Shleifer & Vishby, 1997:737). In another definition, corporate governance has been defined as a system of factors, rules and laws that control the activities of companies (Gillan, 2006:382).

The purpose of corporate governance is to protect the rights of all stakeholders and interest groups, regardless of the level or degree of their rights, and to ensure that company goals are achieved by improving the financial performance of companies, ensuring their continuity and increasing their competitiveness (Cadbury Report, 1992:13). In this context, it can be stated that the purpose of corporate governance is to create an environment of trust for the investors by protecting the rights of all interest groups and to increase the performance of the company by protecting the rights and interests of all other interest groups, especially the shareholders, by ensuring continuity in the company's activities.

For corporate governance practices to be successful, certain principles and rules have been introduced, and companies have been required to comply with them. These principles, published by the Organization for Economic Cooperation and Development (OECD) in 1999, are briefly explained below.

The Fairness/ Equality Principle is based on protecting the rights of shareholders and ensuring cooperation. It emphasizes the importance of equitable and fair treatment of all shareholders in companies regardless of the rates of their shares (OECD, 2004:19). In short, the principle of fairness or equality means that senior management should be fair and equitable in their dealings with all rightful holders.

The Transparency Principle means that the company shares all of its non-confidential financial and non-financial information with the public accurately, completely and promptly (OECD, 2004:22). In other words, the principle of transparency is the disclosure of financial and non-financial information of the company, which is not confidential, in a timely, complete and understandable manner with easy accessibility.

The Accountability Principle means that the management must be accountable to all interest groups as a result of the company's activities. In other words, it indicates that the senior management or the board of directors has the responsibility or obligation of accountability related to the management of the company towards all stakeholders (OECD, 1998:22). With the principle of accountability, it is aimed to ensure that all activities of the management and their results are controllable, in other words, to ensure that the senior management fulfills its responsibility and is accountable for the resources it manages.

The Principle of Responsibility means that the board of directors of the company must ensure effective control of the entire senior management and in this context, they must bear the obligation of accountability to all right holders. It is clearly stated in the principle that the management of the company should carry out activities by the laws and the legislation of the country and in compliance with all social values (OECD, 2004:24; OECD, 1998:23). In summary, the principle of responsibility can be defined as ensuring that the behaviors of the senior management of the company comply with the relevant legislation and social criteria in terms of the activities performed in the companies.

There are differences in the implementation of universally accepted corporate governance principles across countries. In this context, in 2003, the Capital Markets Board (CMB) of Turkey prepared corporate governance principles to be applied in Turkey based on the principles of corporate governance published by the OECD. These are as follows:

The Principle of Shareholders: In this principle, there are statements that all shareholders should be treated fully and fairly (CMB, 2011:4–6). The principle aims to ensure that shareholders are protected against arbitrary practices due to the provision of equal conditions and equal rights to them. It emphasizes responding to the requests for non-public but non-confidential information about the company made by the shareholders, in other words, making available to the shareholders all information necessary for exercising their shareholding rights accurately and safely. **The principle of Public Disclosure and Transparency:** The principle includes the creation of a disclosure policy by the companies for the shareholders and also disclosures aimed at enlightening the public by adhering to these rules. In this context, it is required that policies of public disclosure be created by the companies to inform the public and to disclose the financial statements and reports (CMB, 2011:67).

The principle of Stakeholders emphasizes the necessity of taking into account the rights of all parties affected by the company's activities in the process of implementing the goals of the management. It includes supporting the participation of the right holders in management, human resources policy within the scope of employing qualified personnel for the company and supporting relations with customers and suppliers, which should be created for the stakeholders. It also includes the ethical principles within the company as well as principles regarding the necessity of acting in favor of social responsibility and regulation of the relations between them. (CMB, 2011: 8–9).

The Principle of the Board of Directors: The board of directors is a board that represents right holders in companies and has all the powers regarding management. The principle of the board of directors includes the working principles of the board of directors, the principles regarding the boards created as well as the financial responsibilities and rights provided to the members and senior managers (CMB, 2011:9–10).

As a result of the increasing importance and implementation of corporate governance principles all over the world, it has become necessary to determine the effectiveness of the companies' compliance with these principles and to make comparisons among themselves. The concept of corporate governance rating has been introduced as a consequence of the need for a common measurement system that will allow the determination of this effectiveness and making comparisons. In line with the developments in corporate governance principles and application areas around the world, the rating procedure was also defined with the Communiqué Serial: VIII No: 40 in 2003 in Turkey, and the conditions for the rating agencies to operate and to be included in the rating list were determined, and the principles regarding the rating procedure were laid down. The reason for all of these regulations was to encourage better corporate governance, make incentives for companies, and ensure widespread implementation of corporate governance practices.

Within the scope of these studies, in 2005, the Istanbul Stock Exchange (ISE), or to use its new name; BIST initiated the activities to create a corporate governance index, which would include companies that apply corporate governance principles and whose application of these principles has been verified with their rating score. Consequently, the corporate governance index was started to be calculated in 2007 and its code was determined as XKURY. While the number of companies in the corporate governance index was 48 as of 31.08.2019, on the date of the study, it reached 51 as of 2020. Companies are rated according to their implementation status of the four criteria set by the CMB in Turkey; namely, the principles of shareholders, stakeholders, public disclosure and transparency and the board of directors.

Whether companies have achieved their economic goals and objectives can only be evaluated by measuring financial performance. With globalization, the importance of institutionalization, corporate governance, and capital markets have increased day by day, and the financial performance evaluations of companies have become more important (Şenol & Ulutaş, 2018: 86). The financial performance is the determination of whether the intended targets have been achieved in the sector in which the companies operate. Thus companies gain a competitive advantage and reach a sustainable position. In addition, financial performance helps companies to determine strategies by revealing their strengths and weaknesses. Both company executives and company investors analyze the financial performance of the company to make the right decision. In summary company's financial performance should be analyzed in order to determine the success of the internal control system and corporate governance practices.

3. Methodology of the Study

When the domestic and foreign literature was reviewed, it was found that there were studies on the effects of the ICS and corporate governance practices separately on financial performance. It has been observed in these studies that both conclusions suggesting and not suggesting the existence of a relationship have been made. This study focused on the moderator effect of the ICS on the financial performance of corporate governance elements for the companies in the BIST (XKURY) corporate governance index.

3.1. Literature Review

Many studies have found a relationship between corporate governance and the financial performance of companies (Andreou et al. 2014; Mohamed & Eleva, 2016; Pillai and Al-Malkawi, 2018; Iqbal, 2019), but some studies have found the relationship insignificant or these variables not to be acting in the same direction (Al-Ahdal at al.2020; Gupta and Sharma, 2014). In addition, there are studies that have found a relationship between the ICS and the financial performance of companies (Yang et al. 2020; Ibrahim at al. 2017; Kabuye et al. 2019) as well as some studies that have found this relationship to be insignificant or negative (Ejoh & Ejom, 2014; Alkan & Doğan, 2020). However, when the relevant literature was reviewed, no study was found to determine the moderator effects of corporate governance and the ICS on the financial performance of the ICS and corporate governance practices. Studies are showing that different variables of corporate governance practices or ICS increase the financial performance of the companies individually. Similar studies investigating the ICS and corporate governance practices and indicating that they increase the financial performance of the companies are given below:

In a study which reported that the application of corporate governance together with earnings management increased financial performance, Nuryani & Surjandari (2019) performed a multiple regression analysis using data of 25 manufacturing companies in the Indonesia Stock Exchange about the period 2012–2016. In the analysis made between seven variables created for corporate governance success and earnings management and financial performance success, no significant relationship could be found. In the study, it was found that there was no relationship between the board of directors, corporate ownership, managerial ownership, the existence of an independent audit board, the size of the audit committee and the presence of an audit committee and earnings management; and also earnings management did not effect on financial performance. However, it was demonstrated that good corporate governance, together with earnings management, had a significant effect on financial performance.

In a similar study, Nabi (2016) aimed to determine the effect of corporate governance and ICS on financial performance by performing multiple regression and descriptive statistical analyses of 29 companies listed on the Palestinian stock exchange. In this context, only the control environment element, which is included in the ICS and regarded as the basis of all other components, was examined in that study. It was stated that the control environment consisted of integrity and ethical values, commitment to the principle of merit, participation of the board of directors and audit committees, management philosophy and working style, organisational structure, distribution of responsibilities and duties and human resources policies and processes. In the study by Nabi, the characteristics of the board of directors (independence of the board of directors and size of the board of directors) and the characteristics of the audit committees (independence of the audit committee, financial expertise of the audit committee, audit committee meetings and size of the audit committee) that represent the control environment were chosen for corporate governance. It was stated that this is because this participation would provide audit, guidance and a regulatory feature given the role of the board in the ICS. Return on assets (ROA) and return on equity (ROE) were selected as dependent variables.

As a result of the study, it was determined that there were statistically significant relationships between audit committees and ROA. On the other hand, a significant result could not be obtained between other selected independent variables and ROE and ROA. However, that study differs from the present study in that it was solely based on the control environment and did not examine the moderator effect.

In this respect, it is believed that this study will contribute to the relevant research area.

On the other hand, a study by Al-Zwyalif (2015) aimed to reveal the effects of ICS elements (control environment, risk assessment, control activities, information communication and monitoring) on corporate governance principles (fairness, transparency, accountability and responsibility) separately. A survey was applied to board members, financial managers, accounting managers and internal auditors of twenty-seven (27) insurance companies in Jordan. It was found that the effectiveness of ICS practices also played a role in strengthening corporate governance practices. In addition, it was reported as a result of the study that corporate governance and ICS practices can significantly contribute to improvements in the financial performance of the company.

In another study (Olumbe, 2012), the relationship between the effectiveness of the ICS and corporate governance practices in commercial banks in Kenya was investigated. Consequently, it was found that there were strong and significant relationships between the ICS and corporate governance. In addition, it was revealed that this result improved the company's performance as well as the financial performance in companies. In another study (Suyono & Hariyanto, 2012), the interaction between internal control, internal audit and corporate governance practices of the local administrations in Indonesia was investigated. Suyono & Hariyanto found in their study that the effectiveness of the ICS and corporate governance practices strongly supported companies, and as a result, they significantly contributed to the financial performance of the companies.

When the literature was examined, no similar study was found regarding the moderator effect of the internal control system. However, Chong et al. (2018) studied the moderator effect of corporate governance on the performance of real estate investment partners in Asia. In their studies, ROA and ROE ratios were used and it was revealed that corporate governance should be improved as a result of the study. In addition, it has been suggested that mandatory corporate governance practices should be implemented in real estate investment partnerships in Asia.

In another study (Ngatno et al. 2021), they tried to determine the moderator effect of corporate governance on the financial performance of the capital structure. In the study conducted in micro-financial institutions, ROA and ROE rates were used. The study determined significant positive effects of short-term debts on ROA and ROE, but negative and insignificant effects of long-term debts on ROA and ROE. The study concluded that capital structure had a positive effect on financial performance, and in terms of the moderator effect of corporate governance, board members strengthened the effect, but board size and ownership density did not affect the relationship between capital structure and company performance.

3.2. Purpose and Importance of the Study

According to some studies, effective implementation of the internal control systems and corporate governance practices in companies increased the profitability and value of companies and ensures success in companies (Agyei-Mensah, 2016; Sari et al. 2018; Koutoupis&Pappa, 2018). Some studies in the literature (Olumbe, 2012; Suyono & Hariyanto, 2012) have concluded that effective ICS in companies also positively affect their corporate governance practices, which, in turn, has a positive effect on the financial performance of companies. This result shows that there is a strong relationship between companies' ICS's and corporate governance practices. The strength of the relationship in question affects the profitability, market superiority and continuity of businesses.

The present study aimed to reveal the moderator effect of the ICS on the financial success of corporate governance. When the current studies in the literature were examined, many studies were found that investigated the effect of the ICS (Feng Mei et al, 2015; Ahmed & Nganga, 2019; Pakurar et al. 2019;) on financial performance and the effect of corporate governance practices (Black et al. 2006; Iqbal et al. 2019; Mohamed & Eleva, 2016; Pillai & Al-Malkawi, 2018) on financial performance separately for companies. However, there were no studies investigating the moderator effect of the ICS on the financial performance of corporate governance. Therefore, the present study focused on this gap in the literature. It can be said that the present study differs from other studies in the literature and has a unique value because of this aspect.

This study is important, because it reveals to the company executives which factor is more important to make the success of the company sustainable. However, the fact that one of these two factors holds weight does not mean that the other factor is not important. It is believed that companies in capital markets should attach the necessary importance to both of these factors.

3.3. Scope and Limitations of the Study

The study is limited to companies included in the BIST (XKURY) corporate governance index. The main reason for this is that CGP is compulsorily applied in the companies within this scope. In addition, cost and time constraints played a role in determining the scope. Due to these limitations, companies that are not included in the corporate governance index were excluded from the study. Although there are numerous financial performance indicators in the literature, due to time and cost constraints, three market-based indicators and two accounting-based indicators were preferred among the financial performance indicators. These indicators are ROA, ROE, market value, price to book ratio (PB), stock value (SV) and market return on equity (MROE). The reason why these indicators were preferred is that they are the most commonly used indicators in the literature.

3.4. Method of the Study

The first data set of the study was created by the survey method. The survey technique, one of the data collection methods, was used to determine the effectiveness of the ICS.[5] It has been reported that the survey method is the most effective tool for measuring the effectiveness of the ICS (Uzay 1999: 100). Pre-prepared surveys were sent to individuals qualified in the ICS in 48 companies included in the BIST (XKURY) corporate governance index, and 41 of these companies responded to the survey. The survey consisted of 20 questions in total to measure the effectiveness of the ICS. The survey questions were prepared based on the 5-–point Likert scale. Accordingly, points 1–5 had the following meanings: 1: Definitely not applied, 2: Not Applied, 3: Partially Applied, 4: Applied, 5: Definitely Applied. The second data set of the study was created by using the corporate governance rating scores in the Public Disclosure Platform (PDP) of the companies participating in the survey. Since the rating scores were not announced as of the date of the study, the scores for 2018 were used. The third data set of the study was obtained from the financial statements of companies published on the CMB and PDP websites and the databases of Hitit University named Refinitiv Thomson Reuters Eikon and Data Stream.

MROE, PB, SV, ROE and ROA indicators of the companies used in the study were obtained from these databases. Then, the moderator effect of the ICS on the financial performance of corporate governance was investigated. In this investigation, corporate governance principles were examined using the regression analysis method. The moderator effect is a quantitative or qualitative variable that affects the strength and direction of the relationship between the dependent variable and the independent variable (Baron & Kenny, 1986: 1174). Accordingly, in the model developed in the study, ICS were included as the moderator variable, corporate governance principles as the independent variable, and financial performance as the dependent variable. Moderators are used to investigating whether they affect the strength and direction of the relationship.

Financial performance indicators of companies were used as the dependent variable in the study. Five ratios, which were considered to help explain the financial performance of the company, were determined to be used in the study. These ratios, selected as dependent variables, are market-based and accounting-based indicators. PB, SV and MROE were the market-based performance indicators selected. The ratios were chosen from those used in similar studies in the literature (Shahwan, 2015; Wessels and Wansbeek 2016; Unlu et al. 2017). The ratios selected as accounting-based performance indicators were ROA and

[5] Doctoral dissertations by Çiğdem (2018: 139–141), Kara (2018: 116–119), Polat (2018: 214–216), Özçetin (2017: 277–284), article by Hermanson, Smith and Stephens (2012) and COSO (2013) "Internal Control: The Integrated Framework Report" were used for preparing the questions in the survey.

ROE. There are many studies in the literature using these indicators (Renneboog, 2000; Valenti et al.2011; Gupta & Sharma 2014; Al-Matari et al. 2014; Heenetigala et al.2011; Pillai & Al-Malkawi, 2018).

3.5. Reliability and Validity of the Study

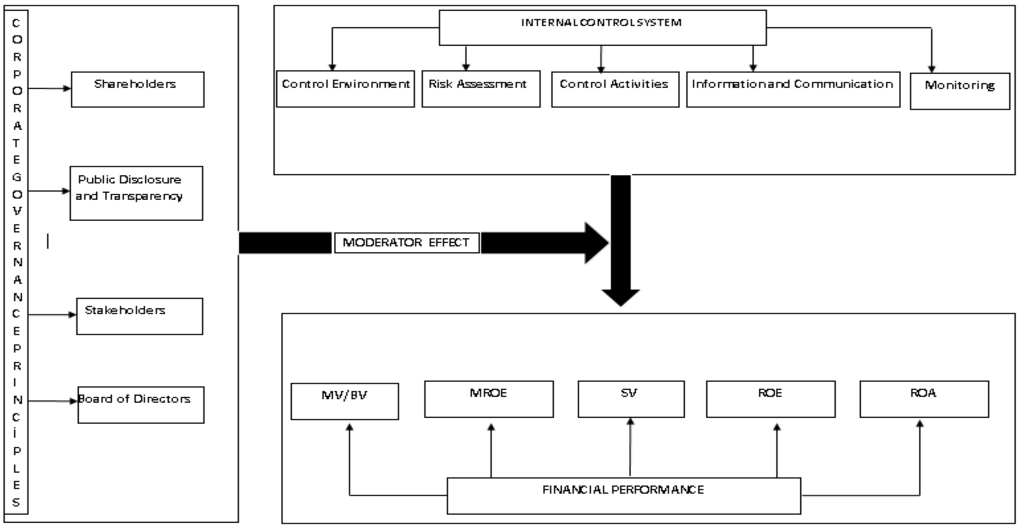
Reliability Analysis: The reliability of the study focuses on the test's internal reliability obtained in repetitive measurements under the same or similar conditions. The validity of the study focuses on the reliability of the results obtained. For reliability analyses, Cronbach's Alpha coefficient is widely used in studies. Therefore, Cronbach's Alpha coefficient was used in the present study. Cronbach's Alpha coefficient expresses the value of agreement based on the correlation between questions. A coefficient of 0.90 and above indicates that the scale is highly reliable, 0.70 and 0.90 indicate that it is very reliable, the scores between 0.60 and 0.70 is acceptable, and the scale between 0.60 and 0.50 is reliable. In addition, being below 0.50 means that it is not reliable (George & Mallery, 2019:141-148). The reliability analysis result for the survey questions was 0.879 for the ICS. The fact that Cronbach's Alpha coefficient was 0.879 shows that the data obtained from the surveys related to the ICS were highly reliable.

Validity is defined as proof of consistency by measuring the scores of a series of tests (Ebel & Frisbie, 1972: 100). Validity deals with the accuracy of the study results and it is expressed as an important criterion of validity to include direct quotations and explain the results based on them (Yıldırım & Şimşek, 2005: 257). Since the corporate governance rating scores, which are the second data set of the study, were obtained directly from the website of PDP, it is accepted that the reliability and validity of this data set were high. Performance indicators, the third data set, were prepared using independently audited financial statements disclosed to the public by companies. Therefore, it is possible to say that this data set was reliable and valid.

3.6. Study Model and Hypotheses

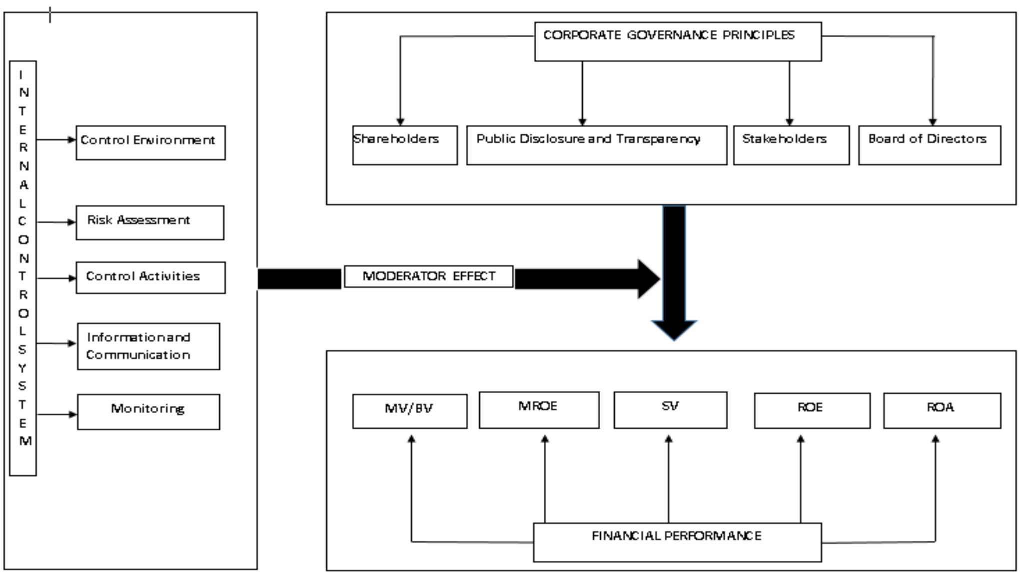
The moderator variable in the relationship between corporate governance principles, internal control system effectiveness and financial performance in the literature can be considered from two perspectives. From the first point of view, it is assumed that corporate governance is more determinant in financial success than the internal control systems. This point of view is expressed with the help of figure 1 below.

Figure 1: The Moderator Effect of Corporate Governance on the Relationship Between Internal Control System and Financial Success.



The second point of view was chosen as the model of the research. The reason for this is that the first point of view is that the Anglo-Saxon form of corporate governance is thought to be more suitable for markets with a high free float rate of stocks. In other words, it better reflects the markets where the minority shares have a high share in the company's total stocks.

Figure 2: The Moderator Effect of the Internal Control System on the Relationship between Corporate Governance and Financial Success



The first point of view is one in which corporate governance principles such as accountability to investors, protection of interests and transparency are more prominent in such markets. Our country, on the other hand, is closer to the European type of corporate governance understanding. In other words, a limited part of the total shares of companies whose stocks are traded on the stock exchange is bought and sold on stock exchanges. In addition, the holder of the shares circulating on the stock exchange (minority shareholder) has almost no opportunity to participate in the management personally or with a representative. Therefore, such markets are the markets where the issues that investors care about, such as transparency, protection of their interests, and accountability are ignored more. The ratio of circulating shares of publicly traded companies in Istanbul to total shares is approximately 30%. For this reason, when we evaluate internal control and corporate management together with business performance, we can say that the regulatory effect (moderator effect) of the internal control system will be more realistic. In this case, we can expect business management to hold shareholders accountable to those who are close to the public (large shareholders) and protect their interests. For this reason, it can be said that internal audit mechanisms are used more in both risk management and performance management. In other words, the information, findings and recommendations obtained in internal control can be expected to be more effective in company decisions. Therefore, the model was created according to the second approach rather than the first approach. Since the research model is the second approach, the research hypothesis is given below;

H: ICS has a moderator effect on the effect of corporate governance principles on financial performance.

3.7. Method

Regression equations were created to determine the moderator effect of the ICS on the impact of corporate governance.

$$(MV/BV)_i = \beta_0 + \beta_1 CG_i + \beta_2 IC_i + \beta_3 M_i + e_i \quad (1)$$

$$MROE_i = \beta_0 + \beta_1 CG_i + \beta_2 IC_i + \beta_3 M_i + e_i \quad (2)$$

$$SV_i = \beta_0 + \beta_1 CG_i + \beta_2 IC_i + \beta_3 M_i + e_i \quad (3)$$

$$ROE_i = \beta_0 + \beta_1 CG_i + \beta_2 IC_i + \beta_3 M_i + e_i \quad (4)$$

$$ROA_i = \beta_0 + \beta_1 CG_i + \beta_2 IC_i + \beta_3 M_i + e_i \quad (5)$$

In the above equations, M refers to the moderator variable. The moderator variable in these equations consists of multiplying the centralized CG and centralized ICS variables. The centralization of CG and IC variables is to address the problem of high multicollinearity in regression analysis. The moderator variable coefficient (β_3) is expected to be statistically significant. In addition, the coefficient of the IC variable (β_2) should increase significantly compared to the coefficient obtained in the original regression analysis, where the moderator variable is not included. The results of the original regression analysis, in which the moderator variable is not included, are given below in Table2.

Table 1: Correlation Coefficients

Independent Variables	Dependent Variables				
	MV/BV	SV	MROE	ROE	ROA
Internal Control	0.3260	0.3644	0.5829	0.7426	0.5560
Corporate Governance	0.0059	0.0927	0.0726	0.0449	0.0474

The results of regression analysis of the research model in which the Moderator variable is included are presented in Table 3 below. The study analysis was carried out in three stages. In the first stage, the correlation between the variables was checked. In the second stage, the effect of independent variables on the dependent variable was estimated by regression analysis. In the third stage, regression analysis was performed in which the research hypothesis was tested.

Table 2: Multiple Regression Analysis Results

Independent Variables	Dependent Variables				
	Market Indicators			**Accounting Indicators**	
	MV/BV	**MROE**	**SV**	**ROE**	**ROA**
Invariable	1.098	-4.396	-4.514	-8.948	-4.853
Corporate Governance	-0.286	-9.229	-0.421	-1,034**	-3.673
Internal Control Effectiveness	0.6191*	3.591***	1.822*	3.960***	1.353***
VIF	<2	<2	<2	<2	<2
Adjusted R^2	0.114	0.347	0.133	0.577	0.321
F Statistic	2.53*	8.25***	2.55*	23.09**	10.83***

Note: *, ** and *** show significance levels of 0.10, 0.05 and 0.01, respectively. Despite the variable variance problem, robust standard errors were used in regression analyzes.

The correlation coefficients of each dependent variable required for the first stage and the CG and IC arguments are given in Table1. The correlation coefficient between IC and CG is 0.2699. The magnitude of the correlation coefficient between dependent variables is low. It was found that the levels of correlation coefficients between dependent variables and IC were small and medium-sized. However, it was found that the correlation coefficients between dependent variables and CG are at a low level.

In the second stage of the analysis, the effects of CG and IC independent variables on company performance were estimated by analysis and the results are given in Table 2. In regression analysis in table2, it is shown that the model as a whole is significant with the significance levels of F statistics. Looking at adjusted R2 values, regression analysis explains 11% to 57% of the total change of independent variables in the dependent variable. According to the VIF indicator of the analysis, there was no problem of high multicollinearity between the independent variables. Looking at the individual effects of independent variables on the dependent variable, it was determined that the effect of internal control compared to corporate management was more pronounced. Looking at the sign of the effects, it was found that corporate governance has negative, while IC has positive effect on the company's performance. Corporate governance has a statistically significant influence only on ROE. Internal control, on the other hand, has a positive and statistically significant effect on all performance indicators. This means that internal control, accounting and market performance indicators all increase. Corporate governance, on the other hand, has been found to reduce ROE from accounting performance indicators. This result is because internal control has a creative effect on revenue, while corporate governance has a creative effect on cost.

In the third stage of the analysis, the research hypothesis was tested. The test results are given below in Table 3. In a regression analysis with a moderator variable in table3, it is shown that the model as a whole is significant with the level of understanding of F statistics. Looking at adjusted R2 values of regression analysis, it was found that independent variables explain approximately 18% to 58% of the total change in the dependent variable. According to the VIF indicator of the analysis, there was no problem of high multicollinearity between the independent variables.

Companies in the BIST (XKURY) corporate governance index are regarded as the best companies in Turkey. The fact that the moderator effect was not significant in terms of ROA, ROE and MROE indicators, which are accounting-based indicators, does not mean that companies cannot use their resources efficiently. Likewise, the fact that the moderator effect was not significant in terms of the market-based indicators PB and SV was not due to the perceived low market values of companies. It was observed that the coefficient of the internal control variable (β_2) increased significantly compared to the coefficients obtained in the previous regression analysis (in Table 2).

Table 3: Moderator Effects of Internal Control System

Independent Variables	Dependent Variables				
	Market Indicators			Accounting Indicators	
	MV/BV	MROE	SV	ROE	ROA
Constant	5,913	-4,396	-2,141	-7,089	-8,110
Corporate Governance Rating	-0,790	1,531	-3,705	-1,182	-3,332
Internal Control Effectiveness	$0,605^{**}$	$3,895^{***}$	$1,729^{*}$	$3,984^{***}$	$1,363^{***}$
Moderatör	-1,426	30,463	-9,298	2,412	0,965
VIF	<2	<2	<2	<2	<2
Adjusted R^2	0,176	0,376	0,138	0,577	0,321
F Statistic	$2,63^{*}$	$7,45^{***}$	$3,35^{**}$	$16,00^{**}$	$7,12^{***}$

Note: *, ** and *** show significance levels of 0.10, 0.05 and 0.01, respectively. Despite the variable variance problem, robust standard errors were used in regression analyzes.

The reasons why the moderator effect of the internal control system was not significant may be indicated by stating that although financial performance improves as the effectiveness of the corporate governance increases, a sufficient link could not be established yet between the effectiveness of corporate governance principles and financial performance. In addition, it may be due to the fact that a sufficient relationship could not be established yet between the accounting system and corporate governance in Turkey. The most important reasons for this result may be that the CGP has not been sufficiently internalized by the managers in the companies, the corporate governance practices have remained on paper, and the investors are aware of this situation. All these reasons indicate that a corporate culture for CGP has not been established in companies.

On the other hand, the reasons may include the view that corporate governance practices may bring a financial burden to companies, differences in the sectors of the companies in the BIST (XKURY) corporate governance index causing management and implementation differences, the lack of qualified personnel or the lack of qualified human resources to implement the system and the resulting legislation and procedures not having been established in companies. The fact that the CGP and practices do not contain any compelling provisions and ignorance of the effect of corporate governance practices lead to a failure to show sufficient care in their implementation. It can also be said that it may have resulted from a lack of awareness in companies about the impact of corporate governance practices and that the corporate governance rating of the companies in the corporate governance index (XKURY) remained on paper and could not be internalized or assimilated by the company personnel.

When Table 3 is analyzed, it may be seen that the moderator effect of the ICS was statistically significant on market- and accounting-based indicators MV/BV, MROE, SV, ROE and ROA (at a significance level of 1% to 10%). Accordingly, it is possible to say that the ICS has a moderator effect on the effect of corporate governance on financial performance. In other words, the hypothesis was accepted.

This result is theoretically an expected result. The ICS minimizes the mistakes and fraud in the companies and positively affects the profitability of the companies, causing the investors' interest to be focused on the company. This explains the moderator effect of the ICS on the financial performance of corporate governance. On the other hand, although the increase in the company's profitability affects financial performance favorably, it does not affect market indicators at the same rate. This is because factors such as news about the market, future and risk, which investors take into account, may have a role along with profitability in PB and SV, which are market-based indicators. Therefore, market indicators may not be affected as strongly as profitability indicators (ROA and ROE).

Therefore, the ICS, can prevent any irregularity in all kinds of financial transactions, and prevent corruption in companies through an audit, control and monitoring mechanisms as a result of its moderator effect. In addition, it can be said that the idea that resources can be used correctly as a result of obtaining correct reports and correct information has been established in companies; in other words, the ICS has a moderator effect on the effect of the corporate management and ICS on financial performance and the system has been established in companies.

4. Conclusion and Suggestions

If corporate governance is a process that regulates relations with all stakeholders in the fulfilment of the company's goals and objectives, the efficient continuation of this process can only be achieved by establishing an effective communication and control environment. Therefore, it can be said that the positive impact of the ICS and corporate governance on financial performance is acceptable to everyone. However, no study has been found regarding the moderator effect of the ICS on the financial success of corporate governance. In the present study, moderator effects were examined. As a result of the analysis, it has been determined that the ICS has a moderator effect on the financial success of corporate governance.

In a setting where there is corporate governance in place was not found to be significant. This possibly means that the investors in the market are not concerned about whether the company successfully applies CGP when making investment decisions; in other words, they do not take into account the corporate rating score. In other words, corporate governance principles do not affect investment decisions, as investors believe that all businesses comply with corporate governance principles. It can be considered that this leads to the fact that corporate governance principles do not affect market indicators. In addition, it is widely believed that the implementation of CGP only increases the costs of the company, and thus profitability rates are either negatively affected or not affected at all. In terms of CGP, this may be due to the fact that corporate culture has not been sufficiently developed in Turkey. All these explanations address why the moderator effect of corporate governance was not found to be significant.

The application of CGP in companies does not have an effect of reducing the costs of the company or increasing its revenues, therefore it is logical that it does not have any favorable effect on accounting-based financial indicators. However, the fact that it does not have any impact on market-based indicators is a result that should be discussed. Under normal circumstances, the demand for the shares of companies with a high corporate governance rating should be high, which can be expected to be reflected favorably on the share prices and company value. However, the results of the study have indicated that there is no correlation between corporate governance rating scores and the share prices and company value in Turkey. Accordingly, it may be said that stock investors in Turkey do not take into account the companies' CGP, and thus no link was found between financial indicators and CGP. On the other hand, since the management of companies in Turkey is under the control of shareholders who are close to the public, the implementation of policies that will take into account the interests of this group prevents the formation of a culture of CG. For this reason, as the ratio of shares offered to public Stock increases, the managers ' perspective will change. In this sense, as markets develop, the CG culture will develop and the impact of CG on financial performance will increase. As markets improve, it can be said that the topic of CG's moderator influence can lead to future work.

Efforts can be made to increase the benefits of corporate governance practices by introducing motivating tax reductions and similar practices within the context of corporate governance practices. Such practices can have a positive impact on creating a corporate culture, strengthening the external image of the company and increasing the value of the company, as well as making the company managers adopt the concept of corporate governance.

In order to increase corporate governance, it may be recommended to increase the number of companies in the corporate governance index, provide the necessary incentives for this purpose, raise awareness among investors and carry out activities to improve the corporate culture regarding this issue. In addition, activities to raise awareness of the benefits of corporate governance for companies can be performed for both companies and investors.

Considering the moderator effect of the ICS, it can be said that the ICS is almost solely effective on the financial performance of companies. It leads to an increase in the profitability of the company by reducing fraud and irregularities, increasing efficiency through control mechanisms, decreasing costs and a combination of all these factors. The increase in the profitability of the company causes the accounting-based indicators to be positively affected and the investors to show interest in the company leading to an increase in the company value.

It has been determined that the ICS has a moderator effect on the financial success of corporate governance. However, it should be kept in mind that the effectiveness of the ICS may decrease over time. Therefore, it is necessary to ensure the continuity of the effectiveness of the internal control system. For this purpose, a culture should be created within the company and the employees should increase their commitment to the company within this culture. Company personnel and managers should be frequently warned about the importance of internal control systems, and training seminars should be given if necessary. It is recommended to increase the number of thesis studies regarding this issue and to particularly focus on the elements of the internal control system.

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